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EVALUATION

Final Performance Evaluation of the Community-Managed Disaster Risk Reduction Activity

August 6, 2017

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FINAL PERFORMANCE EVALUATION OF THE COMMUNITY-MANAGED DISASTER (CMDRR) RISK REDUCTION ACTIVITY

**AN ANALYSIS OF CMDRR RESULTS RELATED TO RESILIENCE,
GENDER AND SOCIAL INCLUSION, TECHNOLOGY AND
INNOVATION, AND THE APPROPRIATENESS OF THE ACTIVITY
DESIGN**

August 6, 2017

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Ethiopia Performance Monitoring and Evaluation Service (EPMES) for USAID/Ethiopia Activity

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ABSTRACT

Climate variability affects all Ethiopians, but is especially a threat to the livelihoods of the rural poor. USAID's Community Managed Disaster Risk Reduction activity, running from 2014-2017, aims to build community and household resilience to climate-related shocks. This final performance evaluation of CMDRR examines changes in household and community resilience, the activity's gender and social inclusion, the effectiveness, sustainability, and scalability of new technology and innovations, the layering and sequencing with other disaster risk management efforts, and the appropriateness of the activity design. To do so, the evaluation team conducted a household endline survey with community members in ten target woredas, compared results to the 2011 baseline, and conducted key informant interviews and focus group discussions with implementers, government officials, and activity beneficiaries. Findings demonstrate continued household livelihood vulnerability and decreasing income, particularly in the wake of Ethiopia's historic 2016 drought. Community resilience grew through the creation of robust disaster risk reduction community groups. Women's savings groups promoted women's leadership and access to financial resources. Disability inclusion initiatives were also successful. Early warning systems insufficiently linked governments and communities vertically to ensure timely information flow. Water and environmental technologies were effective, and rural areas have continued demand for such technologies. CMDRR collaborated productively with PSNP, but in a more limited way with other stakeholders. The participatory activity design was appropriate, though technological innovations were not always appropriate to the target communities.

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ACRONYMS

ACORD	Agency for Cooperation and Research in Development
ADS	Automated Directives System
AFD	Action for Development
CAHW	Community Animal Health Worker
CAP	Community Action Plan
CARE	Cooperative for Assistance and Relief Everywhere
CIAFS	Capacity to improve agriculture and food security
CMDRR	Community-Managed Disaster Risk Reduction
CMPs	Contingency Mitigation Plan
CORDAID	Catholic Organisation for Relief and Development Aid
CRGE	Ethiopian Climate Resilient Green Economy
CRS	Catholic Relief Services
DA	Development Agent
DFAP	Development Food Assistance Program
DFID	Department for International Development
DPO	Disabled people's organizations
DPPO	Disaster Preparedness and Prevention Office
D-RISK	Dynamic Research-Informed System for Managing Risk
DRM ATF	Disaster Risk Management – Agriculture Task Force
DRM SPIF	Disaster Risk Management – Strategic Programme and Investment Framework
DRMC	Disaster Risk Management Coordinator
DRR	Disaster risk reduction
DRRC	Disaster Risk Reduction Committee
EPMES	Ethiopia Performance Monitoring and Evaluation Service
ETB	Ethiopian Birr
EWC	Early warning committee
EWI	Early warning information
EWS	Early warning systems
FAO	Food and Agriculture Organization of the United Nations
FES	Fuel-efficient stoves
FEWSNET	Famine Early Warning Systems Network
FGD	Focus group discussion
FtF	Feed the Future
FY	Fiscal year
GIS	Geographic Information System
GoE	Government of Ethiopia
GTP II	The Second Growth and Transformation Plan
HCS	Hararghe Catholic Secretariat
HDW	Hand-dug well

HEW	Health Extension Worker
HI	Handicap International
IGA	Income-Generating Activity
IK	Indigenous knowledge
IP	Implementing partner
IR	Intermediate result
JEOP	Joint Emergency Operation Program
KA	Kebele Administration
KII	Key informant interview
M&E	Monitoring and evaluation
MEL	Monitoring, evaluation, & learning
MFI	Micro-financial institution
MoU	Memorandum of Understanding
NDRMC	National Disaster Risk Management Commission
NDVI	Normalized Difference Vegetation Index
NGO	Non-governmental organization
NMA	National Meteorology Agency
NRM	Natural resource management
OFDA	Office of U.S. Foreign Disaster Assistance
PCDP	Pastoral Community Development Programme
PCI	Project Concern International
PDO	Pastoral Development Office
PDRA	Participatory disaster risk assessment
PPMEL	Participatory planning, monitoring, evaluation, and learning
PRIME	Pastoralist Areas Resilience Improvement through Market Expansion
PSNP	Productive safety net program
PWD	People with Disabilities
RVCWDO	Rift Valley Children and Women Development Organization
REAAP	Resilience through Enhanced Adaptation, Action Learning, and Partnership
REVIVE	Restoring Vibrant Villages and Environments
RFM	Risk Financing Mechanism
RuSACCO	Rural Savings and Credit Cooperative
SAPARM	Satellite-Assisted Pastoral Resource Management
SART	Sub-Saharan Africa Research and Training Center
SI	Social Impact, Inc.
SILC	Savings and Internal Lending Committee
SLM	Sustainable land management
SMILER	Simple measurement of indicators for learning and evidence-based reporting
SMS	Short message service
SO	Strategic objective
SOW	Statement of work
SWC	Soil and water conservation

TANGO	Technical Assistance to NGOs
USAID	United States Agency for International Development
WALRIS	Water and Land Resource Center
WASH	Water, sanitation, and hygiene
WDRP	Woreda Disaster Risk Profiles
WE	Women's empowerment
WEAI	Women's Empowerment in Agriculture Index
WGP	Wealth generation pathways

EXECUTIVE SUMMARY

The Community-Managed Disaster Risk Reduction (CMDRR) Activity is composed of two parallel three-year Activities which share the same strategic objectives. The Resilience through Enhanced Adaptation, Action Learning, and Partnership (REAAP) Activity is implemented by a consortium led by Catholic Relief Services (CRS) with a budget of \$5,992,920. The Restoring Vibrant Villages and Environments (REVIVE) Activity is implemented by a consortium led by Project Concern International (PCI), with a budget of \$5,885,387.

The overall goals of the CMDRR Activity are to sustainably increase household and community resilience and to reduce long-term vulnerability to climate change, climate variability, and climate-related shocks and stresses in the fifteen most disaster-prone woredas of Oromia region.

Strategic Objective 1: Improved access to science and analysis for community-based disaster risk reduction decision-making.

Strategic Objective 2: Improved household and community measures to adapt to climate variability, change, and resulting shocks.

Strategic Objective 3: Systems for planning, implementation, monitoring and evaluation around DRR and climate change adaptation are established and strengthened through working with government and other stakeholders.

There are three main purposes to the final performance evaluation of the CMDRR Activity: to examine its resiliency and disaster risk reduction outcomes or results; to determine overall effectiveness of the interventions and partnerships; and, to identify any strengths and challenges in the courses of implementation. Further, the evaluation examines the results of CMDRR-supported interventions based on three key dimensions: effectiveness, sustainability, and scalability of both REVIVE and REAAP.

The CMDRR final performance evaluation uses a mixed methods design, with the following approaches:

1. Desk review of: REAAP/REVIVE programmatic, financial, and monitoring documents; USAID strategic and programmatic documents related to disaster risk reduction (DRR) and resiliency; and, documents from the GoE and partner institutions sharing DRR and resiliency goals;
2. Key informant interviews (KIIs) with a wide range of partners, stakeholders, and beneficiaries.
3. Focus Group Discussions (FGDs) with strategically selected groups of beneficiaries in the field;
4. Endline Survey designed to follow the Baseline Survey conducted during the first year of both Activities;
5. Site Observations to assess the quality of implementation of physical natural resource management (NRM) interventions, including water interventions, in the REAAP and REVIVE Activity areas.

The evaluation findings will inform the changes in CMDRR implementation tactics, if any, in their last year of implementation, and will contribute to the design of similar Activities in the future.

SUMMARY OF FINDINGS AND CONCLUSIONS

Q1: To what extent have household and community resiliency to *climate change, variation, and climate-related shocks* been changed due to CMDRR Activity in the target area?

Q1.1: Changes in household resiliency and vulnerability to climate change, variation, and climate-related shocks when compared to the baseline metrics.

Household resilience: Households with no or low livestock ownership at baseline showed an increase in the type and number of livestock owned, suggesting improvement in livelihood productivity and diversity with the contribution of CMDRR. On the other hand, the impact of drought and three consecutive years of failed rains from 2015 to 2017 contributed to a notable increase in the percentage of respondents reporting livestock losses – from 12.9% to 36.9% in REAAP areas, and from 52.9% to 63.3% in REVIVE areas. This result could also be influenced by the increase in household ownership of livestock since the baseline. Across the Activity areas, the drought had substantial impact on dryland areas and pasture resources (particularly Rayitu, Lega Hida, and Mieso of visited woredas), and there is little evidence of agricultural livelihood diversification. A substantial share of households experienced a decrease in income over the course of the Activity – from 64% at baseline to 85%.

Overall, the CMDRR Activities have contributed to building resilience among households that directly benefitted from livelihood, GoE's Productive Safety Net Program (PSNP), and women's empowerment (WE)/Savings and Internal Lending Committee (SILC) group activities. The percentage of households that reported using protected sources of water for drinking increased by 29% during the Activity period. Of the planned 128 water points to be created/rehabilitated under REAAP, 79 have been completed, while 34 of the 90 planned water points under REVIVE have been rehabilitated or maintained by the Activity, with another 23 planned for rehabilitation or maintenance before the end of the Activity period. Nonetheless, water remains a lasting stress for households, especially around, but also extending beyond, the lean season of January through March. Across the Activity area, more than 40% of households reported having insufficient water during this dry period. While there is strong demand for fuel-efficient stoves (FES), with 35 groups created in the REAAP area, only 6 FES groups were adequately linked to market opportunities, which limited income potential and community access to the improved stoves.

Q1.2: Changes in the community resilience to climate change, variation, and climate-related shocks by evaluating design, implementation and management aspects of common assets and community systems (such as early warning system and community platforms) when compared to the baseline metrics.

Community resilience was enhanced by the establishment and/or strengthening of structures to support improved community risk mitigation and contingency planning. The Contingency Mitigation Plan (CMP) and Community Action Plan (CAP) were enhanced through the participatory disaster risk assessment (PDRA) and Dynamic Research-Informed System for Managing Risk (D-RISK) processes, which supplied up-to-date information and data to the plans. The PDRA process was found to be more effective in establishing community owned plans than the D-RISK process.

The implementation of the CMDRR approach in 100 REAAP kebeles and 151 REVIVE kebeles was successful in fulfilling the steps within the designed methodology. Strong, robust community groups that had ownership over the process and were the custodians of the CAPs were created. The CMDRR methodology, which was followed most closely in REAAP, promoted a shared sense of ownership among communities and built a strong foundation for implementation of a wide range of interventions. This is a positive indicator for the communities' ability to take collective action to prepare, mitigate, sustain, and respond to drought and the other hazards they identify within their communities. Time and resource constraints did not allow sufficient time for learning, adapting, and applying the approach over the full range of Activity interventions, or to maximize synergies among key stakeholders. In spite of active involvement of woreda staff in the development and implementation of the REAAP CAPs, the evaluation team found no evidence that REAAP-supported CAPs influenced woreda action plans. In the case of REVIVE, the implementing partner's (IP's) central role in CMP development lessened ownership and weakened capacity at the woreda level to sustain the process. Ultimately, while woredas demonstrated strong ownership of the planning process, they exhibited less ownership over the use and outcomes of its products.

The Activity effectively established structures and processes to introduce early warning systems (EWSs) that aimed to increase the flow of information between communities, woredas and IPs. EWS interventions

contributed to building, bridging, and linking forms of social capital between these stakeholders. However, indigenous indicators did not integrate adequately with agro-meteorological advisories, and the Activity demonstrated poor partnerships with relevant institutions mandated to collect, analyze, and communicate forecast information and advisories to end-users in appropriate formats. In the absence of greater understanding of the scientific basis for external forecast information and proper contextualization of this information to the local setting, community members tended to rely on the information they have been using for decision-making.

Sustainability of these systems is in question since the implementing partner, which plays a central role in facilitation, lacks connection to the National Disaster Risk Management Commission (NDRMC) and its regional bureaus. Although community-level data collection under two-way EWS is progressing effectively, the centrality of the DRR facilitators to this process casts doubt about the efficient functioning of the system when the Activity ends.

The use of the early warning information (EWI) by communities was not as high as the Activities targeted, likely due to the dissemination and sensitization issues, as well as the perceived level of usefulness of the information presented. Only 15.4% of REVIVE respondents report using satellite-assisted pastoral resource management (SAPARM) maps as part of their migratory decision-making. Issues with timeliness and frequency of map delivery, and the geographical area that one physical map is to be used in, contributed to the low use of SAPARM maps. Further, SAPARM maps lack important detail needed by pastoralists to make strategic decisions about migration, such as highlighting areas with different types and quality of vegetation, as well as water points and their supply. Sustainability of these systems is in question, since the implementing partner, which plays a central role in facilitation, lacks connection to the NDRMC and its regional bureaus.

Both Activities took appropriate measures to ensure that water source site selection was strategic and based on community needs, and involved the relevant stakeholders (woredas and kebele representatives, development agents (DAs), community members). A total of 57 water points were completed or slated for completion in REVIVE, and 79 water points in REAAP were receiving Activity support. In REAAP, most of the targeted water points had functioning water management committees and corresponding by-laws to govern use of the water point, and the use of the community-owned CAPs to implement NRM actions has supported effective community participation, whereby communities have contributed substantial amounts of local materials and labor.

The approach REVIVE used to leverage labor resources from PSNP, local materials from communities, and strategic inputs and technical guidance, was a successful feature in the design and implementation of water source development. Relevant stakeholders and future users of the water point were instrumental to its successful completion. Similarly, the integration with PSNP to implement watershed plans was effective, as it ensured the necessary materials, tools, and technical guidance were available to carry out the work in targeted kebeles.

REVIVE's approach to managing the enclosures created under the watershed work through cooperatives is aligned with the GoE watershed approach that supports unemployed community members to manage and utilize these rehabilitated resources. However, as enclosures are largely created on communal land, when cooperatives and their members become the sole users of this land and its resources, this could introduce conflicts between cooperative use of the land, and communal pastoral resource management.

The Activities' designs to implement WE/SILC groups in all Activity woredas in both REAAP and REVIVE successfully supported community-level cohesion through empowering women to save and access credit to support income generating activities. In REAAP, 633 SILC Groups (12,607 members, 90% women) were established, while in REVIVE, 843 WE groups were established, comprising 17,015 women. Furthermore, this component strengthened collective action in communities, which contributes to community resilience.

CMDRR had a stated objective to promote vertical integration with zonal, regional, and federal counterparts as part of their Activities, and specific activities, such as experience-sharing and stakeholder forums, were in place to engage and create mutually beneficial relationships with government counterparts. The evaluation team found that beyond the woreda level, there was little integration, as Activity efforts were guided more by practical rather than strategic considerations. The Activity increased communication and interaction between communities and woredas, increasing kebele-level vertical integration. The Activities further strengthened institutional and technical capacities for woreda administration due to the numerous capacity building events and trainings they participated in.

Q2: How, if at all, have the CMDRR Activities affected gender equity, women's empowerment and disability inclusion?

Gender Equity: Key CMDRR institutions - DRR Committees and SILC/WE groups - have promoted women's empowerment by elevating women into leadership roles, spread influence of women through horizontal linkages in the Activity, and increased community bonding and bridging capital.

Female Empowerment (Production): SILC/WE Groups have given 29,622 female members (100% of WE Group members and 90% of SILC Group members – the other 10% are men) access to new financial resources, - promoting a savings culture, supporting income-generating activities (IGAs), and strengthening emergency safety net. Through the introduction/reinforcement of complementary capacity-building activities (financial literacy, and food preparation tied to SILC and keyhole/home garden, small-scale irrigation, and IGAs linked to WE), CMDRR has increased opportunities, if not yet incomes. Despite these gains, domestic burdens (water/fuel gathering) continue to limit ability of women to engage more fully in alternative livelihoods and income generating activities.

Female Empowerment (Decision-making): Gender-based division of labor, and lack of access and control over resources continue to affect women severely. SILC/WE group FGDs and KIIs stated that perception of women as key contributors to household resilience is improving, which helps groups allocate more social resources to the challenges their communities face.

Female Empowerment (Leadership): REAAP Disaster Risk Reduction Committee (DRRC) requirements for equal membership between men and women creates a new, well received, model for participatory development. Of the 2,000 REAAP DRRC members, 1,000 are women, though the process in REAAP and REVIVE is still primarily led by men.

Inclusion: In REAAP areas, all DRR committees include at least two people with disabilities (PWDs). Partner, GoE staff, and community awareness and inclusion (through multi-media, extensive, awareness raising campaigns) of disabled people and their needs has been championed by partner Handicap International (HI), as there are no other organizations dedicating efforts to this issue. While appropriate channeling of resources to PWDs can be life-changing for individuals, evidence suggests that a relatively small number of PWDs (298) are receiving direct benefits through disability kits.

Q3: How successful were CMDRR Activities in introducing and implementing new technologies or process innovations?

The SAPARM Activity was effective in creating an EW system that supplied SAPARM maps from the IP to the 8 woredas and down to their 151 kebeles. These kebeles are home to 572,448 people. There were, however, some issues in the timelines and frequency of consistent map distribution. Woredas have currently allocated insufficient or no budget to print the maps, maintain the printers, and support dissemination of the maps to ensure sustainability. Also, the system is not yet linked to the zonal, regional and federal Disaster Risk Management Coordinators (DRMCs) for oversight and official links to the map producers. The introduction of mobile technology to disseminate the maps would support scalability of the maps.

REAAP set up the two-way EWS structure and process to facilitate the collection and dissemination of information. The evaluation team found the EWS structure to provide the necessary linkages between key stakeholders, but the number of people/institutions that the information travels through may be affecting timely receipt of messages to the community. It has been effective in increasing linkages and flow of information but has not been effective at integrating the use of indigenous indicators with scientific information. However, the transmittal of EWI through this structure does not necessarily mean that individuals will use the information for decision-making. Though the structure was in place, survey and KII/FGD data suggest that respondents have not seen sufficient value in the science-based information relative to locally available knowledge. No evidence was found connecting EWS components of the Activity to regional or federal-level DRMCs, which calls into question sustainability and scalability of the system without IP support and monitoring.

The D-RISK process was effective in creating community and woreda-level CMPs. The process was more successful in raising awareness about DRR/M and building capacity at the woreda-level, than at the community level. The process had not yet translated the CMP into woreda-level planning and budgeting processes but IPs planned activities to support this in Year 3. This process is critical for sustainability. Without the support of the IPs, the D-RISK process would likely become ineffective, and would encounter challenges in becoming scalable.

Soil and water conservation (SWC) measures, such as terracing, trenches, bunds, and micro-basins, were generally implemented correctly in terms of spacing and technical specifications in the REAAP Activity area. Historical experience and familiarity of community members, government agents, and IPs in utilizing SWC measures may account for their stronger capacity for implementing SWC measures compared to REVIVE Activity counterparts. Except for gully plugging, which was not effectively addressed, REAAP sites effectively applied technically sound physical and biological SWC structures. Program reports indicate area closures of 4,512 ha in REVIVE, and completion of nearly 1,500 km of bunds, 269 km of trenches, and 55,287 micro-basins in REAAP. Nonetheless, the Activity would be more sustainable given a watershed analysis, which would have ensured that the correct spatial and temporal application of the measures at a larger scale.

Despite prevailing lack of access to adequate and quality water sources, technical aspects of water point development and maintenance in both Activities was deemed acceptable by the evaluation team expert. Sustainability of water points will be affected by the functionality of a water management committee to support and maintain the water point over time. Though many water points did have water committees, the Activities did not systematically train these committees, which might threaten sustainability over time. Although there is a great need to scale water interventions, especially due to the prevailing drought, the cost of doing so is prohibitive without the additional support of the GoE and the donor community.

Erosion control measures applied to spate irrigation systems were effective, though there is further need to provide proper technical assistance. Regular maintenance of the irrigation canals, and use of gabion instead of loose stone, will be needed to ensure sustainability. Small scale irrigation schemes can serve as demonstration sites, to test techniques and generate interest. These demonstrations can be supported and maintained by multiple groups/farmers using generators and pumps and can be scaled up and linked to larger government programs. Adequately linking these groups to DAs and the woredas will greatly increase sustainability. There are many potential sites for spate irrigation scalability, as this is a low-cost intervention compared to small scale irrigation schemes needing much reconnaissance, a feasibility assessment, detailed design, and headwork.

A total of 3,603 keyhole gardens were promoted in REAAP. As a low-cost and water-efficient technology, keyhole gardens are an effective technology to promote in areas where land may be sparse or where water is available. Access to water and vegetable seed supply will promote sustainability of the gardens. Further, with minimal support and supervision, keyhole gardens can be easily scaled up by communities and households.

FES technology is cost-efficient and is an effective measure to improve the time poverty of women and to improve household health. Adequate linkages to market opportunities, and training and provision of stove mold or form work are necessary for sustainability and scalability.

Q4: To what extent has there been effective layering and sequencing between CMDRR Activities with other resiliency and disaster risk management efforts of the USAID, the Government of Ethiopia and other donors?

CMDRR's support for PSNP's watershed management, small-scale irrigation (more applicable in REAAP), water harvesting and conservation structures, and the Risk Financing Mechanism (RFM) (REVIVE) have enhanced the implementation capacity of local governments and communities, as well as ensuring local ownership and effectiveness of implemented soil and water conservation structures. CMDRR collaboration platforms have generally created better understanding and interaction between stakeholders. However, activities must do more to improve coordination, and ensure that cross-learning events inform programming and implementation.

PSNPs and CMDRR Activity' watershed management approach is jointly planned, implemented and monitored with woreda and Zonal Pastoral Development and Food Security Offices and DAs. There is good coordination and leverage of resources between the Activity and PSNP's watershed activities. The utility of SAPARM maps can be enhanced by local knowledge, scientific models/methods, and a robust risk mapping tool of forage, water, topographic information system data. The CMDRR Activity, despite having highly complementary goals and objectives with regional and national programs, has little or no direct linkages to regional and national DRMCs.

Despite facilitating the sharing of weather information and agricultural advisories among stakeholders, REAAP's two-way early warning system and the seasonal Multi Stakeholder Platform have resulted in a duplication of effort among REAAP and GoE institutions with respect to blending indigenous forecasting and weather and resource monitoring systems with scientific forecast information. The CMDRR Activity, despite having highly complementary goals and objectives with regional and national programs, has little or no complementarity in the same technical areas as early warning and DRR institutions.

Q5: How appropriate was the design of the CMDRR?

As a result of the implementation of a CMDRR methodology in both Activity areas, the awareness and willingness of REAAP and REVIVE community members to be active agents in reducing vulnerability and increasing resilience has increased and a strong foundation for inclusive and participatory development has been put in place. The level of community engagement in CMDRR varies with the vitality of community leaders and DRR Facilitators. The REAAP PDRA process was more participatory and comprehensive than the process undertaken in REVIVE areas. This contributed to a generally greater awareness for DRR, hazards, risks, vulnerabilities and capacities in REAAP committees.

Government and IP KIs confirm that the combination of a large geographic area with a short Activity period of performance, especially for a resiliency-focused activity, posed a challenge for even and consistent implementation of CMDRR interventions and for the generation of results related to resiliency and sustainability. The large number of kebeles (100 in REAAP, 151 in REVIVE) and modest budget per kebele, stretched Activity resources thin. Adding to this, accessibility issues in the rainy season, security considerations, difficult terrain, lack of vehicles, price of fuel, and new and reduced limits on government per diems, all limited staff, GoE and community mobility, necessitated changes in the implementation of interventions and shortened the timeframe for capturing, sharing, and learning from interventions.

Strong Monitoring and Evaluation systems in both Activities helped mitigate some of the limitations imposed by the extensive geography, limited time, and modest resources by capturing deviations from targets in a timely manner and allowing for more rapid adaptation. CRS's Simple Measurement of Indicators for Learning and Evidence-based Reporting (SMILER) system merged the monitoring tools for

all activities into one system, making it easier to conduct analysis and assess data across different activities. It was also possible to track individual beneficiaries across all activities and reduce or eliminate double counting. It requires the contribution, and regular participation of beneficiaries, Activity staff, and government partners, and increases the transparency of the Activity, which IP KIs stated improved monitoring and evaluation (M&E) capacity of these stakeholders.

Women's empowerment has been a strategic and effective way to introduce and support a variety of interventions to increase household resiliency and community resiliency, although to a lesser degree. The CMDRR approach has provided women with opportunities for greater involvement in community affairs and expanded their skills in leadership and financial and natural resource. Women have actively engaged in livelihood diversification through participation in WE/SILC Groups, though they still encounter limited ability to balance new opportunities with traditional roles.

Strong and productive relationships have been developed and promoted through the CMDRR approach, often mediated by relationships between DRRFs and DAs. These individuals and their relationships need constant reinforcement to bridge the social capital between communities and between communities and government. Lack of sufficient linkages to zonal, regional, federal is the biggest impediment to transformational change. However, the Activities have enhanced local government capacity for decision making by improving access to more information/data and support to integrate community plans with woreda-level documents and processes. As noted previously, the evaluation team could not verify how this increased capacity is being exercised beyond the woreda level.

Vertical integration of community plans into woreda-level documents has not yet taken place, and is highly dependent on support from regional and national offices. At the woreda and kebele levels, GoE integration in all planning, implementation, and monitoring activities in REAAP has built a shared understanding and platform for future collaboration. Level of day to day cooperation with GoE in REVIVE is not as extensive.

GoE partners have been included in Activity capacity building efforts, which is a positive benefit recognized by all. Circumstances outside of the control of the Activities (such as the state of emergency, drought conditions, budget issues, lack of accessibility), however, often interfere with full participation of government staff in Activity interventions.

RECOMMENDATIONS

For the upcoming CMDRR follow-on activity, the evaluation team recommends that USAID should:

1. Promote the CMDRR approach as a methodology to build the capacities of communities to plan, organize, and respond to the hazards they face. In doing so, USAID should dedicate ample time to ensuring that the community-level outputs (CAPs) are effectively and formally tied to local government processes to ensure sustainability and scalability of priority actions.
2. Support the creation and development of women-focused savings and loans groups. WE/SILC groups are an effective way to introduce savings, increase access to loans, support IGAs, improve women's confidence, and change male perceptions about the role of women in the community.
3. Build on the successful introduction of NRM technologies noted in this report, and should allocate a minimum of five years to pursue watershed activities to allow for the three steps of mobilisation, implementation, and consolidation to take place. USAID should also invest sufficient time and planning into ensuring that biological measures are in place to complement the intensive work to stabilize physical SWC structures.
4. In partnership with the Ministry of Agriculture and Natural Resources, rethink the application of watershed approaches for lowland pastoral woredas, as these areas are more suited to approaches that take into account deep-rooted and flexible customary rangeland governance systems, such as landscape or ecosystem based participatory rangeland management.

5. Design holistic, systems-based programs that favor resiliency from the outset. Support to piecemeal aspects of livelihood systems (e.g. providing improved seed, providing hardware equipment for beehives, training community animal health workers (CAHWs)) will not contribute to sustained change within that system. Rather, support to the multiple constraints within a livelihood system would better support strengthening livelihood productivity and incomes, and, in turn, household resiliency.
6. Ensure that water access and quality, are critical limiting factors across both Activity areas, are assessed and addressed as a priority intervention. More emphasis, supported by a larger financial allocation, is needed on deep groundwater sources that will provide water throughout the dry seasons.
7. Dedicate greater attention to assessing individual capacity to understand and integrate scientific information prior to introducing science-based innovations, and more closely monitor user perception and actual use of information to ensure the information meets user needs.
8. In collaboration with the GoE local authorities, ensure that mechanisms and commitments are in place to ensure that information generated from woredas is integrated into systems designed and managed at the regional, zonal, and federal levels.
9. Implementing partners invest in a robust and comprehensive monitoring, evaluation, and learning (MEL) system, as it will pay dividends throughout life of program. USAID needs to ensure adequate resources are available to develop, implement, monitor, and evaluate pilot or innovative models to provide evidence based proof of concepts to increase internal/external learning from promising interventions.

BACKGROUND

Climate variability affects all Ethiopians, but is particularly a threat to the livelihoods of the rural poor. Many studies point to the increased frequency and intensity of meteorological drought, riverine and flash floods and outbreak of human and livestock diseases in many parts of rural Ethiopia¹. Recent drought episodes, flash floods and disease outbreaks in the south-eastern parts of Ethiopia are stark reminders of how food and water security and rural livelihood strategies (pastoral, agro-pastoral and farming) are still largely dependent on the climate system and vulnerable to its seasonal variability and long-term changes.

Recognizing this, the Government of Ethiopia (GoE) developed a Climate Resilient Green Economy (CRGE) Strategy and Disaster Risk Management Strategic Program and Investment Framework (DRM SPIF) to accelerate the country's transition towards a climate-resilient, sustainable economic development pathway by addressing sustainable agricultural production, climate change adaptation, disaster risk management, and energy poverty issues.

Building on GoE's national policy frameworks, USAID designed the Community Managed Disaster Risk Reduction (CMDRR) Activity with funding from the Office of U.S. Foreign Disaster Assistance (OFDA), the Gulf Cooperation Council, and Feed the Future (FtF) to contribute to the goal of sustainably increasing household and community resilience, and reduce long-term vulnerability to climate change, climate variability and climate-related shocks and stresses in the most disaster prone 15 woredas of Oromia region. The Activity has three strategic objectives (SO), which are directly linked to the three core investment areas of its Global Climate Change Adaptation strategy:

1. *Strategic Objective 1:* Improved access to science and analysis for community- based disaster risk reduction (CMDRR) decision making.
2. *Strategic Objective 2.* Improved household and community measures to adapt to climate variability, change and resulting shocks.
3. *Strategic Objective 3.* Enhanced community DRR and climate adaptation planning and processes integrated with, and supported through GoE and other resiliency initiatives.

CMDRR contributes to improving agricultural production and productivity of staple crops and livestock, which are core objectives of the FtF strategy. It also builds the capacity of communities to prepare for and effectively manage disasters, contributing to OFDA's priority. CMDRR was launched in September 2014, and, at the time of this writing, is in its last year of implementation. The Activity is layered with USAID's Development Food Assistance Program (DFAP) and the GoE's Productive Safety Net Program (PSNP), which provides multi-annual predictable transfers, as food, cash or a combination of both, to help chronically food insecure households resist shocks, acquire assets, and become food self-sufficient.

Although CMDRR was initially designed as one activity, it was split into two awards during the procurement process: Resilience through Enhanced Adaptation, Action learning Partnership (REAAP), and Restoring Vibrant Villages and Environments (REVIVE). The Annual Program Statement did not specify funding two independent Implementing Partners with different technologies/approaches, but since innovative science-based tools are integral to the activity designs, this afforded USAID the opportunity to explore different approaches to meeting the overarching goal of increased resilience and reduced vulnerability in the targeted woredas.

¹ Aklilu, A & Alebachew A. (2009). *Assessment of climate change-induced hazards, impacts and responses in the southern lowlands of Ethiopia*. Forum for Social Studies, Addis Ababa. Federal Democratic Government of Ethiopia (Undated). *Ethiopia's Climate Resilient Green Economy: Climate Resilience Strategy for Agriculture and Forestry*. Addis Ababa. Marius Keller (2009). *Climate Risks and Development Activities: Assessment Report for a Community-Level Activity in Guduru, Oromiya, Ethiopia*. Available at: <https://www.iisd.org/cristaltool/documents/BFA-Ethiopia-Assessment-Report-Eng.pdf>

REAAP is a \$6 million Activity implemented by Catholic Relief Services (CRS) in consortium with Ethiopian Catholic Church Social and Development Coordination Office of Harrar, Catholic Organization for Relief & Development Aid (CORDAID) and Handicap International (HI). REAAP operates in six chronically drought-affected and food-insecure woredas of East (Fedis, Midhega-Tola and Meta) and West Hararghe (Mieso, Oda-Bultum and Tulo) Zones of Oromia National Regional State. The Activity aims to sustainably increase resilience and reduce long-term vulnerability of 475,000 people (95,000 directly and 380,000 indirectly) in 100 kebeles in the six targeted woredas.

REAAP's theory of change posits that communities can make better evidence-based decisions and increase resilience against shocks and stresses if they have improved access to information and knowledge of how to implement appropriate protective and adaptive activities. Further, communities with more links to their government and appropriate knowledge management systems can access more resources for evidence-based decision-making, which, in turn, help communities increased resilience (REAAP Monitoring and Evaluation (M&E) Plan). To support this theory of change, REAAP's key activities included: training government staff; forming and training DRR committees in communities, including in risk analysis and mitigation; farmer-managed seed production; small scale irrigation; watershed resource management; nutrition behavior change communication; home gardens; improved water, sanitation, and hygiene (WASH); early warning systems (EWS); and savings and loans groups.

REVIVE is a \$5.9 million Activity implemented by Project Concern International (PCI) in consortium with Agri-Service Ethiopia, Hundee and Rift Valley Children and Women Development Organization (RCWDO). REVIVE operates in nine of the most vulnerable pastoral and agro-pastoral woredas in Bale Zone of Oromia (Dewe Serer, Dawe Kachen, Rayitu, Meda Welabu, Seweyna, Lege Hida, Gura Damole, Harena Buluk and Dolo Mena). The Activity aims to reach 620,000 people across 151 kebeles.

REVIVE's theory of change proposes that community capacity building, coupled with community analysis, planning, community disaster risk reduction (DRR), and climate change adaptation leads to increased long-term community resilience to climate change shocks in drought-prone Bale Zone (Baseline Study, 2015). To support this theory of change, REVIVE's key activities included: developing woreda disaster risk profiles and kebele contingency and mitigation plans; watershed mapping; inputs to improve crop and livestock production and sales; alternative livelihoods for women; satellite assisted pastoral resource management to guide grazing migration; Dynamic Research-Informed System for Managing Risk (D-RISK), a system that aggregates data to minimize and map risk; and community Contingency Mitigation Plans (CMPs).

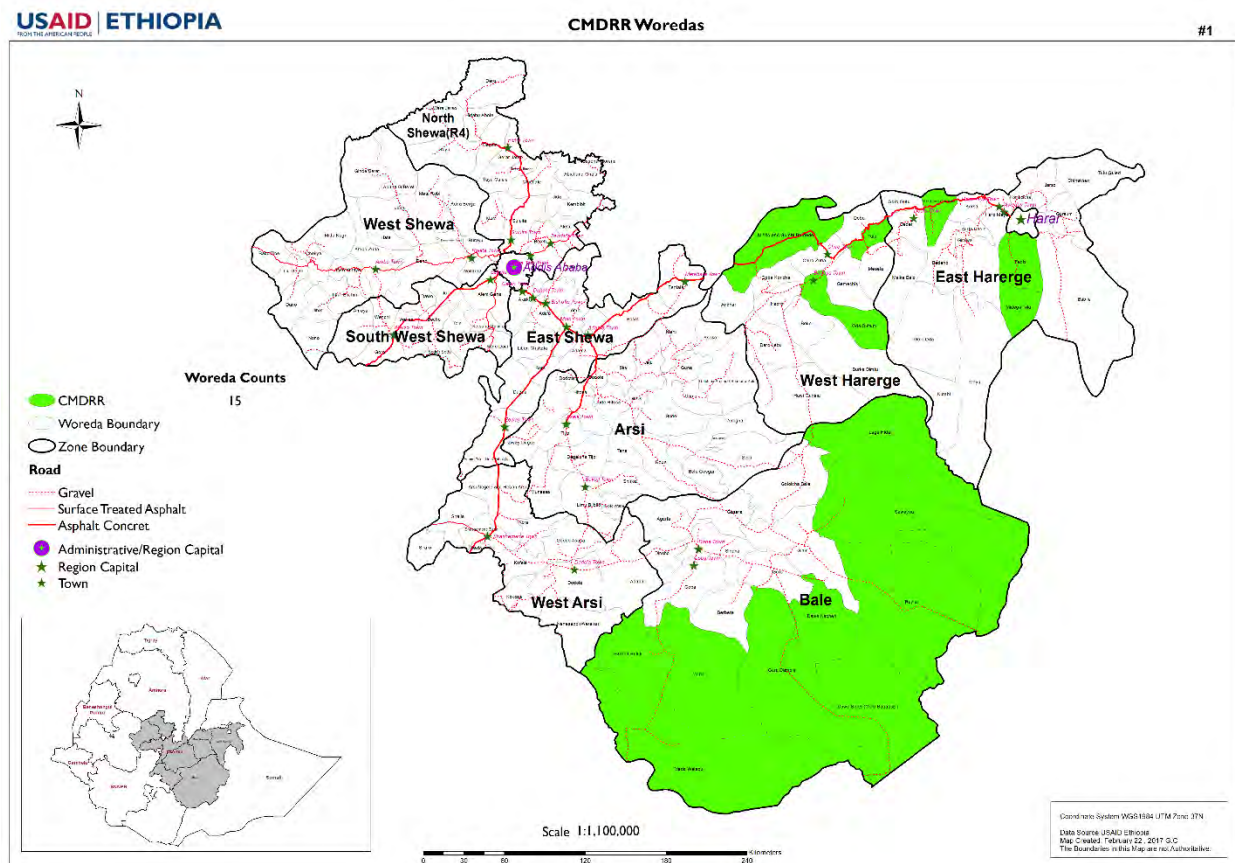
The table below summarizes the key similarities and differences between the two Activities and their approaches.

Table 1: Details of the REAAP and REVIVE Activities

	REAAP	REVIVE
Geography	6 woredas in East and West Hararghe, Oromia	9 woredas in Bale Zone, Oromia
Consortium	CRS (Prime); Handicap International, CORDAID, Hararghe Catholic Secretariat	PCI (Prime); Agri-Service Ethiopia, Hundee, Rift Valley Children and Women Development Organization (RVCWDO)
Beneficiary Population	475,000	620,000
Number of Kebeles	100	151
Funding	\$5.99 Million	\$5.88 Million
Period of Performance	10/1/14 – 9/30/17	9/15/14 – 9/14/17

Goal	Communities of East and West Hararghe have sustainably increased resilience and reduced long-term vulnerability to current and future climate change and climate-related shocks and stresses.	Increased long-term community resiliency to climate change and climate-related shocks in drought-prone zones of Oromia.
Intermediate results	1. Communities have improved access to technical information and analytical tools for decision-making 2. Communities identify and implement actions that increase resilience to climate variability, long-term climate change, and climate-related shocks 3. Systems for planning, implementation, monitoring and evaluation around DRR and climate change adaptation are established and strengthened through working with government and other stakeholders	1. Improved access to science and analysis for community-based DRR decision-making 2. Improved household and community measures to adapt to climate variability, change, and resulting shocks 3. (Cross-cutting) Enhanced community DRR and climate adaptation planning and process integrated with, and supported through GoE and other resiliency initiatives

Figure 1: REAAP and REVIVE Activity Areas (REAAP areas are in East and West Hararghe; REVIVE areas are in Bale Zone)

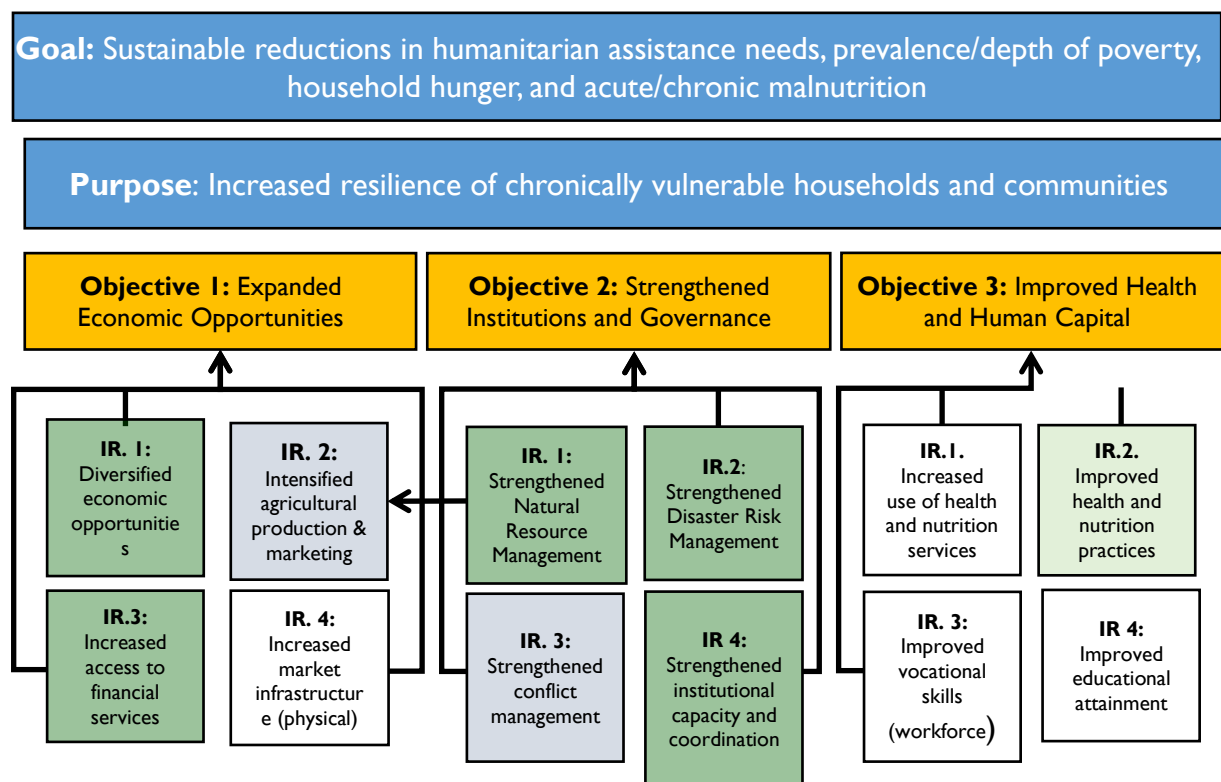


This report presents the results of the final performance evaluation of CMDRR, conducted by the Ethiopia Performance Monitoring and Evaluation Service (EPMES) Activity implemented by Social Impact, Inc.

CMDRR EVALUATION CONCEPTUAL FRAMEWORK

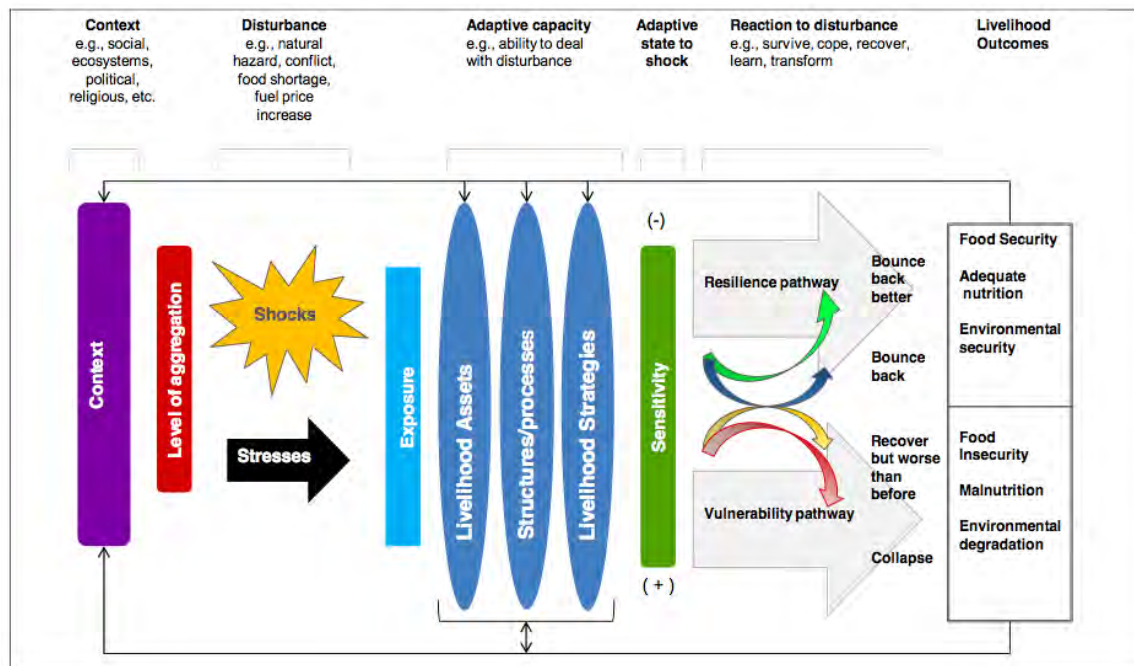
The Activities were designed to increase household and community resilience, which fits within USAID's larger Regional Resilience Strategy (figure below) implemented across the Horn of Africa. The resilience framework explained herein was used to guide this evaluation's conceptual approach.

Figure 2: **USAID’s Regional Programmatic and Results Framework to Building Resilience to Recurrent Crises**



USAID defines resilience as “the ability of people, households, communities, countries and systems to mitigate, adapt to and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth” (USAID, 2012, *Building Resilience to Recurrent Crisis*). To better unpack and understand how to view the concept of resilience, this evaluation will use the globally accepted resilience framework by Frankenburger (2013) below:

Figure 3: Disaster Resilience Framework



Source: TANGO 2012. Adapted from DFID Disaster Resilience Framework (2011), TANGO Livelihoods Framework (2007), DFID Sustainable Livelihoods Framework (1999) and CARE Household Livelihood Security Framework (2002).

This evaluation uses the above framework to examine:

- Resilience for whom (context): farming, agro-pastoral, pastoral / women & disabled focus
- Resilience of what (level of aggregation): households and communities / livelihood systems, DRR systems
- Resilience to what (shock/stress): variable weather (drought), ecological degradation
- Resilience through what (absorptive, adaptive, and transformative capacities): outcome-based capacities (change in exposure and sensitivity to reduce vulnerability)

Within this framework, vulnerability is determined by the relative exposure and sensitivity of the target groups to the shock, or, in this instance, drought. Both REAAP and REVIVE Activity outputs and outcomes respond directly to decreasing the exposure and sensitivity, or vulnerability, of the target groups to the shock. This is accomplished by ensuring that capacity is being built at the absorptive, adaptive, and transformative levels, and is directly addressing this vulnerability. As per the framework, the Activity seeks to strengthen disaster resilience outcomes through (1) adapted livelihoods, (2) revitalized natural resource base, and (3) reduced vulnerability to shocks and stresses.

EVALUATION PURPOSE AND QUESTIONS

The main purpose of this performance evaluation was to examine the resiliency and disaster risk reduction outcomes of CMDRR, determine the overall effectiveness of the interventions and partnerships, and generate learning that will contribute to the design of future similar Activities and the update of USAID/Ethiopia's CDCS in 2017. This evaluation also provides lessons learned to the GoE's CRGE and DRM-SPIF strategies and the broader development community.

To fulfill this purpose, this report addresses the following evaluation questions:

1. To what extent have household and community resiliency to climate change, variation and climate-related shocks been changed due to CMDRR Activities in the target area? To answer this question, the evaluator is expected to take following aspects into a consideration:
 - a. Changes in household resiliency and vulnerability to climate change, variation, and climate-related shocks when compared to the baseline metrics.
 - b. Changes in the community resilience to climate change, variation, and climate-related shocks by evaluating design, implementation and management aspects of common assets and community systems (such as early warning system and community platforms) when compared to the baseline metrics.
 - c. Contributions of each three strategic objectives (SO) and different interventions under the SO's into the overall goal of household and community resiliency building.
2. How, if at all, have the CMDRR Activities affected gender equity, women's empowerment and disability inclusion?
3. How successful were CMDRR Activities in introducing and implementing new technologies or process innovations? To answer this question, the evaluator is expected to consider effectiveness, sustainability, and scalability of these new technologies and process innovations.
4. To what extent has there been effective layering and sequencing between CMDRR Activities with other resiliency and disaster risk management efforts of the USAID, the Government of Ethiopia and other donors (e.g., PSNP/DFAPs, Woreda Disaster Risk Profiling and Joint Emergency Operation Program (JEOP))? To answer this question, the evaluator will assess following aspects:
 - a. Effects of types and levels of layering and sequencing on CMDRR Activity results.
 - b. Duplication or complementation of efforts in same technical area in the same geographical region.
 - c. Appropriateness and effectiveness of the layering and sequencing² to achieve resiliency, climate change adaptation and disaster risk reduction objectives.
5. How appropriate was the design of the CMDRR? Specifically, evaluators should assess the following aspects to answer this question and make recommendations:
 - a. Appropriateness of the design of the set of interventions to achievement of the Activity's Objectives.
 - b. Appropriateness of the geographical coverage in terms of different livelihoods such as pastoralist, agro-pastoralist, agricultural, lowland and highland zones for the proposed interventions.

² Layering involves geographic and programmatic overlap and collaboration of its activities. Sequencing is an approach that helps vulnerable populations towards a pathway from their current status to expanded assets, enhanced resilience capacities, improved technical knowledge and skills, and greater confidence to engage in risk taking or transformative activities.

- c. Appropriateness of the Activity period to sufficiently achieve the Activity's intended results.
- d. Pros and cons of having two awards for one Activity in terms of Activity management, cost, promoting innovations and cross learning.

EVALUATION APPROACH AND METHODS

The CMDRR Final Evaluation is a mixed methods evaluation in which findings are derived from: a desk review of REAAP/REVIVE programmatic, financial, and monitoring documents; USAID strategic and programmatic documents related to DRR and Resiliency; documents from the GoE and partner institutions sharing DRR and Resiliency goals; key informant interviews (KIs) with a wide range of partners, stakeholders, and beneficiaries; focus group discussions (FGDs) with strategically selected groups of beneficiaries in the field; a quantitative endline survey designed as a follow-on to the baseline survey conducted during the first year of both Activities; and site observations to assess the quality of implementation of physical natural resource management (NRM) interventions, including water, in the REAAP and REVIVE Activity areas.

The evaluation examined the results of CMDRR-supported interventions based on three key dimensions: effectiveness, sustainability and scalability of the two Activities:

- *Effectiveness* assessed the added value of CMDRR outputs for beneficiaries and their consistency with program objectives;
- *Sustainability* assessed whether any changes realized are likely to be stable over the time, and whether the partners, local governments, and communities are sufficiently involved in Activity activities to take the necessary measures to continue the realization of outcomes after the Activities end;
- *Scalability* assessed the potential for and capability of local government expansion of DRR activities to new areas to reduce vulnerability and increase resilience of a larger and more diverse population.

These cross-cutting criteria were applied to qualify outcomes across the two implementation strategies based on the evidence of data, and to generate results, conclusions, and recommendations regarding their relative contributions to promoting resiliency.

Desk Review

The team conducted a desk review of secondary materials prior to fieldwork. These included: USAID strategic documents related to DRR and Resilience programming, Gender, Food Security, and Climate Change; Performance Management Plans for the CMDRR Activity and evaluations of relevant USAID programs; REAAP and REVIVE-specific program descriptions, M&E plans, monitoring reports, technical assessments, and baseline surveys; Government of Ethiopia strategy and policy documents from programs relevant to DRR, such as DRM and PSNP, including zonal and woreda-level guidelines, where available, other information related to donor DRR activities in the CMDRR area of operation. These sources helped frame the design of the evaluation. Findings from these sources are included in this report to supplement primary data collected through KIs, FGDs, site observations, and an endline household survey (see Annex 13 for full list of documents reviewed under the desk review).

Quantitative Methods

A population-based household survey was conducted to measure the performance of CMDR on key indicators. Both REAAP and REVIVE conducted baseline studies in April and May 2015, respectively.

REAAP's baseline used a stratified sampling approach, first by randomly selecting 20 kebeles from all targeted kebeles in the six Activity woredas, then randomly selecting villages within kebeles, and, finally, randomly selecting households within villages. REAAP calculated the baseline sample size using a Design Effect of 2 and conservative values (.45 and .55) for the expected proportions of any given indicator at baseline and endline. REAAP calculated the baseline sample size to be 680 respondents/households, and they successfully achieved the target sample interviews.

REVIVE's baseline purposively selected four of the seven target woredas to represent the different livelihood zones (pastoral versus agro-pastoral), crop types and water resources that were common in Activity areas. Within these four woredas, 30% of the kebeles were randomly selected, and within each kebele, 30% of the villages were randomly selected. Finally, households within these target villages were randomly selected using systematic random sampling. REVIVE calculated the baseline sample size of 1,434 using a Design Effect of 3. from the achieved sample size was 1,438 respondents.

The endline survey targeted, to the extent possible, the same kebeles where the baselines were conducted, and used the same sample sizes to make the methods at endline as comparable to the baseline as possible. Seven kebeles from the REAAP Activity surveyed during baseline did not receive CMDRR interventions, and so were not included in the endline evaluation. Instead, seven comparable kebeles with similar livelihoods and that received the CMDRR interventions were included in the sample. Within kebeles, villages were selected from the administrative lists. In REAAP areas, 39 households were interviewed per kebele. In REVIVE areas, the sample was half of the villages per kebele (see Annex 7 for a full list of woredas in the sample and kebeles/respondents per woreda). Enumerators sampled respondent households in each kebele on location using an on-site systematic random sampling methodology. The achieved sample size was 2,228: 780 households in REAAP areas and 1,448 in REVIVE area which is equal to the calculated sample size used during the baseline (slightly higher than the sample size of 2,118 at baseline: 680 in REAAP areas and 1,438 in REVIVE areas, adjusted after Social Impact's recalculation of sample sizes; see Annex 2).

Table 2: Demographic snapshot of REAAP and REVIVE household surveys

DEMOGRAPHIC INDICATORS		REAAP		REVIVE	
		BL (%)	EL (%)	BL (%)	EL (%)
Respondent sex					
	Male	50.6	53.2	48.2	50.8
	Female	49.4	46.8	51.8	49.2
Respondent Relationship to Household Head					
	Head of Household	-	61.5	-	60.7
	1 st wife	-	37.9	-	34.2
	2 nd , 3 rd wife	-	0.4	-	4.2
	Son or daughter	-	0.1	-	0.7
	Brother or sister of household head/spouse	-	0.0	-	0.1
	Other relatives	-	0.0	-	0.1
Respondent Marital Status					
	Married (monogamous)	-	91.9	-	78.5
	Married (polygamous)	-	1.4	-	13.4
	Single	-	0.3	-	0.8
	Divorced or separated	-	1.3	-	1.5
	Widowed	-	5.1	-	5.8
Respondent Education					
	No Education	-	65.1	-	48.8
	Can read or write	-	2.4	-	4.7
	Grade 1-4	-	15.1	-	27.7
	Grade 5-8	-	13.5	-	15.2
	Grade 9-10	-	3.6	-	3.0

Grade 11-12	-	0.1	-	0.2
Vocational Education	-	0.1	-	0.1
University	-	0.0	-	0.3
Average Respondent Age (years)	37.0	36.3	35.9	36.2
N	680	780	1,438	1,440

Table 2 above details the REAAP and REVIVE household survey samples' key demographic indicators. Respondents were evenly divided between male and female, and were of similar age at both baseline and endline. Most respondents were the heads of household (60.7-61.5%) or first wife (34.2%-37.9%). A substantial share of respondents (48.8% in REVIVE, and 65.1% in REAAP sites) reported having no education, and very few respondents had completed secondary school.

Data collection took place from March 13 to April 1, 2017. Social Impact's local data collection partner, the Sub-Saharan Africa Research and Training Center (SART), collected the household survey data.

The evaluation team designed the endline questionnaire by merging the REVIVE and REAAP baseline questionnaires and adding questions for key evaluation indicators that the baselines did not measure. The analysis in this report standardizes the baseline data between the two Activity areas to the extent possible. Because the two baselines did not match completely, some indicators have baselines from only one Activity area. The evaluation team disaggregated all data by Activity area while conducting the analysis, and, where relevant differences exist, presents that disaggregation in the baseline/endline comparisons throughout the report to ensure that differences between baseline and endline can be disentangled from differences by geography or Activity.

Qualitative Methods

FGD participants and key informants were purposively selected. With the exception of some KIIs conducted in Addis Ababa, all other KIIs and FGDs were conducted in a sample of areas where the household survey was done, balancing between the agricultural and pastoral areas. Details of the field plans are found in Annex 5. The evaluation team conducted 35 KIIs and 19 FGDs. KIIs covered community volunteers and Development Agents, local, regional and national government officials, Activity staff, and other donors or experts related to DRR. FGDs targeted Activity beneficiaries of all the major REAAP and REVIVE Activities. With the assistance of Activity staff, the evaluation team invited FGDs to include direct participants in CMDRR Activities, and attempted to reach a balance of men and women in each group, and include at least one person with disabilities (PWD), elders, youth, and customary/traditional authorities or experts.

A list of people interviewed is included as Annex 7.

Table 3: Type of FGDs and Numbers of Participants

FGD TYPE	REVIVE # FGDs	Participants			REAAP # FGDs	Participants			TOTAL # FGDs	Participants		
		F	M	T		F	M	T		F	M	T
Women Empowerment Groups	2	20	0	20	n/a	n/a	n/a	n/a	2	20	0	20
DRR Committees and Community Members/Early Warning Committee	4	6	35	41	4	15	21	36	8	21	56	77
Watershed Committee/water management committee	2	4	14	18	2	3	8	11	2	7	22	29
Pastoral-customary/NRM	2	2	8	10	1	5	5	10	3	7	13	20
SILC/Fuel Efficient Stove Group Members	n/a	n/a	n/a	n/a	3	40	n/a	40	3	40	0	40
Seed Producer Group	n/a	n/a	n/a	n/a	1	1	10	11	1	1	10	11
Total	10	32	57	89	11	64	44	108	21	96	101	197

The evaluation team developed separate interview guides for each target group through a multi-stage process of developing sub-questions to each evaluation question, separating out the ones that required qualitative data to answer, determining which stakeholders were best placed to answer these questions, and developing open-ended, non-leading questions designed to solicit answers to the evaluation and engender rich discussion.

The evaluation team developed seven site observation checklists to evaluate the quality of NRM interventions and other CMDRR-supported processes/technologies. While in the field, the list was expanded to eventually include hillside/eyebrow terracing/ micro basin; nursery; seedling planting; fuel-efficient stoves (FESs); Irrigation from small springs/streams; spate irrigation systems; improved seed; bee keeping; and keyhole gardens.

Prior to data collection, the evaluation team pre-coded the qualitative instruments in electronic question guides, adjusting codes in the field as necessary. The evaluation team then placed all major findings under each evaluation question into a spreadsheet and used this tool to identify the most common themes that emerged from the FGDs and KIs.

Gender and Social Analysis

This evaluation assessed CMDRR's results on gender and disability inclusion. A subset of FGDs focused on specific aspects of the Activity that target women (e.g. DRR Committee governance, savings and loans activities and water and fuel collection), and all FGDs included questions related to gender, PWD and other vulnerable social groups. As an important indicator of women's household empowerment, the household survey included a module on gendered household decision-making. During data analysis, the evaluation team disaggregated both quantitative and qualitative results by gender and other social groups to ensure that the experiences of women, PWDs, and other vulnerable groups affiliated with the activity are transparently documented, as well as to better inform the evaluation's recommendations to USAID.

LIMITATIONS

Baseline comparisons: REVIVE and REAAP employed different methodologies and structures for their baseline surveys. Consequently, not all key endline indicators align directly with REVIVE and REAAP baseline data, and some indicators do not allow for cross-Activity comparison. To the extent possible, the evaluation team has standardized indicators in the two baseline datasets and the endline dataset to better

facilitate comparisons between time periods and CMDRR Activities. Where data cannot be standardized, the report utilizes secondary data, qualitative data, and presents results of different indicators for different areas. While sampling methodologies differed between the two baselines, there is no indication that these differences systematically bias results that produce differences between the two Activity areas. REAAP sampled kebeles differed between baseline and endline; to mitigate the influence of this on results, the evaluation team purposively made replacements with alternate kebeles, which were as comparable to baseline areas as possible.

Attribution: The baselines and the endline did not include a comparison group (a group not participating in CMDRR Activities). Consequently, while this evaluation measures change in key indicators over time, any increases or decreases in reported outcomes cannot be attributed to CMDRR Activities. In addition, the existence of other interventions from other development partners or from the Government of Ethiopia may have influenced the observed results. Therefore, this evaluation presents quantitative results in the context of qualitative explanations to better understand the extent to which CMDRR may have contributed to any measurable changes, though the evaluation cannot quantify changes due to CMDRR.

Activity contexts: REVIVE and REAAP operated in very different contexts, including experiencing different impacts from climate change over the course of the Activity. Consequently, both CMDRR Activities are unlikely to see the same degree of change in outcomes, nor would the same set of activities or recommendations be appropriate for both Activities. While this evaluation makes comparisons in interventions and outcomes where possible, the analysis in this report is sensitive to the differences between Activity areas.

Translation: The team employed local Afan Oromo interpreters for assistance with the FGDs, and relied on their local knowledge, translation and interpretation skills for accurate capture and documentation of participant responses. Time constraints during some of the FGDs and interviews meant that members of the evaluation team who were not speakers of Afan Oromo may have missed opportunities to guide the discussion to cover desired topics.

Involvement of Implementing Partners: Due to geographic isolation and security considerations, the evaluation team relied on implementing partners (IPs) for support during fieldwork, including organizing the FGDs and making introductions for KIs. This may have made it difficult for some respondents to see the evaluation as independent, and consequently may have influenced participant responses. To mitigate this bias, the evaluation team stressed the independent nature of the evaluation, and ensured that REAAP nor REVIVE Activity staff would be at the interviews; that respondents' feedback would not influence their receipt of future activity benefits; and the anonymity of evaluation reporting.

Activity Timeframe: The three-year timeframe for the CMDRR Activity limits the ability of the evaluation team to make some judgements related to the sustainability of interventions, especially when new knowledge and technologies are being introduced. The evaluation documents changes in attitudes and behaviors, including the adoption of improved practices, but must be measures in assessing sustainability of these practices.

Security and Travel Restrictions: Due to the on-going State of Emergency in Ethiopia, and specific security risks in some of the project's operational woredas, the evaluation team's travel was restricted in several ways. During the evaluation team field visits, REAAP and REVIVE IPs provided timely guidance to the team about the existing security landscape. First, not all baseline kebeles in REAAP and REVIVE areas were plausible for the evaluation field visit and the endline survey because of the possible security risks to enumerators and the evaluation team. SART replaced conflict kebeles with comparable kebeles during the data collection phase; however, being able to sample from the same kebeles would have been the best practice to maximize comparability between baseline and endline and minimize bias due to unobservable variables. Second, the expatriate members of the evaluation team stayed in-country for only 42 days due to visa restrictions, while the evaluation statement of work (SOW) had envisioned a 75-day period for

the inception, fieldwork, analysis and presentation phase. This gave the evaluation team overall a more constricted schedule for planning, data collection and the initial analysis phase.

FINDINGS AND CONCLUSIONS

OVERVIEW

This section address the key findings under each evaluation question, and then details the conclusions that stem from these findings as is relevant to addressing the evaluation questions. The table below presents REAAP and REVIVE's key performance indicators, and their performance at baseline and endline.

Table 4: Summary of REAAP and REVIVE's baseline and endline performance indicators

BASILINE INDICATOR	Baseline	Endline
REAAP		
Number of stakeholders with increased capacity to adapt to the impacts of climate change as result of USG assistance (GCC), disaggregated by:		
Using climate change information in their decision making ³	54.7%	22.9%
Implementing risk reducing practices/actions to improve resilience to climate change ⁴	56.2%	22.9%
With increased knowledge of climate change impacts and response actions	74.7%	71.7%
Percent of beneficiaries reporting their livelihoods restored within three to six months after receiving support (OFDA). 306 End line asked: "After the impact of the disaster, how many months had it taken/will it take the household to recover from the impact of the most recent disaster?"	w/out external assistance: 11.5 months with external assistance (PSNP): 4.45 months	w/out external assistance: 42.1 months with external assistance (PSNP): 27.3 months
Percent of community members who received at least one early warning message from at least one source prior to a disaster occurring (OFDA).	Question not asked in end line	
Number of farmers and others who have applied improved technologies or management practices as a result of USG assistance (FtF). 317-320	30.4%	79.4% (REAAP self-reported)
Number of institutions with improved capacity to address climate change issues as a result of USG assistance (GCC indicator).	40	190 (REAAP self-reported)
REVIVE		
Percent of households who owns livestock. EL	56.2%	90.0%
Percent major reasons for livestock loss by households	Pasture: 74.1% Water: 63.4% Disease: 80.0% Theft: 39.9%	Pasture: 60.7% Water: 31.0% Disease: 34.5% Theft: 7.4%
Percent of households experienced crises in last 5 years, that led to loss of income and assets.	no baseline	85.4%
Percent of different sources of information that guided the livestock movement (based on all)	Previous experience: 47.7% Scout reports: 70.4% Other Informal Sources: 6.7% Other: 6.4%	Previous experience: 27.9% SAPARM: 0.4% Scout reports: 0.1% Other Informal Sources: 12.8% Other: 0%

³ The endline value for this indicator is significantly lower than the baseline value. While we do not have strong evidence for this decline, the evaluation team considers that the difference in the data collection approach between the baseline and the endline may explain this discrepancy. Baseline data were collected by the Activity staff, while the endline data were collected by an independent firm. It is difficult to guarantee that the question was conveyed to the respondents in the same way and with the same meaning between the baseline and the endline. Additionally, the Implementing Partner informed the evaluation team that information and planning of climate change interventions was more focused on community leaders than the households. Consequently, exposure to and use of climate information had a community focus than an individual or household focus had more

⁴ Same explanation is possible for this also

Percent of the common water sources for people and livestock consumption, by source.	Protected water distribution point: 13.8% Unprotected well: 24.8% Protected well: 4.7% Protected spring: 2.4% Unprotected spring: 12.8% Pond: 11.5% River: 29.8% Roof water: 0.1%	Protected water distribution point: 21.0% Unprotected well: 13.4% Protected well: 22.7% Protected spring: 3.7% Unprotected spring: 7.4% Pond: 4.4% River: 27.4% Roof water: 0%
Percent of households applied new technology or new management practices in last 3 years	14.4%	43.0%

EVALUATION QUESTION I

To what extent have household and community resiliency to *climate change, variation, and climate-related shocks* been changed due to CMDRR Activities in the target area? To answer this question, the evaluator is expected to take following aspects into consideration:

Q1.1 Changes in household resiliency and vulnerability to climate change, variation, and climate-related shocks when compared to the baseline metrics.

To capture the multi-dimensional nature of resilience, the evaluation team examined this evaluation question across three focal areas: (1) income and food access, (2) assets, and (3) adaptive capacity.

(1) Income and food access

Increase in livelihood productivity and food availability: REAAP and REVIVE conducted activities to strengthen the productivity of existing crop and livestock livelihoods. Verified through FGDs and KIIs, REAAP activities included the introduction of improved seed varieties, the promotion of crop production/post-harvest technologies, haymaking and preservation activities, the promotion of key-hole gardens and homestead vegetable production, training on livestock marketing, health and management, support to irrigation systems, and training in food preparation and preservation. In REVIVE, the evaluation team documented Activity support for irrigation systems for selected women's empowerment (WE) groups, training Community Animal Health Workers (CAHWs), NRM scout training in Climate Smart Agriculture and rangeland management, PSNP participants, and food-for-work payouts. These groups are detailed in Annex I.

Due to delays in both REAAP and REVIVE implementation, the above activity components were ultimately implemented in certain communities only, such that households directly affiliated with activities would be more likely to report change in agricultural practices than other households. The implementation plans did not, however, specify that these activities were to be implemented only in certain areas. Because these activities were not rolled out at the same time, they have taken different amounts of time to get established and generate results. This is evident in the endline responses concerning improvements in crop production: a small percent of respondents reportedly irrigated their crops (8.8% of respondents who cultivated crops at baseline in REAAP areas, and 6.8% at endline). In REVIVE areas, 5.2% of respondents who cultivated crops reported irrigating at endline (the question was not asked in the REVIVE baseline). The area of land under irrigation rose slightly in REAAP areas from 0.23 hectares to 0.29 hectares per respondent.

At endline, 40.7% of respondents reported knowing where to purchase improved seeds: 50.2% in REAAP areas, versus 35.2% in REVIVE areas. Mainly, respondents named certified suppliers as a source of improved seeds in REAAP areas (69.0% of those who knew where to purchase improved seeds)⁵, while REVIVE area respondents were more likely to name the informal market (38.9%) than certified suppliers (35.3%).

Table 5: REAAP and REVIVE endline survey respondents on knowledge of improved seed source

SOURCE OF IMPROVED SEEDS	REAAP	REVIVE	TOTAL
Informal market	10.4%	39%	26.1%
Certified suppliers	69.0%	35.3%	50.6%
Research institute	12.2%	17.0%	14.9%
Other	8.3%	8.6%	8.5%
N	384	464	848

In REAAP areas, people reporting use of farming/livestock inputs rose from 22.7% at baseline to 78.7% at endline (the share of respondents in REVIVE areas was 56.8% at endline). Among all input types, the only inputs whose usage increased were animal feed and veterinary drugs and vaccines: 15.3% to 25.4% of REAAP area respondents, and 18.4% to 30.1% of REVIVE area respondents. The share of respondents reporting use of other inputs⁶ decreased 5-10% from baseline to endline.

At baseline, REAAP households reported experiencing 7.5 months without sufficient food in the past year, which decreased to an average of 5.9 months at endline. In REVIVE areas, households reported an average 4.8 months of insufficient food in the past year at baseline, which increased to 6.6 months at endline, indicating that the year prior to the survey had left households more food insecure than usual. In 2015/16, the affects of the El Nino left 10.2 million⁷ food insecure while the current drought has impacted 7.8 million⁸ people across Ethiopia (including in parts of Bale Zone) who are currently receiving humanitarian food assistance. FGD and KII respondents repeatedly mentioned the toll that the drought has taken on food supply from poor or failed harvests, corroborating survey respondents' reports of increased food insecurity in REVIVE areas. In REAAP 254,934 people (131,644 Male, 123,290 female) were beneficiaries of food assistance in four woredas of REAAP intervention areas out of the total six woredas. In REVIVE areas, information available from the Implementing Partner shows that 300,000 beneficiaries were initially beneficiaries of emergency food relief, but during the activity period, the Federal Government requested resources to provide assistance to an additional 164,000 people, out of which resources for 99,000 people were approved for a total of 499,000.

All REVIVE woredas, and four of the six REAAP woredas, are considered pastoralist or agro-pastoralist, whereby communities' livelihood primarily depends on livestock. Therefore, livelihood productivity in these communities is closely related to the share of households who own livestock. The endline survey revealed that livestock ownership narrowly decreased in both activity areas: from 97.1% to 94.0% in REVIVE areas, and from 92.6% to 88.6% in REAAP areas. Again, KII and FGD participants consistently spoke of the effects of the drought, particularly noting how poor pasture and water supply negatively impacted livestock health and productivity.

The endline survey also elicited information on household livestock diversification. The percent of REVIVE area respondents reporting current ownership of one to two types of livestock increased since the start of the Activity, while the share of respondents reporting three types of livestock decreased during this

⁵ Options included from formal seed supplier, informal market, research institutions, or other.

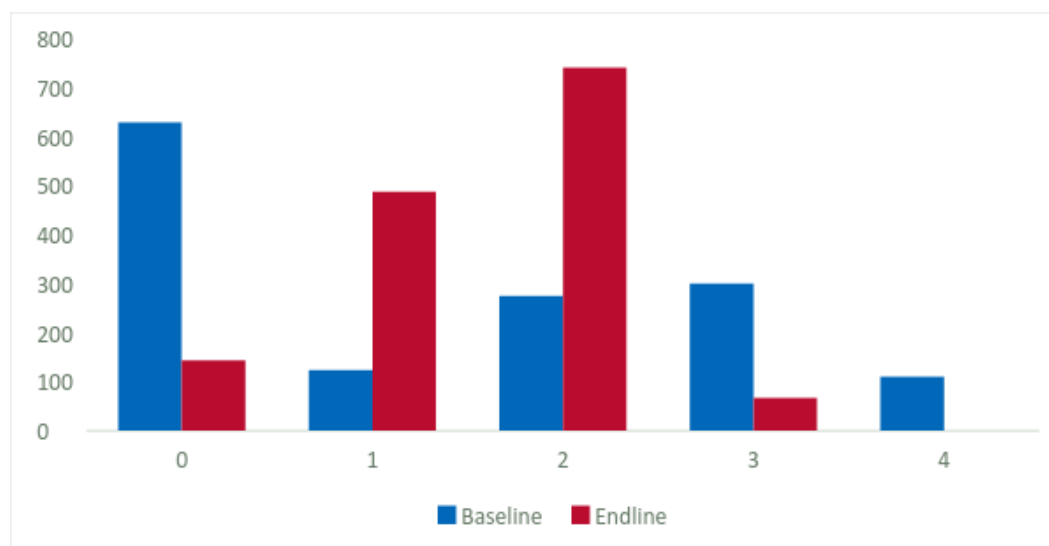
⁶ Other inputs refers to: organic fertilizers (manure, compost, etc), inorganic fertilizers, insecticides & fungicides, pesticides, and improved/cross breed animals

⁷ <http://reliefweb.int/sites/reliefweb.int/files/resources/FAO-Ethiopia-ElNino-Response-Plan-2016.pdf>

⁸ <https://www.usaid.gov/ethiopia/food-assistance>

same time. These results reveal an overall increase in the number of households owning livestock, potentially a coping strategy, among respondents reporting no livestock at baseline, as shown in Figure 4. The decreases in income over the last three years shown in Table 6 may explain why fewer households report owning three or more livestock.

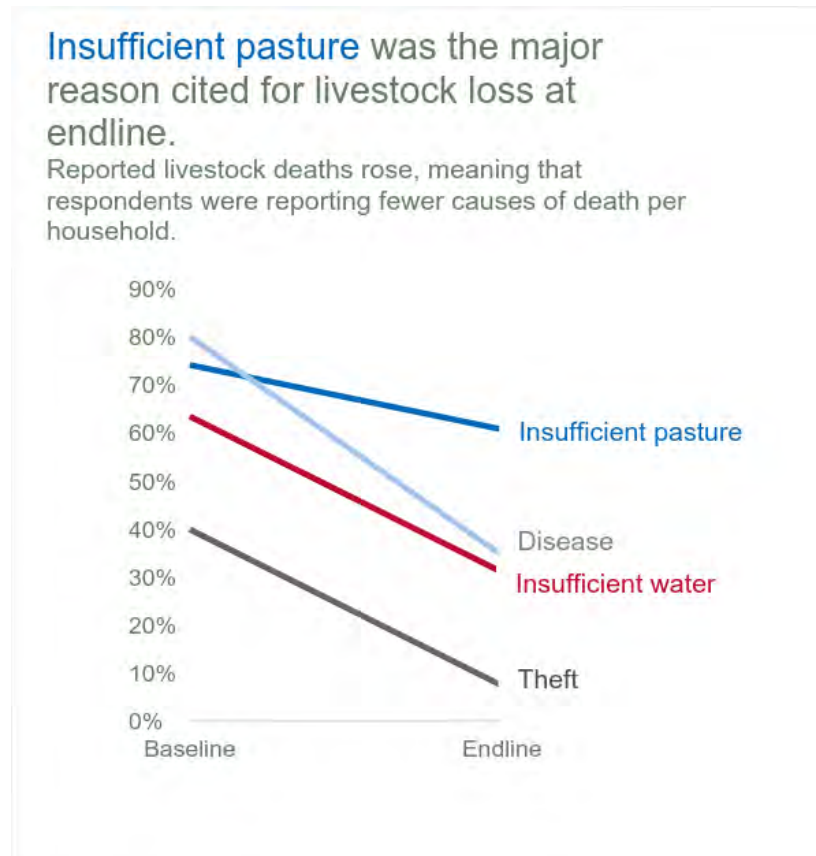
Figure 4: Number of livestock types reported at baseline and endline (REVIVE household survey)



The endline survey revealed an increase in the percent of respondents reporting losses in livestock within the last three years, from 12.9% to 36.9% in REAAP areas, and 52.9% to 63.3% in REVIVE areas. Respondents from community field visits and woreda KIs blamed livestock reduction on the drought, which the evaluation team directly witnessed during visits to homesteads with dying livestock. In REVIVE, Rayitu woreda records reported 1,074 livestock deaths due to the drought between December 2016-March 2017. With respect to REAAP, woreda authorities in Mieso (W. Hararghe) reported the death of 10,000 cattle last year alone, which they claimed are documented in official records; however, the evaluation team was unable to get access to the official records while at the site.

Figure 5 shows that environmental factors, particularly poor pasture followed by livestock diseases, were the largest reported contributors to livestock loss while at baseline, these factors were reversed in terms of larger risk. This can be explained by the detrimental impact the drought has had on pasture availability for communities. Livestock assets may not necessarily represent a net improvement in household well-being during periods of drought; livestock becomes a household liability when feed resources are scarce, access to quality medicines against animal diseases is poor, and there is low awareness of about herd management and destocking.

Figure 5: Major reasons for livestock loss (by %) (source: endline survey)



Increase/diversity of income streams: In the efforts to increase income and income stream diversity, both activities supported strengthening household-level savings and loan capacities through the Women Empowerment (WE) and Savings and Internal Lending Committee (SILC) groups. Overall, REVIVE established 867 WE groups (17,015 women), and REAAP created 633 SILC groups with 12,607 members (11,340 women; 26 PWD). The groups provided a tool through which women could save and access loans to pursue income-generating activities. Both REAAP and REVIVE planned to link Group income-generating activities (IGAs) to market opportunities. However, only 6 of the planned 35 FES groups in REAAP were ultimately linked to market opportunities, and no beekeeping, incense, or aloe soap groups under REVIVE had been linked to market actors at the time of this writing. Reasons for this include: products of new groups were not yet ready for market (beekeeping); activities could not identify appropriate market demand (bee keeping, aloe soap); a lack of diverse actors to which groups could link (incense); and market linkage strengthening is planned for Year 3 (FES). Annex 1 provides a list of group IGAs supported under REAAP and REVIVE.

For individuals in groups, REAAP M&E data show 3,227 SILC members (2,946 females) from 235 groups are participating in income generating or livelihood support activities, including: small ruminants (goat/sheep) fattening, rearing and trading, petty trading, selling vegetables crops, selling grains, consumer goods, poultry and poultry product selling, and selling snacks and cooked foods, renting land for farming, and purchasing seed. For REVIVE, 5,016 members from 150 groups are participating in petty trade, livestock fattening, bulking products locally and selling in market, and buying products in bulk and selling locally were common income generating activities that participants undertook through loans from WE/SILC groups. KIIs and FGDs both frequently detailed positive change from the IGAs:

“The habit of savings has changed, in previous times, the men/husbands only do business activity alone but now there is savings that comes from the women, it has proven to be fruitful for the household as now husbands and wives are helping each other.” -Lega Hida

“The livelihood diversification activities (petty trading, goat rearing) are improving women’s incomes and strengthening their social position in the community.” -Rayitu

Participants in other FGDs spoke about the limitations of group funds for loans. A WE group in Dola Mena Woreda commented:

“WE group contributions are small and the amount of money that can be given as loan is not much, ETB 1,000 (~\$43). Although encouraging results are being seen in the livelihood strategies of few members, the results are not that great.” Dola Mena

Despite these gains for SILC/WE group participants and PSNP beneficiaries, the majority of households reported that overall household income has declined in past years, particularly worsening over the course of the Activity period. Across both activities, 85% of respondents reported a decrease in overall income in the past three years, up from 64% of all respondents at baseline. Income reported specifically from agricultural and pastoral activities followed the same downward trend from baseline to endline among REVIVE survey respondents. Respondents most frequently cited climate change (from 59% at baseline to 92% at endline) as the main reason for their reduced income level.

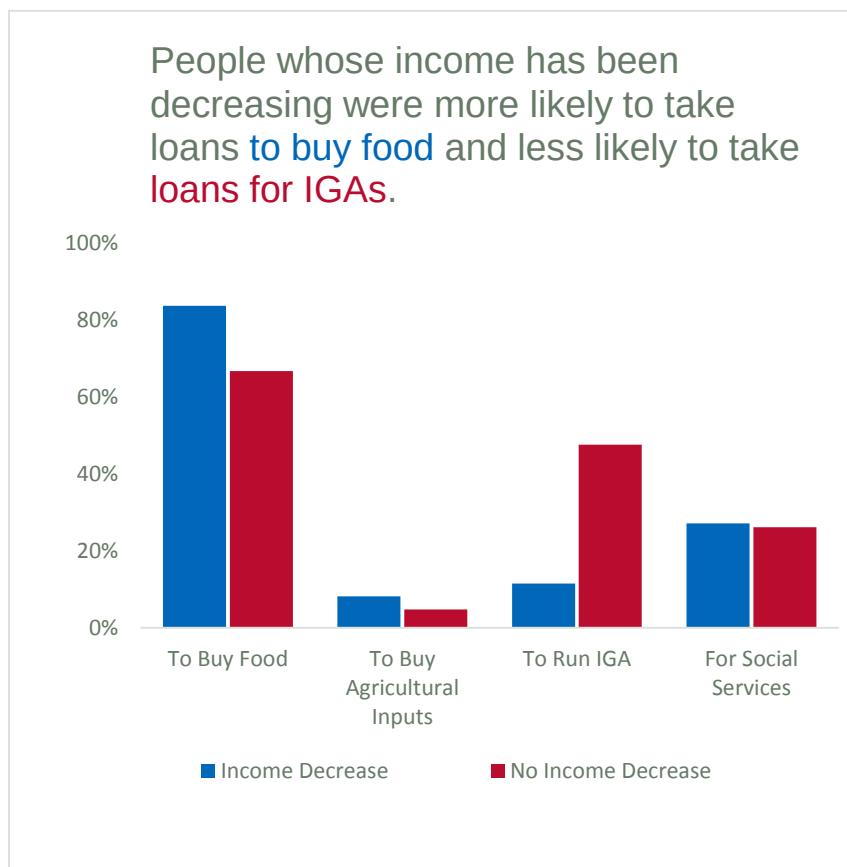
Based on the findings from KIs and FGDs, the reduction in income among respondents at endline can be primarily attributed the recent drought, among other secondary factors. These other factors include: WE/SILC group members are from more vulnerable households, which may have a proportionately greater impact on their overall income streams; not all members in groups implemented IGAs equally, resulting in unequal gains; IGAs had yet to commence or produce outputs, which may delay in increase in respondents’ reported income, many group IGAs had not yet been connected to market opportunities, and, lastly, the current drought (and the variable climate/rain patterns over the past three years) have had a serious impact on communities and their livelihood/income potential.

Table 6: Percent of respondents reporting decreased income in the past 3 years (source: endline survey)

% REPORTING DECREASED INCOME	REAAP		REVIVE	
	Baseline	Endline	Baseline	Endline
Overall Income	51.0%	77.8%	70.3%	89.4%
From agricultural activities	-	83.7%	68.3%	93.7%
From pastoral activities	-	67.7%	70.5%	86.9%

Respondents reporting a decrease in income who had also taken out a loan in the past three years were more likely to use the loan to purchase food than invest in an IGA, as shown in Figure 6. The inverse is also true: those respondents with incomes that did not decrease were more likely to use loans to invest in IGAs.

Figure 6: Use of loan funds among respondents who did and did not experience an income decrease over the activity period (n=745)



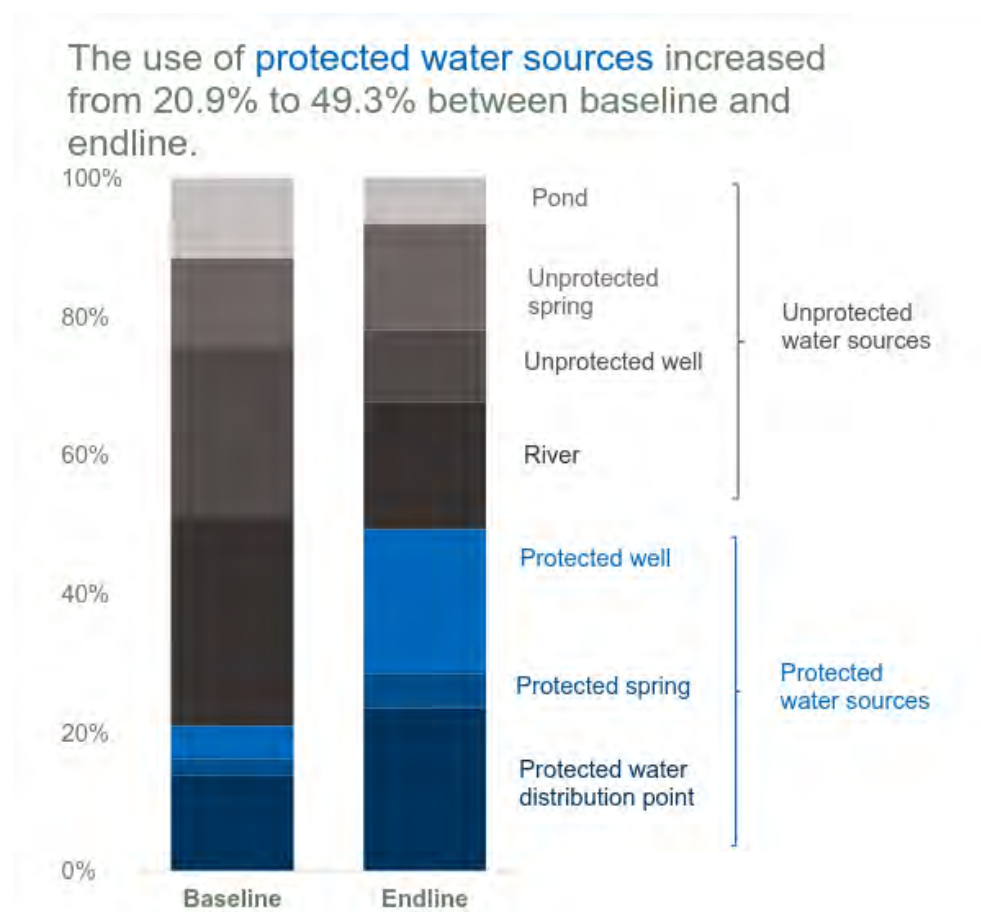
Despite interventions targeting SILC/WE group members and/or targeted households for agricultural activities, the endline did not reveal that WE/SILC group members fared better than non-members with respect to stronger income streams. FGD testimony reinforces this point; two WE groups reported that members had recently stopped weekly contributions, and groups halted loan provision due to the strain the drought had placed on households' ability to save.

(2) Assets⁹:

Both REAAP and REVIVE activities focused on improving water point functionality for both livestock and human consumption, and activities were implemented across high drought risk and water stressed areas. Of the planned 128 water points to be created/rehabilitated under REAAP, 79 have been completed, while 34 of the 90 planned water points under REVIVE have been rehabilitated or maintained by the activity, with another 23 planned for rehabilitation or maintenance before the end of the Activity period. Across both REAAP and REVIVE survey respondents, 49.3% reported using protected water sources for drinking water at endline, an increase from 20.9% at baseline (Figure 7 below). FGD participants reported improvements in the quality of water at water points, and some also reported health improvements due to the improved source.

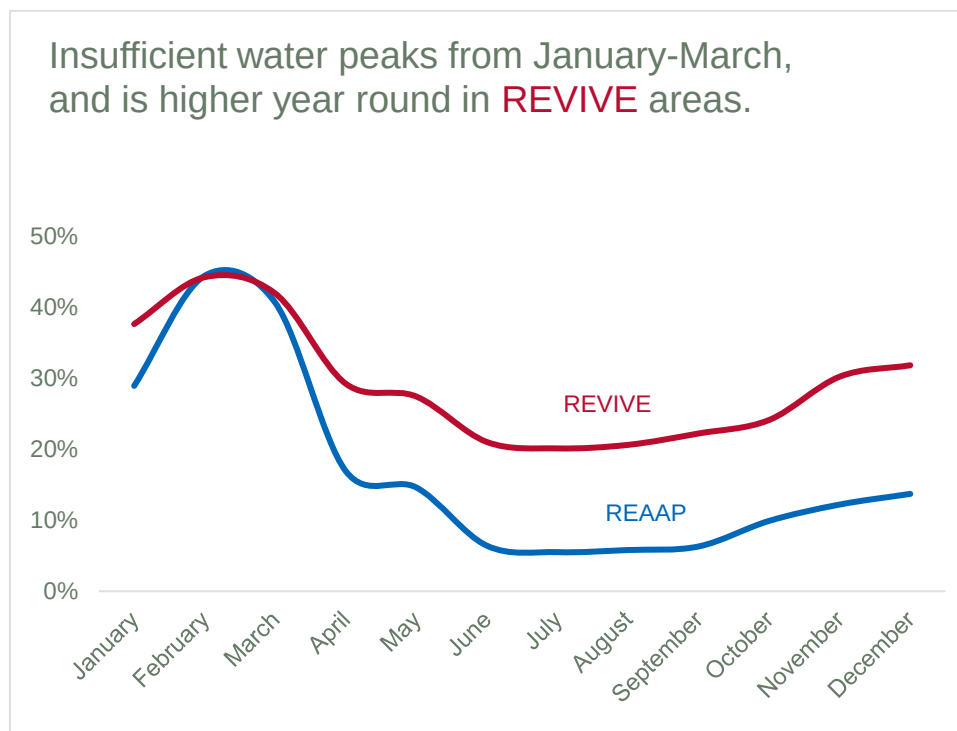
⁹ Refers to physical assets

Figure 7: Source of drinking water in REVIVE and REAAP areas (%) (source: endline survey)



Despite progress towards safer drinking water sources, key informants in all REVIVE woredas, and 2 of the 6 REAAP woredas reported that the Activity did not adequately address the water vulnerabilities of the community, both during normal and drought-affected periods. Although the woreda officials praised the work that the activities had undertaken to address water issues, many also requested further interventions not only to rehabilitate, but to create new water points focusing on deep ground water, which communities can access year-round. Endline results also demonstrate continued water shortages; both REAAP and REVIVE Activity areas reported water stress periods between the January to March dry season, with more than 40% of households in both areas having insufficient water. In keeping with the greater emphasis of REVIVE KIIs on water vulnerability, water stress remained higher year-round in REVIVE areas than in REAAP areas (Figure 8).

Figure 8: Months where water stress is reported in REVIVE and REAAP areas (%)



In REVIVE woredas, officials stressed the need for emergency water support for both humans and livestock. Activities did not have a crisis-modifier, and were unable to support water trucking needs. However, PCI was supporting this with non-CMDRR Activity funds.

REAAP also promoted FESs as an IGA that also helps to reduce time spent collecting firewood and improve household health. REAAP supported 35 groups, although only 6 had yet been linked to market opportunities. In FGDs, users expressed happiness with the FES for the time it saved them. An FGD participant in Tulo reported that an average fuel wood load lasts 4-5 days when using the FES, as compared to the same amount of wood lasting one day with a traditional stove. The FES group remarked, “FES, which is seen in other areas, is already sold and there is high demand from the community, we are willing to produce more.” Tulo FGD participants shared that sales of more stoves were limited by supply, not by demand, owing to a shortage of production materials, and some quality control issue. FES group members sold stoves for ETB 150 (~\$6), which produced an average profit of ETB 75 (~\$3) per stove.

To address another critical community need, WE group members in Lega Hida woreda (under REVIVE) designed their own initiative in helping fellow members build latrines in their households. Groups created 661 pit latrines, introducing sanitation assets into these households. These latrines were not a planned activity; rather, the group itself initiated the Activity with support from health extension workers (HEWs) and the RCWDO WE/Livelihood Coordinator, demonstrating the ability of WE/SILC groups to provide for collective action.

Although the Activity did not specifically target strengthening household assets, assets are a common measure of household resiliency at the household level. In the endline survey, 88.2% of respondents in REAAP areas and 96.9% of respondents in REVIVE areas who had experienced a natural disaster reported having lost assets in the last three years. This corresponds to 82.6% and 85.5% of the sample overall.

(3) Adaptive capacity

Adaptive capacity is broken down into seven areas: access and use EWS information, livelihoods diversity, use of new technologies, women's empowerment, access to credit, improved NRM practices, and coping capacities utilized.

In REAAP areas at endline, there was no statistically significant change from the 74.7% of respondents reporting knowledge of climate change at the baseline. Although this question was not asked in the REVIVE baseline, 72.3% of respondents were aware of climate change at the endline. Of the 74.7% of REAAP respondents indicating awareness of climate change, 96.2% and 96.8% at baseline and endline, respectively, also believe climate change affected them personally (98.8% in REVIVE areas at endline). Comments from KIs at woreda and kebele-level reinforce quantitative results that suggest the Activity contributed to improved community understanding of DRR and climate change.

Access and use EWS information in decision-making: Both activities supported EWS to strengthen households and community access to information to make livelihood decisions, as discussed in more detail in section 1.2 and Q3. The percentage of respondents who report using climate information to make farming and livestock decisions decreased from 93.2% to 72.2% in REAAP areas (60.1% in REVIVE areas at endline). Of those who report using information to make migratory decisions, 15.4% of REVIVE respondents report using satellite-assisted pastoral resource management (SAPARM) maps as part of their decision-making, in addition to previous experience, scouting reports and other informal or traditional methods of sharing news/information. This number is in contrast to the 0.4% value reported in Table 3, which was based on all survey respondents.

Livelihoods diversity: The endline survey found that crop diversification and livestock activities were the two most commonly-known alternative livelihoods activities. Both activities were slightly better known in REAAP areas than REVIVE areas. Both activities supported WE/SILC group members to diversify livelihoods through IGAs.

Use of new technologies: The CMDRR Activities introduced new technologies through irrigation, FES, modern beehives, and improved seed varieties. Findings related to irrigation, accessing improved seed, and employing improved practices are found above, under section (1) Income and Food Access.

Women's empowerment: Women's empowerment is fully discussed under Q2. Although the endline did not find major changes in household decision making for women or an increase in income streams, likely because of the short timeframe of the Activity and the young age of the WE/SILC groups (groups are 1-2 years old), KIs and FGDs did identify women's empowerment improvements due to the WE/SILC groups. Aside from the numerous examples surrounding IGAs and increased access to financial support, there were multiple comments about how the perception of women has changed in households and communities, as well as the confidence levels of women. With respect to WE/SILC groups, a WE facilitator in Rayitu said, "the whole community is changed because of the WE groups, especially at household level, teaching 1 woman is like teaching 5 men."

Access to credit: The core function of the SILC/WE groups is to increase savings and loan capabilities. For the 867 WE groups (17,015 women) in REVIVE, at the end of fiscal year 2, the groups' members had saved \$114,115 (exchange rate ETB 1 = \$.0434) and given loans in the amount of \$84,902, of which \$19,939 is loan repayment.¹⁰ Under REAAP, the 633 SILC groups with 12,607 members (11,340 women; 26 PWD) had saved \$60,760, and, from this 3,227 SILC members were supported in different IGAs. In both REAAP and REVIVE areas, women in WE/SILC groups were more likely to report having taken loans than women not in WE/SILC groups: 32.8% versus 23.9% in REVIVE areas and 70.5% versus 46.6% in REAAP areas.

The endline found that in REAAP areas, the share of respondents reporting having taken a loan in the last three-five years rose from 14.3% to 46.7%. This rise was more pronounced among female respondents: from 15.2% to 52.3%, compared to an increase from 13.4% to 41.7% among male respondents. In REVIVE

¹⁰ Data and exchange rate figure taken from REVIVE Year 2 report.

areas, 26.5% reported taking a loan in the last three years at endline, with no statistically significant difference based on sex of respondent. Of these respondents, the most common uses of loans were for social services (47.2%), to run an IGA (36.4%) and to buy food (27.3%).

The SILC/WE groups also contribute to a social fund that provides informal support to members in times of social hardship, specifically around marriage, funeral, and childbirth. FGDs and KIs generated numerous positive comments about the support that access to these funds provides women, both as a form of quick capital for emergencies, as well as a channel for support in times of social hardship.

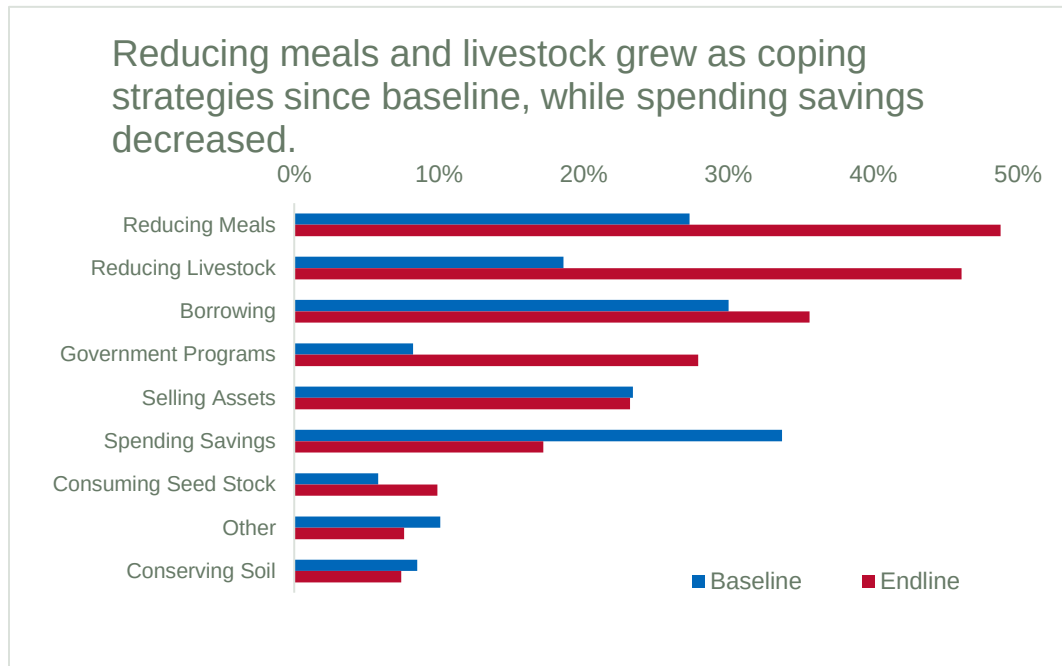
Improved NRM practices: Both activities supported the rehabilitation of degraded land areas selected as part of participatory DRR action planning or watershed planning processes; however, this was not accomplished uniformly across all activity locations under REVIVE (54 out of 151 kebeles). As many areas are still undergoing rehabilitation, results of this work are yet pending. In REVIVE, most enclosures will, in the future, be managed and supported by cooperatives, according to key informants during site observation visits. Question 1.2 and Question 3 discuss the NRM interventions in detail.

Increased coping capacities: The endline found that the coping strategies¹¹ to continuing and worsening drought related stress that respondents reported relying on most frequently at endline were borrowing (from 30.0% to 35.6%), reducing meals (27.2% to 48.9%), reducing livestock (18.6% to 46.1%), consuming seed stock (5.8% to 9.9%), and relying on government programs (8.2% to 28.0%). Fewer people reported spending savings: 33.7% respondents at baseline reduced to 17.1% at endline. Figure 7 summarizes these findings. These coping strategies can be categorized as either positive or negative¹² depending on their impact on household or individual ability to deal with future stresses.

¹¹ Response options for coping strategies in the endline included: Borrow/beg for money or food; Collect wild food; Reduce size/number of meals; Spend saving; Sell household assets; Reduce/sell number of livestock; Consume seed stocks held for next season; Rent farm land; Send children to work outside the household; Migrate for work; Introduce new crop types and varieties; and introduce new type of livestock.

¹² “Positive coping strategies enable households to withstand periodic shocks without adversely affecting livelihood security or jeopardizing the health and nutrition of individual members (e.g., using cash savings, consuming reserve food stocks, relying on formal and informal safety nets). Negative coping strategies can have a permanent and debilitating impact on household capacity to manage future risk (e.g., selling productive assets, reducing quantity and quality of food consumed, relying on risky livelihood activities).” WFP, 2012. “Background Paper for the Expert Consultation on Resilience Measurement for Food Security.” https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=9&ved=0ahUKEwjsulW717PUAhUhyoMKHZrzCGYQFg hUMAg&url=http%3A%2F%2Fwww.fsnnetwork.org%2Fsites%2Fdefault%2Ffiles%2Fresilience_measurement_background_paper_2.12.2013.docx&usg=AFQjCNHv02qyW4dKR3a1FsIXUBDqj8it2Q&sig2=YI3wRIPKF97whMJV4vjDZg.

Figure 7: Coping capacities utilized by households to reduce risk source: endline survey)



Q1.2 Changes in the community resilience to climate change, variation, and climate-related shocks by evaluating design, implementation and management aspects of common assets and community systems (such as early warning system and community platforms) when compared to the baseline metrics.

Enhancing community-level resilience was supported through multiple interventions in both activities that aimed to strengthen community platforms/committees (DRR Committees, Watershed Committees, WE/SILC groups) by introducing new disaster risk and early warning systems and processes (CMDRR/participatory disaster risk assessment (PDRA), D-RISK, two-way EWS, SAPARM), restoring and rehabilitating community assets (water points and NRM). The activities aimed to increase vertical linkages of communities to local government actors (through committees, joint monitoring, and enhanced bottom-up planning), and horizontal linkages between health, education, and nutrition interventions.

CMDRR Approach:

CMDRR Methodology (PDRA):

CORDAID describes CMDRR as a “process in which communities are actively engaged in the identification, analysis, M&E of risks, with the aim of reducing people’s disaster risk and enhancing their capacities. It places the communities at the heart of decision-making processes and in the management of disaster risk reduction measures.”¹³ Accordingly, REAAP establishes DRR committees with 20 community members (10M, 10F) that receive CMDRR and climate change adaptation training on the concepts, cause and effects of climate change, and applied CMDRR principles. REAAP staff involve woreda staff in these trainings to promote cross learning and to develop synergies between community and woreda-centered activities. In addition, the kebele government assigns a Development Agent (DA) to be a counterpart to the DRR Facilitator. Committee members then complete a PDRA that involves four steps: (1) hazard identification, (2) capacity and vulnerability analysis, and (3) risk analysis (hazard prioritization), (4) CMDRR

¹³https://www.cordaid.org/en/wp-content/uploads/sites/3/2013/05/Booklet_2_Module_1_CMDRR_Principles_Concepts_and_Practices.pdf

report and Action Plan. Zonal and woreda sector government offices approve the drafted action plans after incorporating feedback, and DRR committees lead campaigns to strengthen community awareness on climate change and other hazard-related topics. DRR committees routinely monitor and update these actions plans, participate in cross-learning activities, and set up vertical linkages to local government actors by integrating components into kebele and woreda-level plans.

In the 100 kebeles where CMDRR was implemented, DRR committees comprised equal female and male representation (1,000 M, 1,000 F in total), with PWDs as well (2-3 PWDs per kebele). Each kebele has undertaken the PDRA process as described above, having completed the hazard assessment, vulnerability assessment, and capacity assessment. REAAP's M&E data report that DRR committees have created Community Action Plans (CAPs) in all 100 kebeles, and the evaluation team verified the existence of these for those kebeles visited during fieldwork. Moreover, as reported by REAAP and validated by the evaluation team in FGDs and KIs, DRR committees meet regularly, all communities have validated the action plans, and committees are monitoring action plans by DRR committees and providing feedback to IPs and the accountable government sectors (agriculture, water and energy, Disaster Preparedness and Prevention Offices (DPPOs), health). FGDs with DRR Committees found that committees had engaged in cross learning visits, and were aware that their plan had been shared with woreda officials. The evaluation team noted images, posters and pictures related to the process displayed in all Activity facilities. These visual displays provided reminders of the shared responsibility for documenting progress as part of the collaborative M&E system introduced transparency and accountability into the system, which implementing teams believe gave the community a greater sense of ownership.

The final aspect of the CMDRR approach involves ensuring that community plans are linked vertically to local government planning and processes. REAAP has sought to do this by ensuring woreda linkages, as well as by sharing the kebele CAPs with the woreda for its validation and approval. In doing so, REAAP is ensuring that the CAPs are aligned with the government woreda plan, and not duplicating efforts. However, the evaluation team did not see evidence that planning processes had been influenced at the woreda level by REAAP, despite stating that “100 community action plans have already fed into woreda government plans.”¹⁴ REAAP has reported that the woredas have started replicating some of the activity's good practices such as keyhole gardens, spate irrigation, SILC activities, and PWD and gender inclusion; however, the CAP had not influenced the woreda annual plan, which guides woreda-level actions and budget support throughout the year.

D-RISK

The D-RISK methodology has two dimensions: the community (kebele) level, and the woreda level. At the kebele level, the community creates a resource map of community risks, hazards, assets, and resources. CommCare mobile data collection then gathers primary data that geo-locates water points, schools, government offices, human and livestock health posts, market locations and human settlements. Once data is digitized, PCI staff, in collaboration with DRR committees, create CMPs that identifies DRM strategies and activities along with implementation period, identifying resources needed, and identifying responsible actors along with roles and responsibilities. Woreda and zonal officials then endorse the resulting plan.

At a community level, the evaluation found mixed results of communities and DRR committees that could speak about the D-RISK process, or were even aware of the kebele-level CMP. Only 1/4 DRR FGDs was aware that CMPs had been shared with the woreda and could speak to the use of CMPs in providing updates on chronically food insecure households who require emergency support.

In Dolo Mena Woreda, a DRR Committee said they had met with REVIVE only once (at the beginning of 2016) “to discuss hazards and existing coping mechanisms. Since then we had no relationship with the

¹⁴ REAAP Year III, Qtr. I report

Activity. The committee is unaware of the CMDRR of D-RISK.” They were able to speak to a hazard assessment and vulnerability and capacity assessment being done during that meeting, but were unaware of a CMP for the kebele.

At the woreda level, PCI organizes a woreda contingency planning meeting with relevant woreda sector departments to analyze information and plan the actions for the CMP. Following this workshop, PCI’s D-RISK advisor compiles the data collected, as well as the decisions made at the meeting, to create the woreda-level CMP.

REVIVE reports that within the CMPs, different actors have roles and responsibilities in managing and coordinating the plan, however “the plan is focused on strengthening the capacity of woreda DRM in D-RISK analysis, and EVWS, link the community early warning committees (EWCs) with woreda-level EWC, gather information, organize, analyze and write-up the reports, monitor field situation and management of food aid distributions.”¹⁵

REVIVE’s Year III, Quarter I report notes that several key activities still needed to be undertaken to streamline, and institutionalize the CMP process both at kebele and woreda levels, including “validating the plan by each woredas planning team; endorsing/approving CMPs as working document to manage risk; integrating CMPs into woredas regular development and emergency response plan, and providing regular capacity building and mentoring for woreda experts in regularly updating the CMP.”

In assessing the success of D-RISK against the components performance indicators, REVIVE reports the following performance against key D-RISK indicators:

- 167/168 kebeles had developed community resource and risk maps
- 150/168 community resource and risk reports developed based on maps layered with secondary data sources
- 167/168 kebele CMPs had been created
- 9 woreda CMP workshops had taken place and 6 woreda CMPs have been completed (all 9 by activity end)

From the KIIs undertaken at the woreda level, the evaluation team found various levels of understanding about the D-RISK process among relevant woreda staff interviewed. To varying degrees, staff could to speak to the process of data collection, of bringing together relevant woreda departments to analyze the information, and to creating CMPs that focused on a Development Plan and an Emergency Plan. In Rayitu woreda, officials reported that the Activity provided “support to CMP development from kebele level to woreda, this is carried out in two ways, first to identify the problem and the second is to respond to the identified problem. There has been good integration, under this we are working under several offices to make the woreda-level plan, 9 offices are integrated to prepare plan.”

The evaluation team found from the field visit and interviews that all woredas were appreciative of the process and the additional, updated data brought to their woreda. In Meda Walabu, a respondent stated, “they used to collect data, but it was not updated regularly, and this is important. PCI helps them to compile the data and then use it in to inform the C&MP. They had a C&MP plan before, but it was not updated with information to inform it.” PCI staff indicated in KIIs that D-RISK added value to the Government of Ethiopia Woreda Disaster Risk Profile (WDRP) process by providing the woredas with up-to-date information to inform the CMPs.

In KIIs, IP staff criticized the WDRP process’s top-down approach whereby teams from the federal Disaster Risk Management Coordinator (DRMC) came to woredas to collect data, then took it back to the federal level, analyzed it and presented it back to the woredas. When the evaluation team asked federal-level DRMC officials about this characterization of the process, they replied, “Capacity limit is

¹⁵ REVIVE, Year 3, Qtr. I report

beyond them [the woredas] to do the work... there is a high staff turnover, low computer literacy, power outages... this is a challenge, we [the federal DRMC EW Directorate] are trying to capacitate more at the regional level and then zonal level too.” Table 7 below demonstrates that the IP staff skills are still fundamental to the D-RISK process to address the capacity gaps that are experienced at the woreda level.

Table 7: D-RISK Process Roles and Responsibilities

	IP role	Woreda role
Data collection	Support with CommCare technology and mobile phones, provide logistical support to process, receive and compile information from CommCare	Participate in data collection
Map creation	Using CommCare information and other relevant information collected from FGDs/community mapping exercises, create resource and risk maps using geographical information systems (GIS)	Not involved in this step. They receive maps back from IP
Data Analysis	Data is provided from PCI to Woreda where a woreda-level workshop is organized to review data, analyze it, and create emergency and development plans	9 woreda departments participate in workshop
CMP product	PCI (D-RISK advisor) culminates collected data, analysis, and decisions taken at the workshop into a final CMP narrative document.	Receives final product from PCI

The goal of creating the woreda CMP is to aid a woreda’s planning and decision-making. Although the evaluation team found one woreda office currently using the CMP, KIIs with woredas and IPs revealed that woreda were not systematically using their CMP in its planning processes. When asked about the CMP being used in woreda planning, a KII in Meda Walabu indicated no knowledge of which livestock diseases previously existed in this woreda, but after CMP data collection, the KI now knows what diseases are present and how to manage them. In Lega Hida, the woreda said that the CMP helped to indicate who the vulnerable are in the communities, which allows them to better understand numbers of people to plan for with emergency support when it is needed. None of the KIIs with woredas indicated that the CMP had been used or integrated into their annual woreda-level plans, underscoring a lack of systemic use of the CMPs for woreda-level planning.

Of the nine Activity woredas under REVIVE, each woreda already had a WDRP in place, and four of the nine woredas had already undergone the DRR planning process.¹⁶ Annex 4 details the completion of these plans by woreda.

Linking the work of D-RISK more succinctly to the WDRP process and its process holders is an important step towards ensuring that the process is complementing, not duplicating, the work of the WDRP. While awareness raising for zonal authorities about the CMPs was planned for Year 3, Quarter 1, there had been no link or planned link to regional and federal DSRM Commissions. When regional and federal DRM Commissions were asked if they knew about the work under REVIVE and in creating CMPs, they were unaware of such activities. The Director of the Early Warning Directorate commented, “NGOs and government we are not working together, separately they [NGOs] go to the community and are both collecting information, they should discuss with regional level and federal level. The communities, it [data collection] may be boring for them, so many people are coming, asking the same questions, we need to work together. If this information is here, they can get it from us, and if here is any gap they can go and find that and update it.” Furthermore, the Early Warning Directorate stated that if there have been changes to the woreda WDRP, updates in data collection, and/or support to creating/revising the CMP, these then needed to be shared with the federal DRMC.

¹⁶ <http://profile.dppc.gov.et/Downloads/WDRP%20DRR%20Planning%20and%20Mainstreaming%20Flyer%20-%20202016.pdf>

Early Warning Systems (EWS):

REAAP - Two-way EWS

REAAP aimed to increase early warning information (EWI) fed to, and collected by, communities, with the goal of increasing the use of indigenous knowledge (IK) and indicators through blending knowledge systems with scientific weather and climate forecast information. To do this, there are four different ways in which the Activity has collected/shared EWS information: (1) Rainfall data collection and dissemination (2) Food security data collection and messaging through short message service (SMS), (3) seasonal weather forecasting forums (4) Weather information collected from different sources (e.g. National Meteorology Agency (NMA), Famine Early Warning Systems Network (FEWSNET), UN Food and Agriculture Organization (FAO)).

At the community level, the two-way EWS consists of just a few basis elements – traditional knowledge and rain gauges, which are easily understood and utilized by members. Further, the DRR Facilitators, which are community members, are intimately involved in collecting and sharing this information through the EW committees. The survey data reflects the disconnect between community-generated and externally generated EW information.

For rainfall data, the Activity installed 850 Plastics rain gauges in 50 kebeles and daily readings were collected by DRR facilitators and sent by SMS to the CRS database (642 reported SMS sent since Activity inception). Rain gauges had not been provided to all 100 kebeles as of the writing of the report. For those kebeles which received rain gauges, each received 16 gauges distributed across the different villages. Monthly, the information was analyzed along with the amount, frequency and distribution of rainfall and a feedback report is produced and shared back to EW (Early Warning) officer who shares with the woreda and DRR facilitator, who, in turn, provides the information to the DRR committees. At the seasonal forums, rainfall data from the rain gauges is combined with external rainfall forecasts to assess degree of complementarity and to recommend further actions.

The evaluation team found the following EWS results had been achieved (actual/targeted):

- 100/100 DRR Committees created
- 4/18 number of reports produced that include the four EW tools (rainfall; food security; seasonal forums; weather info from NMA, FEWSNET, FAO)
- 850/1,600 rain gauges
- 8/12 seasonal forums

The activity also collected weather information from NMA, Disaster Risk Management-Agriculture Task Force (DRM-ATF), FEWSNET, and other platforms, retrieved by CRS and fed into the CRS-generated monthly assessment reports that are shared with the woredas, EW officers, and DRR facilitators. The final EW activities implemented in REAAP were the seasonal weather forecasting forums held twice annually in each woreda. In reference to indigenous and scientific information, an FGD participant within a DRR committee told the evaluation team, “we will come up with what our local forecasters said is real and sometimes we find [scientific] information real and it complement with the forecast of local peoples.”

In Meta, Mieso, and Fedis woredas, the evaluation team found evidence that EWS information was being shared by community-level actors (DAs, DRR facilitators, EW committees). In an FGD in Meta with Goro Biyu EW Committee, a participant confirmed information sharing: “Yes, we received early warning messages from the community [referencing from each other, not from outside sources]. EW messages relate to livestock diseases, flood hazard.”

In FGDs in Tulo, Mieso, and Meta, the evaluation team found evidence of EWI being utilized by community members to support livelihood planning and management decisions, including for when to destock, when

to save livestock feed in preparation for coming drought, and in the timing of when to sow seeds. Referencing the rain gauges, one community FGD from Meta noted:

“Yes we have a rain gauge in our village. Yes, we know how to read it and the rain gauge help to make decisions about planting by reading the amount of rain shower measured in the instrument for example if the amount of rainfall was above 45mm then it result hazard but if it was in the range of 20mm to 30mm then it was suitable to sow the seed.”

In terms of sustainability, REAAP has built capacity of DRR committees, woreda DPPOs, and in community DRR facilitators around EW systems and processes through trainings and technical support. The woreda DPPO and Agriculture/pastoral offices have been linked with different platforms including NMA, FEWSNET for accessing an open information. As an exit strategy, REAAP plans to hand over the systems it set up to DPPO to lead the system after the Activity phases out. However, the centrality of the DRR Facilitators and CRS generated reports to the process coupled with no formal connection to regional or federal-level DRMCs, presents real challenges to the sustainability of the systems created.

REVIVE-SAPARM:

Under REVIVE, the Activity supported the introduction of an innovative early warning tool that has been developed by PCI to provide scientific, satellite-derived data to pastoralist populations called SAPARM. The SAPARM component of the Activity is comprised of a series of activities designed to generate and disseminate EWI about grazing resources using custom digitized maps of traditional grazing areas overlaid with current, satellite-derived vegetation information in order to improve pastoral mobility decision-making. The activity also organized awareness-raising events for selected local government and community representatives on understanding, interpreting and utilization of the maps and to establish memoranda of understanding (MoUs) between community representatives and woreda Pastoral Development Offices to mitigate overgrazing.¹⁷

Additionally, map distribution mechanisms were negotiated and distribution protocols agreed with individual woredas to outline how uninterrupted supply and distribution of the maps would take place. Although protocols differ on specifics from woreda to woreda, generally, PCI emails the SAPARM images to the three IPs every 10-15 days who then print the maps and distribute them to the woreda Pastoral Development Office (PDO). The PDO then distributes them to each kebele through an identified community resource person, who then distributes further down to the three kebele zones, where maps are supposed to be hung up at meeting points and presented in community meetings, although there is no formal plan to quantify these dissemination targets per map dissemination (2-3 times per month) or to monitor the community dissemination routes by the IP. In an effort to strengthen the use and understanding of the map, community-level awareness trainings on SAPARM map interpretation and utilization were carried out in all 8 of the woredas receiving maps. In total, 120 out of 150 planned sensitization meetings took place, and were attended by 2,224 (1,794M, 330F) participants.

According to REVIVE's performance indicator reports, implementation of the SAPARM system is successful, whereby 8 out of 9 woredas are continuously disseminating SAPARM maps to kebele representatives. All woredas, and most kebele DAs, were able to speak to a dissemination structure and system and were aware of roles and responsibilities in the distribution of maps, showing clear evidence that these structures were established in the woredas interviewed. However, this finding is not quite complete, as it does not illustrate the timeliness and frequency that maps are received at the woreda and kebele levels. In FGDs and KIs, the evaluation team found issues with timely dissemination in all woredas visited; in Rayitu and Lege Hida, for example, on average, the maps were received once every fourth months. The evaluation team was told in KIs in three different woredas that the geographical area that

¹⁷ 1 of the 9 REVIVE woredas, Dawe Serer, does not have a map integrated with the traditional grazing areas because there is a dispute about the woreda boundary and its demarcation. That has meant that the SAPARM maps are used only in the other 8 Activity woredas.

one physical map print out was supposed to cover in each kebele zone was too large and meant that people far from kebele centers were likely not accessing the map. Moreover, there was no direct monitoring by the IP of where the maps were posted, at what community meeting they were discussed, and generally how the information was passed from the kebele resource person to the community and individual households. Annex 3 summarizes the comments received from FGDs and KIs about issues with the maps delivery and timeliness.

The endline survey found that 15.4% of respondents who were using information to make mobility decisions were using the map as a form of information to help them decide on migratory routes, compared to an activity target of 70%. KIs with woreda-level officials and DAs and in FGDs with DRR Committees, five KIs (three woreda officials and two DAs) indicated that the maps were useful, and helping to save time of the communities in making mobility decisions. One KI indicated that the maps could not be read and interpreted by the illiterate community (Rayitu), while two (1 KI, 1 FGD) commented that the maps were not used because of missing information (water points, forest vs. pasture, wild animals, conflict hotspots), and one DRR committee was not aware of the maps (Dola Mena). Generally, at the woreda level, officials were thankful for the maps, noting that they had helped communities to save time. In Dola Mena woreda officials commented:

“The maps help to find pasture, improving from the past where they [the community] wasted their time looking for pasture, and sometimes didn’t find. After SAPARM, woreda is benefiting from this technology.” Dola Mena

At community-level FGDs, respondents reported strong awareness of the maps, but comments were more critical about their use, and highlighted how decisions on pastoral mobility and the governance of rangeland resources still relies on information from scouts and customary institutional leaders. In Meda Walabu, an informant told the evaluation team:

“Migrating is traditional, our forefathers have been doing this, in my opinion, I never see any value added, if it [the map] is also not given, in my opinion, it doesn’t matter, because the people will go and search to find pasture, this is what our people have done for many years. The maps do not show the dangerous animals, especially lions, where the water is found, where there is conflict. Because of all these things, why is it being used?” Mela Walabu.

This remark also highlights the limitation of the map that were discussed in KIs and FGDs. The evaluation team heard most frequently that the map shows all types of vegetation, rather than the density or type of vegetation, such as nutritious pasture. This was followed by comments that the map did not show water points and their availability, dangerous animals, topography; conflict hotspots, and common mobility routes. Annex 3 provides comments received in KIs and FGDs about the maps limitations.

At the federal DRMC Early Warning Directorate, the evaluation team learned that the Directorate was previously aware of PCI and their use of the SAPARM maps in Afar Region, and had advised PCI to distribute the maps with rainfall data, and to indicate conflict hotspots on the maps.

Community Assets:

Water points: Both REVIVE and REAAP undertook strategic water point rehabilitation and/or creation. This section examines the design and implementation of how water points were selected, constructed and will be maintained. The types and appropriateness of the technologies chosen will be covered in Q3.

In REAAP, the Activity carried out feasibility studies that included women and PWD to assess and prioritize which water points to rehabilitate/construct. As of Year III, Quarter I, the Activity had undertaken 30 of these studies. When sites were selected, they would devise bills of quantities to determine the materials needed, and the local materials required. For community ponds, the Activity reported that communities actively participated in supporting works to improve these structures. In total,

REAAP supported 71 water points (7 spring developments, 8 hand pump developments, 41 pond rehabilitations and maintenance, 15 irrigation schemes).

REAAP reported that EWI was being used to maintain and clean ponds before rain, as well as to inform communities if more water could be collected from the ponds. In REAAP's Year 3, Quarter 1 report, it is noted that a WASH Committee training (1 committee/kebele) for 150 people will be organized in Year 2 alongside the provision of tool kits to trained technician for maintenance of water scheme (2 technicians/kebele and 1 kit/kebele); however, this activity was not implemented. Of the 71 water points that the Activity supported, only 11 of the water management committees had received training by the Activity. Nonetheless, the evaluation team found evidence from field visits and in REAAP's M&E data that most water points (63 of 71) had water management committees and by-laws in place to manage these water points.

In REVIVE, strategic water resource development and maintenance is informed by the D-RISK data collection and analysis, which includes information on the specific coordinates of water points and schemes, the water source type, its functionality, use type, and duration. This data was analyzed by the IP and woreda water officials alongside other data (distance from settlements, population serviced, and availability in the season) in an effort to analyze the water scarcity by village/kebele and by woreda. In turn, the D-RISK data was supported site selection of water schemes supported under watershed development plans. To carry out the work, the Activity leveraged PSNP labor resources, communities contributed local materials, and REVIVE supplied strategic inputs like cement, iron bars and technical capacity.

The Activity supported 12 government and IPs in a training to build capacity in undertaking assessments, design, and maintenance of major water schemes. Aside from not reaching their Activity target of 90 water sources (they have supported 33 thus far and a further 24 are planned by Activity end totaling 57), the REVIVE Activity has done little to capacitate water management committees through training and links to appropriate kebele/woreda-level water actors. Only 5 of the planned 57 water points will have had committees trained in managing the water points.

NRM actions: In REAAP, NRM interventions were focused at the community level resulting directly from the development of the CAPs. The agreed-upon actions contained in the CAPs, and the commitment on the part of the communities to provide 40% of the cost through in-kind contributions of labor and local materials, created bonds among community members, bridges between different community groups benefiting from the CAP, and linkages between the community and the government and outside resources.

REAAP reported that the value of community contribution was estimated at \$1,034,592 for the first year of work in 50 kebeles. When compared to the inputs supplied by the Activity, the community contributed to an average 81%, to the cost of NRM actions.¹⁸ These NRM activities took place in communal lands; however, REAAP has reported that farmers are also implementing soil and water conservation (SWC) measures on their farms. REAAP staff, alongside woreda and Zonal government sector office staff, participated in joint monitoring field visits to NRM sites.

In REVIVE, the NRM interventions were linked to the watershed planning process, a separate process from supporting the DRR committees and the CMPs, working through different committees. REVIVE supported the strengthening of kebele watershed committees to better plan and manage watershed activities. REVIVE reported that many of these committees were not functional; however, the evaluation team instead heard reports that these committees had previously existed (as they were already part of the PSNP Watershed program), and had been the preferred approach to implementing PSNP works for many years. Nonetheless, it was reported in Kils that these committees (along with woreda watershed officials) were strengthened through technical training on how to design the watershed plan. REVIVE reports that these plans were supported by the information and analysis of the D-RISK process, which

¹⁸ Community contribution are computed using work norms and the current market wage rate for PSNP which the government is using for East and West Hararghe.

was also used to create the CMPs at the kebele level. In REVIVE, all 54 of the targeted watershed plans were created and implemented.

Like the water actions, REVIVE partnered with PSNP to leverage PSNP labor to undertake NRM interventions that were prioritized in the watershed plans and supported kebeles to reach their annual quotas to rehabilitate 1,000ha of land per kebele. Woreda officials supported this approach and praised the technical support the Activity supplied, which, in conjunction with the labor provided by PSNP, they viewed as an effective way to undertake the NRM work in REVIVE. Several woreda officials commented that before the coming of the Activity, watershed work was sub-standard or not able to be completed due to lack of tools and materials. A woreda official in Meda Walabu commented, “they did very large and very vast things in the watershed work, supporting the government emphasized strategy of watershed development, there was a gap in our woreda for material support, so it is a great thing that the Activity has come in and provided support on this.”

KIIs with woreda officials and by IPs and kebele DAs in site visits that the future management of the REVIVE NRM work, which is mainly to manage the work done inside enclosures, would be accomplished through establishing cooperatives of people who would benefit from the resources (grasses/pasture/trees-gums/residues) and space to carry out livelihood activities.

Platforms:

SILC/WE groups: In both Activities, KIIs and FGDs with WE/SILC groups considered activities aimed at empowering women as a success. REVIVE established 867 groups, and REAAP established 633 groups. In addition to increasing access to credit and supporting IGAs, KIIs, and FGDs reported that WE and SILC groups were responsible for introducing a savings culture to these women and their households, for changing the perception of women in communities (and by their husbands), providing emergency capital to women in times of immediate need (welfare fund), and in strengthening the confidence of women to voice their opinions. In both REAAP and REVIVE areas, women in SILC/WE groups were more likely to report having taken loans than women not in these groups: 32.8% versus 23.9% in REVIVE areas, and 70.5% versus 46.6% in REAAP areas. According to REAAP reports, REAAP supported 3,227 SILC members to begin IGAs (there is no reported figure from REVIVE). Despite the work to support increasing access to credit, and, in turn, income generating activities, the endline survey found a decrease in income levels at the household level. These findings will be further elaborated in Q2.

Conclusions

1.1 Household resilience: Households with none or low livestock ownership at baseline showed an increased in the type and number of livestock ownership, signaling an improvement in livelihood productivity and diversity. On the other hand, there is little evidence of agricultural livelihood diversification. Nonetheless, the impact of three years of variable rainfall due to El nino/La Nina and the subsequent drought has had substantial impact on dryland areas and pasture resources (particularly Rayitu, Lega Hida, and Mieso of visited woredas), and a substantial share of households experienced a decrease in income over the course of the activity. The impact of the variable weather and current drought shock is likely responsible for the poor performance of CMDRR on their core indicators.

The Activity supported an increase in access and use of protected water sources through creating, rehabilitating, and maintaining water points. Nonetheless, water remains a lasting stress for households, especially around, but also extending beyond, the lean season of January to March. While there is strong demand for FES products in communities, few FES groups were adequately linked to market opportunities, which limited income potential and community access to the improved stoves. Overall, the activities have contributed to building resilience among households that directly benefitted from livelihood, PSNP, and WE/SILC group activities.

1.2 While it is the stated objective of both REAAP and REVIVE to promote vertical integration as part of their Activities, and specific activities were in place to engage and create mutually beneficial relationships with government counterparts, these efforts were guided more by practical rather than strategic considerations. The activity increased communication and interaction between communities and woredas, increasing kebele-level vertical integration. The activities further strengthened institutional and technical capacities for woreda administration due to the numerous capacity building events and trainings they participated in. This, combined with the systems set up under SO 1, enhanced local government decision-making surrounding managing risk by increasing access to early warning DRR planning information. Nonetheless, without formal vertical connection to the DRMCs at regional and federal levels, the sustainability of the EWS and D-RISK processes at the woreda is in question.

Community resilience to climate change, variation, and climate-related shocks: The evaluation team finds the implementation of the CMDRR approach as successful in fulfilling the steps within the designed methodology. The activity was successful in creating strong, robust community groups that had ownership over the process and were the custodians of the CAPs. This is a positive indicator for the communities' ability to take collective action to prepare, mitigate, and respond to drought and the other hazards they may have identified for their community. However, many mechanisms that REAAP supported did not formally influence woredas' decision-making, or, as in the case of an IP's central role in CMP development, undermined ownership and capacity at the woreda level. Ultimately, while woredas demonstrated strong ownership of the planning process, they exhibited less ownership over the use and outcomes of its products.

EWS interventions contributed to building bridging and linking forms of social capital between these levels/groups. However, indigenous indicators did not integrate adequately with agro-meteorological, advisories, and the activity demonstrated poor partnerships with relevant institutions mandated to collect, analyze and communicate forecast information and advisories to end-users in appropriate formats. Community-level data collection under two-way EWS is progressing effectively. Again, though, the centrality of the DRR facilitators to this process calls into question the sustainability of the system when the Activity ends.

Although communities conducted sensitization around SAPARM to improve public interpretation of the maps, these sessions did not cover all kebeles receiving maps, and did not reach a sufficient population size. The evaluation also found that the physical maps were not sufficiently distributed to all communities, especially those that were not close to the kebele zonal centers. Further, SAPARM maps lack important detail necessary for pastoralists to make strategic decisions about migration, such as highlighting areas with different types and quality of vegetation, as well as water points and their supply.

Both Activities took appropriate measures to ensure that water source site selection was strategic and based on community needs, as well as by involving the relevant stakeholders (woredas and kebele representatives, DAs, community members). In REAAP, most of the targeted water points had functioning water management committees and corresponding by-laws to govern use of the water point, and the use of the community-owned CAPs to implement NRM actions has supported effective community participation, whereby communities have contributed substantial amounts of local materials and labor.

The approach REVIVE used to leverage labor resources from PSNP, local materials from communities, and strategic inputs and technical guidance, was a successful feature in the design and implementation of water source development. Relevant stakeholders and future users of the water point were instrumental to its successful completion. Similarly, the integration with PSNP to implement watershed plans was effective, as it ensured needed materials, tools, and technical guidance were available to carry out the work in targeted kebeles.

REVIVE's approach to managing the enclosures created under the watershed work through cooperatives is aligned with the GoE watershed approach that supports unemployed community members to manage

these rehabilitated resources; however, this calls into question how these spaces will support communal pastoral resource management when managed by a cooperative.

The activities' design to implement WE/SILC groups in all Activity woredas in both REAAP and REVIVE successfully supported community-level cohesion through empowering women to save and access credit to support income generating activities. Furthermore, this component strengthened collective action in communities, which contributes to community resilience.

EVALUATION QUESTION 2

How, if at all, have the CMDRR Activities affected gender equity, women's empowerment and disability inclusion?

Q 2.1 Gender equity

An internal REAAP gender analysis¹⁹ documented that women in Tulo, Oda Bultum and Mieso woredas spend between 13 to 17 hours per day on domestic activities during slack and peak seasons, respectively. In the activity areas, socially and culturally ascribed gender roles designate men as household decision-makers. At the community level, men dominate decision-making on community meeting attendance and the decisions made therein, as well as leadership positions in these groups.²⁰

CMDRR seeks to address this imbalance by supporting DRR Committees that promote gender equity by requiring a 50/50 split in composition between males and females in the case of REAAP, and for REVIVE, compliance with the government policy of having at least 1 - 2 women as members. All 100 REAAP kebeles have equal representation between men and women: out of a total of 2,000 DRR committee members, 1,000 are female and 1,000 are male.

In addition, REAAP has developed a strong M&E system, which allows for the disaggregation of a wide range of program indicators, not only those which are required to be disaggregated by USAID. Annex 10 shows disaggregation for females and PWD for REAAP and REVIVE activity indicators.

While representation is not equivalent to participation, the REAAP methodology ensures that female and male participants have equal access to the key community decision-making institution supporting DRR. As DRR committee members, they are eligible to be part of subcommittees and to build relationships with the constellation of partners linked to the DRR Committees. A few FGD participants noted that regular female participation in Disaster Risk Reduction Committee (DRRC) meetings can be hindered by competing household responsibilities. Activity monitoring information, noted under the Leadership section below, indicates that female DRRC leadership is concentrated at the deputy level, and not as DRRC Chairpersons.

2.2 Women's empowerment:

Empowerment is a broad concept that is used differently, depending on the context or circumstance. The evaluation team utilizes the framework of the Women's Empowerment in Agriculture Index (WEAI),²¹ which was developed by FtF, a funder of CMDRR, and used by FtF in Ethiopia as an important diagnostic tool, to analyze changes in the roles and extent of women's engagement in the following five areas:

1. Decisions about agricultural production,
2. Access to and decision-making power over productive resources,

¹⁹ Social Impact, Inc. (February 2017) Ethiopia Performance Monitoring and Evaluation Services (EPMES) Gender Analysis Report.

²⁰ Catholic Relief Services (October 2015) REAAP Gender Analysis Report, West Hararghe.

²¹ Women's Empowerment in Agriculture Index (WEAI)

3. Control over use of income,
4. Leadership in the community, and
5. Time use

REAAP addresses gender through:

- Ensuring the voice and participation of the most vulnerable populations.
- Appropriately identifying risks and risk management strategies that address sexual and gender-based violence, displacement, exploitation and abuse, and making efforts to mitigate these risks and prepare women as potential first responders.
- Identifying opportunities for adaption based on local knowledge, need, priority and capability.
- Addressing the domains of gender integration – roles and responsibilities of women and men, boys and girls; access and control of assets and resources; power and decision-making; work load and labor time; leadership and participation.

In REVIVE, gender equity and mainstreaming are integrated into the design of the risk-assessment and DRM interventions, and in the capacity-building strategies. Activity staff strive to ensure that marginalized groups have equal access to participation in all aspects of program implementation, and have established targets for women's participation.

Production: The activities addressed women's inequality by developing and implementing an empowerment model designed to increase women's social and economic status in Activity households and communities. The activity supports the creation and growth of SILC (REAAP) and WE (REVIVE) groups, expanding women's participation in IGAs, which promotes livelihood diversity, and increases female decision making over production through access to loans or credit.

Participation in SILC/WE Groups has given female members (100% of membership in REVIVE and 92% of membership in REAAP) access to loans and an opportunity to develop, implement, and manage income-generating activities. As of 3/2017, 633 SILC Groups (12,607 members, 90% women) have been established and they have collectively saved ETB 1.4 million (~\$60,870) in the loan and social fund. In REVIVE, 843 WE groups were established, comprising 17,015 women, with group members saving ETB 3,020,552 (~\$131,328), disbursing ETB 1,723,017 (~\$74,913) as loans, and maintaining a social fund balance of ETB 177,933 (~\$7,736).

REVIVE supported IGAs including: livestock production and fattening, bee keeping, production of gum, resin, and aloe products, and petty trade (marketing of grains, fruits and honey). Petty trade is conducted by WE group members and their families. The women buy grains, fruits, or coffee from a place where it is relatively cheaper and sell it at a place where it can fetch better prices. REAAP supported IGAs including: making and selling fuel efficient stoves, livestock fattening, rearing and trading of small ruminants (goat /sheep), petty trading, selling vegetables crops, selling grains, selling consumer goods, poultry and poultry product selling, and selling snacks and cooked foods. Some members also engaged in on farm activities using SILC loans for plot of land renting and purchase of seed.

After receiving training on how to save, female graduates from PSNP are encouraged to create their own businesses to help other women. Building on DFAP, 4,827 women received complementary business skills and leadership training related to participation in SILC. One KII stated:

“Because of WE groups, women are managing their children in better ways, there was a higher turn-over in school, but they see a reversal in that because of WE groups. This is because they are saving, their economy is changing, instead of staying home and working and because they have more social interaction between the women, their ideas are changing. They know that sending kids to school will benefit the kids and family.” - REVIVE KII, Meda Welabu.

With respect to food production, the activities implemented a joint demonstration with HEW on food preparation and preservation, which reached 1,642 women. Further, REAAP supported the creation of 1,557 key-hole gardens, and supported 2,096 households to create homestead gardens, giving women greater access to nutritious foods. An Activity coordinator noted that women managing key-hole gardens and/or homestead gardens were introduced to new and improved seed varieties through this activity.

Access to and decisions on savings and credit: woreda KIs shared anecdotes of how the groups had changed the household and community perception of savings. In some instances, husbands were actively helping their female relatives to save, and providing funds to be banked with the WE/SILC groups.

“The habit of savings has changed, in previous times, the men’s/husbands only do business activity alone but now there is savings that comes from the women, it has proven to be fruitful for the household as now husbands and wives are helping each other” –
REVIVE KII, Lega Hida

In addition to the savings culture the groups instill, they also provide access to credit through and informal social/welfare fund and formally through group loans. The social fund was mentioned repeatedly as a way in which the women help each other in times of economic hardship (delivery, marriage, funeral) and for emergency access to credit. The groups not only are supporting poor, more vulnerable women to increase their income through IGAs, but also, if REAAP plans to adapt DFAP's program to integrate women's business skills and leadership training to 6,000 SILC members in FY17, groups will support women to improve their financial literacy.

Some KII and FGD respondents report issues with not being able to access large enough loan amounts (generally limited to ~\$44) or capping the number of people in a group accessing loans at any given time. In addition, lack of linkages to formal finance, legal registrations, limit the growth potential of WE/SILC Groups and their members limiting expansion opportunities and potential profits.

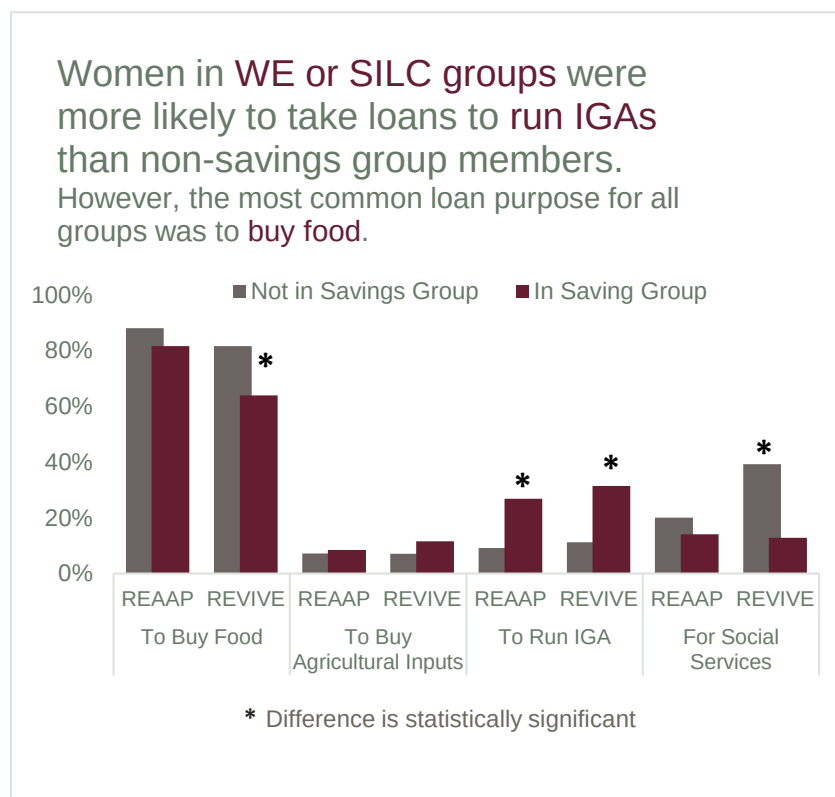
Income: Membership in SILC/WE groups provides women with access to money and income. The end-line survey indicated that the percentage of female REAAP respondents who reported taking out a loan in the last three years rose from 15% to 52% from baseline (compared to a rise from 13% to 42% for males). It is noteworthy that in both REAAP and REVIVE Activity areas, more women participating in SILC/WE Groups reported taking loans than those not participating in these groups (33% versus 24% in REVIVE/WE and 71% versus 47% in REAAP/SILC). Use of loans to purchase food and social services increased in both REAAP and REVIVE areas. Female respondents were more likely to report taking loans to run an IGA, a risk-coping strategy, than for purchasing agricultural inputs, perhaps reflecting biases in the division of labor and decision-making noted elsewhere. Women report more autonomy in decisions over the

“Before they [the WE groups] began, there is a conflict among the households – conflict arises because of financial constraints, after she began to save, she has come to play a great role in her family. Sometimes even her husband is asking for her support, because she is now maybe better off than him because she is participating in business activities” – REVIVE KII, Lega Hida

“There is a change in households, before the husband would go and sell their cattle, they would simply give them [the wives] whatever they chose as money. Now because she is saving, he will provide for her money for savings as well as money for household goods.”; “Even the conflict in households has reduced because of these agreements and the women’s empowerment.” – REVIVE KII, Rayitu

money they earn; however, as mentioned several times, IGAs were too small to make a meaningful difference in household income.

Figure 9: Women's reported use of loans (source: REAAP and REVIVE survey respondents)



The endline survey asked respondents to what extent the wife/female head of household was involved in common household decisions before and after the activity, ranked on a scale of 1-4. The analysis groups the specific decisions (such as what crops to grow, borrowing money, household maintenance) into three categories: Production and Livelihoods Decisions, Financial Decisions, and Household Decisions. In each of the categories, there is a small but statistically significant rise in how respondents ranked the involvement of women before and after the Activity. However, disaggregating the data by gender, women were likely to report a slight decrease in their involvement in making decisions, while men tended to report more involvement overall and more of an increase.

Table 8: Involvement in decision-making before and after the activity (source: REAAP and REVIVE endline survey)

TYPE OF DECISION	OVERALL			MEN			WOMEN		
	Before	After	p	Before	After	p	Before	After	p
Production and Livelihoods Decisions	2.4	2.5	.000*	2.4	2.6	.000*	2.1	2.0	.045*
Financial Decisions	2.4	2.5	.002*	2.5	2.7	.000*	2.0	1.9	.070
Household Decisions	2.4	2.5	.019*	2.5	2.6	.000*	2.2	2.0	.005*
n	1035			853			182		

* significant at the $p=.05$ level

Leadership and Group membership: In this domain, the evaluation team found evidence of bonding social capital through group membership (DRR Committees and sub-committees, WE/SILC groups, seed producer groups, watershed groups, FES) and enhanced leadership by women in community affairs through leadership roles in these groups, as well as community members employed as WE group facilitators (REVIVE) and DRR Facilitators (REAAP). It is noted, however, that the highest leadership

positions for Activity field staff, for both REAAP and REVIVE, were overwhelmingly male, particularly in the DRRs. Women hold 100% of DRR deputy-chair positions in Mieso, Fedis, Midhega Tola and Meta woredas, 82% in Oda Bultum woreda, and 71% in Tulo woreda. Overall, 92% percent of females who occupied deputy chair positions. Women assume 100% of top leadership, including chairperson and deputy chair-person positions, in REAAP SILC and FES groups. Further, 100% of REVIVE WE Groups is female, and their rotating leadership structure allows all women the opportunity enhance their leadership skills. This was mentioned several times as important by WE facilitators in helping women to speak confidently in public.

KIIs and FGDs reported that leadership of, and participation in, SILC/WE groups has increased women's confidence, increasing the chances of their voices, ideas, and concerns being heard in the group, in the community and household. SILC/WE groups encourage women to share thoughts on economic, social and institutional matters. Respondents said the following about the activities' contributions to women's public leadership:

"Yes, it brings change in their mental capacity, change in their households. Establishing a bond between the women, when we first created these groups the women were shy to negotiate themselves, then when we take turns as leaders, they each lead and discuss about their social problems and this has increased their confidence." - Rayitu

"Yes, one of the strengths is that since every woman talks about her problems in the group, they are developing skills to speak in public." - Dolo Mena, WE Facilitator

FGD participants under REVIVE noted that the extra income generated by the group facilitated the socially-oriented activities to benefit their communities or vulnerable members within the community such as clearing roads, constructing latrines, or constructing ponds. WE groups reported to have constructed 40 ponds in 6 kebeles with their own funds, and through activity technical support.

Time: The Gender Analysis for West Hararghe carried out by CRS indicated that women travel between five minutes and 12 hours per day to find water for their families, and wait on average between one to six hours in queues to collect water.²² The endline survey indicated that the average time to collect water ranged between 76 and 95 minutes, with male estimates on the lower side and female estimates on the higher side. The endline survey found that the average length of time to fetch water in REAAP was around 80 minutes (not measured in baseline). In REVIVE areas, the average time to collect water on average decreased from 116 minutes to 97 minutes, although this was not uniform across woredas, with some woredas finding increases in time spent collecting water (Lege Hida increased from 158 to 172 and Rayitu 61 to 216). In the FGD's in REAAP, Midhega Tola (Terkafeta kebele) and Meta (Wayber kebele) reported that it takes six hours to fetch water.

The mean time spent collecting fuel was 85 minutes, and varied only slightly between REAAP and REVIVE areas. It is also noted in the REAAP Gender Assessment that they may not have the time to attend capacity-building activities or community/DRR meetings, where their concerns could be voiced.

2.3 Disability Inclusion

REAAP's efforts to promote disability inclusion are grounded in an Activity strategy that explicitly addresses PWD concerns. This strategy is supported by specific activities to include PWDs in the design, implementation and monitoring of REAAP activities, and verified through disaggregated indicators. In

²² Catholic Relief Services (October 2015) REAAP Gender Analysis Report, West Hararghe.

REVIVE, capacity building and inclusion of PWDs was referenced in the Activity design and annual work plans; however, no formal mechanism for disability inclusion or tracking is evident.

Other than a woreda-level awareness raising event, the evaluation team could not find any evidence of structured capacity building interventions or deliberate targeting of PWDs in REVIVE Activity activities. In all FGDs and KIs, the evaluation team found no evidence addressing special needs and priorities of PWDs. This lack of evidence concurs with REVIVE's own midterm review which concluded that in the Activity areas "a large number of people with special needs exists... However, during the review we were unable to encounter purposive targeting of people with special needs".

Qualitative data revealed the perception that community awareness of disabled people and their needs was the biggest area of change under REAAP. FGDs with woreda staff confirmed that awareness about PWDs and their needs prior to the activity was very low. Because of REAAP's efforts using a wide range of reinforcing messages, respondents reported improved community awareness:

"Peoples with disabilities which were not remembered by the community were reported to REAAP and provided wheel chairs. They are now able to move about and visit their relatives for the first time. We have incorporated them in discussions too while previously the community had forgotten to do this." - Midhega Tola Terkafeta DRR

REAAP's strategy for disability inclusion has three major emphases: an increase in accessibility for disabled people, the inclusion of disabled people in community plans, and capacity building around disability inclusion. In support of these components, the activity constructed demonstration ramps leading to public buildings and health centers, and modification of houses to accommodate PWDs, and supplied disability kits (836 out of a target of 1200 kits, to 298 PWDs) and demonstration ramp construction at public facilities (12). Despite a requirement that PWDs be members of DRRCs, it is difficult to establish how PWDs were taken into consideration in CAPs; however, the evaluation team notes observing a ramp for PWDs at a water pump. Finally, the activity implemented training and CB for local government, including joint training for disabled peoples' organization (DPO) Focal persons, and Activity partners, with follow-ups and refreshers, and an experience-sharing visit to Konso (3 busloads of PWDs and non-PWDs).

Conclusions

2.1 Gender Equity: Key CMDRR institutions - DRR Committees and SILC/WE groups - have promoted women's empowerment by elevating women into leadership roles, spread influence of women through horizontal linkages in the Activity, and increased community bonding and bridging capital.

2.2 Female Empowerment (Production): SILC/WE Groups have given female members access to new financial resources, - promoting a savings culture, supporting IGAs, and strengthening emergency safety net. Through the introduction/reinforcement of complementary capacity-building activities (financial literacy, and food preparation tied to SILC and keyhole/home garden, small-scale irrigation, and IGAs activities linked to WE), CMDRR has increased opportunities, if not yet incomes. Despite these gains, domestic burdens (water/fuel gathering) continue to limit ability of women to engage more fully in alternative livelihoods and income generating activities.

2.3 Female Empowerment (Decision-making): Gender-based division of labor, and lack of access and control over resources continue to affect women severely. SILC/WE group FGDs and KIs stated that perception of women as key contributors to household resilience is improving, which helps groups allocate more social resources to the challenges their communities face.

2.4 Female Empowerment (Leadership): REAAP DRRC requirements for equal membership between men and women creates a new, well received, model for participatory development, though the process in REAAP and REVIVE is still primarily led by men.

2.5 Inclusion: In REAAP areas, partner, GoE staff, and community awareness and inclusion (through multi-media, extensive, awareness raising campaigns) of disabled people and their needs has been championed by partner HI, as there are no other organizations dedicating efforts to this issue. While appropriate channeling of resources to PWDs can be life-changing for individuals, evidence suggests that a relatively small percentage of PWDs are receiving direct benefits.

2.6 Access to water: In REVIVE areas, average time to collect water reduced, lessening the time burden of water collection on women. However, the scope and scale of water needs meant that interventions did not impact equally across every woreda; benefits reached communities in close proximity to the new/maintained source. This resulted in some woredas reporting increased time needed to collect water, a predictable outcome given the current occurrence of drought.

EVALUATION QUESTION 3

How successful were CMDRR Activities in introducing and implementing new technologies or process innovations? To answer this question, the evaluator is expected to consider effectiveness, sustainability, and scalability of these new technologies and process innovations.

Evaluation question 3 will measure the effectiveness, scalability and sustainability of the following six process innovations and technologies: (1) SAPARM, (2) two-way EWS, (3) D-RISK, (4) NRM/watershed technologies, (5) water and irrigation technology, and (6) livelihoods technologies.

3.1 SAPARM (REVIVE)

Section 1.2 details the full findings on the design, implementation, and management of SAPARM. In summary, 15.4% of REVIVE area respondents who reported using climate information to make migratory decisions used SAPARM maps. KIIs and FGDs identified the following factors as causes:

- Logistical challenges in disseminating the map in a timely fashion to all target woredas.
- Communities and households did not have access to enough maps or enough sensitization in interpreting the maps to make them useful. REVIVE did not track how the maps were disseminated within communities.
- The map lacks information important to migratory decisions such as water availability, the distinguishment between pasture and vegetation, conflict and wild animal hotspots, topography, and known cattle mobility routes.

IPs indicated in KIIs that their handover plan with woredas included providing printers and ink cartridges to the woredas so that they can continue to generate the maps. However, this plan does not address other issues woreda officials identified such as Internet connectivity, logistical challenges in dissemination, a monitoring plan, and long-term ink budget beyond the initial supply.

PCI indicated in KIIs that they are considering scaling SAPARM through a mobile phone application that the Dutch developer is currently creating. This mobile application has the possibility of including water points, which communities, woredas, and the IP all identified as a major gap in the current system. KIIs indicated that while smart phone ownership in rural areas is low, each kebele does have several individuals who own smart phones and could help disseminate maps.

3.2 EWS two-way systems (REAAP)

REAAP collected and shared EWS information through rainfall measurement, food security data collection and SMS, seasonal weather forecasting forums, and weather information from sources such as NMA, FEWSNET, and FAO. REAAP created a toolkit to help DRR Facilitators more effectively disseminate this

information, analysis and early warnings. Information is in local language, hyper-localized, and devoid of technical jargon. CRS compiles the information from different sources centrally and then field facilitators disseminate messages to DRR Committees who then were responsible for sharing with the community through meetings, posting in public spaces, or other methods.

The end line survey found a decrease in the percent of people using climate information to make farming decisions, from 93.2% at baseline to 72.2% at end line. One possible interpretation for this finding may have to do with the definition of climate information, where climate information at baseline may have been assumed to be traditional knowledge, while at endline it may have included external forecast information. Qualitative data do not expand on the use of climate information in REAAP areas.

REAAP linked woreda DPPO and Agriculture/Pastoral offices to open weather information platforms including NMA and FEWSNET. REAAP plans to hand over the systems it set up to DPPO, which will implement the system after the Activity phases out.

KIIs demonstrated increased information flow between kebeles and woredas. Nonetheless, the systems and innovations that REAAP introduced were not linked to regional and federal-level DRMCs.

3.3 D-RISK (REVIVE)

Section 1.2 details the full findings on the design, implementation and management of D-RISK. In summary, D-RISK provided communities and woredas with up-to-date data on their resources and risks, represented visually on maps, leading to community and woreda-level CMPs. REVIVE provided technical support to this process including analysing data and writing the CMP documents.

KIIs reported that there was no systemic process to use the CMP in woreda planning, though some gave examples of how the data in the CMP had helped them plan for piecemeal woreda-level interventions. To ensure that the CMP's actions were implemented, planning at woreda level (across departments) would integrate these actions where appropriate.

3.4 NRM and Watershed Technologies

Both Activities rehabilitated and regenerated degraded land. Section 1.2 details findings on the design, implementation, and management of undertaking this work was explored. This section will focus on the technical aspects of the NRM work.

Under the GoE guidelines for participatory watershed planning and management, there are three distinct phases in the process: mobilization, implementation and consolidation. GoE Watershed Guidelines recommend a five-year period to fully implement these three phases.

In REAAP, the CAPs guided the NRM work, which DRR Committees oversaw. Communities contributed voluntary labor and local stone and sand. REAAP trained 142 farmers, kebeles and woreda-level experts on Soil and Water Conservation to build their capacity for this work.

In REVIVE, already constituted watershed committees managed the NRM work, resulting in more formal links to PSNP. REVIVE conducted Participatory Watershed Management Planning training with watershed committees, as well as a Training of Trainers to woreda officials. The committees then created updated NRM plans, using D-RISK maps and local knowledge to choose sites for rehabilitation or regeneration. REVIVE also conducted SWC and rangeland management training for DAs, NRM scouts, woreda officials and IPs to support NRM work supervision. The IPs supplied the non-local materials, tools, and seeds, and communities provided labor through the PSNP program.

Annex 2 provides a complete overview of REAAP and REVIVE's NRM work, and Annex 5 details the full list of all sites observations. The following sections will individually assess the main Activity NRM interventions: area closures and hillside treatments, farmland SWC, and gully treatment.

Area closure SWC, hillside treatment, bush thinning:

REAAP planned to enclose 160 hectares (ha) of land and reported enclosing 167ha (104% achievement). The evaluation team's site observations showed that all necessary physical measures such as hillside/eyebrow terracing were complete and some enclosures had been planted with biological measures, while other sites awaited the rains for planting. For those sites that have planted seedlings, the survivability rate was good. The observed trenches were capturing soil, water and nutrients, thus contributing to the growth of planted seedlings and rejuvenation of existing bushes and trees. FGDs and KIs further support these observations.

At some sites, the upper land had not been included in the plan, thereby not following the watershed principles of a ridge-to-valley approach. For example, when eyebrow terracing is done, these structures are only meant to capture the runoff from that micro-catchment area, and are not designed to capture the runoff from land above the site.

REVIVE supported area enclosures, targeting an eventual 19,250ha. As of the end of Year 2, they had enclosed 4,512ha, with another 4,046 planned for Year 3. Site observations verified two general types of enclosures: SWC measures to improve soil moisture retention and support plant growth, or bush thinning in rangeland to remove non-nutritious plants and grasses that restrict pasture growth. Multiple site visits by the evaluation team showed the presence of soil/stone bunds, trenches, half-moons, herring bones, and eyebrows. However, during its visit to the REVIVE area, the team did not see any closures where biological measures had been planted along the physical structures, which are necessary to sustain the structures and to rehabilitate the land effectively. The specific sites are identified in Annex 5. IP KIs noted that seedlings would be planted when the rains come, but there was not yet a clear plan for where these seedlings would come from and how they would be transplanted to sites. IPs stated that there were not functional nurseries in all the Activity woredas, but where there were functioning nurseries, seedlings could be procured from those.

SWC structures seen during site observation are not designed to provide enough water for plantings to survive through the first dry season, but rather to improve soil moisture retention when there is rain. IP and DA KIs stated that small water ponds would boost new planting survival inside the enclosure.

Site observations of areas with bush thinning showed that enclosures where the correct bushes and shrubs had been removed and utilised as the enclosure fencing, except for in Rayitu where an enclosure had used gum tree branches to fence the closure.

REVIVE's watershed management is closely tied to the GoE's unit-based watershed approaches. As a result, in highland and mid-land REAAP woredas, most watershed activities follow sustainable land management (SLM) best practices of spatial and temporal sequencing. However, in the lowland pastoral areas of Bale Zone, human and livestock movement is still central to local production systems and communal land holdings are the norm, which is incompatible with a unit-based approach. Site observations, KIs and FGDs indicated that cooperatives of 30-100 people would manage the enclosures for pasture and IGAs such as livestock fodder harvesting and beekeeping. Conversely, IP KIs reported that the watershed committees would manage the land.

SWC on farmlands:

REAAP planned to construct 1,350kms of soil bunds on farmlands, and by the end of Year 2 had reported 829Km achieved (61%). REAAP technically and materially supported their construction. However, many did not include stabilization with biological measures, leaving them incomplete.

When stone is readily available, farmers tend to prefer stone bunds as they take up less space than soil bunds. Farmers near REAAP Kebele Administrations (KAs) were also constructing bunds on their farmland using their own tools.

Gully Treatment

KIIs with the woreda-level government officials reported numerous gullies in Activity areas, which both REAAP and REVIVE had made progress addressing. In REAAP areas, catchment identification and mapping of erosion hot spots is far below the national standard.

Figure 10: Unattended Gully in Fedis



REAAP conducted some large gully treatments to facilitate PWD and tractor land crossing. Stone-filled gabion works for crossing the gullies appeared stable during site observations. Otherwise, in both Activities most work focused on smaller gullies with loose stone and few gabion-supported check dams.

Site observations did not witness protective tools such as gloves and gabion closet.

Lastly, site observations at some gully treatments indicated that the land above the gully had not been sufficiently treated, an important aspect of the spatial and temporal sequencing.

3.5 Water and Irrigation Technologies

The Activities supported a multitude of interventions aimed at increasing access to improved technologies and practices. The number of respondents who have applied improved technologies or management practices has increased from 30.4% (baseline) to 79.4% (endline). Many of these technologies will be discussed in this section and 3.1.f.

Water point development

The Activity addressed widespread water shortages through installing new water points and maintaining and repairing broken ones. In total, REAAP supported 72 water points (7 springs developed, 8 hand-dug wells (HDWs) with hand pumps installed and 57 community ponds rehabilitated), while REVIVE expects to complete 57 by Activity close (hand pumps, protected springs, HDW and community ponds).

REAAP water point development was part of the CAPs, and therefore limited by the budget allocated to each kebele's CAP— \$677²³. This amount is insufficient for certain activities such as community pond construction, though was sufficient for alternate activities such as integrating silt traps in an existing pond. Site observations generally revealed that the water points work was complete and of good quality, with isolated cases that needed repair.

REAAP site visits, KIIs and FGDs indicated that water points had functional water management committees enforcing their bylaws and, in some instances, collecting fees for future point maintenance.

A full list of all water points can be found in Annex 6 and details of site observations are in Annex 5.

²³ Using exchange rate of ETB 1 = ~\$.0434 (5/52017)

Irrigation

Both Activities supported small-scale irrigation, and REAAP also supported spate irrigation schemes. REVIVE supported three small scale irrigation schemes which serve 238 women from WE groups. REAAP supported four small scale irrigation schemes covering 391.2 ha and serving 1,284 beneficiaries, and 11 spate irrigation schemes covering 1,147ha and serving 1,555 beneficiaries. The IPs provided technical assistance and capacity building for the farmers/groups, materials such as generators and pumps and gabion boxes for spate, and seeds for planting.

According to site visit interviews, before the spate irrigation support, farmers were using temporary diversion structures that would get washed away by flooding and without sufficiently diverting water to the crop fields. Kils with Mieso Woreda said that spate systems implemented by other Activities using concrete diversion and canal works have failed in Tedecha Guracha and Weltane KAs, and advised that diversion with gabion is more effective. In turn, according to REAAP Kils, REAAP supported gabions in the spate systems, which made the gabion affordable to farmers.

Spate systems site visits showed that erosion control measures on stream banks and field canals were typically insufficient. In drier areas, where flood runoff comes from upper catchments and there is a straight reach, not all canals were straight, which is best practice in these circumstances.

Most small-scale irrigation schemes were in good condition during site visits, aside from minor canal scour checks and some REAAP upper catchment spring origination points where some physical and biological SWC best practices were missing. Details of individual site visits are in Annex 5.

According to Kils with farmers, small-scale irrigation has improved crop yields and enhanced their resilience. According to Kils with IPs, communities demonstrated demand for irrigation systems through contributing the necessary labour and local materials to support Activity investments, including ongoing maintenance of systems. Endline survey results, detailed in Section 1.1, show low overall use of irrigation; however, Activity irrigation schemes were piecemeal measures that would not necessarily be reflected in the community-wide survey.

Figure 11: Farmers maintaining breaches themselves



3.6 Livelihoods Technologies

Improved seed: REAAP:

REAAP addressed lack of sufficient and improved seed supply on the market by establishing 36 seed producer groups. Through these groups, REAAP has promoted and distributed drought resistant and high-yielding cereal crop seed varieties. In FY16, they distributed more than 112,200Kg of maize, sorghum,

chickpea, haricot bean and sesame. REAAP partnered with Haromaya University, who donated sorghum and maize seeds to groups and monitored sites of three DRR committee members' farms. Woreda-level KIIs demonstrated appreciation for the provision and distribution of improved seed, particularly disease-resistant chickpea. The survey found that in REAAP Activity areas, use of high yield/drought tolerant crop seeds rose from 45.1% at baseline to 74.1% at endline. Nonetheless, likely due to the drought and its impact on crop harvests, the endline did not see income from crop production increase during the course of the Activity.

Woreda-level KIIs noted problems in the timeliness of delivering improved seed, particularly in Fedis, which received seed after the rains had already arrived. These KIIs also noted that demand for improved seed remains high, and many farmers did not have access to the improved seeds.

Keyhole gardens:

REAAP IPs supported 3,602 households to establish keyhole gardens (homestead vegetable gardens). Site observations of gardens showed the gardens were functional (see example in Figure 12). These gardens are especially relevant where land is scarce. FGDs and KIIs report that these gardens have improved the nutrition status of children and pregnant and lactating mothers. However, gardens cannot be promoted where water supply is very critical. The evaluation team noted during site observations that households outside of REAAP areas had started adopting keyhole gardens.

Figure 12: Keyhole garden ready for second round harvesting in Fedis



FES:

REAAP established 45 Fuel Efficient Stoves (FES) that constructed and sold FES, compared to a target of 50 (90% achievement), and has trained 283 group members (113% achievement). REAAP planned to link 25 of these groups to market opportunities but had only linked 7 groups at the time of fieldwork, well behind target.

In one FES FGD, the group reported successfully selling stoves for ETB 150 (~\$6) each and making a profit. In FGDs and KIIs, respondents said that the stoves help to reduce the amount of time that is spent collecting firewood and has improved their living situation and health through the reduction of smoke. Survey respondents using energy saving stoves increased from 22.6% at baseline to 49.5% at endline.

Figure 13: FES being used in Tulo



Conclusions

3.1 SAPARM: REVIVE created an **effective** EW pilot system through supplying SAPARM maps and disseminating them from woredas to kebeles to committees, albeit with lessons learned regarding the timeliness and frequency of map distribution. REVIVE was less effective in reaching all community members with the map and in the map's ability to address important informational needs, consequently falling short of the Activity map use target of 70%.

SAPARM faces **sustainability** challenges. Woredas currently have insufficient budget to print maps, maintain printers, and disseminate maps. Woredas and kebeles do not have clear dissemination roles and responsibilities that are monitored and tied to performance, nor sufficient connectivity to access the maps in a timely fashion. Lastly, the system is not yet linked to the zonal, regional, and federal DRMCs for oversight and official links to the map producers.

The introduction of mobile technology to disseminate the maps would largely eliminate the sustainability issues (aside from the linkages to DRMC) and support the **scalability** of the maps. However, this plan will face limitations in low smart phone ownership and low community capacity to read and interpret the maps on phones. The use of pastoral scouts and long held indigenous systems is deep-rooted in the community and changing behaviour to receive this information from a mobile phone will require a dedicated campaign to raise awareness and increase the utilisation of the map.

3.2 Two-way EWS: REAAP's information collection and dissemination mechanisms have increased vertical linkages between the kebele and woreda levels. Although the Activity has set up **effective** structures for

collection and dissemination of information, the number of people and institutions that the information travels through may be affecting the timeliness of the messages reaching the community. Moreover, there is no monitoring system for how information is disseminated to the community, which limits understanding of how EWI reaches community members.

The two-way EWS has been less **effective** integrating the indigenous indicators with scientific information. Importantly, endline results showing fewer people using climate information for decision-making than at baseline calls into question the **effectiveness** of the systems overall.

These EWS are heavily dependent on REAAP's DRR Facilitators and the IP's reports. Moreover, EWS activities do not appear to be connected to regional- or federal-level, calling into question the **sustainability and scalability** of the system without IP support and monitoring.

3.3 D-RISK: The D-RISK process was **effective** in creating community and woreda CMPs. The process was more successful in raising awareness about DRR/M and building capacities at the woreda level than at the community level. Kebeles did not demonstrate much ownership of ownership for the CMPs.

The D-RISK process was not fully **effective** at integrating CMPs into woreda planning processes, which also impedes **sustainability**. Furthermore, long-term sustainability would require woredas and communities to update their CMPs annually, which would require them to collect and analyse the data. These same challenges impede **scalability**.

3.4 NRM/Watershed SWC: REAAP NRM actions were **effective** in the mobilization and implementation phases. However, CAPs rather than watershed-level assessment and planning dictated physical activities, impeding the effectiveness of this phase.

SWC measures were generally implemented correctly in terms of spacing and technical specifications in both Activities, indicating adequate capacity building of relevant stakeholders to oversee SWC work.

Where REAAP enclosures and hillsides integrated SWC physical measures with biological measures, the structures harvested the necessary moisture for plant growth and played a role in healing lower lying gullies. These sites **effectively** applied technically sound physical and biological SWC structures. Without such measures, these areas would have likely been occupied by invasive species and further degraded. However, REAAP did not always follow a ridge to valley approach, the result of not doing a watershed analysis, which would have ensured that the correct spatial and temporal planning. Not accounting for upper land also makes SWC measures below it less effective and hinders their long-term **sustainability**.

REVIVE **effectively** mobilized and was implemented through the watershed committees and PSNP labor. Enclosures observed by the evaluation team did not have complementary biological measures, a necessary step to ensure **sustainability** of the work carried out. Biological measures also require additional water, such as a community pond, to ensure survivability of new plantings. These approaches were appropriate and effective in highland areas, but not for lowland areas; this approach can be **scaled** further in highland areas.

3.5 SWC on farmland: The physical structures applied have **effectively** retained soil in the farming fields/plots, increased soil moisture retention, reduced seed and fertilizer wash and farmers are seen to be maintaining these structures. Currently, there is insufficient use of biological measures at SWC assets to ensure **sustainability**. Land management using contour planting and terracing is a well rooted tradition in REAAP Activity areas, making **scalability** of SWC measures advisable.

3.6 Gully treatment: IPs and communities both lack the skills to construct technically sound stone gabions, related to the fact that the Activity was not reshaping gullies and stabilizing with them biological measures. The short Activity time period did allow all the necessary topo-sequence activities. Gully treatment should have been applied after the above catchment has been sufficiently treated and consolidated work achieved.

Both Activities' gully treatment measures did not appear to be either **effective and sustainable**. The Activity gully treatment practices rely on high-cost stone practices, a barrier to **scaling**.

3.7 Water point development: Water points in both Activities were mainly well-constructed and therefore **effective** at increasing access to protected water sources.

While most water points did have a water management committee, the Activities did not systematically train them, which might threaten **sustainability** as the water points age and require maintenance. While there is great need for additional water points, due to the high cost of the structures needed, **scalability** would require continued donor support and substantial investment.

3.8 Irrigation: Both Activities' spate and small-scale irrigation technology were both well-implemented, in good repair, and appreciated by beneficiaries, making them **effective**. As with other technologies, **sustainability** will depend on communities' and farmers' capacities to regularly maintain irrigation canals, pumps and other parts of the system, which the Activities have not yet provided for. Flood diversion and spate irrigation are low-cost interventions compared to small-scale irrigation, making **scaling** them in the drier areas of Hararghe and elsewhere in Bale Zone realistic, especially given government interest.

3.9 Improved seed: Farmers see the improved crop seeds as **effective**, though this requires delivery prior to the rains. The links between farmers and improved seed suppliers are not yet strong enough to be **sustainable and scalable**.

3.10 Keyhole gardens: Keyhole gardens are low-cost, water efficient, and **effectively** improve household food diversity and nutrition. Gardens require continued access to water and vegetable seed supply to be **sustainable**. Because keyhole gardens are a simple intervention requiring few inputs and yielding quick, tangible benefits, they are **scalable** even without donor support, as their spontaneous replication in the field demonstrated.

3.11: FES: Communities have growing demand for FES within the community and it has the potential to be an **effective** and cost-effective IGA for women that can also save women time collecting firewood and bolster household health. Group **sustainability and scalability** will depend on further links to markets for sales.

EVALUATION QUESTION 4

To what extent has there been effective layering and sequencing between CMDRR Activities with other resiliency and disaster risk management efforts of the USAID, the Government of Ethiopia and other donors (e.g., PSNP/DFAPs, Woreda Disaster Risk Profiling and Joint Emergency Operation Program (JEOP))? To answer this question, the evaluator will assess following aspects:

4.1 Effects of types and levels of layering and sequencing on CMDRR Activity results

From USAID/Ethiopia's perspective, layering involves geographic and programmatic overlap and collaboration of its activities. Sequencing is an approach that helps vulnerable populations move sequentially towards a pathway of expanded assets, enhanced resilience capacities, improved technical knowledge and skills, and greater confidence to engage in risk-taking or transformative activities.

4.1.1. Types and effects of layering and sequencing with PSNP/DFAP

Co-location and Programmatic Sequencing: While REAAP relied on the contribution of free community labor to promote NRM activities, REVIVE created temporary employment through PSNP's watershed management activities, which provided rapid responses to food insecurity among both PSNP and non-PSNP households, and provided temporary additional employment/resources through the Public Works

program. REVIVE's support for the Risk Financing Mechanism (RFM) in the form of employment for PSNP and non-PSNP beneficiaries is highly complementary to traditional humanitarian responses to increased acute food needs during a crisis. Because households exposed to unexpected disasters receive income for participation in community watershed activities, the intervention has a comparative advantage over traditional humanitarian responses. REVIVE conducted outreach to both PSNP and non-PSNP beneficiaries in kebeles/districts where the program is already operational, for both localized and more widespread natural disasters and economic shocks. PSNP also provides the necessary staging for the CMDRR Activity through complementary capacity building for WE/SILC group members' households.

Shared DRR objective: As evidenced from 9 of the 10 FGDs conducted in REVIVE woredas, all the FGDs in REAAP, and all the KIIs conducted in the two Activity activities, the D-RISK AND PDRA processes enhanced local awareness about climate risks, and facilitated kebele and woreda-level planning for the design of CMPs/CAPs. While households in these areas are risk-aware and better informed about DRM and context-specific adaptation strategies, there is little evidence of linkages with and leveraging of regional and federal-level EWS, DRM, or food security structures beyond local-level planning. KIIs with regional and federal National Disaster Risk Management Commission (NDRMC) staff confirmed that they were not aware of the Activities being implemented by REAAP and REVIVE.

Shared Watershed management objectives: PSNP has benefited from collaboration with CMDRR Activities, which have a strong community-based watershed management component. The effect of layering with PSNP/DFAP ensured that PSNP's watershed management activity was conducted in a more participatory fashion than before CMDRR, as the activity provided support through the mobilization of community members, training of stakeholders, joint planning, provision of hand tools and technical oversight. According to KIIs with woreda and PSNP staff in five woredas, in addition to facilitating the effective implementation of SWC structures by PDOs as per woreda quotas, the activities also supported additional ecosystem restoration activities, such as flood water diversion, spate irrigation, and area closure.

4.1.2. JEOP coordination and integration: REAAP was designed to layer over the CRS-led JEOP Activity to integrate humanitarian and development program objectives, and set up the sequencing of assistance from humanitarian to development programming. REAAP replicated the kebele data gathering aspect of the JEOP system in CMDRR communities. Building off the already existing EWS managed by JEOP, REAAP introduced a data collection system using an SMS information system linked to a web-based database management system within the REAAP Activity Management Unit. This layering is designed to complement JEOP's early warning systems, and promote effective communication with USAID and other stakeholders around the evolving nature of hazards in REAAP operational locations. CRS' experience managing JEOP was advantageous in setting up the REAAP two-way system, specifically in packaging and channeling external forecast information to the project. As noted elsewhere, however, while both ends of the two-way system functioned, they did not effectively complement one another or lead to improvements in the system.

4.1.3. Coordination among Resilience Partners in Bale: REVIVE is a member of the Bale Resilience consortium which coordinates resilience activities among ECHO-SHARE (Farm Africa), RESET (Danish Church Aid), and UNICEF water Activity activities in Bale. The Activity has a signed MoU with the Consortium, and at the time of this evaluation, had participated in four coordination meetings with the platform members. Beyond information sharing meetings, there is yet little evidence that the platform is used to facilitate joint planning, implementation or streamlining of tasks.

4.1.4. Linkages with financial institutions: The design of the WE/SILC Activity activities reflect the notion that CMDRR's expected results can be achieved mainly when groups are linked to appropriate, inclusive markets and financial services. But from the KIIs and FGDs, the evaluation team is unable to identify market and financial linkages facilitated by the Activity, including linkages with Micro-Financial Institutions (MFIs) and Rural Savings and Credit Cooperatives (RuSACCOs). Year three (Q1) plan of the REVIVE Activity indicates a desire to engage WE groups on Wealth Generation Pathways (WGP) through

targeted investments to link private market actors with WE groups' IGAs.²⁴ Facilitation of linkages and leverages with market actors and financial institutions is vital, as many of the CMDRR approaches, by design, require linkages, leverages and local ownership.

4.1.5. Linkages and leverages with private/profit/non-profit entities: As per REVIVE's WGP and annual work plans, market sector support linkages with women's savings-led enterprises were meant to be leveraged for greater effect. However, planned linkages and leverages with private market actors or profit/non-profit entities have not yet materialized. In particular, the REVIVE WE group activity was designed along PCI's WGP to promote targeted private sector investments and linkages between industries, WE groups and buyers through facilitating private sector stakeholders' access to matching funds, loan guarantees and service contracts. Because of the limited number of viable private enterprises in Bale, and the reluctance of those few enterprises to engage in risky investments in inaccessible lowland woredas of the zone, REVIVE had yet to facilitate the connections, as stated in the WGP plans.

4.1.6. Collaboration with other USAID and donor funded activities: Feed the Future facilitated periodic meetings aimed at sharing experiences and exploring potential for collaboration and synergies between FtF Activities, including Capacity to Improve Agriculture and Food Security (CIAFS), Pastoralist Areas Resilience Improvement through Market Expansion (PRIME), the Agriculture Knowledge, Learning, Development, and Policy Project (both REAAP & REVIVE), Agricultural Growth Program/Livestock Market Development, Commercial Farmers Services Program, DigitalGreen, Haramaya and Wageningen Universities (REAAP), Farm Africa, SoS Sahel, Water and Land Resource Center (WALRIS), and International Water Management Institute (REVIVE).

The evaluation team notes examples of national and field-level coordination, such as REAAP and REVIVE's collaboration with AKLDP and CIAFS for joint documentation and sharing of publications on extension and climate change, validation of the Indigenous Knowledge and Practices assessment, baseline survey and gender analysis (REAAP) and Inventory of Best Agricultural Practices (REVIVE). REVIVE also facilitated experience sharing visits for relevant community members, committees, and kebele/woreda officials to Borena to gain firsthand experience on participatory rangeland/forest management, Haro Beke micro water dam, and non-timber forest production (SOS Sahel-PRIME), information management center for CMDRR and traditional deep wells (*ellas*) promoted by Action for Development (AFD) and youth IGA groups organized by Oxfam and the Agency for Cooperation and Research in Development (ACORD) in Miyo woreda. REAAP held collaborative meetings with CARE to layer activities in overlapping Activity kebeles and learn about PRIME's EVS. Internally, REAAP collaborated with JEOP on the EVS database management system and with DFAP on targeting of kebeles, barrier analysis of keyhole gardens, and the creation of operational synergies in overlapping kebeles. REAAP organized seasonal climate information sharing and agricultural planning sessions with farmers, Haramaya University and woreda and zonal governments in Hararghe.

4.2 Duplication or complementation of efforts in same technical area in the same geographical region

4.2.1. There is strong evidence to support that IPs maintained good communication and coordination mechanisms with woreda and zonal governments. Activity documents such as CMPs/CAPs, SAPARM maps, EVS information, and regular reports were shared with relevant woreda and zonal government offices. D-RISK AND PDRA data on hazards, vulnerabilities and capacities, traditional grazing maps and watershed plans (through PSNP) are developed jointly with the relevant sector offices. Most woreda administrations and sector offices in both REVIVE and REAAP Activity areas acknowledged the sharing of such documents by the Activity.

²⁴ PCI Year Three Work Plan (October 1, 2016 - September 31, 2017)

4.2.2. GoE's WDRP is a comprehensive disaster risk assessment program that collects data for 116 indicators collected from a survey of 400 households, FGDs in 30 kebeles and 10 KIs in a woreda. Of the 15 CMDRR Activity woredas, 13 (9 in REVIVE and 4 in REAAP) already had comprehensive WDRPs. However, there is no evidence to suggest that existing WDRPs are being used to inform local planning and decision making processes. In this case, while duplicating efforts of the WDRP process, the D-RISK and PDRA processes helped the woredas to use updated data in designing community action plans or improving contingency and mitigation planning processes.

4.2.3. According to KIs, the Activity has created strong partnership and leveraged resources with PSNP/DFAP, National Watershed, and Livelihoods, Early Assessment, and Protection Activity initiatives to improve their reach and success. CMDRR's support, in the form of capacity building, community mobilization and technical oversight and monitoring, allowed PSNP and communities to effectively implement some activities on their watershed plans.

4.2.4. D-RISK and PDRA elevated "linkages and leverages" with local early warning and food security/PSNP program activities through the creation of CMPs and CAPs, respectively (which, at the kebele level, are not carried out under the WDRP process). However, the process of data collection may have duplicated the efforts of WDRP processes.

4.2.5. In order to ensure coordination at the field level, REVIVE facilitated the establishment of woreda-level steering committees with mandates to review Activity plans and progresses. At the zonal level, launching and annual review workshops have been organized by REVIVE for government stakeholders from all nine woredas. These platforms ensure that government stakeholders' inputs and feedback are included in the design and implementation of activities. Meanwhile, quarterly coordination meetings with Bale Resilience Platform members has facilitated information sharing and ensured accountability to the Bale zone administration.

4.2.6. REAAP's two-way early warning system and the seasonal Multi Stakeholder Platform facilitated the exchange of weather information and agricultural advisories among researchers, farmers and local government stakeholders. Quarterly meetings organized by the national REAAP Steering Committee ensured information sharing and coordination among IPs.

4.2.7. The evaluation team found a lack of horizontal and vertical linkages with woreda and higher-level Cooperatives Promotion Offices, which, in turn, has limited possibilities for SILC/WE groups to leverage capital from RuSACCOs.

4.2.8. Generally, there is little evidence that there will be sustained change in terms of influencing woreda annual plans and budgets. For example, the evaluation team did not find evidence from Activity documents or field data that the CMPS/CAPs process informed WDRP or woreda planning. Further, the lack of vertical linkages with regional and federal EWS institutions has limited the possibility of linkages with GoE's EWS, which has implications for the sustainability of activity initiatives.

4.3 Appropriateness and effectiveness of the layering and sequencing to achieve resiliency, climate change adaptation and disaster risk reduction objectives.

4.3.1. Stakeholder Participation: Sendai framework for DRR (2015-2030) calls for the "full and meaningful participation of relevant stakeholders at appropriate levels". As evidenced by program reporting and reinforced by FGDs and KIs with participants and implementers, the D-RISK/CMDRR process is designed to be a community-owned and multi-stakeholder process which promotes learning and takes reinforcing people's capacities as its point of departure. The approaches promoted by both Activities brought communities and local government representatives together to analyze and address common disaster risks through established participatory mechanisms. Communities were capacitated to

conduct their own risk analysis, to inform the design of CMPs/CAPs and to implement prioritized DRR measures by the Activity.

4.3.2. Evidence of CMDRR methodology: For the REAAP Activity, significant evidence exists, through KIIs/FGDs as well as program processes and documentation, that the CMDRR methodology is being applied in a rigorous, systematic, and consistent way. REVIVE, however, did not consistently follow the D-RISK process. In Deyu (Dolo Mena) and Hare Goro (Lege Hida), for example, the process was conducted quickly and through a rigid, non-inclusive FGD format to collect information to create CMPs. Risk and resource data collected during FGDs were analyzed by Activity staff, and the development of CMPs was not always following inclusive and participatory processes.

4.3.3. Watershed management: Watershed management planning and implementation in predominantly farming and mixed-farming livelihood zones followed GoE's community-based participatory watershed development guideline (spatial and temporal sequencing). Joint planning and technical and material support to PSNP's watershed activities ensured effective and timely completion of SWC activities and their ownership by communities. Linkages of WE/SILC group activities with watershed activities also facilitated access to IGAs for group members. For example, linking WE group activities with management of the resources of enclosed and rehabilitated micro-watersheds in Rayitu (Arda Kalo), Mada Walabu (Berisa), small scale irrigation activities in Malka Amana kebele and the development of Hida Kumbi spring in Wabaro kebele of Dolo Mena have elevated linkages and leverages with PSNP. In the same way, REAAP flood diversion and spate irrigation interventions linked to PSNP (in Agemsa Chelie and Hayu kebeles of Mieso woreda) and SILC promotion activities linked to production and marketing of FESs in all six target woredas have enhanced layering of REAAP and PSNP/DFAP activities and leveraged resources for sustainable outcomes. Despite this, there are concerns regarding the implementation of the watershed development approach in pastoral woredas with extensive rangelands, as it can be problematic to apply a rigid and conventional approach without tailoring it to address local conditions²⁵.

4.4 Challenges for collaboration and integration: Some IPs expressed challenges related to collaboration. In particular, informants noted challenges with the number and diversity of programming and assessment tools, the lack of complementarity among USAID programs (targeting, activities and areas of intervention), and differences in implementation philosophy and orientation that result in competition between stakeholders.

Conclusions

4.1 CMDRR collaboration platforms have generally created better understanding and interaction between stakeholders. However, not much was done to improve coordination, and ensure that cross-learning events inform programming and implementation.

4.2 Support provided by the CMDRR Activity for the PSNP's watershed management, small-scale irrigation (more applicable in REAAP), water harvesting and conservation structures, and the RFM (REVIVE) have enhanced the implementation capacity of local governments and communities, as well as ensuring local ownership and effectiveness of implemented soil and water conservation structures. CMDRR

²⁵ Past plot based watershed management efforts which viewed rangeland degradation as an engineering problem, and which focused on technical solutions for controlling erosion, reducing runoff and flooding which were often designed and implemented with little regard for their impacts on pastoral livelihoods and rangeland ecosystems have yielded little results (Tigistu, G., Fiona, F., Ulrich, B. & Akloweg, N. (2016). *Woreda (district) participatory land use planning in pastoral areas of Ethiopia: Development, piloting and opportunities for scaling-up*. Paper prepared for presentation at the "2016 world bank conference on land and poverty" the World Bank - Washington D.C, March 14-18, 2016. Sisay A., Fiona, F. & Solomon, B. (2015). *Participatory rangeland management planning and its implementation in Ethiopia*. Paper prepared for presentation at the "2015 World Bank conference on land and poverty" the World Bank - Washington D.C, March 23-27, 2015. Fiona, F. & Adrian, C. (2015). *Introductory guidelines to participatory rangeland management in pastoral areas*. Save the Children USA).

collaboration platforms have generally created better understanding and interaction between stakeholders. However, activities must do more to improve coordination, and ensure that cross-learning events inform programming and implementation.

4.3 Although the CMDRR Activity and the Pastoral Community Development Programme (PCDP) share complementary and sometimes overlapping objectives the activities' lack of coordination is a missed opportunity to leverage respective resources that could maximize their respective efforts.

4.4 Despite facilitating the sharing of weather information and agricultural advisories among stakeholders, REAAP's two-way early warning system and the seasonal Multi Stakeholder Platform have resulted in a duplication of effort among REAAP and GoE institutions with respect to blending indigenous forecasting and weather and resource monitoring systems with scientific forecast information. This hinders the ability to effectively inform decision-making at the local level, and activity design at the REAAP level. The CMDRR Activity, despite having highly complementary goals and objectives with regional and national programs, has little or no complementarity in the same technical areas as early warning and DRR institutions.

4.5 For both REAAP and REVIVE, the D-RISK and PDRA methodologies have achieved their expected outcomes in terms of increasing awareness about climate change and disaster risks, promoting community-based planning and actions to address risks, and facilitation of kebele and woreda-level planning for the design of CMPs/CAPs. However, the approach is not best suited for pastoral woredas with extensive rangelands, where pastoral mobility is still key to local production systems; a different approach is required to reflect the requirements of pastoral livelihood strategies and the variations in such as scale and units of planning, ecology, and land uses.

EVALUATION QUESTION 5

How appropriate was the design of the CMDRR? Specifically, evaluators should assess the following aspects to answer this question and make recommendations:

5.1 Appropriateness of the design of the set of interventions to achievement of the Activity's Objectives.

Design based on global and regional DRR frameworks and national resiliency initiatives: CMDRR uses the Hyogo Framework for Action 2005-2015 (now replaced by Sendai Framework for DRR (2015-2030), the Growth and Transformation Plan (GTP II), the DRM-SPIF and CRGE. These global and national initiatives call for a more 'solid' and 'people-centered' DRR framework emphasize the capacity of communities to effectively plan, implement and monitor community-driven development approaches. Through the PDRA and D-RISK processes detailed in Section I, CMDRR follows the community-driven approach towards improving disaster risk understanding, governance, resilience, and preparedness response, the priority areas of the African Regional Strategy for DRR and the Sendai Framework.

Design based on communities needs and priorities: DRR Committees guided REAAP's CMDRR process and consisted of 20 members representing all kebele villages equally. REAAP area FGDs demonstrated that beneficiaries had a deep and consistent understanding of the process. KIIs with woreda GoE staff and with Hararghe Catholic Secretariat (HCS) Activity staff confirm that this approach instills a sense of ownership among community members, and stands in contrast to the top-down government approach.

REVIVE's CMDRR process used existing kebele DRR committees and followed the GoE guidance for selecting group members. As discussed in Section 1.2, woreda-level KIIs found varying levels of understanding of the D-RISK process but consistent appreciation of the process and the data. The D-RISK process, however, is highly technical and woredas did not evidence the capacity to continue it without REVIVE support.

FGDs and KIIs in both Activity areas reflect serious and on-going shortages of water, with significant implications for livelihoods and well-being, yet neither REAAP nor REVIVE interventions have addressed water shortage in a systematic way, primarily due to resource constraints. REVIVE KIIs specifically mentioned the need for deep groundwater technology. Woreda and IP KIIs also both suggested the importance of a crisis-modifier for Activities in drought-stricken areas.

Appropriateness of beneficiary targeting

Committee composition: As detailed in Section 2, REAAP's approach promoted under-represented groups participating in community planning and implementation through specifically ensuring balance. REVIVE committees do not specify the number of female members beyond requiring a representative from the Women's Affairs Office, nor do they ensure inclusion of PWDs.

PSNP: 54% of REAAP area household reported receiving assistance from PSNP at endline, while 60% reported receiving PSNP assistance in the REVIVE area. According to the most recent PSNP evaluation, the PSNP mechanism for targeting recipients in lowland areas may not adequately cover the poorest or most vulnerable in the population. REVIVE DRRCs use PSNP data to target the most vulnerable individuals, including the elderly, pregnant and lactating women, PWD, and the extremely poor. The participatory and inclusive nature of the CMDRR approach should mitigate against a systematic exclusion of vulnerable populations from benefiting from Activity interventions.

WE/SILC groups: Both REAAP and REVIVE provide a mechanism for women's inclusion through these groups, as detailed in Section 2.

WE/SILC groups promote savings and investments, which requires members to contribute money weekly or monthly. FGDs with WE groups expressed concern that if a woman is too poor to afford the minimal weekly contributions of ETB 7 (~\$0.30), then she cannot be a WE group member. While the groups may have some discretion to waive fees, and can direct funds from its social fund to non-members, initial membership fees can preclude participation from segments of the population most in need.

Design incorporating local Capacity Building to ensure sustainability of interventions: KIIs with REAAP IPs and desk review indicated broad satisfaction with CMDRR capacity building efforts and strategic inclusion of local staff as well as government counterparts. M&E data indicate a strong program for building and reinforcing capacity of Activity partners, beneficiaries, and staff.

In REVIVE, where there were more IPs, including several that had never implemented CMDRR programming, KIIs revealed some gaps in technical capacity. The majority of field staff supported WE groups, while only one staff member per woreda oversaw D-RISK, SAPARM, and NRM interventions. The large Activity geographic scope meant that PCI's advisors had limited ability to consistently support all woredas.

According to IP KIIs, both Activities had notable staff turnover. Staff turnover requires replacements to be trained and oriented. IP field staff KIIs stated that qualified DRRFs transition to GoE because of the positions are more permanent and there is opportunity for advancement. KIIs with two REAAP field staff and one headquarters staff indicated that some replacement DRRFs, who must be from the local communities, may not have the desired qualifications, reducing their effectiveness. DRRFs are central to proper DRRC operation and maintaining the Activity's relationship with DAs and GoE.

5.2 Appropriateness of the geographical coverage in terms of different livelihoods such as pastoralist, agro-pastoralist, agricultural, lowland and highland zones for the proposed interventions

Appropriate technical actions for biophysical environment livelihood zones: By design, the CMDRR Activities align with the GoE's community and unit-based watershed management approach. As detailed in Section 3.4, this is appropriate in highland but not lowland areas.

Geographical coverage: Government and IP KIs confirm that the combination of a large geographic area with a short Activity period of performance, especially for a resiliency-focused activity, poses a challenge for even and consistent implementation. REAAP staff said that the large number of kebeles (100), staggered implementation (50 kebeles in 2015, 50 in 2016), and modest budget (\$7,000 per kebele) stretched Activity resources thin. REVIVE covers 168 kebeles over 9 far-reaching woredas. Accessibility in rainy season, security considerations, difficult terrain, lack of vehicles, price of fuel, and new and reduced limits on government per diems all limited staff, GoE and community mobility, leading to incomplete activities.

5.3 Appropriateness of the Activity period to sufficiently achieve the Activity's intended results.

Timeframe for completion of activities:

According to REAAP's latest Quarterly Report, there have been many implementation delays, including water and NRM activities. In REAAP, delays in implementing improved seed delivery meant that planting timing did not correspond with the rains, before which planting needs to occur. REAAP and REVIVE IPs note in their reports when delays are taking place. In some cases, valuable diagnostic activities, such as a REVIVE mini-survey to gauge household perception, were postponed to nearly the end of the Activity, limiting their value for adaptive management.

Robust M&E Systems provided timely information about Activity implementation: Both Activities' M&E systems provide the basic outputs indicators against targets and document achievements. However, REVIVE IPs pointed out that there were not always adequate staff to monitor implementation, and PCI technical oversight was not always available due to the wide geographic scope (Section 5.2).

REAAP's Real-Time Evaluations for Gender, EWS, SILC, and DRR provided staff with additional holistic information for adaptively managing activities. For example, the October 2015 Gender Study prioritized linking SILC groups to adult education providers, providing gender training, and conducting gender impact assessments. CRS's Simple Measurement of Indicators for Learning and Evidence-based Reporting (SMILER) system merged the monitoring tools for all activities into one system, making it easier to conduct analysis and assess data across different activities. It was also possible to track individual beneficiaries across all activities and reduce or eliminate double counting. It requires the contribution, and regular participation of beneficiaries, Activity staff, and government partners, and increases the transparency of the Activity, which IP KIs stated improved M&E capacity of these stakeholders.

5.4 Pros and cons of having two awards for one Activity in terms of Activity management, cost, promoting innovations and cross learning.

CRS has worked with natural and man-made disasters affecting Ethiopia's most vulnerable communities for more than 50 years. CRS also has a strong prior relationship with HCS, and a central position in the EWS arena as managers of the JEOP Activity. CRS's prior experience in promoting EWS with JEOP led to the effective integration and sequencing of activities with REAAP's two-way EWS. HCS's prior experience in promoting NRM activities in Hararghe coupled with its close working relationship with local government facilitated horizontal communications and joint planning and monitoring mechanisms with local

stakeholders. CORDAID's and HI's specialized knowledge on promotion of the CMDRR approach (CORDAID) and disability inclusion (HI) facilitated a rigorous and consistent application of participatory and inclusive DRR and disability inclusive approaches.

PCI has extensive experience improving community resiliency worldwide, and has been operating in Ethiopia since 2005. PCI has worked with remote communities with a focus on capacity-building, disaster risk reduction and response, and economic empowerment. Agri-service Ethiopia had prior experience providing drought aid in Activity areas and understood the benefits of introducing communities with a CMDRR approach. Other than Agri-services prior experience in DRR tied to emergency interventions and Hundee's experience in promoting women-saving groups, the consortium arrangement is not based on strong familiarity with the core SO1 and SO2 related approaches and processes of the Activity design document.

REAAP and REVIVE yielded different lessons learned from the technology pilots they conducted. While under REVIVE PCI tested SAPARM maps and the DRISK system, CRS tested its own EWS through REAAP. The lessons from these two types of technology are detailed elsewhere in the report.

It is evident from the KIs that having two awards increased the management burden and of the Activity for USAID. For example, conducting field visits of either IP required a two-week trip due to the remoteness of the site locations; conducting a joint visit would have required a three or more-week visit, a major scheduling challenge for USAID staff that are also managing other work. The need to oversee two prime IPs rather than one also diluted the day-to-day management and oversight of issues such as implementation delays.

KIs with field staff in REAAP and REVIVE indicated little exposure to or cross-learning from the other Activity.

Conclusions

5.1 Participation: CMDRR's highly participatory methodology in both Activity areas, specifically participation in the D-RISK and PDRA processes, was an appropriate method for actively engaging communities and promoting their ownership and uptake of CMDRR work to achieve the Activity's Objectives. Activities had mixed records of inclusion, generally both doing well in including women, though REAAP's methods of including women and PWD were particularly appropriate.

5.2 Priorities: In spite of the community input into both processes (PDRA, D-RISK), and the clear prioritization of water access expressed during FGDs and KIs, that the CMPs/CAPs resulting from the process, did not adequately reflect this need.

5.3 Geography: CMDRR targeted areas with great need with appropriate interventions for the most part, but the geographic coverage of the Activities was spread too thin for effective implementation.

5.4 Delays: The short Activity time period and complex nature of the Activities led to Activity delays and have threatened planned implementation completion.

5.5 M&E: The SMILER system introduced by CRS, represents a truly innovative, comprehensive, and coherent system, which requires the contribution, and therefore builds the capacity and commitment for monitoring, evaluation, and learning, to a wider and more diverse audience. It requires investment and regular participation of beneficiaries, Activity staff, and government partners, and increases the transparency of the Activity. Besides expanding awareness across the spectrum of stakeholders, this open, participatory, and transparent system builds trust and ownership from all involved.

5.6 Two Awards: Awarding CMDRR to two IPs allowed USAID to test CMDRR approaches in very different settings, with each prime IP focusing on areas where they had extensive prior experience. It also allowed IPs to test different CMDRR technologies and approaches. However, the management burden

caused by the existence of two rather than one award negated these advantages. Awarding two separate awards to independent consortia did not promote more significant cross learning, even considering a common overarching framework. Differences in CMDRR methodology, management structures, geographic and livelihood characteristics, as well as systems for documenting and reporting on program progress, coupled with Activity-specific challenges noted above, all may have contributed to reducing the perceived benefits of cross learning.

RECOMMENDATIONS

The recommendations below are based on the evaluation findings discussed in preceding sections of this report. In the design and implementation of future CMDRR Activities, USAID and contributing stakeholders should:

1. Promote the CMDRR approach as a methodology to build the capacities of communities to plan, organize, and respond to the hazards they face. In doing so, USAID should dedicate sufficient time (no less than 5 years) to ensuring that the community-level outputs (CAPs) are effectively and formally tied to local government processes to ensure sustainability and scalability of priority actions. Highly participatory processes, like PDRA and participatory planning, monitoring, evaluation, and learning (PPMEL), should be combined with a community cost-share requirement, as they are in REAAP, to increase ownership and commitment to collaborative planning, implementation, and monitoring.
2. Support the creation and development of women-focused savings and loans groups. WE/SILC groups are an effective way to introduce savings, increase access to loans, support IGAs, improve women's confidence, and change male perceptions about the role of women in the community. To further strengthen these groups, they must be linked to greater and more reliable finance mechanisms for long-term sustainability, and to ensure that a more substantial share of members can reap the benefits of savings and loan access. Savings groups should be linked with woreda and Zonal Cooperative Promotion Offices to facilitate legalization of groups to access services, including finance from MFIs and RuSACCOs. Similarly, IPs should help create strong group IGAs and businesses (beehives, incense, aloe, FES, small-scale irrigation schemes) by facilitating market linkages and system relationships, where relevant.
3. Immediately build on the successful introduction of NRM technologies noted in this report, and allocate a minimum of five years to pursue watershed activities to allow for the three steps of mobilization, implementation, and consolidation to take place. USAID should also invest sufficient time and planning into ensuring that biological measures are in place to complement the intensive work to stabilize physical SWC structures. Future closures where SWC measures are undertaken on hillsides need to utilize a ridge-to-valley approach, so as not to disconnect the topo-sequencing of interventions (whereby lower land is treated without adequate attention given to land above it). This is particularly relevant for gully treatment, and underscores the need to gradually build the scalability of interventions, rather than spontaneously implement piecemeal physical SWC measures.
4. Support national GoE NRM agencies in rethinking the application of watershed approaches for lowland pastoral woredas. These areas are more suited to approaches that consider deep-rooted and flexible customary rangeland governance systems, such as landscape or ecosystem-based participatory rangeland management. Dryland pastoral areas are complex, and this complexity requires critical attention to specific system attributes, the relationships between systems within a landscape context, and livelihood, environmental, social, and historical contexts. As opposed to unit-based watershed planning approaches, the proposed approach takes into account the variable nature of dryland environments, the multiple and often over-lapping land uses over a large scale, the communal nature of land holdings, and the flexible management of resources with changing access to grazing, water, and other natural resources. Importantly, these approaches put customary resource governance structures at the center of the process, building in community acceptance and process sustainability.

5. Design holistic, systems-based programs that favor resiliency from the outset. Support to piecemeal aspects of livelihood systems (e.g. providing improved seed, providing hardware equipment for beehives, training CAHWs) will not contribute to sustained change within that system. Rather, support to the multiple constraints within a livelihood system would better support strengthening livelihood productivity and incomes, and, in turn, household resiliency. For example, building the capacity of CAHWs will likely not translate into improved outcomes for livestock health and productivity across a community. However, if an activity addresses capacity building alongside other priority constraints (e.g. consistent access to quality medicines, improved herd management and destocking for drought risk, market price information, access to improved breeds, government-supported disease surveillance, rangeland management that supports dry/wet season mobility needs, etc.), the activity will support more sustainable growth and resilient development of that system. A systems lens approach towards livelihood support will allow actions to more effectively influence communities, rather than only those individuals or households directly receiving Activity support.
6. Ensure that water access and quality, critical limiting factors across both Activity areas, are assessed and addressed as a priority intervention. This recommendation should extend equally to all national and international partners working in these drought-prone areas. The evaluation team recommends that USAID strategize to address the critical water stress seen and felt in the communities visited, focusing on the development of domestic, as well as livestock, water assets for the community. Greater emphasis, supported by a larger financial allocation, is needed on deep groundwater sources that will provide water throughout the dry seasons. USAID should capacitate water management committees and link them to kebele and woreda-level actors to support the sustainability of the water point when future maintenance and repairs are needed. USAID should also consider supporting a crisis modifier that would allow the Activities to support emergency needs such as water trucking and emergency animal feed.
7. Dedicate greater attention to assessing individual capacity to understand and integrate scientific information prior to introducing science-based innovations. USAID should also monitor user perceptions and actual use of information more closely in order to ensure that information meets user needs.
 - a. **SAPARM:** Community understanding of and ability to use science-based climate information must be improved. SAPARM maps do not conform to users' variations in vegetation density and types of pasture, or in water sources and water availability, which are all fundamental components to making informed decisions about mobility. By increasing the amount and type of information the maps capture, maps can be more dynamic and useful to users attempting to identify risks across different landscapes. The evaluation team recommends that community-level sensitization be a defined output of any future interventions utilizing the SAPARM innovation, and that more physical maps be provided to each kebele to increase access to information, particularly for households that are not near kebele centers. Furthermore, a future activity would benefit from a stronger M&E system that can track timely distribution of maps to woredas, kebeles, and, importantly, how information reaches communities, and community perceptions of the maps.
 - b. **Two-way EWS:** USAID should consider how to better integrate IK and scientific knowledge on a more frequent basis than just seasonal forecasting forums. Frequent integration of these knowledge streams maximizes synergy with scientific indicators and allows users to better gauge the utility of this information for decision-making. To ensure EWI is adequately reaching communities (and those households that are far from kebele centres), USAID should prioritize monitoring how information is being disseminated, as this will help elucidate the mechanisms that are more successful than others in reaching end users.

8. Work with GoE officials to ensure that mechanisms and commitments are in place to ensure that information generated from woredas is integrated into systems designed and managed at the regional, zonal, and federal levels. For example, early warning and disaster risk management are best supported when linked to and implemented in a coordinated manner with NDRMC, and within the framework of the federal DRM-SPIF. To avoid unnecessary duplication of efforts, USAID should ensure government buy-in for CMDRR initiatives (D-RISK, WDRP, SAPARM maps, two-way EWS, etc.) that foster learning and future oversight, greater regional and federal-level linkages, and layering and sequencing with GoE's early warning and DRM institutions. Clarifying roles and responsibilities of relevant stakeholders for each of the EW and DRR components would support this recommendation.
9. Work with IPs to invest in a robust and comprehensive monitoring, evaluation, and learning (MEL) system, as it will pay dividends throughout the lives of programs. USAID needs to ensure adequate resources are available to develop, implement, monitor, and evaluate pilot or innovative models to provide evidence-based proof of concepts to increase internal and external learning from promising interventions. Activity interventions embedded in a learning agenda will be theoretically and programmatically aligned. Such a system can help track a broader range of cross-cutting and gender-sensitive social and economic measures, and requires a deeper analysis of trends and patterns across all Activity activities. Tracking all aspects of Activity implementation and capacity building provides an opportunity for decision-makers to better target activity resources to areas where they are most needed.

ANNEXES

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ANNEX I: STATEMENT OF WORK

FINAL PERFORMANCE EVALUATION OF COMMUNITY-MANAGED DISASTER RISK REDUCTION (CMDRR) PROJECT (TWO AWARDS : REAAP AID-663-A-14-00006 AND REVIVE AID-663-A-14-00005)

I. INTRODUCTION

The Resilience through Enhanced Adaptation, Action Learning and Partnership (REAAP) and Restoring Vibrant Villages and Environments (REVIVE) activities were initially designed as one Community-Managed Disaster Risk Reduction project (CMDRR) to sustainably increase resilience and reduce vulnerability of communities to current and future climate change and climate-related shocks and stresses in the most disaster prone areas of Oromia region. During the procurement process, it was split into two awards to two implementing partners (Catholic Relief Services (CRS) and Project Concern International (PCI)) with same goal and objectives.

Both three-year activities aimed to increase resiliency and reduce vulnerability of communities in targeted 15 woredas.

Table 1: CMDRR Budget and Timeline

Award#	Award Name and Implementer	Start Date	End Date	LOP Budget
AID-663-A-14-00006	REAAP (CRS)	10/01/2014	09/30/2017	\$ 5,992,920
AID-663-A-14-00005	REVIVE (PCI)	09/15/2014	09/14/2017	\$ 5,885,387

The objective of CMDRR is directly linked to all three core investment of USAID's Global Climate Change Adaptation strategy to (1) improve access to science and early warning information for resiliency building and disaster management decision making, (2) implement of risk reducing practices and actions to increase resilience to climate change, and (3) establish effective systems for climate resilience. The CMDRR activities also contribute to improved agricultural productivity of staple crops and livestock, which is one of the core objectives of the Feed the Future strategy, and builds community's disaster preparedness and prevention capacity building which contributes in OFDA's priority. The effective community-based planning and implementation of development initiatives is one of priorities under the Government of Ethiopia's Disaster Risk Management Strategic Program and Investment Framework (DRM SPIF).

Table 2: CMDRR Operational Areas in Oromia Region

Award	Woredas	# of targeted kebeles	Population in target woredas
REAAP	Meta, Fedis and Midhega Tola in East Hararghe, and Mieso, Oda Bultum, and Tulo in West Hararghe (6 woredas)	100 kebeles	475,000
REVIVE	Dewe Serer, Dawe Kachen, Rayitu, Meda Welabu, Seweyna, Lege Hida, Gura Damole, Harena Buluk and Dolo Mena in Bale Zone (9 woredas)	151 kebeles	620,000

REAAP is implemented by a Catholic Relief Services (CRS) - led consortium of *Ethiopian Catholic Church Social Development Coordination Office of Harar (ECC-SDCOH)*, *Handicap International (HI)* and *Catholic Organization for Relief and Development Aid (Cordaid)*. REVIVE is implemented by PCI, which is teamed up with three local organizations: Agri Service; Hundee Oromo Grassroots Development Initiative (Hundee); and Rift Valley Children and Women Development Organization (RCWDO).

USAID's evaluation policy encourages independent external evaluation to increase accountability and to inform those who develop programs and strategies, and to refine designs and introduce improvements into future efforts. It is with this objective that this evaluation is planned to review and evaluate the performance of the USAID-funded CMDRR Project activities implemented by CRS and PCI Ethiopia and its consortium members, and inform follow-on project design.

Social Impact, Inc., a Contractor for Ethiopia Performance Monitoring and Evaluation Services (EPMES) activity, will conduct the final performance evaluation of CMDRR to assess program results and document lessons learned, and will hereafter be referred to as the "evaluation team" or "Contractor" as appropriate in this document.. The evaluation will focus on assessing the activity's over two years of performance in achieving its program goal, objectives, and results.

II. BACKGROUND

Climate-induced drought and flood are the most common hazards in Ethiopia that affect millions of people. The number of people who suffered from drought peaked at 14 million in 2003 and 10.2 million in 2016. In addition, rural households often cite frost and hail, crop pests and diseases, livestock disease, and conflict as other hazards. This wide range of hazards is associated with the country's diverse geo-climatic and socio-economic conditions. Climate change is predicted to further exacerbate exposure to climate-related hazards. Ethiopia is particularly vulnerable to climate change due to the economic importance of agriculture, its prominent role in the livelihoods of rural households, and the unsustainable ecological pressures of agriculture on important watersheds.

The Government of Ethiopia's Climate Resilient and Green Economy (CRGE) Strategy and DRM SPIF were developed to address agriculture production growth, climate change adaptation and disaster risk management issues. The CRGE aims to improve the agriculture sector as a major

source of economic growth through ‘small holder agriculture development’ by scaling up best practices of small holder farmers, expanding irrigation development, improving natural resource conservation and soil management. Disaster Risk Management Strategic Program and Investment Framework (DRM SPIF) aimed to establish an effective, decentralized, disaster risk management system that can predict, analyze and respond to different hazards in an optimal, coordinated manner.

Building on Government of Ethiopia (GoE)’s above mentioned strategies and frameworks, CMDRR project was designed by USAID with funding from OFDA, GCC-AD, and FTF to contribute in both GOE and USG strategies to build resilience and reduce vulnerability to climate change and climate related shocks as well as build community-led disaster management systems in the most disaster prone woredas of Oromia region. CMDRR activities were layered with the GOE’s Productive Safety Net Program(PSNP) or USAID’s Development Food Assistance Program (DFAP) fully or partially, which transfers six months food transfer for chronically food insecure households in exchange of public work on natural resource management projects.

Three-year CMDRR activities were launched in September 2014, and will be in the middle of their last year of implementation when this final evaluation takes place. Starting in middle of 2015, Ethiopia was widely affected by El Nino induced drought, which required emergency food assistance in addition to the PSNP/DFAP transfers. Intercommunity conflicts and civil unrest has affected access to the project area during the implementation period.

The CMDRR program has an integrated logical framework designed to achieve its outcomes and ultimately contribute to the goal of the GoE’s DRM SFIF, and CRGE. The framework outlined objectively verifiable indicators and means of verification at output, outcome and goal levels.

III. PROJECT GOALS AND OBJECTIVES

Goal of the CMDRR: To sustainably increase household and community resilience and reduce long term vulnerability to climate change, climate variability and climate related shocks and stresses in the most disaster prone 15 woredas of Oromia region.

1. Strategic Objective 1: Improved access to science and analysis for community- based disaster risk reduction (CMDRR) decision making.
2. Strategic Objective 2. Improved household and community measures to adapt to climate variability, change and resulting shocks.
3. Strategic Objective 3. Enhanced community disaster risk reduction and climate adaptation planning and processes integrated with, and supported through GOE and other resiliency initiatives/Systems for planning, implementation, monitoring and evaluation around disaster risk reduction and climate change adaptation are established and strengthened through working with government and other stakeholders.

Table 3: CMDRR Results Framework

	REVIVE	REAAP
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Strategic Objective (SO) 1: Improved access to science and analysis for community based DRR and resiliency decision making	IR1.1: Satellite Assisted Pastoral Resource Management (SAPARM) innovations adapted and applied.	IR1.1: Knowledge management system is established and knowledge bank is used to draw on.
	IR1.2: Enhanced community-driven risk analysis and decision making.	IR1.2: Communities have increased capacity to understand and analyze information about their context.
SO 2. Improved household and community measures to adapt to climate change vulnerability, change, and resulting shocks	IR2.1: Natural resources rehabilitated, restored and expanded.	IR2.1: Innovative actions that increase community resilience to climate variability, long-term climate change and climate related shocks are identified and investigated by DRR committees.
	IR2.2: Livelihoods reinforced and diversified.	IR2.2: Community DRR committees managed inclusive context-specific DRR/adaptation activities and strategies.
SO 3. Systems for planning, implementation, monitoring and evaluation around DRR and climate change adaptation are established and strengthened through working with government and other stakeholders.	IR3.1: Improved capacity for community management of GOE supported disaster risk systems.	IR3.1: A contextually relevant community resilience framework developed to guide knowledge management, program strategies and learning.
	IR3.2: Public and private resources leveraged to support community resiliency.	IR3.2: Sustained supportive relationships are built between and among DRR Committees, relevant woredas, and other GOE bodies, community organizations, and DRM stakeholders.
		IR3.3: REAAP uses a functional Monitoring, Evaluation, and Accountability and Learning system to facilitate data-driven programming.

The CMDRR facilitates participatory disaster risk assessment (PDRA) and development of community mitigation plans (CMP) using various innovative methods such as D-RISK, community resource and risk mapping and community consultation process, and provides technical and material support to CMP implementation by communities in 250 kebeles. Through CMP implementation, the communities identify and implement natural resource management (NRM) and livelihoods actions to increase their resilience to climate variability, climate change, and climate related shocks. The CMDRR establishes and builds capacity of new and existing community platforms and government systems to use scientific tools such as SAPARM maps, D-RISK, Participatory Disaster Risk Assessment (PDRA) and early warning information and regular meetings about the potential hazards and climate induced disasters and supports their decision making around prevention and preparedness.

REAAP and REVIVE partners conducted household survey to set their baselines at the beginning of their activity which used similar but slightly different indicators to measure resilience, livelihoods, vulnerability to disaster risks, use of early warning information, application of risk reducing practices and technologies and livestock migration at household level. Performance Indicators Tracking Tables for both REVIVE and REAAP are attached.

Indicators used for the baseline survey:

REAAP	REVIVE
Number of stakeholders with increased capacity to adapt to the impacts of climate change as result of USG assistance (GCC), disaggregated by:	Percent of households who owns livestock.
- Using climate change information in their decision making.	Percent major reasons for livestock loss by households.
- Implementing risk reducing practices/actions to improve resilience to climate change.	Percent of households experienced crises in last 5 years, that led to loss of income and assets.
- With increased knowledge of climate change impacts and response actions.	Percent of different sources of information that guided the livestock movement.
Percent of beneficiaries reporting their livelihoods restored within three to six months after receiving support (OFDA).	Percent of the common water sources for people and livestock consumption, by source.
Percent of stakeholders using climate information in their decision making (CRS).	Percent of households applied new technology or new management practices in last 3 years.
Percent of community members who received at least one early warning message from at least one source prior to a disaster occurring (OFDA).	
Number of farmers and others who have applied improved technologies or management practices as a result of USG assistance (FtF).	

Number of institutions with improved capacity to address climate change issues as a result of USG assistance (GCC indicator).	
Number of people implementing risk-reducing practices/actions to improve resilience to climate change as a result of USG assistance (FtF).	

Notes: Please see the baseline values for these indicators from Baseline Reports.

The final evaluation household survey should not be limited to these indicators used for baseline survey. The contractor is expected to review these indicators and propose a methodology to answer the evaluation questions which can capture beyond these indicators, as needed.

IV. PURPOSE AND USE OF THE EVALUATION

The main purpose of this final performance evaluation of CMDRR is to examine its resiliency and disaster risk reduction outcomes or results, and determine its overall effectiveness of the interventions and partnerships, and any strengths and challenges in the courses of implementation. The evaluation findings will inform, if any, the changes in implementation tactic of CMDRR in their last year of implementation, and contribute to the design of future similar projects.

The findings of this evaluation are believed to demonstrate the effectiveness of the program, disseminate results and lessons learned to similar type of programs in the future and share with a broader development community. The recommendations from this evaluation would inform (1) the partners to strategize and make adaptations for their interventions during their remaining period of implementation; (2) USAID Ethiopia and USAID Washington to improve design and implementation of similar type resiliency and disaster risk reduction programs; and (3) National Disaster Risk Management Commission (NDRMC) about lessons learned during implementation of innovative approaches for community disaster risk management in line with the SPIF.

V. EVALUATION QUESTIONS

The evaluation is expected to provide answers to the following key questions:

- I. To what extent have household and community resiliency to climate change, variation and climate related shocks been changed due to CMDRR projects in the target area? To answer this question, the evaluator is expected to take following aspects into a consideration:
 - Changes in household resiliency and vulnerability to climate change, variation, and climate related shocks when compared to the baseline metrics.
 - Changes in the community resilience to climate change, variation, and climate related shocks by evaluating design, implementation and management aspects of common assets and community systems (such as early warning system and community platforms) when compared to the baseline metrics.

- Contributions of each three strategic objectives (SO) and different interventions under the SO's into the overall goal of household and community resiliency building.
- 2. How, if at all, have the CMDRR activities affected gender equity, women's empowerment and disability inclusion?
- 3. How successful were CMDRR projects in introducing and implementing new technologies or process innovations? To answer this question, the evaluator is expected to consider effectiveness, sustainability, and scalability of these new technologies and process innovations.
- 4. To what extent has there been effective layering and sequencing²⁶ between CMDRR projects with other resiliency and disaster risk management efforts of the USAID, the Government of Ethiopia and other donors (eg., DFAP/PSNPs, Woreda Disaster Risk Profiling and JEOP)? To answer this question, the evaluator will assess following aspects:
 - Effects of types and levels of layering and sequencing on CMDRR project results.
 - Duplication or complementation of efforts in same technical area in the same geographical region.
 - Appropriateness and effectiveness of the layering and sequencing to achieve resiliency, climate change adaptation and disaster risk reduction objectives.
- 5. How appropriate was the design of the CMDRR? Specifically, evaluators should assess the following aspects to answer this question and make recommendations:
 - Appropriateness of the design of the set of interventions to achievement of the project's Objectives.
 - Appropriateness of the geographical coverage in terms of different livelihoods such as pastoralist, agro-pastoralist, agricultural, lowland and highland zones for the proposed interventions.
 - Appropriateness of the project period to sufficiently achieve the project's intended results.
 - Pros and cons of having two awards for one project in terms of project management, cost, promoting innovations and cross learning.

VI. EVALUATION METHODS

The evaluation team will be responsible for developing an evaluation strategy and methodologies that include a mix of qualitative and quantitative data collection and analysis approaches. The team should present an evaluation questions matrix showing the source of data, method of data collection and also the tool to be used to answer each of the evaluation questions. The methodology will be presented as part of the draft work plan as outlined in the deliverables below and included in the final report. The evaluation team will have access to a variety of program implementation documents for their analysis and reports. The strengths and weaknesses of proposed methodology/ies should be identified as well as measures taken to address those

²⁶ Layering involves geographic and programmatic overlap and collaboration of its activities. Sequencing is an approach that helps vulnerable populations towards a pathway from their current status to expanded assets, enhanced resilience capacities, improved technical knowledge and skills, and greater confidence to engage in risk taking or transformative activities.

weaknesses. All data collected and presented in the evaluation report must be disaggregated, as appropriate, by partner, sex and geography (E.g. Woreda level).

The suggested methodology should include, but is not limited to:

6.1 Quantitative Method:

- i. *Assessing the activity performance compared to results framework and proposed output and outcome targets:* Review the quarterly and annual reports, activity tracking databases, and other available data from the partners in comparison to their results framework and targets. Conduct data quality check, field visit and stakeholder discussions to confirm the results.
- ii. *Population-based quantitative household survey to measure how the households have benefited from CMDRR interventions* The evaluation team is required to design and execute all aspects of a representative, stratified population-based household survey. These include developing a sampling procedures, questionnaires, and field procedure manuals for enumerators and supervisors; training enumerators and supervisors to administer the questionnaires; piloting and refining questionnaires; arranging logistics for field work; pre-testing the survey rollout; supervising data collection; and ensuring data entry, cleaning, tabulation, and analyses. Note: Two partners used similar but slightly different indicators to collect and analyze their baseline data. Both partners employed a staged implementation strategy, which allowed them to start their activities in 100 kebeles each in the 1st year (1st round), and in the remaining 151 kebeles the activities started in the second year (2nd round) of the project implementation period.

6.2 Qualitative Methods:

The following are list of indicative qualitative methods that might be employed:

- i. *Desktop review of relevant documentation:* includes the implementing partner's proposals, monitoring and evaluation plans, baseline studies, periodic performance reports, midterm evaluation report, case studies, and other related documents as necessary.
- ii. *Site Observation:* Evaluation team members shall visit selected CMDRR sites to assess the performance and, potential for sustainability and scalability of resilience enhancing interventions carried out by using site observation checklist. The evaluation team in collaboration with USAID will choose a strategy to select sites. The evaluation team will prepare and use adequate check list for site visits and consultations.
- iii. *Key informant interviews:* The evaluation team will have interviews with the following stakeholders (note that this list is not exhaustive):
 - Relevant USAID offices and other USG offices in Ethiopia
 - Implementing partner's staff at both prime and sub partner level;
 - Beneficiaries, community leaders, disaster risk reduction facilitators, disaster risk reduction committees, women's empowerment groups etc.;
 - Key stakeholders and relevant Government of Ethiopia representatives at both national, regional, zonal, woreda and local levels;

- Other donors and projects.

VII. EXISTING PERFORMANCE INFORMATION SOURCES

The evaluation team will review the following documents:

- a) Program Descriptions and Modifications
- b) Annual Work Plans
- c) Quarterly Reports
- d) Annual Reports
- e) PMP and other M&E documents
- f) Performance and activity tracking database from the partners
- g) Project-generated assessments (e.g. Real time evaluation of CMDRR approach, SILC, and Key hole garden)
- h) REAAP and REVIVE Baseline Survey Reports
- i) REVIVE Mid Term Evaluation
- j) Feed the Future Mid Term Evaluation
- k) Relevant external evaluations from other sources (e.g., PSNP Impact Evaluation, GRAD final evaluation reports)
- l) Relevant Government of Ethiopia and USAID policies and frameworks. (DRM SPIF, Woreda Disaster Risk Profiling etc)

VIII. TEAM COMPOSITION, QUALIFICATION AND RESPONSIBILITIES

The evaluation team shall consist of three independent international experts (with one serving as the team lead and primary coordinator with USAID's contractor, EPMES) as well as two high level Ethiopian experts, at least one of whom can also serve as an interpreter. . The international experts should be senior-level evaluation analysts specialized in areas such as resilience, climate change adaptation, community-based disaster risk management, early warning, and livelihoods issues. All international experts must be fluent in English and have strong writing skills and at least one team member have credentials and experience in evaluation design and methods. In similar fashion, the Ethiopian experts should have experience in resilience, climate change adaptation, community-based disaster risk management, early warning, and livelihoods, and monitoring and evaluation in Ethiopia. The Ethiopian experts should also be proficient in English, Amharic, and Afan Oromifa. A statement of potential bias or conflict of interest (or lack thereof) is required of each team member.

The multi-disciplinary team should also be capable of assessing most or all dimensions of CMDRR including technical areas (resilience, disaster risk reduction, climate change adaptation, participatory disaster risk assessment, natural resource management, and early warning) and operational areas (management, partnerships, staffing, reporting systems, M&E, etc.).

USAID may propose internal staff members from USAID/Washington or other Missions to accompany the team during site visits or participate in key parts of the evaluation (specific event participation to be determined in conjunction with the contractor and the team leader), and they are expected to provide written inputs to the draft report.

Team Leader (one): The team leader will take the overall responsibility of the evaluation. S/he will be the primary point of contact between USAID and the evaluation team and have responsibility

for submission of all deliverables. The team leader should be an evaluation experts with preferably proven experience in quantitative and familiarity with qualitative methods. Substantial disaster risk management and resiliency background and experience in Ethiopia are desirable.

The incumbent must meet the following criteria:

- Master's or Ph.D. that included high-level coursework or professional continuing-education training in disaster risk management, climate change adaptation, statistics, project evaluation, or another field relevant to evaluation.
- At least 10 year work experience in particular with practical evaluation experience in Ethiopia and /or other African countries and who has led at least two similar evaluation/studies. He/she will be responsible for overall management of the evaluation, including coordinating and packaging the deliverables as well as ensuring quality and timeliness
- Strong team management skills, and sufficient experience with evaluation standards and practices to ensure a credible product;
- Directly managed the design and implementation of at least two large-scale household surveys with complex designs;
- Has excellent organization and writing skills and a demonstrated ability to deliver a quality written product in English (e.g., evaluation report and PowerPoint presentations);
- Has excellent oral communication, presentation, and inter-personal skills; and
- Has the technical and management skills to manage budget resources (dollars and staff) for the study, as well as assist and support the team with field logistics, e.g., coordinating with USAID and/or a government ministry and project stakeholders to set up initial appointments for interviews.

International Experts (Community-based Disaster Risk Management/ Climate Change Adaptation Specialist)- (Two): – These experts will provide technical guidance related to community-based disaster risk management and reduction, and climate change adaptation.

The incumbents must meet the following criteria:

- Should have at least eight (8) year work experience in managing and evaluating community-based disaster risk management, climate change adaptation, early warning and/or resiliency projects in Ethiopia and/or other African countries.
- Master's or PhD degree in a related field of study.
- Strong knowledge of disaster risk reduction and climate change adaptation indicators, and DRM policies and programs in Ethiopia;
- Must be fluent in English and have strong writing and organization skills;
- Excellent oral communication, presentation, and inter-personal skills;
- Excellent analytical and technical skills; and

- Strong knowledge of USAID’s programming, experience on past food security and livelihoods baseline surveys or final evaluations would be a plus.

Local Ethiopian Experts (Two): The Ethiopian experts, with at least five year work experience in monitoring and evaluation, should be a mix of Disaster Risk Reduction Specialist, Climate Change/Adaptation Specialist, and Early Warning Expert. One of the two Ethiopian experts should have proven expertise in implementing, evaluating and/or designing natural resource management, water and soil conservation, and climate change adaptation activities. The other Ethiopian expert is preferably to have proven expertise in implementing and evaluating early warning, participatory disaster risk assessment and community disaster risk management projects. The Ethiopian experts should also be proficient in English, Amharic and Afan Oromo .

As appropriate, the contractor may also hire other lower level evaluation team members who can serve as data collectors, field work supervisors, etc.

IX. EVALUATION SCHEDULE

The estimated time period for undertaking this evaluation is 80 calendar days, of which at least 75 days should be spent in Ethiopia. The ideal available time for the evaluation team is January 1- March 31, 2017, however, the date will be finalized between USAID and the EPMES Contractor.

The evaluation team is required to work six days a week, but with no premium payment for the sixth day. The team is required to travel to select Woredas in each region where program activities are being implemented. At least 30% of the consultants’ time will be spent to conduct interviews with project staff, government partners, and project beneficiaries both in Oromia and Addis Ababa. The evaluation team will prepare an exit briefing and presentation of the findings to USAID staff before the consultants depart Ethiopia. Also, the evaluation team will submit a draft report 24 hours in advance of the exit briefing for review and comments by USAID. Comments from USAID will be incorporated before the submission of the final draft. The evaluation results will be disseminated among stakeholders through a workshop to share findings and recommendations to the implementing partners, other stakeholders and concerned parties who have been involved in the courses of the activity implementation.

Table 3: Level of Effort (LOE) in person days

Activity	Expat Team Leader [1]	Expat Expert [2]	Ethiopian Experts [2]
Travel to/from Ethiopia	4	8	-
Document review, Initial work plan submission (methodology, draft questions, data analysis plan, suggested list of	10	20	20

Activity	Expat Team Leader [1]	Expat Expert [2]	Ethiopian Experts [2]
interviewees, finalized questions for the survey)			
In-briefing with USAID	1	2	2
Submission of final draft work plan	5	10	10
Submission of FINAL Work Plan	5	10	10
Interviews in Addis Ababa	3	6	6
Interviews or survey work in project/activity areas	20	40	40
Mid-term briefing and interim meetings with USAID	1	2	2
Data analysis and preparation for presentation on preliminary findings	8	16	16
Exit presentation to USAID (with PowerPoint presentation)	1	2	2
First Draft Evaluation Report	10	20	20
Second Draft Evaluation Report	5	10	10
Final evaluation report & one page briefer	5	10	10
Workshop to disseminate evaluation findings with stakeholders (PowerPoints and facilitation of discussion)	2	4	4
Totals	80	160	152

X. MANAGEMENT

Social Impact, Inc., the Contractor managing the Ethiopia Monitoring and Evaluation Service (EPMES) activity will identify and hire the evaluation team, pending the Contracting Officer's Representative (COR's) and relevant technical office's concurrence, assist in facilitating the work plan, and arrange meetings with key stakeholders identified prior to the initiation of the fieldwork. The evaluation team will organize other meetings as identified during the course of the evaluation, in consultation with EPMES's Contractor and USAID/Ethiopia. The EPMES Contractor is responsible for all logistical support required for the evaluation team, including arranging accommodation, security, office space, computers, Internet access, printing, communication, and transportation.

The evaluation team will officially report to the Ethiopia Monitoring and Evaluation Service (EPMES) Contractor, Social Impact, Inc. The EPMES Contractor is responsible for all direct coordination with the USAID/Ethiopia Program Office through the EPMES COR. From a technical management perspective, the evaluation team will work closely with Munkhzaya Badarch, Disaster Risk Management Coordinator and AOR's for REAAP and REVIVE and Endale Lemma, Senior Program Management Specialist/M&E POC in the Assets and Livelihoods in Transition

(ALT) Office. In order to maintain objectivity, all final decisions about the evaluation will be made by the USAID/Ethiopia's Program Office.

XI. LOGISTICS

The contractor will be responsible for all travel and logistics associated with conducting the evaluation.

XII. REPORTING REQUIREMENTS AND DELIVERABLES

A. DESCRIPTION AND TIMELINE OF DELIVERABLES

- 1. In-briefing:** After the availability of the evaluation team in the EPMES's Contractor Office and completion of the preparation of work plan/evaluation design, the evaluation team will have an in-brief meeting with USAID/Ethiopia's Program Office and ALT Office for introductions; presentation of the team's understanding of the assignment; initial assumptions; review of the evaluation questions, survey instruments, and initial work plan; and adjustment of the SOW, if necessary.
- 2. Evaluation Work Plan:** Within five working days following the in-brief, the Evaluation Team Leader shall provide a final work plan to USAID/Ethiopia's Program Office and ALT Office. The work plan will include: (a) the overall evaluation design, including the proposed methodology, data collection and analysis plan, and data collection instruments; (b) a list of the team members and their primary contact details while in-country, including the e-mail address and mobile phone number for the team leader; (c) the team's proposed schedule for the evaluation; and (d) the estimated cost for the evaluation. USAID offices and relevant stakeholders are asked to take up to three working days to review and consolidate comments through the EPMES COR. Once the evaluation team receives the consolidated comments on the initial work plan, they are expected to return with a revised work plan within two working days. The revised work plan shall include the list of potential interviewees and sites to be visited.
- 3. Mid-term Briefing and Interim Meetings:** Schedule a mid-term briefing with USAID to review the status of the evaluation's progress, with a particular emphasis on addressing the evaluation's questions and a brief update on potential challenges and emerging opportunities. The team will also provide the COR for EPMES, DRM Coordinator and AOR's for CMDRR with periodic written briefings and feedback on the team's findings. If desired or necessary, weekly briefings by phone can be arranged with the Program Office and the Assets and Livelihoods in Transition Office to provide updates on field progress and any problems encountered.
- 4. PowerPoint and Exit Presentation** to USAID and relevant partners that will include a summary of key findings and key conclusions as these relate to the evaluation's questions and recommendations to USAID. To be scheduled as agreed upon during the in-briefing at least five days prior to the evaluation team's departure from Addis Ababa. A copy of

the PowerPoint file will be provided to the Program Office prior to the exit presentation. Within two days of the exit briefing, USAID will provide consolidated comments on the preliminary findings to the Contractor for consideration while working on the draft evaluation report.

5. **First Draft Evaluation Report:** The content of the draft evaluation report is outlined in Section XII.B, below, and all formatting shall be consistent with the USAID branding guidelines. The focus of the report is to answer the evaluation questions and may include factors the team considers to have a bearing on the objectives of the evaluation. Any such factors can be included in the report only after consultation with USAID. The draft evaluation report will be submitted by the Contractor to the Program Office after 10 working days of the exit briefing. USAID's Program Office and ALT Office will then have 10 working days to review and comment on the first draft evaluation report..
6. **Second Draft Evaluation Report:** Within 5 working days of receipt of USAID's comments, the contractor will re-submit the revised second draft report to the Program Office. Assets and Livelihoods Transition and the Program Office will have five working days to review the second draft report and to send any final comments to the contractor.
7. **Final Evaluation Report will** incorporate final comments provided by the Program Office and ALT and this should be submitted to USAID within 5 working days of receipt of USAID's comments on the second draft report. The length of the final evaluation report should not be more than 30 pages, not including Annexes and Executive Summary. All project data and records will be submitted in full and shall be in electronic form in easily readable format; organized and fully document for use by those not fully familiar with the project or evaluation; and owned by USAID and made available to the public, barring rare exceptions, on the USAID Development Experience Clearinghouse (<http://dec.usaid.gov>).
8. **One-page briefer** on key qualitative and quantitative findings and conclusions relative to the key evaluation questions included in the evaluation's scope—to be given to the appropriate government counterpart(s) so that they have the opportunity to review evaluation findings and share them with the larger community. Each briefer will be reviewed by the Program Office and ALT prior to distribution.
9. **Dissemination and Experience Sharing Workshop** – The evaluation team in collaboration with USAID/ALT Office will organize a one day workshop for stakeholders who are working in the field of community-managed disaster risk management, early warning, and climate change adaptation to share a summary of key findings, conclusions and recommendations of CMDRR, (and to provide opportunity to other stakeholders to share their experience in community-managed disaster risk management, early warning, and climate change adaptation field and reflect on CMDRR evaluation. This workshop will be organized within 30 days since the final evaluation report is submitted.

B. FINAL REPORT CONTENT

The evaluation report shall include the following:

1. **Title Page**
2. **Table of Contents (including Table of Figures and Table of Charts, if needed)**
3. **List of Acronyms**
4. **Acknowledgements or Preface (optional)**
5. **Executive Summary (3-5 pages)**

The executive summary should succinctly capture the evaluation purpose and evaluation questions; project background; evaluation design, methods; and limitations; and the findings, conclusions, and recommendations.
6. **Introductory Chapter**
 - a. A description of the project evaluated, including goals and objectives.
 - b. Brief statement on purpose of the evaluation, including a list of the main evaluation questions.
 - c. Brief statement on the methods used in the evaluation such as desk/document review, interviews, site visits, surveys, etc.
 - d. Explanation of any limitations of the evaluation—especially with respect to the methodology (e.g., selection bias, recall bias, unobservable differences between comparator groups, etc.)—and how these limitations affect the findings.
7. **Findings:** This section should include findings relative to the evaluation questions. *The information shall be organized so that each evaluation question is a sub-heading.*
8. **Conclusions:** This section must answer the evaluation questions based upon the evidence provided through the Findings section. *The information shall be organized so that each evaluation question is a sub-heading.*
9. **Recommendations:** Based on the conclusions, this section must include actionable statements that can be included into future program design. Recommendations are only valid when they specify who does what, and relate to activities over which the USAID program has control. For example, recommendations describing government action is not valid, as USAID has no direct control over government actions. Alternatively, the recommendation may state how USAID resources may be leveraged to initiate change in government behavior and activities. It should also include recommended future objectives and types of specific activities based on lessons learned. *The information shall be organized so that each evaluation question is a sub-heading.*
10. **Annex:** The annexes to the final evaluation report should be submitted as separate documents—with appropriate labels in the document file name (e.g., Annex I – Evaluation SOW), and headers within the document itself—and may be aggregated in a single zipped folder.
 - a. Mapping of the CMDRR contribution to USAID and the Government of Ethiopia's strategic initiatives (eg, the Global Climate Change- Adaptation, the Feed the Future, the Joint Planning Cell –Resiliency Framework, Climate Services for Resiliency Development, and Government of Ethiopia's Disaster Risk Management Strategic Program and Investment Framework (DRMSPIF)).

- b. Analysis of data utilization by the partners and USAID. This is an annex on identification of data collection and utilization gaps and recommendations.
- c. Evaluation Statement of Work
- d. Places visited; list of organizations and people interviewed, including contact details.
- e. Evaluation design and methodology.
- f. Copies of all tools such as survey instruments, questionnaires, discussions guides, checklists.
- g. Bibliography of critical background documents.
- h. Meeting notes of all key meetings with stakeholders.
- i. Evaluation Team CV's

C. REPORTING GUIDELINES

- The format of the report shall be consistent with the USAID branding guidelines.
- The evaluation report should represent a thoughtful, well-researched and well-organized effort to objectively evaluate what worked in the project over the given time period, what did not, and why.
- Evaluation reports shall address all evaluation questions included in the statement of work.
- The evaluation report should include the statement of work as an annex. All modifications to the statement of work, whether in technical requirements, evaluation questions, evaluation team composition, methodology, or timeline need to be agreed upon in writing by the Program Office.
- Evaluation methodology shall be explained in detail and all tools used in conducting the evaluation such as questionnaires, checklists and discussion guides will be included in an annex in the final report.
- Evaluation findings will assess outcomes and impact on males and females, and data will be disaggregated by gender, age group, and geographic area wherever feasible.
- Limitations to the evaluation shall be disclosed in the report, with particular attention to the limitations associated with the evaluation methodology (selection bias, recall bias, unobservable differences between comparator groups, etc.).
- Evaluation findings should be presented as analyzed facts, evidence, and data and not based on anecdotes, hearsay or the compilation of people's opinions. Findings should be specific, concise and supported by strong quantitative and/or qualitative evidence.
- Sources of information, including any peer-reviewed or grey literature, will be properly identified and listed in an annex.
- Recommendations will be supported by a specific set of findings. They will also be action-oriented, practical, and specific, with defined responsible parties for each action.

ANNEX 2: ENDLINE AND BASELINE SAMPLE SIZE DETERMINATION AND SAMPLING PROCEDURES

The sample size determination procedure for the endline was mainly based on the sample size determination procedure followed during the baseline. However, some corrections were made on the sampling formula and assumptions to improve sample sizes in REAAP and REVIVE implementation areas. This includes using two tailed type I error values/level of significance and using 0.5 as initial value for proportion at period 1 to reach at optimum sample value. The formula below has been employed for both REAAP and REVIVE.

$$n' = \frac{\left(z_{1-\alpha/2} \sqrt{2\bar{P}(1-\bar{P})} + z_{1-\beta} \sqrt{P_1(1-P_1) + P_2(1-P_2)} \right)^2}{(P_1 - P_2)^2};$$

1. REAAP

To make comparison between the baseline and the endline values of indicators we retain most of the assumption of the baseline but with few corrections:

Assumptions

1. P1- proportion of respondents who have access to safe drinking water before intervention and this is considered to be 0.5 (50%) as it gives optimum sample size. This assumption is corrected from the baseline assumption of 0.45
2. A two sided 95% confidence interval is used to be in a safer side by having a higher sample size (the baseline was one sided)
3. A power of 80% is used as was the baseline
4. A change of 10% is considered so that the endline value will be 60%
5. A design effect of 2 is considered, as clustering will be involved in the sample selection process (the size of the design effect was determined during baseline)
6. A 10% non-response rate is assumed for REVIVE but for REAAP we did not include as the sample size will be much higher than what was communicated to start earlier before calculation (and SART agreed to exert maximum effort to collect data with no or very minimal non-response)

With the above assumption and applying the sampling formula for two periods -indicated above a sample size of 780 has been determined which is higher than the baseline by about 100. The Evaluation Team accordingly increased the endline sample size to 780.

2. REVIVE

Considering the above similar assumptions but with higher design effect of 3 (as per the baseline) a sample size of 1277 is required this is slightly lower (by 157) than the sample size of the baseline 1434. And the baseline sample size is retained for this final evaluation.

Note the sample allocation will be determined based on the baseline or by making some changes that can help to improve precision or to facilitate manageability of the survey.

Instruction for Sample Selection (Data Collection firm—SART to Apply)

I. REVIVE project (Bale Zone)

- A. We will follow the baseline procedure with some adjustment in this endline as necessary
- B. The total number of woredas for the survey are 4
- C. 24 kebeles were selected for the baseline and now we will maintain the same number of kebeles for the endline and the data collection will take place within these same kebeles. Since there are suspects of conflicts we have reserves for such kebeles for replacement. But replacement will be possible in such a way that supervisors will get clear information from local administration and supervisors inform SART and SART will inform SI. SI will approve replacement based on the information it received.
- D. Get the number and list of villages from the kebele administrator/Manager. Randomly select half of the villages. If a kebele has two villages, two of the villages should be considered for the survey. If a kebele has more than two villages, consider half of the villages for the survey. Again, if number of villages in a kebel are odd number half of the villages should be rounded up.
- E. Proportionally decide the number of respondents in each village totaling the total number of hhs in a kebele as given in Table-I. (therefore, proportionally allocate the sampled number of households into villages – get the approximate number of households in each village from the kebele administrator/Village-(size of sample hhs in a kebele divided by total hhs in the sample villages multiplied by total number of hhs in the village you are determining number of hhs)
- F. Get the center of the village and randomly select one household and start data collection, go and get the second household by skipping with a number which is equal to total number of households in the village divided by number of sampled household in the village (after the first household go to the north and then continue in clock wise direction).

Note that the total sample size in all the 4 woredas in 24 kebeles is 1440 households

Table 1. Number of Kebeles and number of respondents in each woreda

Woreda name	Total number of respondents in the woreda	number of sampled kebeles	Number of respondents per kebele	Remark
Dolo Mena	464	4	116	
Lege Hida	338	8	43	For equal allocation within the kebele the woreda sample size will raise to 344
Meda Welabu	450	5	90	
Rayitu	182	7	26	
Total	1434	24	--	

II. REAAP (East Harerge and West HarerGe zones)

- A. We will follow the baseline procedure with minor adjustment in this endline as necessary
- B. The total number of woredas for the survey are 6
- C. 20 kebeles were selected for the baseline and now we will maintain the same number of kebeles for the endline
- D. 13 of the kebeles are baseline kebeles whereas 7 of the kebeles are newly added in the endline as the baseline 7 kebeles were not included in the project intervention
- E. For the 13 kebeles villages were selected during the baseline as shown in the table below written in red and use this villages for the endline.
- F. For the other 7 kebeles which were not part of the baseline but included now randomly select two villages in the Kebele (first get the number and list of villages in each kebeles and randomly select two villages in each kebele)
- G. Proportionally decide the number of respondents in each village totaling the total number of respondents in a kebele to 39. (therefore, proportionally allocate the 39 respondents into villages – get the approximate number of households in each village from the kebele administrator/Village-(39/total hhs in the villages X total number of hhs in the village you are determining number of hhs)
- H. Get the center of the village and randomly select one household and start data collection, go get the second household by skipping with a number which is equal to total number of households in the village divided by number of sampled household in the village (after the first household go to the north and then continue in clock wise direction).
- I. Note that the total sample size in all the 20 kebeles is $39 \times 20 = 780$ households

Table-List of woredas, Kebeles and villages for REAAP

Woreda	Kebele	Villages
Meta	Wayber	01 and 02
	Goro Biyo	1
	Leliftu	
	Duda eyila	
Fedis	Iftu	1
	Negaya Umer Kule	
	Kerensa Lencha	
	Melka	
Midega Tola	Bilisuma	01 and 02
	Mudhi Balli	01 and 02
	Roba	01 and 03
Tulo	Terkafeta	01 and 02
	Chafe	01, 02 and 03
	Kirikufis	
Oda Bultum	Oda Biyo	1
	Sabele	1
	Saqariga	
Mieso	Sirba	1
	Dera Kalu	1
	Oda Roba (Mieso)	1

Table 2- List of Kebeles -Shaded in red is conflict suspected kebele and in front of each red shaded is a reserve kebele

WOREDA	ORIGINAL KEBELE (red highlights are potential conflict)	ALTERNATIVE KEBELE
Dolo Mena	Dayyu	Gomgoma
	Haya Odaa	
	Malak Amana	
	Waabaro	
Lege Hida	Daraba	Haro Goro
	Eelelluu	Doyo Abboo
	Gaar Jaloo	
	Goni	
	Heero	
	Hidha Hundaa	
	Lukku Qilxu	Angoye
	Sema	
Meda Welabu	Hoborsoo	
	Kar Jalu	
	Madda	Odaa
	Madhicho	
	Odaa Booji	
Rayitu	Adaala	
	Boororee	
	Dhdacha Bela	
	Faltee	
	Hara Adi	
	Hara Dubee	Arda Kalo
	Hay Odaa	

ANNEX 3: EVALUATION TOOLS

Household Survey

INTRODUCTION

Greet the person you are interviewing, and introduce yourself.

Introduce yourself .

Good morning/afternoon. My name is _____. I represent Social Impact, Inc. through Sub-Saharan Africa Research and Training Center. We are conducting a performance evaluation of the USAID-funded Community Managed Disaster Risk Reduction (CMDRR)-- (REAAP or REVIVE) project. The purpose of the evaluation is to examine the results of CMDRR and determine its effectiveness. We are interested in your response for the different questions I have about CMDRR (REAAP or REVIVE). The information we receive from you will be used only in evaluating the CMDRR (REAAP or REVIVE) project. The interview will take about one hour and the interview is based on your full willingness. You can stop anywhere or you may not answer some of the questions that you do not want to. But we appreciate your participation in the interview and would be grateful. Is it all right if we begin now? 1=Yes, 0 =No. (if No stop interview)

Thank you!

MODULE I. HOUSEHOLD IDENTIFICATION

Instruction: please refer the list of woredas and kebeles from the sample list provided by the team leader/supervisor.

No.	Item	Name
	Project	1. <u>REAAP (Yes or No)</u>
101a	Woreda Name (drop down menu)	1= Fedis 2= Meta 3 = Midhega-Tola 4= Mieso 5= Tulo 6 = Oda-bultum
	Project	2. <u>REVIVE (Yes or No)</u>
101b	Project/Woreda Name (drop down menu)	1= Dolo Mena 2= Meda Welabu 3= Lege Higa 4=Rayitu
103	Zone name (use code given from 1-6)	1.Bale Zone 2. East Harerge 3.West Harerge
102	Kebele name)	
103	Village name	

107	Date of interview (self-generated)	DD	MM	YY
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Data collectors and Supervisors

110	Enumerator Name		
111	Supervisor Name (pick from list)		

MODULE II: HOUSEHOLD DEMOGRAPHIC CHARACTERISTICS

201. Sex of respondent (drop down menu)

Male 2. Female

202. Age of respondent (MUST be 18 years and older)

_____ years

203. Respondent relationship to head of household

- 01 = Head of household
- 02 = 1st wife
- 03 = 2nd, or 3rd wife
- 04 = Son or daughter
- 05 = Son/daughter in law
- 06 = Grandson/granddaughter
- 07 = Mother or father of 01/02/03
- 08 = Father/mother in law of 01/02/03
- 09 = Brother or sister of 01/02/03
- 10 = Other relatives
- 11 = Adopted child, custody
- 12 = No relationship
- 98 = Don't know

203a. Current marital status of the respondent

- 1 = Married (Monogamous)
- 2 = Married (polygamous)
- 3 = Single
- 4 = Divorced or Separated
- 5 = Widowed
- 6 = Living with partner

203b. Respondents' educational status; what is the highest grade level completed? (Single-response question)

- 1 = No Education
- 2 = Can read or write (informal/religious education only)
- 3 = Grade 1-4 (Primary School) 1 – 4
- 4 = Grade 5-8 (Primary School) 5– 8
- 5 = Grade 9-10 (secondary school) 9 – 10
- 6 = Grade 11-12 (Preparatory) 11 – 12
- 7= Vocational Education
- 8= Above grade 12 (University/College)

If respondent is head of the HH then skip to Q207a

204. Sex of head of household

1. Male headed 2. Female headed

205. Age of head of household

_____ years

98. Don't know

206. Marital Status of head of household (single-response question)

- 1 = Married (Monogamous)
 2 = Married (polygamous)
 3 = Single
 4 = Divorced or Separated
 5 = Widowed
 6 = Living with partner

207. Household head educational status; what is the highest grade level completed? (Single-response question)

- 1 = No Education
 2 = Can read or write (informal/religious education only)
 3 = Grade 1-4 (Primary School)
 4 = Grade 5-8 (Primary School)
 5 = Grade 9-10 (secondary school)
 6 = Grade 11-12 (Preparatory)
 7 = Vocational Education
 8 = Above grade 12 (University/College)

Q207a What is the highest grade level completed by the most educated child in the family? (Single-response question)

- 1 = No Education
 2 = Can read or write (informal/religious education only)
 3 = Grade 1-4 (Primary School)
 4 = Grade 5-8 (Primary School)
 5 = Grade 9-10 (secondary school)
 6 = Grade 11-12 (Preparatory)
 7 = Vocational Education
 8 = Above grade 12 (University/College)

208. Currently how many persons live in your household, including yourself?

Total			< 5 Years			5-18 Years			19-60 Years			> 60 Years		
M	F	T	M	F	T	M	F	T	M	F	T	M	F	T

209. Is there any member of the household living with a disability?

1. Yes 2. No (If No skip to Q301)

209a. How many members of the household are living with a disability?

Number -----

MODULE III: LIVELIHOODS, VULNERABILITY & ADAPTATION PRACTICES

Interviewer: Household livelihoods and perception. Based on the below information please ask the respondent Q301.

Now I will ask you about your livelihood/major income sources. Use the below code when the respondent responds to Q301 below. Please do not mention the list for the respondent. Probe if the respondent is not clear.

1. Crop agriculture/farming (food crops, vegetables, fruits, etc)
2. Livestock (production/rearing/fattening)
3. Mixed farming (crop-livestock)
4. Cash crop (coffee, Chat, tobacco)
5. Skilled trade /artisan
6. Microenterprise/Medium /Large business
7. Casual labor – Agriculture & non-agriculture
8. Formal salary/Pension
9. Petty trade (Chate, Tela, Areke, etc)
10. Land lease/land renting
11. Agro-forestry product (timber, firewood, charcoal, hand crafts, etc).
12. Remittance
13. Government/NGOs Food/Cash aid
14. Other (Specify)

301. What are the **three most important** sources of income/livelihood for your household? Please mention in order of importance from the most important and list the others irrespective of their importance? **Enumerators:** *please probe the respondents if he/she couldn't list three most important ones in order (1st, 2nd and 3rd income sources)*

1. 1st important:

2. 2nd important

3. 3rd important:

4. _____

5. _____

6. _____

301a. What alternative income or livelihood do you know?

1. Honey production
2. Crop diversification
3. Gum and Resin
4. Livestock activities
5. PSNP (crop and livestock)
6. PSNP (off farm income generation)
7. PSNP (employment)
8. Other (Specify)
98. Do not know (Skip to Q303)

301b. Among those alternatives of incomes/livelihood in your area which one/s have you adapted?

1. Honey production

2. Crop diversification
3. Gum and Resin
4. Livestock activities
5. PSNP (crop and livestock)
6. PSNP (off farm income generation)
7. PSNP (employment)
98. Do not know

303. Have you ever been affected by any hazard/disaster shocks/stress (in the past three years)?

1. Yes
2. No **(If No skip to Q308)**

304. Did you lose some asset/livelihoods as a result of the disaster?

1. Yes
2. No **(If No skip to Q308)**

305. Did you recover from the impact of disaster?

1. Yes
2. No **(If No Skip to Q306)**

Q305a. What did you do to recover /cope from the disaster? (Multiple response is possible)

1. Migration of HH
2. Taking kids out of school
3. Putting kids to work
4. Improved access to a water source
5. Home gardens
6. Soil and water conservation
7. Food aid
8. Mobility of livestock
9. Access to credit
10. Other (Specify) _____

Q305b. Did you receive support from any sources during this disaster? YES or NO, If yes, which ones:

1. Productive Safety Net Programme (PSNP)
2. Extension of credit or SILC (Saving and Internal Lending Communities)
3. Informal safety nets (neighbors/friends)
4. Other (Specify) _____

306. Following Q305 *after the impact of disaster* how many months or years had it taken/will it take the household to get back to the previous livelihood situation/condition (recover from the impact of the most recent disaster)? (If the response is less than a year use month otherwise use year if the response is in year).

A. Without external assistance/aid (Government, NGO, relative, etc)

1. If in months: _____ **2. If in year:** _____

B. If you get external assistance/aid (Government, NGO, relative, etc)

1. If in months: _____ **2. If in year:** _____

Based on the following information ask the respondent/household question 307 [Multiple Response]

- | | | |
|------------------------|--------|-------|
| 1. Recurrent drought | 1. Yes | 2. No |
| 2. Heavy flood/erosion | 1. Yes | 2. No |
| 3. Sever Wind storm | 1. Yes | 2. No |

- | | | |
|--|--------|-------|
| 4. Short rain | I. Yes | 2. No |
| 5. Prolonged rain/too much rain | | |
| | I. Yes | 2. No |
| 6. Shift in planting and harvesting time/date | | |
| | I. Yes | 2. No |
| 7. Pest infestation | I. Yes | 2. No |
| 8. Early onset of rain | I. Yes | 2. No |
| 9. Late onset of rain | I. Yes | 2. No |
| 10. Early cessation of rain | | |
| | I. Yes | 2. No |
| 11. Crop failure/Poor yield | I. Yes | 2. No |
| 12. Excessive heat, excessive humidity, cold weather | I. Yes | 2. No |
| 13. Hunger/food insecurity | I. Yes | 2. No |
| 14. High cost of food items | I. Yes | 2. No |
| 15. Malnutrition | I. Yes | 2. No |
| 16. Human disease outbreak | I. Yes | 2. No |
| 17. Water shortage/scarcity | I. Yes | 2. No |
| 18. Increased Livestock diseases | I. Yes | 2. No |
| 19. Livestock lose weight/loss body condition | | |
| | I. Yes | 2. No |
| 20. Decreased Livestock market price | | |
| | I. Yes | 2. No |
| 21. Increased human disease (diseases outbreak) | | |
| | I. Yes | 2. No |
| 22. High livestock death | I. Yes | 2. No |

307. What were the three most important disaster affected your life/livelihoods in the past three years? Please name in order of importance from 1 to 3 from the above list. **Enumerators:** please probe if not clear for the respondent.

1. **1st important:** _____
2. **2nd important:** _____
3. **3rd important:** _____

308. Is the household safety net (PSNP/HABP/PCDP) beneficiary household (receiving food and cash for six months)? (Please ask HH ID to cross-check)

1. Yes (**If Yes skip to Q310**) 2. No

309. If no, why was your household **not** selected to participate in safety net program (cash and food transfer)? [**Multiple Response**]

- | | | |
|--|--------|-------|
| 1. We have some land/enough land/ or better quality land | I. Yes | 2. No |
| 2. We own livestock | I. Yes | 2. No |
| 3. We have other income | I. Yes | 2. No |
| 4. We are not targeted to participate in PSNP | | |
| | I. Yes | 2. No |
| 5. We are not so poor as the selected | | |
| | I. Yes | 2. No |
| 6. We do not need to participate in Safety net public work | | |
| | I. Yes | 2. No |
| 7. Our household did not receive food aid or cash aid in history | | |

310. Have you ever received any credit/loan during the last three years?
 I. Yes (If Yes skip to Q314) 2. No

311. For what purpose you received loan/credit? [Multiple Response]

- | | | |
|--|--------|-------|
| 1. To buy food for family consumption. | I. Yes | 2. No |
| 2. To buy Agricultural inputs (seed, fertilizer, etc) | I. Yes | 2. No |
| 3. To run income generation activities (business, petty trade etc) | I. Yes | 2. No |
| 4. To get social services (health, education, wedding, funeral, etc) | I. Yes | 2. No |
| 5. For loan repayment | I. Yes | 2. No |
| 6. Other (Specify) _____ | I. Yes | 2. No |

312. Have you encountered any difficulty in repaying the creditloan ?

- I. Yes 2. No (If No Skip to Q314)

313. What is the reason? [Multiple Response]

- | | | |
|--|--------|-------|
| 1. Loss of crop (crop failure) | I. Yes | 2. No |
| 2. No other income source | I. Yes | 2. No |
| 3. Use the money for other purpose (for consumption) | I. Yes | 2. No |
| 4. Used to pay previous loan | I. Yes | 2. No |
| 5. It was stolen/robbed | I. Yes | 2. No |
| 6. Used for social services (education, health, funeral, wedding, dabo, idir, etc) | I. Yes | 2. No |
| 7. Loss of livestock/death | I. Yes | 2. No |
| 8. Business failure/bankruptcy | I. Yes | 2. No |

Crop and livestock production, inputs/technologies

314. Do you cultivate food crops?

- I. Yes 2. No (If No Skip to Q319)

315. How many hectares of land do you cultivate (own and/or rent)? (convert local unit to hectare)

_____ hectares
 98. Don't Know

316. What are the three major food crops you cultivate, in order of importance? (USE the below code list)

1st _____
 2nd _____
 3rd _____

- | | | |
|-----------|---------------|--------------|
| 1. Maize | 2. Sorghum | 3. Barely |
| 4. Wheat | 5. Teff | 6. chickpea |
| 7. Sesame | 8. Ground nut | 9. pea/beans |

10. Potato	11. Other (specify)
------------	---------------------

317. Do you use irrigation for crop cultivation?

1. Yes 2. No (If No Skip to Q318a)

318. How many hectares of land do you cultivate using irrigation?

Type of land	Hectares (convert the local unit to Hectares)
--------------	---

Own land	_____
Rented land	_____
Share cropping	_____

318a. Do you or member of your household know where to purchase improved seed?

1. Yes 2. No (If No Skip to Q319)

318b. Where do you purchase your improved seed?

1. Informal market
2. Certified suppliers
3. Research institute
4. Other (specify)_____

319. Do you use any farming/livestock inputs (investment on Agriculture)?

1. Yes 2. No (If No Skip to Q321)

320. Do you use the following inputs? [Multiple Response]

- | | | |
|---|--------|-------|
| 1. Improved crop Seeds | 1. Yes | 2. No |
| 2. Inorganic fertilizers | 1. Yes | 2. No |
| 3. Organic Fertilizers (manure, compost, etc) | | |
| 1. Yes | 2. No | |
| 4. Insecticides & fungicides | 1. Yes | 2. No |
| 5. Animal feeds | 1. Yes | 2. No |
| 6. Veterinary drugs & Vaccines | | |
| 1. Yes | 2. No | |
| 7. Pesticides | 1. Yes | 2. No |
| 8. Improved/cross breed Animals | 1. Yes | 2. No |

320a. Does your farm now have higher yields?

1. Yes 2. No

Now I will ask you few questions about livestock type you rear or own today compared to three years ago.

321. How many of the following livestock species do your household own, as of today? Including any animals that belong to you, but are being raised by other households, but do not include any animals that you are rearing for someone else which are not belong to you. *If HH have none, write '0' in the columns.*

S/n	Asset type	Number owned today	Number owned Three years ago	Current Cost of replacing one [in Birr]	If the number owned today is different from three years ago, why? [See code below and circle <u>all</u> that apply]
	(a)	(b)	(c)	(d)	(e)
Livestock Livestock					
1	Oxen				1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
2	Bulls				1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
3	Cows				1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
4	Heifers				1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
5	Calves				1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
6	Sheep				1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
7	Goats				1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
8	Donkeys				1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
9	Mules				1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
10	Horses				1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
11	Camel-Male				1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
12	Camel-Female				1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
13	Poultry (chicken)				1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

1. HH was forced to sell the asset to buy food
2. HH was forced to barter/exchange the asset for food
3. HH was forced to sell the asset to pay for health expenses
4. HH was forced to sell the asset to pay for education expenses
5. HH had to sell the asset to meet social obligations (e.g. wedding)
6. HH used the asset in a social occasion (e.g. wedding gift)
7. The asset was stolen
8. Livestock died due to disease/drought
9. Livestock was sold as an income-generating activity
10. Livestock reproduced
11. HH bought this asset
12. Someone gave us this asset for free
13. Government projects (PSNP/HABP/PCDP) assisted us to create assets
14. NGO (s) have assisted us to create assets
15. Sold for other reason

322. What are the major factors affecting Crop production in this area? [Multiple Response]

- | | | |
|--|--------|-------|
| 1. Unpredictable rain fall | I. Yes | 2. No |
| 2. Increased pest and disease | I. Yes | 2. No |
| 3. Low soil fertility | I. Yes | 2. No |
| 4. Lack of farm inputs (fertilizer, improver seeds, pesticides, etc) | I. Yes | 2. No |
| 5. High price of farm inputs | I. Yes | 2. No |
| 6. Shortage of labor | I. Yes | 2. No |
| 7. Inadequate farm land | I. Yes | 2. No |
| 8. No farm land | I. Yes | 2. No |
| 9. Insecure land tenure | I. Yes | 2. No |
| 10. Other, specify _____ | I. Yes | 2. No |

323. Have you experienced livestock loss in your household in the last three years?

- I. Yes 2. No (If No Skip to Q325)

324. What caused the livestock loss in the last 3 years (check if they did lose livestock)

CAUSES OF LIVESTOCK LOSS

Type of livestock	Did you loss this livestock in the last three years? (1=yes, 2=No)	Shortage Of pasture (1=yes, 2=No)	Shortage of water (1=yes , 2=No)	Epidemics (livestock disease prevalence) (1=yes , 2=No)	Predators/theft/raiding (1=yes, 2=No)	Other (specify)
Camel						
Cattle						

Sheep						
Goat						

325. Have you ever migrated away from your community?

1. Yes 2. No (If No Skip to Q401 (Module IV))

325a. During which Months do you usually migrate away from your community (Write 1 if migrate in the month 0 if you do not migrate in the month)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

MODUEL IV: Perception of households on Climate information, risk, vulnerability and adaptation practice

Ask the household head or mother or father or mature/adult family member.

Household perception on weather/Climate information

401. Have you ever heard about climate change issues?

1. Yes 2. No

402. How do you describe the pattern of current climatic condition relative to the condition before 5 to 20 years?

- 1 = changed
2 = no change (the same)
98 = I do not know

403. How do you describe the pattern of environmental temperature during the last 5 to 20 years?

- 1 =Decreasing
2 =Increasing
3 =No change
98 = I don't know

404. How do you describe the pattern of rainfall amount during the last 5 to 20 years?

- 1 =Decreasing
2 =Increasing
3 = No change

98 = I don't know

5= Difficult to predict

405. Do you think the problem of climate change has affected you and your community in the last three years?

1. Yes
know

2. No

98. I don't

407. Do you get weather/climate related information (rainfall, temperature, humidity, precipitation, etc)?

1. Yes

2. No (If No Skip to Q424)

408. From where did you get these information? **[Multiple response]**

Enumerators please probe based on the codes below

- | | | |
|---|--------|-------|
| 1. Radio | 1. Yes | 2. No |
| 2. Television | 1. Yes | 2. No |
| 3. Newspaper/flyers | 1. Yes | 2. No |
| 4. Mobile phone SMS message | 1. Yes | 2. No |
| 5. Mosque/church/religious leaders | 1. Yes | 2. No |
| 6. Cooperatives/CBOs (idir, ikub, etc) | 1. Yes | 2. No |
| 7. School children/students and School mass-media | 1. Yes | 2. No |
| 8. Extension agents (DA, HEWs, KM) | 1. Yes | 2. No |
| 9. Neighbors/village | 1. Yes | 2. No |
| 10. Community early warning committee | 1. Yes | 2. No |
| 11. Disaster Risk Reduction (DRR) facilitator or committee | 1. Yes | 2. No |
| 12. Traditional leaders/elders/local forecasters | 1. Yes | 2. No |
| 13. Meteorologists, Researchers and NGOs | 1. Yes | 2. No |
| 14. Market centers/Traders/input providers | 1. Yes | 2. No |
| 15. Woreda office (Agriculture/Pastoralist office, DPPO, etc) | 1. Yes | 2. No |
| 16. Early warning indicator through mobile | 1. Yes | 2. No |
| 17. SAPARM maps SAPARM | 1. Yes | 2. No |

410. Do you get/receive Forecast of onset/Start of rain and cessation/off set of rain related information?

1. Yes

2. No

411. Do you get/receive the likely intensity of rains related information?

1. Yes

2. No

412. Do you get/receive forecast of planting time related information?

1. Yes

2. No

413. Do you get/receive Risk projections for extreme weather events related information?

1. Yes 2. No

414. Do you get/receive forecast of pest or disease outbreak related information?

1. Yes 2. No

415. Do you get/receive anticipated temperature and its impact on crop & livestock related information?

1. Yes 2. No

416. Do you get/receive Precipitation related information?

1. Yes 2. No

417. Do you get/receive changing soil moisture and/or temperature related information?

1. Yes 2. No

418. How frequent do you get climate/weather information?

1. Daily
2. Weekly
3. Within 10 days
4. Bi-monthly (every 2 weeks)
5. Monthly
6. 2-3 months
7. More than 3 months

Now I would like to ask you about how you use climate information for decision making

420. Do you use the information that you receive to make decisions on your farming and livestock activities?

1. Yes 2. No (If No Skip to Q424)

421. What farming or livestock decisions have you made in the past year using the weather/climate change information that you get? **[Multiple Response]**

- | | | |
|---|--------|-------|
| 1. Planning for planting time/season | 1. Yes | 2. No |
| 2. It helps me forecast harvesting and trashing time | 1. Yes | 2. No |
| 3. It helps me select type of seed/crop to plant | 1. Yes | 2. No |
| 4. Plan for type of weeding (manual and herbicides) | 1. Yes | 2. No |
| 5. Select type of fertilizer | 1. Yes | 2. No |
| 6. Use pesticides | 1. Yes | 2. No |
| 7. Forecast expected onset and cessation of the rainy season. | 1. Yes | 2. No |
| 8. Forecast the likely intensity of expected rains | | |

- | | | | |
|---|--------|--------|-------|
| | | I. Yes | 2. No |
| 9. Forecasts drought/hunger | 1. Yes | 2. No | |
| 10. Forecasts planting time/season | | I. Yes | 2. No |
| 11. Forecast flood warnings | I. Yes | 2. No | |
| 12. Forecast market prices (crops, livestock, goods, etc) | I. Yes | 2. No | |
| 13. Forecast the likely occurrence of conflict | | I. Yes | 2. No |
| 14. Forecast human diseases outbreak | | I. Yes | 2. No |
| 15. Forecast crop diseases, and livestock diseases | | I. Yes | 2. No |
| 16. Share information with others/villages/elders/neighbors | I. Yes | 2. No | |
| 17. Select better/best crops to plant | | I. Yes | 2. No |
| 18. Informs time of weeding | I. Yes | 2. No | |
| 19. Forecast harvesting time and storage | | I. Yes | 2. No |
| 20. Diversification of livestock | | I. Yes | 2. No |
| 21. Avoid overgrazing of livestock | | I. Yes | 2. No |
| 22. Avoid diseases for livestock | I. Yes | 2. No | |
| 23. Mobility of livestock | I. Yes | 2. No | |

424. Please tell us whether you move your animals in search of pasture and food in the last year, tell us also your information source to make decision to move and identify the most important information source and how stable the source is

424A. Have you moved your animals in search of food?

I. Yes

2. No (If No Skip to Q501)

424B) Source of information		424C) Is the source of information most important	424D) Is the information source becoming more reliable, less reliable ☐ stayed the same
Previous experience	I= Yes 2= No	I= Yes 2= No	I= More reliable 2= Less reliable 3=Same
SAPARM maps	I= Yes 2= No	I= Yes 2= No	I= More reliable 2= Less reliable 3=Same
Scouting reports	I= Yes 2= No	I= Yes 2= No	I= More reliable 2= Less reliable 3=Same
Other informal method of sharing news /information	I= Yes 2= No	I= Yes 2= No	I= More reliable 2= Less reliable 3=Same

Other source (Specify)	1= Yes 2= No	1= Yes 2= No	1= More reliable 2= Less reliable 3=Same

MODULE V: TECHNOLOGIES AND MANAGEMENT PRACTICES

Now I would like to ask you about climate adaptation practices/actions at household level.

Technology type	Response		How long have you used practice? Months or Years	If yes how many hectares? (Skip the shaded areas)
501. Do you harvest Rain water (ponds, spring development, hand-dug wells/shallow well, boreholes, roof catchments, storage, etc)	1. Yes	2. No	___Months___Ye ars	
502. Do you plant tree seedlings?	1. Yes	2. No	___Months___Ye ars	
503. Do you use weather index-based crop insurance/crop insurance generally	1. Yes	2. No	___Months___Ye ars	
504. Do you use weather index-based livestock insurance	1. Yes	2. No	___Months___Ye ars	
504a. Do you have diversified income sources	1. Yes	2. No	___Months___Ye ars	
505. Do you use inorganic fertilizer	1. Yes	2. No	___Months___Ye ars	
506. Do you use organic fertilizers (dung/manure, compost)	1. Yes	2. No	___Months___Ye ars	
507. Do you use mixed/intercropping	1. Yes	2. No	___Months___Ye ars	
508. Do you use high yielding and drought tolerant crop seeds (maize, potato, sorghum, etc), introducing new crop types and varieties	1. Yes	2. No	___Months___Ye ars	

509. Do you use energy saving stoves and or solar panel	1. Yes	2. No	___Months___Ye ars	
510. Do you practice bush thinning from pasturelands	1. Yes	2. No	___Months___Ye ars	
511. Do you replant when crop fails	1. Yes	2. No	___Months___Ye ars	
512. Do you use crop rotation/switching crops	1. Yes	2. No	___Months___Ye ars	
513. Do you reclaim rangeland and protect area closures	1. Yes	2. No	___Months___Ye ars	
514. Do you use mulching	1. Yes	2. No	___Months___Ye ars	
515. Do you participate in Soil and water conservation (soil bund, terracing, stone bund, check dam (loose stone or gabion field stones, trench, microbasin, cut-off drain, waterways, etc)?	1. Yes	2. No	___Months___Ye ars	
516. Do you use herbicides (for weeding) and pesticides	1. Yes	2. No	___Months___Ye ars	
517. Do you practice livestock hay making and reserve livestock feed	1. Yes	2. No	___Months___Ye ars	
518. Do you use irrigation (spate irrigation, flood diversion) for planting/farming	1. Yes	2. No	___Months___Ye ars	
519. Do you rear/keep different livestock species	1. Yes	2. No	___Months___Ye ars	
520. Do you use bed nets	1. Yes	2. No	___Months___Ye ars	
521a. Do you use satellite technology to improve migration decisions	1. Yes	2. No	___Months___Ye ars	
521b. Are you aware of a management plan to reduce vulnerability to risks	1. Yes	2. No	___Months___Ye ars	

522. During which months did you not have enough food for the last 12 months of 2008/09 E.C and for which months not enough food from all different sources (including purchases)?

Enumerators- You should read each month of the year one by one, and, for each month, enter “**1 or 2**” to represent the household either had “Enough” food or “Not Enough” food for that month. ***Start asking the questions from the latest month and finish by the earliest month.***

523. Month with enough food	1 =Yes 2 = No	524. Month with no enough food	1 =Yes 2 = No
1. January 2009		1 month ago	
2. December 2009		2 months ago	
3. November 2009		3 months ago	
4. October 2009		4 months ago	
5. September 2009		5 months ago	
6. August 2008		6 months ago	
7. July 2008		7 months ago	
8. June 2008		8 months ago	
9. May 2008		9 months ago	
10. April 2008		10 months ago	
11. March 2008		11 months ago	
12. February 2008		12 months ago	

525. Based on the above level of severity (Likert scale) please tell me the level of vulnerability (to disaster, drought, flood and others) of the following households, individuals and family members?

Category □□□	Scale:
A. Adult Male no adult female HHs	1= not vulnerable 2= less vulnerable, 3- moderately vulnerable, 4= highly vulnerable
B. Adult female no adult male HHs	
C. Child no adult HHs	

D. Women in women headed HHs	
E. Women in male headed HHs	
F. Women in child headed HHs	
G. Children and Old ages	
H. Male headed HHs	
I. Polygamous households	
J. Landless households	
K. People with disability	
L. Multi-generational households	

Module VI: Vulnerability Factors

601. In the past 7 days are there times that you did not have enough food or money to buy food for the household?

1. Yes 2. No (If No Skip to Q602)

	Raw Score (0-7 Days)
601a. Rely on less preferred and less expensive foods?	
601b. Borrow food, or rely on help from a friend or relative?	
601c. Limit portion size at mealtimes?	
601d. Restrict consumption by adults in order for small children to eat?	
601e. Reduce number of meals eaten in a day?	

602. In the last 5 years, has your household experienced any weather related crisis (flood, drought, medical emergency, etc.) that led to a significant loss of income or assets (belongings)?

1. Yes 2. No

603. What are the **three major threats/risks to livelihood security in your village/kebele?**

A. Drought	1. Yes	2. No
B. Conflict, natural resource	1. Yes	2. No
C. Flood	1. Yes	2. No
D. Too much rain fall	1. Yes	2. No
E. Early rain fall	1. Yes	2. No
F. Late rain fall	1. Yes	2. No
G. Hailstorm	1. Yes	2. No
H. Strong wind	1. Yes	2. No
I. Landslide	1. Yes	2. No
J. Extreme cold	1. Yes	2. No
K. Extreme heat	1. Yes	2. No
L. Livestock disease	1. Yes	2. No
M. Crop disease	1. Yes	2. No
N. Others (specify)	1. Yes	2. No

604. Can you list any coping strategies your household has used to reduce risks to livelihoods?

[Multiple Response]

[Interviewer: Do not tell the respondents these options]

a) Borrow/beg for money or food	1. Yes	2. No
b) Collect wild food;	1. Yes	2. No
c) Reduce size/number of meals;	1. Yes	2. No
d) Spend saving	1. Yes	2. No
e) Sell household assets;	1. Yes	2. No
f) Reduce/sell number of livestock;	1. Yes	2. No
g) Consume seed stocks held for next season	1. Yes	2. No
h) Rent farm land	1. Yes	2. No
i) Send children to work outside the household	1. Yes	2. No

- | | | |
|--|--------|-------|
| j) Migrate for work | I. Yes | 2. No |
| k) Introduce new crop types and varieties; | | |
| | I. Yes | 2. No |
| l) Introduce new type of livestock | | |
| | I. Yes | 2. No |
| m) Livestock fattening | I. Yes | 2. No |
| n) Rely on PSNP and other livelihood programs under the government | I. Yes | |
| | 2. No | |
| o) Rely on other humanitarian assistance | | |
| | I. Yes | 2. No |
| p) Conserve soil | I. Yes | 2. No |
| q) Develop additional water sources | | |
| | I. Yes | 2. No |
| r) Buy Insurance | | |
| | I. Yes | 2. No |
| s) Others (specify) | I. Yes | 2. No |

Module VII: Water & Livelihood

701.What is the main source of drinking water for your household? **[Single Answer]**

- a. Protected water distribution points
- b. Unprotected well
- c. Protected well
- d. Protected spring,
- e. Unprotected spring
- f. Ponds
- g. Rivers
- h. Roof water catchment

702.What is the main source of drinking water for the cattle, sheep and goat? **[Single Answer]**

- a. Same as humans
- b. Protected water distribution points
- c. Unprotected well
- d. Protected well
- e. Protected spring,
- f. Unprotected spring
- g. Ponds
- h. Rivers
- i. Roof water catchment

703.On average, how long do you have to walk to get your drinking water?

_____ minutes (round trip)

703a. Has this changes in the last three years?

1. Yes 2. No

704. Does the household get sufficient safe drinking water during the course of this year?

1. Yes **(If Yes Skip to Q705)** 2. No

704 a. During which months do you not get enough water?

705. Is there a water management committee in charge of where you get your drinking water?

1. Yes 2. No

706. On average, how long do you have to walk to get your source of fuel per day?
_____ minutes

707.. Over the past 3 years, has your household income increased, decreased, or stayed the same?

- a. Increased
b. Decreased

C. Stayed the same **(skip to Q 709)**

708. Reason for change of income (If increased or decreased, select all that apply): **[Multiple Response]**

- | | | |
|--|--------|-------|
| a. Government programs | 1. Yes | 2. No |
| b. Price change | 1. Yes | 2. No |
| c. Improvement or reduction in quality of inputs | | |
| | 1. Yes | 2. No |
| d. Availability of credit | 1. Yes | 2. No |
| e. Climate | 1. Yes | 2. No |
| f. CMDRR activity | | |
| | 1. Yes | 2. No |
| g. Other (specify) | 1. Yes | 2. No |

709. Over the last three years, has your income from agricultural activities increased, decreased, or stayed the same?

- a. Increased
b. Decreased
c. Stayed the same **(skip Q711)**
d. The household is not a farming family (Not applicable) **(Skip to Q711)**

710. Reason for change in agricultural income (If increased or decreased, select all that apply):

- a. Government programs 1. Yes 2. No

- | | | |
|--|--------|-------|
| b. Price change | I. Yes | 2. No |
| c. Improvement or reduction in quality of inputs | | |
| | I. Yes | 2. No |
| d. Availability of credit | I. Yes | 2. No |
| e. Climate | I. Yes | 2. No |
| f. CMDRR activity | | |
| | I. Yes | 2. No |
| g. Other (specify) | I. Yes | 2. No |

711. Over the last three years, has your income from pastoral activities increased, decreased, or stayed the same?

- a. Increased
- b. Decreased
- c. Stayed the same **(skip Q713)**
- d. The household has no live stocks (Not applicable) **(Skip to Q713)**

712. Reason for change of pastoral income (If increased or decreased, select all that apply):

- | | | |
|--|--------|-------|
| a. Government programs | I. Yes | 2. No |
| b. Price change | I. Yes | 2. No |
| c. Improvement or reduction in quality of inputs | | |
| | I. Yes | 2. No |
| d. Availability of credit | I. Yes | 2. No |
| e. Climate | I. Yes | 2. No |
| f. CMDRR activity | | |
| | I. Yes | 2. No |
| g. Other (specify) | I. Yes | 2. No |

713. Have you and/or your family member received any short-term agricultural sector productivity or food security training in the past three years?

- I. Yes 2. No **(If No Skip to Q800)**

714. If yes, by whom was this training facilitated/organized:

- 1. Government agency, or sector office
- 2. REAAP/REVIVE
- 3. Other USG assistance
- 4. Other (specify)
- 98. Do not know

Module VIII. WOMEN'S EMPOWERMENT and Social Connections (NOT IN BASELINE)

800. If the respondent is female, ask her if she is the only adult living in her household. If the answer is yes skip to the next exercise. Similarly if the respondent is male and there are no adult females in the household, skip to the next exercise and write NA in large letters next to the table below

801 On a scale of 1-4, ask the respondent how much influence the wife or main female in the household has over decisions on the following aspects of Household life.

1= No influence at all			
2 = A little influence			
3 = A medium amount of influence			
a. Production & Livelihoods Decisions		SCORE Before intervention	After intervention
1	What crops to grow		
2	What farming inputs to use or buy (<i>fertilizer, improved seeds etc.</i>)		
3	What crops to take to the market to sell and when to sell them		
4	What livestock production activities to engage in (<i>rearing/fattening/dairy etc.</i>)		
5	What livestock to purchase or sell		
6	What business or Income Generating Activities to engage in		
b. Financial Decisions			
7	Major household expenditures (<i>such as clothes purchases, furniture etc.</i>)		
8	Minor household expenditures (<i>such as food for daily consumption</i>)		
9	Borrowing money (<i>loan amount/source and utilization</i>)		
10	Lending (loaning) money to relatives or friends		

c. Household Decisions			
8	Food and meal		
9	Children's education		
10	Household construction/maintenance		
11	Family planning		

802. Does any member of your household currently participate in any of the following social groups?

Group a. Respondent b. Other members

	a. Respondent (1. Yes 2. No)	b. Other member (1. Yes 2. No)
a. Fuel Efficient Stoves group		
b. WE Group		
c. SILC Group		
d. A financial-related group (credit, funeral, or other savings group etc.)		
e. Other group, including religious groups or other community based group (CBO)		

803. Do you think that members of your community can help each other in times of crisis?

1. Yes

2. No

For the interviewer: inform the respondent that you have finished your questions and thank him or her. Ask the respondent if he/she has questions and record here.

FINAL Evaluation CMDRR Focus Group Discussion Guide DRR Committee members and Community Members- REAAP

Suggested composition for FGD:

10 people:

- DRR committee members (leadership/non-leadership members)
- Disabled person
- Elder
- Youth
- Traditional forecasters
- Community animal health worker
- As close a balance as we can of men and women

General Information:

Zone	
Woreda	
Kebele	
Village	
Date of FGD	
Facilitator name	
Note taker name	
Group make up (e.g. women, men, elders, youth, mixed)	
Total number of participants disaggregated)	Male: Female:

Theme/area of discussion	Q#	FGD questions
DRR Committee formation	1	When was your DRR committee established? Was it existing or created under this project? How many people are in your committee in total?

	2	How many members in this FGD are part of the CMDRR community group? What is your role in this group?
	3	Would you please tell us what is the make up of the DRR committee of community members? (<i>probe for diversity of membership community leaders, customary institutions represented, PWDs, women, etc</i>). (31)
	4	How was the committee composition decided? (<i>probing here to make sure there is female and disability inclusion on committee</i>) (110)
	5	What are the roles of the members in the group? (<i>probing here to see women or PWD have leadership positions</i>) (125)
CMDRR process	6	Has a hazard assessment been conducted in the community? Who participated in it? Were vulnerable groups considered (women & PWD)?
	7	Has a hazard map been prepared by the committee? Was it done with high level of community participation? Was the map shared and validated with the wider community?
	8	Has the hazard assessment/mapping been useful to the community? What were its findings and how were they used? In what ways?
	9	What has this community prioritized as the main hazards that could impact the community? Are most people in the community aware of these main hazards?
	10	Has the community carried out participatory vulnerability and capacity assessments (VCA), shared the findings and have human resources capable of conducting and monitoring these assessments?
	11	Has a Vulnerability and Capacity Assessment been conducted in the community? Who participated in its creation?
	12	Were the results of these assessments and the CMPs shared or communicated to the community? How many members of the community know about them?
	13	Has the VCA been useful to the community? In what ways?
	14	Has the community created an action plan and had it validated by the greater community? How has

		this plan been used? How to people in the community like and dislike about the plan? (33)
	15	Does the action plan have specific activities aimed at Women and PWD? What are these activities? (126)
	16	From your action plan, are there members of the committee that monitor the activities that are being implemented? Which people do this? How were they selected? Have you seen any results from this monitoring? If yes, what are they? (37)
Early Warning	17	Do you receive Early warning messages in your community?
	18	What types of early warning messages do you receive?
	19	How do you receive them? (<i>probe for if they receive them from a specific person, by text by radio? </i>)
	20	Do these messages help you in making decisions for planting or livestock movements? If yes, please explain how.
Communal NRM	21	Are their practices that your community uses that are damaging to the environment and which increase disaster risk? Examples? (<i>probing to see that they know of harmful practices – cutting down trees, using dry season reserve pasture, planting in wetlands, etc.</i>). Does the community have bylaws or rules to mitigate these practices? If so, who enforces them?
	22	How does your community take measures to protect the environment? At the household and community levels? Are people more aware of these measures now and adopting them across the community?
	23	On average, how many people in your community depend on charcoal production to supplement their incomes? (<i>probe here for 25%, 50%, 75%, all</i>). Do people produce charcoal to supplement incomes? Can you tell us about the impact of charcoal production on the environment?
	24	Can you please tell us about some of the measures that you have been supported to take in this project to rehabilitate and strengthen your communal resources? (<i>they may mention enclosures, reseeding, gully treatments, tree planting, hay making, SWC, etc.</i>)

SWC Technologies	25	What is your understanding of soil and water conservation (SWC) technologies? Can you tell us about some SWC practices that can be taken at household and community level?
	26	How well known are these practices in your community? How many people in the community do you think use such practices at household level? (0, 1-25%, 25-50%, 50-75%, 75-100%)
	27	If they have been implementing SWC measures, ask: Have the SWC structure performed well by sustaining the last one or two rains?
	28	Is there a checkdam construction carried out in your community? If so how is the general performance? Good; Medium; Poor (<i>probe for reasons to why it is that way</i>)
Water	29	Has your community had a new water source created through this project? Or rehabilitated? Is it for human or animal use, or both?
	30	If it was a new water source, have you been involved in the site identification and locating of any water points? If so which ones and how were you involved?
	31	What has been the impact of this new/now functional water source? (<i>probe here to see if there is less time fetching water or travelling for animals</i>)
	32	Is there a water point management committee established and operation? What do they do? What do people in your community think of this committee? Are fees collected by the community using the water point?
Impact on livelihood/income	33	What is the main reason for livestock death in your community? If they give several, that is fine and expected, ask them to prioritize the reasons (7)
Livestock:	34	Is there any change in livestock mortality rate (increase, decrease and/or same as the baseline)? (1) why is there an increased or decrease in livestock death? (1)
	35	In the current drought you are facing, did members of the community take any destocking measures to protect their herds and productive assets? How would you go about doing this? (83)

		In what ways has the project supported household livelihoods in this community? <i>(probe here to find out if they diversified their livelihoods and in which ways. We would like to learn two things here, that they know that diversifying livelihoods is important to lower risk and in which ways the project helped them do this... promoting new improved seed varieties, FES, key hole gardens, diversified crops, livestock production, starting new business, etc.)</i> (82)
	37	<i>If the project supported them directly with new livelihoods then ask: Please tell us about the support you received from the project to be able to take up this livelihood activity. What was helpful? What was not? (probe here to find out about technical training, inputs they may have received, business plan support, project monitoring, i.e. field staff continue to return and monitor and support their needs, etc.).</i>
Impact on social cohesion	38	Do you think that your community can depend on each other in times of crisis? (Can you provide examples of how the community supports each other during these times? <i>(Remember it is a current drought right now, so you can probe around their current situation)</i>). 78)
	39	Do you feel more prepared as a community to take actions to survive the current drought you are facing? How and why? (78)
	40	How does your community make decisions that impact communal resources? What are your opinions of this process? <i>(probe: we are trying to understand if they work well together as a community and are actively working together to manage their natural resources)</i> (78)
	41	Has there been a reduction in in the frequency and duration of community (resource-based) conflict in your community? (88)
	43	Do you think the project has supported women, disabled people, and vulnerable groups in the community? If yes, in what ways?
	43	Do you see any changes in the women who participated in SILC groups? If yes, please tell us what these changes are.
Link to other gov' t	44	Do you know if your woreda officials were given your Kebele Action Plans and C&MPs? (188)

actors/stakeholders		
	45	Do any other stakeholders help you support activities in your action plan (<i>remember action plans are implemented through the watershed committee and planning process</i>)? (probe here to find out if local gov't/other NGOs/etc. are supporting them to implement the actions in the watershed plan) (188)
	46	Did you ever visit any other communities for cross-learning visits? If so, what did you learn? (192)

FINAL Evaluation CMDRR Focus Group Discussion Guide
DRR Committee members and Community Members- REVIVE

Suggested composition for FGD:

10 people:

- DRR committee members (leadership/non-leadership members)
- Disabled person
- Elder
- Youth
- Traditional forecasters
- Community animal health worker
- As close a balance as we can of men and women

General Information:

Zone	
Woreda	
Kebele	
Village	
Date of FGD	
Facilitator name	
Note taker name	
Group make up (e.g. women, men, elders, youth, mixed)	
Total number of participants (M/F disaggregated)	Male: Female:

Theme/area of discussion	Q#	FGD questions
DRR Committee make-up	1	When was your Community DRR committee established? Who supported you in doing this? How many participants in this FGD are part of the DRR Committee? (<i>PCI uses the existing DRR committees as entry points for CMDRR</i>).
	2	How many men and women are in the committee?
	3	What positions are held by women, and which are held by men?
	4	We would like to discuss the process that the DRR committee and community have undertaken to assess, plan, and take action for the disasters that you face in your community. Can you tell us what are the three disasters (shocks) are that affect this community the most and why?
DRISK steps- (166 Kebeles) Participatory risk analysis (hazard, vulnerability, capacity assessment)	5	Can you tell us about the process for mapping community level resources.? What information was included in this map? Who participated in creating it? (<i>they should say water points, government services, market locations, and health facilities (the BASE map) and participation by a representative range of community members</i>)
	6	Has a hazard assessment been conducted with the group? Were vulnerable community groups considered in this (<i>probe for women and PWD</i>)?
	7	Has the community carried out participatory vulnerability and capacity assessments (VCA)? When was this done? Can you tell us about the findings of this assessment? Were they shared with the wider community?
	8	Would you recommend that these assessments be done regularly in your community?
	9	What information did you use to develop your action plans and contingency and mitigation plans? (<i>probe to see if they used info from the assessments and also from the climate data that IPs provided and supported communities to use</i>).
	10	Were the community action plans and the community C&M plans shared with the wider community for validation?
	11	How are you implementing the activities in the action plan? If you are not, why is that? (<i>probe here to see if they are aware the watershed</i>

		<i>committees are who the action plans are being implemented though).</i>
	12	Does the action plan have specific activities aimed at women and PWD? (126)
	13	From your action plan, are there members of the committee that monitor the activities that are being implemented? How is the monitoring done? What are some of the main findings from the monitoring? How are the monitoring results used? (37)
EWS- SAPARM (166 Kebeles)	14	What process was used to create your community grazing maps? What was the entry point? Was a committee set up? (there should be 7-10 people in these meetings, including elders and traditional institutions) (166)
	15	Who participated in creating the maps? Was there representation from different members of the community? (women, youth, elders, PWD?)
	16	What considerations and factors were made when mapping grazing resources? Please tell us what was actually mapped? <i>This is what the methodology should map:</i> • <i>key traditional/seasonal (dry and wet season) grazing areas;</i> • <i>rangelands/forest;</i> • <i>seasonal water sources;</i> • <i>resource users;</i> • <i>drought time grazing</i> • <i>Identify traditional mobility patterns/routes and/or seasonal herd mobility;</i> • <i>Customary natural resource governance system: management institutions, practices (grazing scouts and decision-makers)</i>
	17	Was the map shared with the community for validation? In what ways has it benefited the community?
	18	Do you know why that process was undertaken? (<i>probe to inform SAPARM maps</i>)
	19	Are you aware of a dissemination protocol/plan for your kebele/village for receiving SAPARM map information?
	20	Was a training conducted with the community on how to interpret the maps? Who carried out the

		training? How did the training equip you to interpret the maps?
	21	How often do you receive information and maps with NDVI data? <i>(should be every 10 days)</i>
	22	Who shares that information with you? How is that information shared? <i>(probe to see if they know that the Kebele chairman is given the map every 10 days, and it is he who is responsible for disseminating info).</i>
	23	How do you use the maps? How do they affect your decision making? <i>(probe to see if the maps help them make mobility decisions)</i>
	24	Have the maps helped you in saving time in providing accurate ideas about where there is available pasture?
	25	What are your opinions about these maps? <i>(Probe for why they have that opinion I.e. why they like/dislike them and how they could be improved. If they trust the scientific information.)</i>
	26	How do women access these maps? How do they use them? (106)
	27	Do you have traditional scouts in your community? What are their responsibilities? Are the traditional scouts still useful to your community? <i>(trying to understand the impact of the maps here and how that has effected the work the traditional scouts do).</i>
	28	Have you noticed changes in the level of conflict over pasture and water? What changes? What brought about those changes? <i>(probing to see if b/c of maps, if the process strengthened customary institutions, b/c there is now increased dialogue on shared resources, etc.)</i> (85)
	29	What animal health interventions are undertaken in your community? By who? How easy or difficult is it to get animal health services? Has there been any change in the level of availability of animal health interventions in the past year?
Communal NRM	30	
	31	Are there practices that your community uses that are damaging to the environment and which increase disaster risk? Examples? <i>(probing to see that they know of harmful practices – cutting down trees, using dry season reserve pasture, etc.).</i> Does the

		community have bylaws or rules to mitigate these practices? If so, who enforces them?
	32	How does your community take measures to protect the environment? At the household and community levels? Are people more aware of these measures now and adopting them across the community?
	33	On average, how many people in your community depend on charcoal production to supplement their incomes? (<i>probe here for 25%, 50%, 75%, all</i>). Do people produce charcoal to supplement incomes? Can you tell us about the impact of charcoal production on the environment?
	34	Can you please tell us about some of the measures that you have been supported to take in this project to rehabilitate and strengthen your communal resources? (<i>this is through the watershed plans, they may mention enclosures, reseeding, gully treatments, tree planting, hay making, etc.</i>)
	35	Can you tell us about how people were selected in the community to carry out the work to implement these actions? (<i>probe here to find out how PSNP cash for work recipients were selected and how this successful they think this process was</i>).
SWC Technologies	36	What is your understanding of soil and water conservation (SWC) technologies? Can you tell us about some SWC practices that can be taken at household and community level?
	37	How well known are these practices in your community? How many people in the community do you think use such practices at household level? (<i>0, 1-25%, 25-50%, 50-75%, 75-100%</i>)
	38	If they have been implementing SWC measures, ask: Have the SWC structure performed well by sustaining the last one or two rains?
	39	Is there a checkdam construction carried out in your community? If so how is the general performance? Good; Medium; Poor (<i>probe for reasons to why it is that way</i>)
Water	40	Has your community had a new water source created through this project? Or rehabilitated? Is it for human or animal use, or both?
	41	If it was a new water source, have you been involved in the site identification and locating of any water points? If so which ones and how were you involved?

	42	What has been the impact of this new/now functional water source? <i>(probe here to see if there is less time fetching water or travelling for animals)</i>
	43	Is there a water point management committee established and operation? What do they do? What do people in your community think of this committee? Are fees collected by the community using the water point?
	44	Does the community contribute to the repair and maintenance of the water points? How? Is the full amount provided by the community or is there an expectation of support from the government/development partners?
Impact on Livelihood/Income Livestock/Crops	45	What is the main reason for livestock death in your community? If they give several, that is fine and expected, ask them to prioritize the reasons (7)
	46	Is there any change in livestock mortality rate (increase, decrease and/or same as the baseline)? (1) why is there an increased or decrease in livestock death? (1)
	47	In the current drought you are facing, did members of the community take any destocking measures to protect their herds and productive assets? How would you go about doing this? (83)
	49	In what ways has the project supported household livelihoods in this community? <i>(probe here to find out if they diversified their livelihoods and in which ways. We would like to learn two things here, that they know that diversifying livelihoods is important to lower risk and in which ways the project helped them do this... promoting honey production, gum/resins, incense making, diversified crops, livestock production, etc. (82)</i>
		<i>If the project supported them directly with new livelihoods (honey production, gum/resins) then ask: Please tell us about the support you received from the project to be able to take up this livelihood activity. What was helpful? What was not? (probe here to find out about technical training, inputs they may have received, business plan support, project monitoring, i.e. field staff continue to return and monitor and support their needs, etc.).</i>
	51	Do you think that your community can depend on each other in times of crisis? Can you provide examples

Impact on social cohesion		of how the community supports each other during these times? <i>(Remember it is a current drought right now, so you can probe around their current situation).</i> (78)
	52 53	Do you feel more prepared as a community to take actions to survive the current drought you are facing? How and why? (78)
	54	How does your community make decisions that impact communal resources? What are your opinions of this process? <i>(probe: we are trying to understand if they work well together as a community and are actively working together to manage their natural resources)</i> (78)
	55	Has there been a reduction in in the frequency and duration of community (resource-based) conflict in your community? (88)
	56	Do you think the project has supported women, disabled people, and vulnerable groups in the community? If yes, in what ways?
	57	Do you see any changes in the women who participated in WE groups? If yes, please tell us what these changes are.
Link to other gov't actors/stakeholders	58	Do you know if your woreda officials were given your Kebele Action Plans and C&MPs? (188)
	59	Do any other stakeholders help you support activities in your action plan <i>(remember action plans are implemented through the watershed committee and planning process)? (probe here to find out if local gov't/other NGOs/etc. are supporting them to implement the actions in the watershed plan)</i> (188)
	60	Did you ever visit any other communities for cross-learning visits? If so, what did you learn? (192)

FINAL Evaluation CM-DRR Focus Group Discussion Guide Kebele Watershed Team - REVIVE

****PRIOR TO FGD, FACILITATOR SHOULD HAVE A COPY OF THE WATERSHED PLAN TO**

SUPPORT LOCATION SPECIFIC QUESTIONS**

Suggested composition for FGD:

Kebele watershed team (KWT): Kebele Chairman; Kebele Rural Development Head; three DAs; one male representative/leader of each community one female representative/leader of each community; one respected and influential person from each community and representative of the youth, traditional institution member.

General Information:

Zone	
Woreda	
Kebele	
Village	
Date of FGD	
Facilitator name	
Note taker name	
Group make up (e.g. women, men, elders, youth, mixed)	
Total number of participants (M/F disaggregated)	Male: Female:
REVIVE Project Area	

Theme/area of discussion	Q#	FGD questions
Process of committee set-up/functions	1	Why was their KWT formed? When was it formed?
	2	How many men and women are on the KWT? (111)
	3	What do they think about the ability of the women in these committees to make decisions when compared with the men?

	4	What does the KWT do? What are your roles and responsibilities?
	5	How does the community views their role?
	6	What achievements they have made?
	7	What resources does the KWT have and where do they come from?
	8	How they intend to sustain the KWT?
	9	What challenges they face and how they cope? How can your group be better supported?
Watershed planning steps	10	Check if the proper steps of the GoE Community Based Participatory Watershed Development Guideline (CBPWDG) are followed - there are 8 steps
	11	How were the maps produced? Who participated in the process of creating them and analyzing them? How do they share the maps with other members of the community?
	12	What training have they received? Who did the training? When? What do they think about the training?
	13	Was the KWT trained on layout making? Do you use range poles and line levels?
	14	Was the KWT trained on SWC technologies? Can you tell us about 3 practices that you learned about in this training?
	15	Does the KWT have a Watershed plan? Has this been shared with other Kebele and Woreda level officials?
	16	Is planning on watershed activities based on GoE Community Based Participatory Watershed Development Guideline (CBPWDG)?
	17	What are the main elements/components of your watershed plan? (<i>probe to see if they have a watershed development map, a base map, and a land use map</i>)
	18	Can you please describe what happens during planning and reporting process?
	19	Do you know if your woreda has a Woreda Watershed Team (WWT)? What are its functions?
	20	Has there been prioritization of smaller watersheds within the larger watershed? How did you prioritize which smaller watersheds would receive actions?
	21	Has there been training given on the Soil and Water Conservations (SWC) technologies ? Ccan you tell us

		about the training and what SWC practices you learned about. How have you been promoting these in your community?
Context specific questions	22	After seeing the specific watershed plans that have been created, probe around the activities that have been carried out:
	23	Why were these actions prioritized?
	24	Are there household level and communal resources level actions in the watershed plan?
	24	How they will the action benefit diverse members of the community?
	25	Is there a plan to maintain actions that require maintenance and continuous support?
	26	What are the effects that you hope to see from rehabilitating and managing your resources?

FINAL Evaluation CM-DRR Focus Group Discussion Guide

Pastoral NRM Groups- REVIVE

Suggested composition for FGD:

10 people making up:

- Community pastoral leaders
- Scout
- Herders
- Traditional water manager
- Women

General Information:

Zone	
Woreda	
Kebele	
Village	
Date of FGD	
Facilitator name	
Note taker name	
Group make up (e.g. women, men, elders, youth, mixed)	
Total number of participants (M/F disaggregated)	Male: Female:

Theme/area of discussion	Q#	FGD questions
About rangeland resources	1	What are the most important rangeland resources which are critical to pastoral livelihoods in your kebele?
	2	What are the most commonly used rangeland management practices by communities in your kebele?
	3	Do you have customary rangeland management institutions in the community/kebele? If yes, how

		strong are they in promoting sustainable rangeland management practices? What are their roles and responsibilities for the leaders? The scouts? The traditional water managers? The herders?
	4	Have you established any rules and/or by-laws for managing and governing your communal resources? If yes, what are they for? If not, why not?
	5	If yes, how did you come to decide on them (who was involved) and how are they enforced?
Rangeland Management planning in this project	6	In what ways have you been part of the community D-DISK process? Do any of you sit on the DRR committee?
	7	How did you participate in Watershed planning in your community, in deciding and prioritizing what NRM actions would be undertaken?
	8	What has been the effect of the mapping and planning in your community of communal resources? Can you provide examples of positive and negative effects, if any?
	9	What support do you receive from kebele (DAs) or woreda officials? What are your opinions about this support? Is it adequate? Has it been helpful? How can this support be improved?
Conflict	10	We would like to better understand your experiences with conflict. (88) (132) (85) Please can you tell us how frequently do you experience this conflict in a year?
	11	What are the main causes of these conflicts?
	12	How often did these conflicts occurs in the past 3 years?
	13	Has this frequency reduced? If reduced, what caused it to reduce? (<i>probe here for how the planning process supported you to better manage resources with neighboring communities?</i>)
	14	What could be done to prevent this conflict in the future (by the community, government, donors/development partners)?
NRM activities	15	What activities have been undertaken by the project in this community to restore and rehabilitate rangeland resources? (<i>probe for: delineating area enclosures, Training on hay making and preservation, re-seeding, bush clearing/thinning and ask follow-up questions below?</i>)

	16	If yes, for enclosure, please tell us about how this process was undertaken (<i>probe: deciding sites, carrying out the work</i>)
	17	What is the communities interest and view of enclosures in light of past experiences?
	18	If yes for training on haymaking, please tell us about where and who participated in the training.
	19	Are other members of your community partaking in haymaking exercise after the training took place?
	20	If yes for bush clearing/thinning, please tell us about how this process was undertaken (deciding sites, methods used)
	21	Do you think the methods utilized for bush thinning/clearing were appropriate? Do you think they will improve the pasture situation? Can you see improvements?
	22	What support does your community receive to carry out rangeland rehabilitation activities? Who/where does this support come from? <i>If they mention PSNP, then ask: Please tell us how people in your community were selected to participate in the cash for work program</i>
Water points	23	Has your community received any support in creating new water points or in rehabilitating older ones? Who provided this support?
	24	How do you assess the appropriateness of the sites selected for strategic water points development? (<i>probe here for their influence in either promoting or obstructing pastoral mobility and flexible resource use</i>).
	25	Please tell us how the water point has impacted your decisions for where to graze your animals.
Early warning systems – decision making	26	Do you receive and early warning messages? If yes, what types of messages do you receive? Who do you receive them from? In what ways have these messages helped you/your community? Can you please provide examples for how your community has used/benefited from these messages?
	27	If yes, how often do you receive them? In what form do you receive them (<i>probe meeting, text, radio</i>)?
	28	(<i>assuming they say they have seen the SAPARM maps</i>) Can you please tell us what new information these maps tell you?

	29	In what ways have these messages helped you/your community? (<i>Probe around if they feel more prepared to make decisions about where to graze than they did before they started receiving the maps</i>)
	30	How do you compare the value of information generated by SAPARM maps and scouts in informing mobility decisions?
Conclusion	31	What were the main achievements of this CMDRR intervention for your community? What could have been done differently?

FINAL Evaluation CM-DRR Focus Group Discussion Guide

Seed Producer Group- REAAP

Suggested composition for FGD:

8-10 members of the seed producer group

General Information:

Zone	
Woreda	
Kebele	
Village	
Date of FGD	
Facilitator name	
Note taker name	
Group make up (e.g. women, men, elders, youth, mixed)	
Total number of participants disaggregated)	Male: Female:

Theme/area of discussion	Q#	FGD questions
Process of setting up seed producer group	1	How were the members of the seed Producers Farmers Group (PFG) identified and selected?
	2	What is the composition of the members of the SPG? (Probe for: women and PWD representation)
	3	Has this group received any training? If so, please tell us about it (type of training, duration of training, by who, refreshers?)
	4	What were the strengths and weaknesses about the training?

	5	Do the seed PFGs receive agricultural extension service from the respective Woreda Agricultural Office and project staff?
About improved Seed	6	Before the project, how did farmer's access seed? Did you have access to improved seed varieties from a formal market?
	7	What were the challenges / hurdles faced with farming communities to access and use of improved and quality seed?
	8	Has there been Farmers' Field Day organized on the seed PFGs while the crop stand is in the field? What happens during these events? In what ways have the Field Days been beneficial to this community?
	9	What types of seeds have the seed PFG been provided? Would you know and indicate the best type and variety of improved crop, in a priority order, in this system? (maize, sorghum, HB, sesame, ground nut, Sp, fruit seedlings)
	10	What benefits have you observed from using the improved seeds? What concerns, if any, do the farmers in your community have about improved seeds?
	11	What is the advantage of improved seed in relation to the indigenous varieties?
	12	What are your opinions about the future of using improved seeds in this community? Will people continue using them?
	13	What would influence continued use of improved seed? What concerns may affect continued use?
	14	Would people be willing to buy the seeds if produced locally?
Crop production/ Post-harvest technologies	15	What Crop Production/post harvest Technologies being promoted along with the improved seed system? If so what are these?

FINAL Evaluation CMDRR Focus Group Discussion Guide

Water Management Committee - REVIVE

Suggested composition for FGD:

Water Management Committee

General Information:

Zone	
Woreda	
Kebele	
Village	
Date of FGD	
Facilitator name	
Note taker name	
Group make up (e.g. women, men, elders, youth, mixed)	
Total number of participants (M/F disaggregated)	Male: Female:
REAAP Project area:	

Theme/area of discussion	Q#	FGD questions
Process of committee set-up/functions	1	When was this Water Management Committee formed? Was it through this project?
	2	If not by this project, the how was the group formed?
	3	How many men and women are in the committee? (40% GoE guidance)
	4	What positions are held by women, and which are held by men?(111)

	5	Can you please tell us about how the committee functions? What are your roles and responsibilities?
	6	How many water points does this committee over see? Which ones are they?
	7	Does the committee have an action plan or any type of plan supporting its work?
	8	Did you receive training to support your responsibilities as being members of this committee? If yes, who carried out the training? What did the training cover?
	9	What were the strengths and weaknesses about the training?
	10	Is this committee a legal entity? I.e. formally registered? (GoE has pushed this in Oromia)
Water point site selection/ management	11	What was the role of the committee in the selection of new sites for water development?
	12	How was the planning and development of the water points carried out? Did the wider community contribute?
	13	When water points were constructed, does the community make an in-kind contributions to its development (labor, local material provision, money)?
	14	Does the committee collect fees from the community for use of the water point?
	15	How was it decided what these fees would be?
	16	How are the fees collected and stored?
	17	Have you used any of the collected fees? If so for what?
	18	What do you do if a water point no longer functions?
	19	Are O&M services available locally?
Connection to gov't structures	20	Do you know who your Kebele level DA is to support your committee? What about the Woreda level official?
	21	If a new water source was created under this project, was a feasibility study conducted by a technical person from Woreda level?

	22	Is the committee aware of the Community Development Fund? Have you ever (or how often) received funds from this to improve water sources? If so, what were these funds used for?
	23	Are your water points ever tested for water quality by woreda officials?
Sanitation	24	What activities does the committee conduct on sanitation and hygiene? (probe by asking them if they work with their Health Extension Worker to promote WASH in the communities)
By - laws	25	Has there been oral or written bylaws functional along the water points or other water technologies, such as irrigations schemes (if they exist in this kebele)? (147)
	26	What is done/or what happens if someone in the community violates the bylaws?
	27	What do you consider to be the main achievements of the committee and what made the committee successful.
	28	In what ways has the committee not been unsuccessful?

Move on to asking specific questions regarding the following water technologies that are applicable to the sources they manage.

Questions related to Specific Water Technologies:

Spring Development	29	Is the spring water point supported by the project functional and operational? How do you tell if there is adequate discharge during the dry seasons?
	30	Are there separate access points for water collection for human and livestock? How have you done this?
	31	How are the runoff protection works incorporated into both the design and the development?
	32	Is there a sign of good flow of the developed springs over the dry seasons b/c the watershed (upper catchment) is treated with adequate SWC measures?
	33	How is the overflow structure incorporated?

Hand dug wells	34	Did this community have traditional hand-dug wells before the project?
	35	How many meters deep is the hand-dug well?
	36	Are farmers willing to contribute their labor voluntarily for digging the wells?
	37	Is the head capped and protected?
	38	What is the lifting mechanism? Rope and bucket? pump?
	39	Tell us about the level of your well in the dry season. Are you still able to use it?
	40	How do you ensure there are not incidences of contamination around the site?
	41	Is a operation and maintenance system in place? If yes, Please explain what this is.
	42	What purpose is the dug-well used for? (probe for garden vegetables or purely domestic use).
Pond Construction/ Maintenance	43	How was the site for the water pond selected? What criteria were used?
	44	How the water pond supported by the project? (probe for construction, maintenance or both)
	45	How many beneficiaries (No. of HHs) or number of LS is the pond serving?
	46	Is inlet and outlet (spillway) channel incorporated in the design and its construction?
	47	How long does the pond maintain after the cessation of the rain?
	48	Can you tell us how you help to mitigate unregulated runoff from entering the pond (silting)?
	49	How has the bank of the pond been treated? (hope to hear well compacted and stabilized, fenced, trees planted, etc.)
	50	Is it regulated access or direct access by the gathering of LS, by the herders, when watering the animals?
	51	How many times has the pond has been maintained/desilted since its construction?
	52	Is there a plan for future desilting? If so, who has the responsibility of undertaking this?

	53	Has there been a practice of LS water fasting in the past (before the project) and is there any sign of reduction of this now?
Spate Irrigation	54	Was there a traditional knowledge and practice of the spate system before the project?
	55	How are the beneficiaries selected? Is there inclusion of vulnerable groups?
	56	What are the crops being grown with the spate irrigation?
	57	Are there any improved crop management practices associated with spate irrigation systems?

FINAL Evaluation CM-DRR Focus Group Discussion Guide

WE Groups- REVIVE

****GET ANY ACTION PLANS THAT THIS GROUP DEVELOPED AS WELL AS ANY DOCUMENTATION ON GROW PATHWAYS****

Suggested composition for FGD:

10 women who are part of a WE group

General Information:

Zone	
Woreda	
Kebele	
Village	
Date of FGD	
Facilitator name	
Note taker name	
Group make up (e.g. women, men, elders, youth, mixed)	
Total number of participants (disaggregated)	Male: Female:

Theme/area of discussion	Q#	FGD questions
Process of setting up WE group	1	When was your WE group established? How many people are in your WE group in total? (WE groups should be able to function with less and less assistance after 6-10 months)
	2	What were the criteria to become a member? Do you think that the criteria was fair?
	3	What are your opinions about the criteria used to select vulnerable households? Did it help ensure that the right households/women were selected?

	4	What did you like and what didn't you like about the process for setting up this group?
	5	How is your WE group managed? Are there leadership positions? A facilitator? How many members?
	6	How often does your facilitator visit the group?
	7	Has your WE group undergone a full cycle of training and support? (groups should be able to function more independently in 6-10 months)
	8	What did the training cover? What were the strengths and weaknesses about the training?
	9	Can you explain to us how the WE group savings and loan mechanism functions? (rules/guidelines for how much each member is supposed to save upon meeting, how many loans are able to be given at a time, interest rate for repaying back loans).
	10	How much has your group saved in total since it formed?
	11	Does the WE group have a social insurance fund? If so, what are the rules for members accessing the welfare fund?
	12	How has the social welfare fund been used in the past?
	13	How is the money that is saved by the group stored?
Income/ livelihood/ business impact	14	Can you please describe how the decisions about income are made in your household? Who mostly makes these decisions? Are you able to influence these decisions?
	15	In what ways has your membership in the WE group helped you to diversify your sources of income and livelihood? (86)
	16	Did this WE group receive support to start an IG activity? Which IGs did this group prioritize? (honey production, incense making, soap production, goat fattening).
	17	If yes to the above question, ask How was the group supported to carry out e IG activities? (<i>probe for training support both business skills and on the IG itself as well as any inputs</i>) (112)
	18	Can you tell us about your business plan for the IG? Is this plan for the group or at an individual household level?

	19	Do you have any examples of business that women have established as a result of participation in this WE group? How are those businesses run? (119)
	20	How have those businesses helped you and your family?
	21	Can your business be strengthened?
Sustainability	22	Is your WE group linked to a RUSSACOs? if yes, when, how? (174)
	23	What are the advantages and disadvantages of linking to RUSSACOs? (174)
	24	Does your group have any support or connection to other groups outside the project?
	25	Does your group have any relationships with government structures?
Other benefits of being a WE group member	26	Aside from participating in the savings and loan aspect of the group, your WE group developed action plans to discuss social issues and take actions around them. Can you please tell us about what social issues your group prioritized and what actions were taken?
	27	Do you feel you have developed a stronger bond with the women in your group?
	28	Do you turn to group member for advice or when you have a problem?
	29	What was the most useful aspect of being part of a WE group?
	30	How do you think your WE group could be improved in the future?
Water sources	31	Have there been any new water sources established or repaired to functionality in your community? (write as much info as possible about the source so we can verify that it was attributed to this project)
	32	Has this affected the amount of time you spend fetching water? (133)
	33	In what ways has this new water source affected the lives of the people in your community? (Probe for Women, men, children, livestock)
EWS	34	Does your community receive any early warning messages related to drought? (radio announcements,

		text messages, maps, meetings with leaders) If yes, how do you receive these messages and in what form?
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KII Questions- Agri-Services- Program Staff

Introduction: Introduce yourself/your team, and purpose of the interview

Good morning/afternoon. My name is _____. I represent Social Impact, Inc. We are conducting a final evaluation of the USAID-funded Community Managed Disaster Risk Reduction (CMDRR)-- (REAAP or REVIVE) project. The purpose of the evaluation is to examine the results of CMDRR and determine its effectiveness. CMDRR is a process in which communities come together to assess their hazards, vulnerabilities, and capacities in order to better plan, prepare, and mitigate the impact of hazards in their community.

We are interested in your response for the different questions we have about CMDRR (REAAP or REVIVE). The information we receive from you will be used only in evaluating the CMDRR (REAAP or REVIVE) project. The interview will take about one hour and the interview is based on your full willingness. You can stop anywhere or you may not answer some of the questions that you do not want to. But we appreciate your participation in the interview and would be grateful. Is it all right if we begin now?

Date: _____

Location: Zone _____

Name of interviewee: _____

Name of interviewer: _____

Place of interview: _____

Questions

REVIVE project partner questions

1. What systems were put in place for communication, reporting, M&E, financial management, and for procurements? Were they effective?
2. Do you think the project locations/geographies were appropriate in terms of scale and scope? Can you please explain?
3. Please tell us more about your M&E systems and how you capture learning and best practice and how you ensure these are

- internalized by your organization.
4. Do you think there were ways that the consortium could have improved implementation?

General-context:

5. What are the main climate change related risks and vulnerabilities affecting communities in the project area?
6. Can you tell us about how the El Nino/La Nina has effected the project and its outcomes?

REVIVE Project Design:

1. What were the steps you took to ensure that the project was designed to meet the needs of the target communities? Are you aware of any risk assessments, context analysis, vulnerability assessments that were conducted prior to the project?
2. What the key features of the approaches used in this project?
3. What measures did you take to ensure the involvement of women and disabled people in the design and implementation of project activities? (177)
4. Were the project activities appropriate for each specific local context (bio-physical environment/livelihood zonation), and why? (184)
5. Can you tell us about the types of improved practices, technologies or process innovations introduced or implemented by the project and why they were chosen? What difference did these make to the implementation and achievement of project results?
6. Can you tell us about the appropriateness (177) and effectiveness of newly introduced or implemented practices, technologies and process innovations to the local context (agro ecology, livelihoods, social and political)? (150)
7. Can you tell us about the scalability of newly introduced or implemented practices, technologies and process innovations to the local context (in terms of design appropriateness, cost-effectiveness, agro ecology, livelihoods, social and political)? (150)

Project Implementation Questions:

8. To what extent have the project interventions addressed the core issues affecting the target groups? (What were the needs and priorities of the target beneficiaries at the beginning

- of the project implementation?) Are there community issues that this project should have addressed that it didn't? (177)
9. Tell us about the process of implementing the main processes of CMDRR (done in D-RISK process). What steps are taking in the process? Check if the following steps were followed: (33, 171) (do not need to be in this exact order).
 - a. Training communities in the CMDRR concepts and process
 - b. Setting up a DRR committee (if not already existing)
 - c. Hazard assessments and mapping
 - d. Vulnerability and capacity assessments
 - e. Creating a community Action Plan
 - f. Creating a community CMP
 - g. Documentation, monitoring and evaluation
 10. What is your opinion on the sustainability of the SAPARM process? In terms of human and technological capacity and in terms of the GoE's interest in institutionalizing the system within their Directorate?
 11. Do you think that the maps help livestock herders make more informed decisions? Do you think that the way in which the maps are distributed (frequency and method) and in their form (language, presentation) are useful to herders to make informed decisions? (40)
 12. Please tell us about the Watershed Planning process and how NRM interventions were prioritized and selected.
 13. How do you assess the cost-effectiveness of introduced technologies and management practices by the project?(150)
 14. How do you assess the social acceptance of the technologies promoted by the project (SWC structures, irrigation schemes, strategic water points, enclosures, nurseries, improved seeds, post-harvest materials, etc.)? (150)
 15. Do you think the water sources promoted by the project are appropriate to the local context (150)
 16. Please tell us about the WE groups and how these contribute to empowering women.
 17. In what ways do they facilitate change in women's lives?
 18. Do you think that the IG activities chosen were appropriate? Why or why not?
 19. Do you see envision that the IG/businesses supported are sustainable past the project life?

Linkages to government:

20. Please tell us about the integration of PSNP into your project and how this was coordinated with the GoE? What were the challenges and successes?

21. Is there any linkage or integration between the CMDRR planning processes of the project with PCDP and the Woreda PSNP planning and implementation processes? (154, 161, 162)
22. Do you have joint planning, implementation and monitoring experience with the woreda administration? If yes, what are the modalities for joint planning and implementation? (161)
23. Has the project supported the D-RISK process to better inform the Woreda Disaster Risk Profiles? Please take us through the steps of how the WDRP were strengthened. What were the challenges in doing this? What lessons were learned?
24. How did you make links to private sector. Please provide examples.

Cross-learning:

25. Do you organize/attend cross-learning events with CMDRR project IPs? If yes, how often are such events being organized?(192)
26. How useful were the cross-learning events? (193)
27. Have you used any of the lessons learned from cross-learning events with other IPs to develop or modify the design and/or implementation strategies of your organization? (193)
28. In what ways have you used monitoring of progress, learning and reflection to inform project implementation? (193)
29. How do you assess the motivation of community members to participate in the project activities? (194)

Summary:

30. What constraints and risks (climate risks/El Nino/La Nina, human, technical, logistical, conflict, declaration of the state of emergency, etc.) were faced during implementation of project activities? (194)
31. What factors were crucial for the achievement or failure to achieve the project objectives? (194)
32. In the implementation process, what has worked, and worked most effectively, what has not worked and why? (194)
33. In your opinion, what were the main lessons drawn from the project implementation? (194).

KII Questions- PCI (D-RISK Advisor)

Introduction: Introduce yourself/your team, and purpose of the interview

Date: _____

Name of interviewee: _____

Name of interviewer: _____

Place of interview: _____

Questions:

SAPARM:

1. Tell us about the process followed by the project to facilitate the development and validation of traditional grazing/community resource and risk maps?
2. How participatory and inclusive is the mapping and map validation process?
3. Can you please tell us about the SAPARM system, how it functions and the responsibilities assigned to go community structures and the different layers of government (kebele-woreda-zone-region-federal)?
4. How was/is SAPARM built into the existing LEAP national EWS system? How is information complimentary and not duplicated?
5. How does the map reach the end users? Not just the village leader/elder who receives the map? What about women and PWDs?
6. According to the project, community leaders are expected to organize village level meetings every 10 days to discuss information from SAPARM images. Have you organized such meetings before? If yes, how frequent?
7. How effective do you think the distribution is in ensuring the maps reach a many end users?
8. What are the challenges are there in distributing the maps? Have you made changes to the system to address these challenges?
9. Efficiency- Do you think that the SAPARM system has been built into the existing LEAP national EWS system? How is information complimentary and not duplicated?
10. How do you compare the effectiveness and utility of SAPARM maps and scouts in informing mobility decisions?

11. Do you think the maps helped to improve resource conditions by avoiding overgrazing? Can you show concrete examples of this?
12. Do you think the maps helped to improve coordination for animal health activities/campaigns? Can you show concrete examples of this?
13. Do you think that the maps have helped to reduce conflicts over resources? Can you give any examples?
14. It was noted in reports that some weaknesses of SAPARM are: accommodating local language, availing color printing system at woreda/zonal level, building capacity of woreda/zonal level staff to produce SAPARM data from the internet, and the challenges of internet access. Have these been addressed?
15. What are the challenges in distribution that you learned and how did you overcome these and/or make change to the distribution system?
16. The Midterm indicated that SAPARM maps do not tell about the availability of water, potential conflict, carrying capacity of the pasture, and the type of pasture. Has this been improved or was it even supposed to?
17. Year 2 report indicates that there is little community capacity to interpret the maps and that the project would facilitate community dialogue on the use and interpretation of the maps at village level. Was this done? How? Follow-up? Do we have any indication this was successful?
18. Sustainability- The responsibility of running the SAPARM system is to be done by the WPDO, is this office prepared to take over this responsibility? In terms of operations (printers, ink, distribution of maps), capacity (staff time and commitment), and finance (budget in Woreda to continue to support the activity)?
19. Sustainability- Has the SAPARM system been institutionalized at central level? Is the relevant ministry aware of the system and providing guidance oversight to the system?

D-RISK:

20. Is the D-Risk process, essentially, the main steps in the CMDRR process, where communities come to know about the hazards they face, understand their risk, and assess their capacities, while making action plan? (D-RISK facilitators were trained on: Participatory Hazard, Vulnerability, Capacity Assessments (PHVCA); Contingency and Mitigation planning; and D-RISK assessment using mobile phone technology).

21. Is the Contingency and Mitigation plan the equivalent of the DRR committee action plan? Is this the basis for community adaptation activities?
22. Was local government part of the process to create Contingency and Mitigation Plans? Were these plans shared with them upon completion? Or who keeps them, updates them, uses them?
23. Can you please explain how the D-RISK process is connected to the central government level of DRR/EWS systems/processes? Are the maps used at central level or do they remain only at local Woreda level?
24. How have the D-RISK maps supported better planning and coordination among national programs such as the national watershed initiative, PSNP, HABP, etc.
25. Is watershed mapping included on the DRISK map? Or are these their own individual maps?
26. How did the D-risk process inform woreda disaster risk profiles (WDRP)? Please explain.

KII Questions- Rift Valley- Program Staff

Introduction: Introduce yourself/your team, and purpose of the interview

Good morning/afternoon. My name is _____. I represent Social Impact, Inc. We are conducting a final evaluation of the USAID-funded Community Managed Disaster Risk Reduction (CMDRR)-- (REAAP or REVIVE) project. The purpose of the evaluation is to examine the results of CMDRR and determine its effectiveness. CMDRR is a process in which communities come together to assess their hazards, vulnerabilities, and capacities in order to better plan, prepare, and mitigate the impact of hazards in their community.

We are interested in your response for the different questions we have about CMDRR (REAAP or REVIVE). The information we receive from you will be used only in evaluating the CMDRR (REAAP or REVIVE) project. The interview will take about one hour and the interview is based on your full willingness. You can stop anywhere or you may not answer some of the questions that you do not want to. But we appreciate your participation in the interview and would be grateful. Is it all right if we begin now?

Date: _____

Location: Zone _____

Name of interviewee: _____

Name of interviewer: _____

Place of interview: _____

Questions

REVIVE project partner questions

7. What systems were put in place for communication, reporting, M&E, financial management, and for procurements? Were they effective?
8. Do you think the project locations/geographies were appropriate in terms of scale and scope? Can you please explain?
9. Please tell us more about your M&E systems and how you capture learning and best practice and how you ensure these are internalized by your organization.
10. Do you think there were ways that the consortium could

have improved implementation?

General-context:

11. What are the main climate change related risks and vulnerabilities affecting communities in the project area?
12. Can you tell us about how the El Nino/La Nina has affected the project and its outcomes?

REVIVE Project Design:

34. What were the steps you took to ensure that the project was designed to meet the needs of the target communities? Are you aware of any risk assessments, context analysis, vulnerability assessments that were conducted prior to the project?
35. What the key features of the approaches used in this project?
36. What measures did you take to ensure the involvement of women and disabled people in the design and implementation of project activities? (177)
37. Were the project activities appropriate for each specific local context (bio-physical environment/livelihood zonation), and why? (184)
38. Can you tell us about the types of improved practices, technologies or process innovations introduced or implemented by the project and why they were chosen? What difference did these make to the implementation and achievement of project results?
39. Can you tell us about the appropriateness (177) and effectiveness of newly introduced or implemented practices, technologies and process innovations to the local context (agro ecology, livelihoods, social and political)? (150)
40. Can you tell us about the scalability of newly introduced or implemented practices, technologies and process innovations to the local context (in terms of design appropriateness, cost-effectiveness, agro ecology, livelihoods, social and political)? (150)

Project Implementation Questions:

41. To what extent have the project interventions addressed the core issues affecting the target groups? (What were the needs and priorities of the target beneficiaries at the beginning of the project implementation?) Are there community

issues that this project should have addressed that it didn't?
(177)

42. Tell us about the process of implementing the main processes of CMDRR (done in D-RISK process). What steps are taking in the process? Check if the following steps were followed: (33, 171) (do not need to be in this exact order).
 - h. Training communities in the CMDRR concepts and process
 - i. Setting up a DRR committee (if not already existing)
 - j. Hazard assessments and mapping
 - k. Vulnerability and capacity assessments
 - l. Creating a community Action Plan
 - m. Creating a community CMP
 - n. Documentation, monitoring and evaluation
43. What is your opinion on the sustainability of the SAPARM process? In terms of human and technological capacity and in terms of the GoE's interest in institutionalizing the system within their Directorate?
44. Do you think that the maps help livestock herders make more informed decisions? Do you think that the way in which the maps are distributed (frequency and method) and in their form (language, presentation) are useful to herders to make informed decisions? (40)
45. Please tell us about the Watershed Planning process and how NRM interventions were prioritized and selected.
46. How do you assess the cost-effectiveness of introduced technologies and management practices by the project?(150)
47. How do you assess the social acceptance of the technologies promoted by the project (SWC structures, irrigation schemes, strategic water points, enclosures, nurseries, improved seeds, post-harvest materials, etc.)? (150)
48. Do you think the water sources promoted by the project are appropriate to the local context (150)
49. Please tell us about the WE groups and how these contribute to empowering women.
50. In what ways do they facilitate change in women's lives?
51. Do you think that the IG activities chosen were appropriate? Why or why not?
52. Do you see envision that the IG/businesses supported are sustainable past the project life?

Linkages to government:

53. Please tell us about the integration of PSNP into your project and how this was coordinated with the GoE? What were the challenges and successes?

54. Is there any linkage or integration between the CMDRR planning processes of the project with PCDP and the Woreda PSNP planning and implementation processes? (154, 161, 162)
55. Do you have joint planning, implementation and monitoring experience with the woreda administration? If yes, what are the modalities for joint planning and implementation? (161)
56. Has the project supported the D-RISK process to better inform the Woreda Disaster Risk Profiles? Please take us through the steps of how the WDRP were strengthened. What were the challenges in doing this? What lessons were learned?
57. How did you make links to private sector. Please provide examples.

Cross-learning:

58. Do you organize/attend cross-learning events with CMDRR project IPs? If yes, how often are such events being organized?(192)
59. How useful were the cross-learning events? (193)
60. Have you used any of the lessons learned from cross-learning events with other IPs to develop or modify the design and/or implementation strategies of your organization? (193)
61. In what ways have you used monitoring of progress, learning and reflection to inform project implementation? (193)
62. How do you assess the motivation of community members to participate in the project activities? (194)

Summary:

63. What constraints and risks (climate risks/El Nino/La Nina, human, technical, logistical, conflict, declaration of the state of emergency, etc.) were faced during implementation of project activities? (194)
64. What factors were crucial for the achievement or failure to achieve the project objectives? (194)
65. In the implementation process, what has worked, and worked most effectively, what has not worked and why? (194)
66. In your opinion, what were the main lessons drawn from the project implementation? (194).

KII Questions- CRS Project Coordinator

Introduction: Introduce yourself/your team, and purpose of the interview

Good morning/afternoon. My name is _____. I represent Social Impact, Inc. We are conducting a final evaluation of the USAID-funded Community Managed Disaster Risk Reduction (CMDRR)-- (REAAP or REVIVE) project. The purpose of the evaluation is to examine the results of CMDRR and determine its effectiveness. CMDRR is a process in which communities come together to assess their hazards, vulnerabilities, and capacities in order to better plan, prepare, and mitigate the impact of hazards in their community.

We are interested in your response for the different questions we have about CMDRR (REAAP or REVIVE). The information we receive from you will be used only in evaluating the CMDRR (REAAP or REVIVE) project. The interview will take about one hour and the interview is based on your full willingness. You can stop anywhere or you may not answer some of the questions that you do not want to. But we appreciate your participation in the interview and would be grateful. Is it all right if we begin now?

Date: _____

Location: Zone _____ Woreda _____ Kebele _____

Name of interviewee: _____

Name of interviewer: _____

Place of interview: _____

Questions

REAAP project partner questions

67. Can you tell us about your organization's roles and responsibilities in the REAAP project?
68. Can you please tell us about how the project partners was coordinated?
69. Do you think the coordination was done well? Please explain.
70. What systems were put in place for communication,

reporting, M&E, financial management, and for procurements? Were they effective?

71. What would you consider to be the main competencies of the project group? And what areas could be improved?
72. Do you think the project locations/geographies were appropriate in terms of scale and scope? Can you please explain?
73. Please tell us more about your M&E systems and how you capture learning and best practice and how you ensure these are internalized by your organization.
74. Do you think there were ways that the project partners could have improved implementation?

REAAP Project Design:

75. What were the steps you took to ensure that the project was designed to meet the needs of the target communities? Are you aware of any risk assessments, context analysis, vulnerability assessments that were conducted prior to the project?
76. What the key features of the approaches used in this project?
77. What measures did you take to ensure the involvement of women and disabled people in the design and implementation of project activities? (177)
78. Were the project activities appropriate for each specific local context (bio-physical environment/livelihood zonation), and why? (184)
79. Can you tell us about the types of improved practices, technologies or process innovations introduced or implemented by the project and why they were chosen? What difference did these make to the implementation and achievement of project results?
80. Can you tell us about the appropriateness (177) and effectiveness of newly introduced or implemented practices, technologies and process innovations to the local context (agro ecology, livelihoods, social and political)? (150)
81. Can you tell us about the scalability of newly introduced or implemented practices, technologies and process innovations to the local context (in terms of design appropriateness, cost-effectiveness, agro ecology, livelihoods, social and political)? (150)

Project Implementation:

82. From your perspective, what interventions make up CMDRR IN REAAP?
83. Were there CMDRR committees in each of the project operational kebeles before the start of the project (October 2014)? If yes, were the committees strong and functional?
84. If no, how were these committees formed? What is the composition of the committees? It is well constituted? Please explain? (33)
85. Can you please tell us about the CMDRR steps that you took the committees through? From creation/entry point to the output stage? (here is where they should talk about mapping, hazard assessment, VCA, action planning, C&MP).
86. Can you please tell us how the committees undertake implementation and monitoring of the action plans? (33)
87. How do you both encourage and assess the motivation of community members to participate in the process? (194)
88. Are joint planning meetings being organized by the project for community members, CMDRR committee and local government decision-makers? (73)
89. Are the communities provided with the CMDRR outputs in local language (action plans/contingency and mitigation plans)
90. Aside from the output of the community action plan and contingency and mitigation plans, can you tell us what are the strengths of the CMDRR process and in using this approach?
91. Can you please tell us about the EWS activities in this project?
92. What do you think was successful and what do you think did not work in linking indigenous and science based EWS?
93. What do you think are the most effective ways to disseminate EWS information? Please explain.
94. What is your assessment of the effectiveness of EWI dissemination products introduced by REAAP? Can you please give examples of how the EWI products are used to inform decision making? (40)
95. Do you think the water sources promoted by the project are appropriate to the local context (150)
96. Please tell us about the SILC groups and how these contribute to empowering women.
97. In what ways do they facilitate change in women's lives? Please give examples about the changes you may have observed in the lives of women as a result of their participation in SILC?
98. Do you think that the IG activities chosen were appropriate? Why or why not?
99. Do you envision that the IG/businesses supported are sustainable past the project life time? Please give reasons.

Linkages of REAAP Project:

100. As an important aspect of the CMDRR process, linking communities (and their action plans) to local government is essential. How has the project catered for that in its activities and implementation approach? (188)
 - a. Can you provide examples of the ways in which this happens?
101. Is there any link or coordination between the CMDRR action planning and the WDRP/CMP processes? How? (153)
102. If yes, how inclusive and participatory are those meetings? Are participants from various social groups (poor, better-off, young, old, women, PWDs, etc.) adequately represented in those meetings? (73)
103. What do you think are the limitations in ensuring that the community processes are linked vertically to kebele and woreda level planning?
104. Are the outputs of the CMDRR process shared with other development partners/stakeholders in the area?
105. In your experience, what makes communities successful in sustaining the DRR committee and keeping the plans updated and relevant?
106. Is there any linkage or integration between the CMDRR planning processes of the project with PCDP and the Woreda PSNP planning and implementation processes? (154, 161, 162)
107. Do you have joint planning, implementation and monitoring experience with the woreda administration? If yes, what are the modalities for joint planning and implementation? (161)

Cross-learning:

108. Do you organize/attend cross-learning events with CMDRR project IPs? If yes, how often are such events being organized? How many have been conducted in the past year? What happens during these events?(192)
109. How useful were the cross-learning events? (193)
110. Have you used any of the lessons learned from cross-learning events with other IPs to develop or modify the design and/or implementation strategies of your organization? (193)
111. In what ways have you used monitoring of progress, learning and reflection to inform project implementation? (193)
112. How do you assess the motivation of community members to participate in the project activities? (194)

Summary:

- 113. In the implementation of the CMDRR methodology, what has worked, and worked most effectively, what has not worked and why?
- 114. Can you tell us about how the El Nino/La Nina has effected the project and its outcomes?
- 115. Did you feel there were any project components that were not relevant to the target communities? (e.g. because there has been some change in the situation) (177)
- 116. What constraints and risks were faced (climate risks, human, financial, logistical, institutional challenges) in implementing the project activities? (185)
- 117. What were the strengths during project implementation? What factors were crucial for the achievement or failure to achieve the project objectives? (185)
- 118. In your opinion, what were the main lessons drawn from the project implementation? (194).

KII Questions- Cordaid Program Staff

Introduction: Introduce yourself/your team, and purpose of the interview

Good morning/afternoon. My name is _____. I represent Social Impact, Inc. We are conducting a final evaluation of the USAID-funded Community Managed Disaster Risk Reduction (CMDRR)-- (REAAP or REVIVE) project. The purpose of the evaluation is to examine the results of CMDRR and determine its effectiveness. CMDRR is a process in which communities come together to assess their hazards, vulnerabilities, and capacities in order to better plan, prepare, and mitigate the impact of hazards in their community.

We are interested in your response for the different questions we have about CMDRR (REAAP or REVIVE). The information we receive from you will be used only in evaluating the CMDRR (REAAP or REVIVE) project. The interview will take about one hour and the

interview is based on your full willingness. You can stop anywhere or you may not answer some of the questions that you do not want to. But we appreciate your participation in the interview and would be grateful. Is it all right if we begin now?

Date: _____

Location: Zone _____ Woreda _____ Kebele _____

Name of interviewee: _____

Name of interviewer: _____

Questions

REAAP Project partner questions:

1. What were the systems put in place for communication, reporting, M&E, financial management, and for procurements between all partners? Were they effective?
2. Do you think the project locations/geographies were appropriate in terms of scale and scope?
3. Please tell us more about your M&E systems and how you capture learnings and best practice and how you ensure these are internalized by your organization and the consortium?
4. Do you think there were ways that the project partners could have improved implementation?

General-context:

5. What are the main climate change related risks and vulnerabilities affecting communities in the project area?
6. Can you tell us about how the El Nino/La Nina has affected the project and its outcomes?

REAAP Project Design:

7. What were the steps you took to ensure that the project was designed to meet the needs of the target communities? Are you aware of any risk assessments, context analysis, vulnerability assessments that were conducted prior to the project?
8. What the key features of the approaches used in this project?

9. What measures did you take to ensure the involvement of women and disabled people in the design and implementation of project activities? (177)
10. Were the project activities appropriate for each specific local context (bio-physical environment/livelihood zonation), and why? (184)
11. Can you tell us about the types of improved practices, technologies or process innovations introduced or implemented by the project and why they were chosen? What difference did these make to the implementation and achievement of project results?
12. Can you tell us about the appropriateness (177) and effectiveness of newly introduced or implemented practices, technologies and process innovations to the local context (agro ecology, livelihoods, social and political)? (150)
13. Can you tell us about the scalability of newly introduced or implemented practices, technologies and process innovations to the local context (in terms of design appropriateness, cost-effectiveness, agro ecology, livelihoods, social and political)? (150)

CMDRR Process:

14. From your perspective, what interventions make up CMDRR IN REAAP?
15. Can you tell us about what you did to build capacity of the other partners to implement the CMDRR process at community level?
16. What trainings did you undertake, Who were trained? How was the training undertaken? In what ways did the training impact implementation? How could the training be improved?
17. What is your assessment of the institutional capacity (technical, managerial and resources) of the IPs in implementing the CMDRR process? (185)
18. How did you monitor CMDRR activities throughout the project lifetime to ensure quality? In your opinion, what are the main strengths and weaknesses of the monitoring system?
19. What support do you provide to REAAP for implementing community action plans? Is the community receptive to this support? Please explain?
20. How do you both encourage and assess the motivation of community members to participate in the process? (194)
21. Are the communities provided with the CMDRR outputs in local language (action plans/contingency and mitigation plans)
22. Aside from the output of the community action plan and contingency and mitigation plans, can you tell us what are the strengths of the CMDRR process and in using this approach?

Other project implementation areas:

23. Can you please tell us about the EWS activities in this project?
24. What do you think was successful and what do you think did not work in linking indigenous and science based EWS?
25. What do you think are the most effective ways to disseminate EWS information? Please explain.
26. What is your assessment of the effectiveness of EWI dissemination products introduced by REAAP? Can you please give examples of how the EWI products are used to inform decision making? (40)
27. Do you think the water sources promoted by the project are appropriate to the local context (150)
28. Please tell us about the SILC groups and how these contribute to empowering women.
29. In what ways do they facilitate change in women's lives? Please give examples about the changes you may have observed in the lives of women as a result of their participation in SILC?
30. Do you think that the IG activities chosen were appropriate? Why or why not?
31. Do you envision that the IG/businesses supported are sustainable past the project life tie? Please give reasons.

Linkages of Project:

32. As an important aspect of the CMDRR process, linking communities (and their action plans) to local government is essential. How has the project catered for that in its activities and implementation approach? (188)
 - A. Can you provide examples of the ways in which this happens?
33. Is there any link or coordination between the CMDRR action planning and the WDRP/CMP processes? How? (153)
34. If yes, how inclusive and participatory are those meetings? Are participants from various social groups (poor, better-off, young, old, women, PWDs, etc.) adequately represented in those meetings? (73)
35. What do you think are the limitations in ensuring that the community processes are linked vertically to kebele and woreda level planning?
36. Are the outputs of the CMDRR process shared with other development partners/stakeholders in the area?

37. In your experience, what makes communities successful in sustaining the DRR committee and keeping the plans updated and relevant?
38. Is there any linkage or integration between the CMDRR planning processes of the project with PCDP and the Woreda PSNP planning and implementation processes? (154, 161, 162)
39. Do you have joint planning, implementation and monitoring experience with the woreda administration? If yes, what are the modalities for joint planning and implementation? (161)

Summary:

40. Did you feel there were any project components that were not relevant to the target communities? (e.g. because there has been some change in the situation) (177)
41. What constraints and risks were faced (climate risks, human, financial, logistical, institutional challenges) in implementing the project activities? (185)
42. What were the strengths during project implementation? What factors were crucial for the achievement or failure to achieve the project objectives? (185)
43. In your opinion, what were the main lessons drawn from the project implementation? (194).

ANNEX 4: WE/SILC GROUP AND INDIVIDUAL INCOME-GENERATING ACTIVITIES UNDER REVIVE

I. Planned support to WE/SILC Group IGA under REAAP/REVIVE (source: REAAP and REVIVE reporting and M&E data from Year 2 and 3)

REAAP/ REVIVE	Group IGA supported	Number of groups supported/beneficiaries	Inputs provided
REVIVE	Bee production	18 WE groups, 174 beneficiaries trained	Training, 1,080 modern beehives, 54 wax printers, and 3,240 kgs of wax
REVIVE	Incense making	Activity forthcoming to support 10 WE groups with 241 members	Training for selected WE groups
REVIVE	Aloe soap production	Activity forthcoming to support 10 WE groups	Training and support to aloe planting
REAAP	Fuel Efficient stove production	35 groups (233 women trained) and 6 groups linked to market opportunities (target was 25)	Training, stove production inputs, support to promotion and marketing of stoves, facilitating market linkages
REAAP	Goat fattening	Forthcoming	
REAAP	Poultry production	210 households	Training (activity stopped due to poultry disease)

2. WE Group IGAs under REVIVE RCWDO Implementing Partner (source: RCWDO records)

S/N	Name of woreda	# of Kebele	# of Group	# of members	Type of IGA	Engagemen t	Loan taken	Total Sale	Gross profit
1	Legahidha	2	7	173	Goat fattening	Group IGA	8,800.00	10,630.00	1,830.00
		4	19	395	Petty trade	Group IGA	44,880.00	94,100.00	49,220.00
		2	4	96	Honey traing	Group IGA	8,300.00	12,600.00	4,300.00
		1	3	70	Milk trading	Group IGA	15,860.00	18,000.00	2,140.00
		4	6	41	Petty trade	Individuals IGA	258,200.00	299,300.00	41,100.00
	sub total	13	39	775			336,040.00	434,630.00	98,590.00
2	Sawena	5	31	620	petty trade	Individuas IGA	7,675.00	on sale	
		3	4	80	Goat fattening	Individuas IGA	24,000.00	on sale	
	sub total	8	35	700			31,675.00		
3	Dawe sarar	3	6	126	Goat fattening and trading	Individuas IGA	34,500.00	47,192.00	12,692.00
		4	6	120	petty trade	Individuas IGA	21,800.00	27,025.00	5,225.00
	sub total	7	12	246			56,300.00	74,217.00	17,917.00
	G/total		86	1721			424,015.00	508,847.00	116,507.00
	%		30.5	31					

3. WE group/Individual IGAs under REVIVE Hundee Implementing partner (Source: Hundee records)

Woreda	Kebele	WE group's name	Type of business started		# of members part on the IGA	Family size of the WE group members		
			Group based	Individual based		M	F	T
Delo Mena	Wabaro	Lalisu Magarisa	Purchase of coffee	-	25	74	76	150
	Wabaro	Misoma Bari	Purchase of coffee	-	25	74	76	150
	Wabaro	W/Gudina	Purchase of coffee	-	22	65	67	132
	Wabaro	Abdi Boru	Purchase of teff	-	17	50	52	102
	Burkitu	Hedamicho	Purchase of coffee	-	21	62	64	126
	Burkitu	SH/Dire	-	Purchase coffee	18	53	55	108
	Gomgoma	Bakalcha	Purchase of coffee	-	25	74	76	150
	Gomgoma	Lalisa	Goat fattening	-	25	74	76	150
	Gomgoma	Angasu	Oxen fattening	-	23	68	70	138
	Gomgoma	Furtu Misoma	Oxen fattening	-	27	79	83	162
	Gomgoma	Furtu Misoma	Goat fattening	-	27	79	83	162
	Gogoma	Biftu	Oxen fattening	-	20	59	61	120
	Gomgoma	Kananisa	Oxen fattening	-	26	76	80	156
	Malka Amana	Laga Dima	Oxen fattening	-	25	74	76	150
	Malka Amana	Laga Dima	Goat fattening	-	25	74	76	150
	Malaka Amana	Sof umer	Oxen fattening	-	20	59	61	120
	Malka Amana	Sof umer	Goat fattening	-	20	59	61	120
	Malka Amana	Leenca	Oxen fattening	-	25	74	76	150
	Malka Amana	Oda	Oxen fattening	-	20	59	61	120
	Malka Amana	Harerii	Oxen fattening	-	25	74	76	150
	Malka Amana	Harerii	Goat fattening	-	25	74	76	150
	Malka Amana	Hire Gudina	Oxen fattening	-	24	71	73	144
	Malka Amana	Hire Gudina	Goat fattening	-	24	71	73	144
	Malka Amana	Misoma	Oxen Fattening	-	26	76	80	156
	N/dhera	Sulula Kamila	Oxen fattening	-	19	56	58	114
	Bobiya	Burka Gudina	Purchase of teff	-	21	62	64	126
	Haya Oda	Irba	Goat fattening	-	15	44	46	90
	W/Gudina	B/Gudina	Purchase of coffee	-	25	74	76	150
	W/Gudina	Urji Bari	Purchase of teff	-	25	74	76	150
	W/Gudina	Laliftu	Purchase of coffee	-	20	59	61	120
	W/Gudina	Kannisa	Purchase of coffee	-	21	62	64	126
	W/Gudina	Magartu	Purchase of teff	-	25	74	76	150

Woreda	Kebele	WE group's name	Type of business started		# of members part on the IGA	Family size of the WE group members		
			Group based	Individual based		M	F	T
	Dayyu	Misoma	-	Purchase of coffee	18	53	55	108
Meda Walabu	Madhicho	A/Jiregna	-	Goat fattening	25	74	76	150
	Madhicho	Bonsa	-	Goat fattening	24	71	73	144
	Madhicho	Lemi	-	Goat fattening	18	53	55	108
	Oda Boji	Bikila	Oxen fattening	-	22	65	67	132
	Oda Boji	Bikila	Goat fattening	-	22	65	67	132
	Oda boji	Urji	Oxen fattening	-	21	62	64	126
	Oda Boji	Roba	Oxen fattening	-	23	68	70	138
	Oda Boji	M/Burka	Oxen fattening	-	25	76	74	150
	Oda Boji	M/Lalisa	Oxen fattening	-	25	74	76	150
	Oda Boji	A/Gada	Goat fattening	-	17	50	52	102
	Oda Boji	Abdi Boru	Goat fattening	-	16	47	49	96
	Oda Boji	Biftu	Oxen fattening	-	25	74	76	150
	H/Haji	Ababo Buna	Oxen fattening	-	16	47	49	96
	H/Haji	Lalistu	Goat fattening	-	17	50	52	102
	H/Haji	Qindomina	Goat fattening	-	17	50	52	102
	Barisa	Abdi Boru	-	Goat fattening	1	3	3	6
	Barisa	H/Jiregna	Teff	-	10	29	31	60
	Madda	Dureti	Pottery	-	25	74	76	150
	Madda	Biftu	Donkey	-	13	38	40	78
	Madda	Urji	Donkey	-	15	44	46	90
H/Buluk	Kumbi	Iftu	-	Coffee	1	3	3	6
	Kumbi	Dabalo	-	coffee	1	3	3	6
	Kumbi	Gabbatuu	Coffee	-	25	74	76	150
	Kumbi	Abdi Gudina	Coffee	-	25	74	76	150
	Kumbi	Magala	Coffee	-	25	74	76	150
	Kumbi	Jituu	Coffee	-	15	44	46	90
	Kumbi	Biftuu	Coffee	-	25	74	76	150
	Kumbi	Masjida	Coffee	-	15	44	46	90
	S/Tatessa	Urji	-	Goat fattening	1	3	3	6
	S/Tatessa	Walin Gudina	Goat fattening	-	20	59	61	120
	S/Tatessa	Hangatu	Goat fattening	-	20	59	61	120
	S/tatessa	Waddesa	Goat fattening	-	24	71	73	144
	S/tatessa	Lalistu	Goat fattening	-	20	71	73	144

Woreda	Kebele	WE group's name	Type of business started		# of members part on the IGA	Family size of the WE group members		
			Group based	Individual based		M	F	T
	S/Tatessa	Biftuu	Goat fattening	-	16	47	49	96

4. WE Group/Individual IGAs under REVIVE Agri-service Implementing Partner (source: Agrr-service records)

Woreda	Kebele	WE group's name	Type of business started		# of members Participated in the IGA
			Group based	Individual based	
Dawe Kachen	Arda Oru	H/Gudina	Social fund on the form of Idir	Retail shop	All & 1 women have a shop
	Arda Oru	Urji	Social fund on the form of Idir	Tea shop	All & 1 women have a tea shop
	Kubi Waldaya	Urji	—	Sugar and oil	1
	Kubi Waldaya	Burkitu	—	Sugar and oil	1
	Dibe Kilofta	Negele	Sugar, oil& other goods	—	27
	Dibe Kilofta	Urji	Oxen fattening	—	15
	Dibe Kilofta	Walti Kejelo	Sugar, oil& other goods	—	23
	Dibe Kilofta	Burkitu	Sugar, oil& other goods	—	20
	Oda Didibisa	Dinik	—	Retail shop	1
	Oda Didibisa	Burkitu	—	Retail shop	1
	Oda Didibisa	A/ferda	—	Oil& Sugar	1
	Oda Didibisa	Danchile	—	Oil	1
	Oda Didibisa	Danchile	—	Sugar	1
	Oda Didibisa	Danchile	—	Oil& Sugar	1
	Oda Didibisa	A/Gudina	—	Oil	1
Gura Damole	Rayitu Anole	Kenisa	—	Oil	2
	Rayitu Anole	Kenisa	—	Tea shop	1
	Aleshena	Mio	—	Oil	1
	Aleshena	Mio	—	Coffee	1
	Aleshena	Damo	—	Goat fattening	2
	Aleshena	Dursa	—	Salt	3
	Yobdo Sere	Burka Gudina	—	Goat fattening	3
	Yobdo Sere	Biftu Beri	—	Oil	2
	Yobdo Sere	Biftu Beri	—	Coffee	3

Woreda	Kebele	WE group's name	Type of business started		# of members Participated in the IGA
			Group based	Individual based	
	Jibo Awaye	Kora		Oil	1
	Jibo Awaye	Bekelcha		Goat fattening	1
	Jibo Awaye	Oda		Goat fattening	1
	Yedi	Hirmana Gudina	Goat fattening	—	20
	Yedi	Biftu Gudina	—	Plastic shoes	1
	Yedi	Ibsitu	—	Retail shop	1
	Yedi	Ibsitu	—	Tea shop	1
	Yedi	Gudina misoma	—	Goat fattening	1
	Yedi	Biftu Gudina	—	Goat fattening	1
	Jibri	Agertu Gari		Goat fattening	7
	Jibri	Muleta Lemi		Goat fattening	5
	Jibri	Urji		Goat fattening	2
	Jibri	BiftuLeliftu		Goat fattening	2
	Jibri	Bekelle		Goat fattening	3
	Jibri	Gadissa Oda		Goat fattening	3
	Jibri	Biftu Beri		Goat fattening	2
	Jibri	Dugicha		Goat fattening	5
	Jibri	DireEdi		Goat fattening	2
	Jibri	Abdi Boru		Goat fattening	4
	Jibri	Abdi Boru		Petty trade	8
	Jibri	Denbi Leliftu		Petty trade	2
	Jibri	Biftu Oromia		Goat fattening	1
	Ejeru	Robe		Goat fattening	4
	Ejeru	Biftu		Salt	2
	Ejeru	Biftu		Oil	1
	Ejeru	Bowe		Butter	3
	Ejeru	Bowe		Goat fattening	1
	Ejeru	Iftu		Goat fattening	2
	Ejeru	Gebeta		Goat fattening	3
	Ejeru	Burka		Goat fattening	4
		Hawi Gudina		Goat fattening	6
		AbdiBoru		Goat fattening	4
		Melkassa		Petty trade	2
		Melkassa		Goat fattening	3

Woreda	Kebele	WE group's name	Type of business started		# of members Participated in the IGA
			Group based	Individual based	
Rayitu		Chefa		Goat fattening	5
		Hirimtu		Goat fattening	2
		Ella Dulla		Poultry trade	3
	Arda Kalo	Kulu	Goat fattening activity		18
	Arda Kalo	Kulu		Purchasing & selling goat on the market day of Chalchal town	
	Arda Kalo	Kulu		Goat productions	
	Arda Kalo	Kulu	Collecting and Purchasing gum and resins from local village supply to market	Collecting and Purchasing gum and resins from local village suppliers to market	
	Arda Kalo	Kulu	Honey Production		
	Arda Kalo	Kulu	Goat production activity and Honey production	Goat production and Honey production	
	Arda Kalo	Bakalcha Bari		Poultry production and goat production	18
	Hara Dube	Gamtoma	Fattening oxen & Gum and Resins production	Oxen fattening, goat production	15
	Hara Dube	Gobaya		Goat production	21
	Hara Dube	Abdi Boru	Collecting and purchasing Gum & resins	Collecting and purchasing Gum & resins	18
	Hara Dube	Bakalcha Bari	Goat fattening	purchasing cereals& supplying to market	15
	Hara Dube	Hawi Gudina	Goat fattening activity and improved small shop at kebele center		15
	Jara Torbi	Anole	Goat fattening, production & Honey production	Goat fattening and production & Honey production	25
	Jara Torbi	Mi'o	Goat production and supplying sugar for members and other resident community and Honey production		18
	Jara Torbi	Masgida		Goat productions	18
	Jara Torbi	Qillisa		Goat productions	20
	Jara Torbi	Cana	Supplying sugar and oil for members and community		17

Woreda	Kebele	WE group's name	Type of business started		# of members Participated in the IGA
			Group based	Individual based	
	Jara Torbi	Kilisa		Goat production	20
	Dh/Farda	Irresa	Supplying sugar and oil for resident		15
	Dh/Farda	Hara Dimtu	politary activity& Honey Production	politary activity& Honey Production	15
	Dh/Farda	Dhadacha Ifa		goat fattening by purchasing one goat for each members & Honey Production	15
	Adela	Bakalcha Bari	Supplying sugar and oil		15
	Adela	Biftu Gudina		goat fattening activity	19
	Adela	Misoma Magarisa		goat fattening activity	16
	Adela	Hawi Guddina		Petty trade and goat production	15
	Adela	Masgida		Goat fattening and supplying egg for Chalchal market from local village	15
	Adela	Furtu Misoma		Starting poultry activity	15
	Adela	Kallacha		Supplying sugar and goat fattening	15
	Adela	Faco		Goat fattening	15
	Dh/Balda	Anuba		Goat production	15
	Dh/Balda	Bakara		Goat production	19
	Dh/Balda	Bura Bilala		Goat production and petty trade	18

ANNEX 5: LIST OF NRM COMPONENTS UNDER REAAP AND REVIVE

REAAP NRM Interventions				
Interventions - physical	Unit	Planned	Achieved to date	%
Soil bund	Km	1,350	829	61
Micro-basin	#	150,000	55,287	37
Stone bund	Km	850	655	77
Trench	Km	260	269	104
Cut off drains	M ³	14,500	19,096	132
Stone faced soil bund	Km	40	27	68
Eyebrow basin	#	2,500	1,401	
Hillside terrace	Km	28	49	175
Maintenance of physical SWCs	KM	615	539	
Interventions- biological				
Rehabilitation of degraded watershed using area closure	Ha	160	167	104
Establish seedling nursery sites	#	5	23	
Plant tree seedlings	#	1,500,000	177,162	
Gully treatment				
Construction/maintenance of stone check dams	m3	40,000	1,292	
Construction/maintenance of check dams with gabion	m3	5,834	1,672	
Brush wood check dam	m3	3,300	1,336	
Sand bag check dam	m3	846	78	

Gully sides reclamation/re-vegetation.	Ha	40	31.5	
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REVIVE NRM Interventions				
Interventions - physical	Unit	Planned	Achieved to date	Comment
Area Closure (1/3 of kebeles)	Ha	19250	4512 (year 2)	4046 planned for Y3, Q1- not done (in total, 16,184 still to be done)
Bush clearing - per kebele (1/3 of kebeles)	Ha	19250	3737	4,606 planned for Y3, Q1- not done (in total 18,416 still to be done)
Soil and water conservation - soil and stone bunds - (1/3 of kebeles)	Km	1081	404	147 planned for Y2, Q1- not done (in total 682 not done)
Interventions- Biological				
Tree, fruit and forage seedlings	Seedlings	Not in workplan	13,036	This is in 3 kebeles in Rayitu

ANNEX 6: FGD/KII RESPONSES SURROUNDING SAPARM DISSEMINATION, USEFULNESS, AND CONSTRAINTS

FGD/KII Responses on the timeliness and frequency of distribution and its impact on map usefulness		
Woreda	Comment on timeliness and frequency of distribution	Impact of distribution challenges on maps use
Rayitu, Woreda	“The maps come from Goro, so there is a delay. They started receiving the maps 8 months ago [Oct. 2016]*. They receive map and there is severe delay for 5 days or a week because they don’t have logistics to distribute the maps to the kebeles. They have asked for support in this, but they struggle to find transport to the communities.”	In reference to the delay and trouble in distribution, he thinks the community is not seeing the maps. “So we do this without any awareness for the public. When they [PCI/Agri-service] first brought the map to the office, they promised to provide support for distribution.” “They promised us to give every 10 days, as well as transportation to reach the kebele and the sub-zones in the kebele. The community has not really benefited yet.”
Lega Hida Woreda	“The maps began to come 1 year ago.” “But there is some issues in how to distribute there is a delay from coming from Ginir (2 days)	
Meda Walabu Woreda	They get the maps 3 times in a month and it has been consistent. They first started receiving the maps 2-3 years ago	
Dolo Mena Woreda	Aware of the SAPARM maps, livestock DA is given maps by Hundee, then he uses existing meeting to go and share the information on the maps, either watershed meetings or the 2 meetings called weekly by the kebele chairmen; The last time you got information was December, the info is not coming down from the woreda office to the DA regularly so Hundee is now delivering them directly to DA.	Not everyone has access to the maps and information because the kebele is geographically large- not everyone in the sub-zones sees the maps as they cannot come to all the meetings called- it is too far to travel.; “it is not equally accepted by all the sub-zones in the kebele”
Dolo Mena DA	He has been here for 1.5 years. Starting 6 months ago, he has been received 3 maps once a month. Starting 3 months ago, he receives 3 maps TWICE a month.	
Lega Hida DA	So far, the kebele administration has received 4 SAPARM maps (each coming every 4th month); The maps are not reaching the kebele in time. In terms of formatting, DAs are in charging of interpreting the maps.	“The pastoralists already know from experience where and when to move. They rely on customary practices and reciprocal arrangements. Not much has changed in their practices. “
Lega Hida DRR Committee	“So far the kebele has received the SAPARM maps 4 times from the woreda PDO. The first was received at the beginning of 2008 EC (fourth quarter of 2016).” On average the kebele received the SAPARM maps every fourth month. The maps are posted by the Activity staff at PTSs; DRR committee will show maps to public during community meetings	“SAPARM maps show only green and barren lands. They do not differentiate between bush, forest and pasture resources. The maps lack water related information”

FGD/KII responses on the usefulness of SAPARM Maps	
Rayitu Woreda KII	+ Before the coming of this map, the people are moving from areas to area, with the coming of this map our society has improved.
Rayitu Woreda KII	- “Even though the map is distributed to the community, b/c many are illiterate, they cannot all read the and use the map”
Dolo Mena Woreda KII	+ “Helping to find pasture, improving from the past where they wasted their time looking for pasture, and sometimes didn’t find. After SAPARM, woreda is benefiting from this technology.”
Meda Walabu Woreda KII	+ “With the coming of the maps, the community does not waste time moving, but it helps them find pasture, which is benefiting them. When he goes to the communities he asks them if they know what the maps say and how to read them and the communities are able to talk about the maps and know where their kebele is located on the map.”
Meda Walabu DA KII	- “Migrating is traditional, our forefathers have been doing this, in my opinion, I never see any value added, if it [the map] is also not given, in my opinion, it doesn’t matter, because the people will go and search to find pasture, this is what our people have done for many years. The maps do not show the dangerous animals, especially lions, where the water is found, where there is conflict. Because of all these things, why is it being used?”
Rayitu DA KII	- “SAPARM seems a new innovation but communities are not seeing use in it.”
Dolo Mena DA KII	+ “Maps are very good for the community, no need to send scouts anymore– so people are benefitting.”
Rayitu DA KII	+ “Before the technology, they had their traditional way, after the coming of the map it is benefitting the community.”
Lega Hida DRR Committee FGD	- “SAPARM maps show only green and barren lands. They do not differentiate between bush, forest and pasture resources. The maps lack water related information”
Mega Walabu DRR Committee FGD	- “We heard that the maps will be useful to facilitate mobility. But pastoralists are used to relying on scouts and traditional information. The over-whelming majority of community members in the kebele are unable to read and write, let alone interpreting maps. They trust elders and what they can see and feel.”
Dolo Mena DRR Committee FGD	- “The committee is not aware of any mapping process and no one saw the traditional grazing maps or SAPARM maps” [in fact an hour before our meeting with them, the committee members reported seeing a Activity staff posting a map at the wall of the kebele room where we held the FGD with the committee]
Mega Walabu Pastoral NRM FGD	“What you see in SAPARM maps is only green and dry areas. The community know that forest areas near the highlands in Meda Walabu and Dolo Mena are always green while settlement and dry season grazing areas are dry. The information generated by SAPARM maps can be scientific. But community members trust information coming from their experienced and tested scouts.”
Rayitu Pastoral NRM FGD	“Seeing is believing”- Community members get EWS information from scouts and traditional leaders. SAPARM maps are not used to make livestock (mobility) decisions.

FGD/KII responses to the maps constraints	
Federal DRMC EW Directorate KII	They know about SAPARM and PCI from Afar region. They had previously told PCI that the maps should include rainfall data with the NDVI data and they also recommended to put in conflict hotspots. (no direct quote taken from this KII).
Rayitu Woreda KII	“Map only shows pasture, I wish it could show water condition, dangerous animals, and dangerous mountains to climb.” “Water and dangerous animals need to be added to the SAPARM maps.”

Rayitu Woreda KII	“The main thing I want to mention is that it will tell us only about the green areas.”
Dolo Mena Woreda KII	“They want to sustain this technology – find a way to include water. Also, the NDVI data shows all vegetation, not specifically pasture.”
Meda Welabu Woreda KII	“We also see such constraints on the maps, he sees the problem about what is pasture. The community also raises such concern.”
Dolo Mena DA KII	“Map does not show the exact quantity of pasture with how many cattle can go there, carrying capacity, has created over grazing as everyone moves to one place. “
Meda Walabu DA KII	“They are using the maps, but in his opinion, in some ways it has benefits, but in some ways, it has drawbacks, the maps show two areas, the dry and the green, but the green it is not identified if it is pasture or forest”
Rayitu DA KII	“We receive many times the question for the community that it shows the pasture, but no water... it doesn't matter to only know pasture, they need to know water. The community is repeatedly asking this question”
Lega Hida DA KII	The maps lack detail information that can be used by pastoralists to make informed mobility decisions.”

ANNEX 7:WDRP PROCESS COMPLETION IN REVIVE WOREDAS

Woreda	WDRP Completed	DRR planning completed?
Rayitu	Completed	Pending
Delo Mena	Completed	Completed
Meda Welabu	Completed	Completed
Lege Hida	Completed	Completed
Dawe Serere	Completed	Pending
Dawa Katchan	Completed	Pending
Seweyna	Completed	Completed
Gura Dhamole	Completed	Pending
Harena Bulak	Completed	Pending

Source: http://profile.dppc.gov.et/Pages/Wereda_Disaster_Risk_Profile_Status.aspx

ANNEX 8: SITE OBSERVATION LOG

REAAP Site Observations ²⁷					
Site	What was visited? ²⁸	What interventions were observed	What was done well	What was not done well	Additional comment
NRM/Watershed work – Enclosures and SWC measures on Hillsides					
• Meta Woreda, Yber kebele • Gara Kemoni , Sulula Dedo site	• Enclosure • 2ha • Degraded land (public/communal land) • Below this along the landscape there are cultivated fields by individuals. • In Mieso Woreda, Hayuu KA also some 6ha area closure was visited	• 3.5km hillside terracing constructed • Eyebrow/micro basin constructed is 1030 • On the hillside terracing and eyebrows some 1900 seedlings (mix of Olea africana, Juniperus procera, Lucaena, Susbania, and Mexican apple) have been planted and it was seen with good survival	• Appropriate choice of tree/plant species and the survival is very good. Olea and Juniper trees are indigenous to the site. Olea is used for farm implements and while Juniper for house construction. • Dodoniaviscosa which is also an indigenous plant to the site (known as "Tedecha" in Afan Oromo and "Kitikta" in Amharic) is rejuvenating well after the closure and physical interventions; • The hillside has significant open spaces, gravelly surface cover, poor infiltration and prone to generation of high runoff as the original top soil has already been washed away. B/c of this there are already formed gullies, and more rills on their way to further gully formations. Therefore, the intervention with physical SWC measures mentioned above (hillside and eyebrow terraces) are correct interventions. • A verbal byelaw is existing and the community is giving it full protection • Similarly in Mieso, Hayuu KA, Adele steep slope hillside (45% slope) closure of the whole hillside with 6ha of it done with hillside terracing and integrated with some 600 eyebrows.	• The treatment with such physical measures and its planting has to advance to the foot slope of the hill where the cropping field starts, otherwise it would be a major threat to the cultivated fields lying below. • Also in Mieso Hayuu KA the low lying cultivated field need to be treated with physical as well as biological SWC measures • The Activity Coordinator mentioned that there is a plan that seedlings are being raised at the Woreda nursery. Trees such as Moringa and Chinese mole	If this upper hillside is not closed and treated well it will be a threat to these farmlands b/c of the deposition of gravel, cobbles, and boulders.

²⁷ A lot of field photos have been collected and put on a google drive as catalogue

²⁸ For NRM: Enclosure or farmland? If enclosure, how much land was under enclosure

REAAP Site Observations ²⁷					
Site	What was visited? ²⁸	What interventions were observed	What was done well	What was not done well	Additional comment
			Natural bush is seen regenerating. There is a plan to continue the hillside terracing and to plant the pits within the eyebrow system in the coming rainy season. The intervention is well on the way in terms of reducing erosion in the lower lying cultivated fields and the whole watershed. • Moringa and Shines mole – true man tree is being raised at the Woreda nursery and is scheduled to be planted when the rain comes. If the physical and biological SWC measures are not integrated then it will be occupied by invasive plant species such as Lantana camara "Yewof Kolo" and lowland cactus "Tini".	(Trueman tree) are being raised	
Miesso, Hayuu KA, Adele	Steep slope hillside (45% slope) closure of the whole hillside with 6ha	• hillside terracing and integrated with some 600 eyebrows • Natural bush is seen regenerating • There is a plan to continue the hillside terracing and to plant the pits within the eyebrow system in the coming rainy season.	The intervention is well on the way in terms of reducing erosion in the lower lying cultivated fields and the whole watershed.	• Only two points to mention here are: the eyebrow is done in the reverse order which is due to lack of supervision • The lower lying farmland did not get the necessary attention and should be treated with physical as well as biological SWC measures • See the photos in the picture catalogue and the draft report	in Meisso during the construction of the eyebrows there is some lack of supervision and this has been confirmed by the Activity coordinator

REAAP Site Observations ²⁷					
Site	What was visited? ²⁸	What interventions were observed	What was done well	What was not done well	Additional comment
SWC on farmland					
Meta-Yber	Soil bunds and stone-faced soil bunds on farmlands		• Good alignment • Household effort is put on the maintenance of the bunds • Perennial crops such as coffee, chat, and fruit crops are planted in the field • Some rows of the bunds are planted with Elephant grass	• The upper hillside need to be treated in a ridge-to-valley or watershed logic • There is some disconnect b/n the upper and the lower land use treatment • A lot of pictures collected	
Fedis-Iftu	Stone bunds on individual farms		Farmers were seen breaking and constructing stone bunds	• They said there is lack of tools such as crowbar and big hammer to break the stones	
Gully plugging					
Meta-Yber	3-4 rows of stone filled gabion in a cascaded	Stone filled gabion	Filled to the full edge of the gully without a spillway	Spillway is needed and gully side reshaping required	There is a general lack of skill on gully treatment works and this is evident
Oda Bultum-Kereyu KA	Gully plugging	Stone filled gabion checkdam to rehabilitate a big gully	• Well staggered and strong foundation • Started retaining/capturing sediment and moisture too • See the pictures in the picture catalouge	There is only one of its kind and finger or branching gullies have not been included	Planning and implementing on a watershed logic is needed i.e. upper catchment treatment (physical SWC as well as biological) before

REAAP Site Observations ²⁷					
Site	What was visited? ²⁸	What interventions were observed	What was done well	What was not done well	Additional comment
					drowning into the gully
Tulo-Kira Kufis	Stone filled gabion	Mainly done for facilitating the crossing of the gully (i.e. improving accessibility)	• The big checkdam is done with stone filled gabion • People with disabilities can cross it now • Also, tractors can cross over the healed and level gully bed and they can cultivate/plow opposite fields • Lacks proper foundation, side keying, and apron	• No adequate upper catchment treatment • Upper catchment not treated and not consolidated • Finger/feeder gullies were not given priority • There is no any gully reshaping and stabilizing with biological measures as well • Proper theoretical and practical training, demonstration, exchange visits to best performing sites with gully protection works are required • Proper upper catchment treatment without drowning into the big gullies is required	Presence of black cotton soil or vertisol is a problem as it expands on wetting and cracks on drying and collapses thus aggravating the rate of formation
Agriculture Technologies (seed producer groups, Keyhole gardens)					
In all the Woredas	Provision of improved seeds	Acquiring and distribution of 1122 quintals of improved seeds. Remember these are	• Almost every KIIs, FGDs, and site observation are very much happy and comfortable to the type of improved seed promoted by REAAP Activity	• The problem mentioned by the farmers is that it is	The problem mentioned by the farmers is

REAAP Site Observations ²⁷					
Site	What was visited? ²⁸	What interventions were observed	What was done well	What was not done well	Additional comment
		seeds of maize, sorghum, chick pea, haricot bean, sesame, etc.	- Chickpea is inoculated with a nitrogen fixing rhizobium bacteria which is very good technology promoted along this line - The introduction of sesame in the spate irrigation area is also very much appreciated by the beneficiaries - information from horse's mouth - they sale one quintal of harvested sesame for ETB 2500/100kg (Quintal) (~\$109/100kg) - Keyhole gardens are also promoted by the provision of vegetable seeds procured and distributed by the Activity - On the application of improved s	not reaching on time. - Farmers in - Fedis reported that they were told to wait that the improved seed will come and while waiting the useful rain they would have utilized for their local variety passed - Striga weed infestation on mainly sorghum and maize is mentioned as a key problem.	invasion by striga weed
- Fedis-Iftu - Tulo-Chefie	Keyhole garden	- It is fenced and also vegetables are ready to be harvested. They have used it already for first harvest and this is the second time. - In Tulo Woreda Chiefie KA a bed of keyhole garden after harvest is visible standing a little lower than the chest height and laminated by stones with the water inlet at the center - see the pictures attached	- By the Activity 3602 keyhole gardens have been promoted. Technical training, demonstration and provision of vegetable seeds has been provided by the Activity - see what is presented by Ato Anteneh and also our pictures catalogue already put on the google drive. - This is a very successful intervention and many respondents during FGD and KIs have mentioned it enthusiastically. - Improving the nutrition of children, pregnant and lactating mothers - this is said by them not copied from references. - Some neighboring farming households have seen it informally and on a field	The only problem is that it cannot be promoted in areas where moisture/water/rainfall is a limitation - areas such as Midhega Tolla to mean	As NRM person and working so many number of years this is a surprise to me. We used to promote vegetable production on the side of river banks where there is abundant water

REAAP Site Observations ²⁷					
Site	What was visited? ²⁸	What interventions were observed	What was done well	What was not done well	Additional comment
			day basis and they have started copying it already		
Technology- Water/irrigation					
Meta - Bilisuma KA	Spring protection	• Domestic water supply • Also, the water is used for livestock • Surface pond for night storage from which during the day time water is directed to 18ha irrigated fields of chat and vegetables	• Well protected and well capped spring with water collection stand for two villages serving more than 200 households • Bylaw established and operational • Feasibility done by the Activity	No significant problem noticed	Similar efforts should continue where the niche of spring exists
Meta-Oda Roba	Cattle trough	Cattle trough for livestock water drinking	Water is directed from protected spring to a cattle trough construction and completed by the Activity	No significant problem but not all cattle are using drinking water from the trough and some animals are still using from open pond stuff nearby	
Oda Bultum-Seqa Riga KA	Irrigation	• Diversion of small stream/spring using stone filled gabion • Flume from gabion boxes to pass the deep gully	• They are making use the little available water resource for dry season crop production • Crops such as onion, maize, pumpkin and chat were seen irrigated • The total area is reported to be 103ha • It serves for 532 households of which 32 are women headed households and 16 are people with disabilities • Many farmers are seen working in the field as if it is a wet/rainy season which is very good	• Some ditches/canals are scouring and need attention • The upper catchment where the spring originates is not appropriately treated or protected and needs attention • The upper catchment should be treated in a watershed logic i.e. ridge-to-valley approach	

REAAP Site Observations ²⁷					
Site	What was visited? ²⁸	What interventions were observed	What was done well	What was not done well	Additional comment
Miesso-Hayuu	Spate Irrigation	Diversion of approaching dry season flood from neighboring highland Woredas of West Hararghe	- The flood is approaching to the KA from Chiro, Anchar, and Guba Koricha Woredas of West Hararghe - In the past farmers use temporary diversion structures and it gets washed away easily - Such diversion has been made in 9 KAs of Miesso i.e. 4 in the first year of the Activity and 7 in the second year - The Activity has provided support by bringing the farmers together, training, providing technical assistance, provision of purchased gabion, and improved seeds - There has been frequent exchange visits and field days organized by the support of the Activity to the farmers in the neighboring KAs and also Woreda level experts while the crop from spate is on the field so that comparison can easily be made to the crop stands with and without supplementary irrigation from spate	- After the field level exchange visits are made there is more request by the neighboring KAs to be assisted on purchased inputs such as gabion and improved seeds - Some sections of the river banks have been eroded by the action of the flood and needs attention - Avoid installing diversion on ox-bow meandering curves rather it should be applied on the stretch reach of the river is recommended	
Technology- livelihoods (beehives/ FES)					
- Tulo-Chefie - Miesso Activity KAs	Fuel efficient stoves	- Forming the groups - Training - Provision of mold - Linking to markets	- In Miesso Woreda b/c availability of sand is not a problem some members are making goo incomes - It was reported that having once the mold she can purchase a sack of cement at ETB 130 (~\$5.65) and sand is locally available she can make 6 stoves from a sack of cement. Each FES is sold at ETB 150 (~\$6.52)	If good quality of sand is used, then the stove gets cracked or dismantled when put under fire	Pls see pictures catalogue attached on the google drive
Meta Woreda	Distribution of improved beehive	Target KAs and individuals have been identified	The plan was to distribute 18 improved beehives	It is promoted only to the wetter and highland areas of the	

REAAP Site Observations ²⁷					
Site	What was visited? ²⁸	What interventions were observed	What was done well	What was not done well	Additional comment
			The Woreda Activity coordination office has already received 15 and ready to distribute to - as confirmed by Mehamed Suleyman	Meta Woreda and not in the dry areas such as Yber.	

REVIVE Site Observations ²⁹					
Site	What was visited? ³⁰	What interventions were observed	What was done well	What was not done well	Additional comment
NRM/Watershed work – Enclosures and SWC measures					
Dalo Mana-Dayu	• Enclosure • The total area could not be reported,	• Enclosure integrated with SWC: soil bund with trenches; half-moon terrace with infiltration basin and planting pits; herring bone;	• The Woreda and the Kebele chose the site - seems to be little community participation in that; however, it is estimated about 100 people carried out the work- PSNP • Working tools supplied by Hundee • After the work is done (planting) the space will be managed by a cooperative of 30 people (15M/15F) - these are selected from vulnerable, unemployed, poor people; It is reported that they will use the grass to sell and get income • Observation: it is good site selection and effort made to strengthen the enclosure with physical SWC measures	Biological SWC measures are not yet ready	
Dalo Mana-Haya Oda	Enclosure	Stone bund: 400 ha enclosure and incorporated with gabions, half moons, trenches, herringbone	Observation: sufficient stone is available on the site which makes it ideal for the site selection;	However, it is loosely placed and not interwoven; loose stone gabion is also poorly piled as a checkdam; need skill training,	Demonstration, experience sharing on how to make stone bunds, and loose stone checkdams required
Dalo Mana-Gomgoma	Enclosure	• Stone faced soil bund with trenches: half-moon terrace with infiltration basin and planting pits; stone filled gabion checkdam; SWC-trench; half moon; pit preparation; soil bunds;	• Work carried out both by PSNP voluntary labour and PSNP paid labour (from Activity); Work started in January and is still ongoing; As usual, Hundee provided tools/seed, technical support, technical training • Cooperatives have already been established for the area when it is complete; • Observation: Good site selection is a noticeable effect; Adequate stones available on the site;	But checkdam lacks foundation; no side keying; no apron; at times, it is finished in round shapes rather than regular boxes; not reaching the whole gully width; the spill way should be rectangular than trapezoidal; interval	Needs skill training; demonstration and experience sharing

²⁹ A lot of photos and videos have been collected and this will be compiled in a catalogue and will be put on a google drive

³⁰ For NRM: Enclosure or farmland? If enclosure, how much land was under enclosure

REVIVE Site Observations ²⁹					
Site	What was visited? ³⁰	What interventions were observed	What was done well	What was not done well	Additional comment
		herringbone; stone bunds; • This enclosure is 400 hectares • On a separate area, there is 600 hectares enclosed that does not have SWC structures and this is for allowing it to regenerate as the land is not so highly degraded as the enclosure with 400 ha.		b/n consecutive gabions needs adjustment; mix of gabion sizes need improvement	
Lege Hidha-Hare Goro	Enclosure	• Sulula Watershed: bush clearing of the non-palatable species • Microbasins • Pits and improved pits • Trenches • Large halfmoons are visible here and there	• Trenches are dug to be planted when the rain comes • There is nursery in the KA? • Acacia, Susbania, Moringa, and Jatropa; Rhodes? are raised but not seen • There is a thinking of putting ponds in the closure for watering planted seedlings • There is a need of geomembrane for pond lining to lower the seepage loss	• The soil is of black nature which means swells when wet and cracks on drying leading to gully • Livestock is seen roaming inside; it is said livestock are kept away when the rains come	
Rayitu-Cooqui	Enclosure	• Area closure with SWC measures • 500ha of which 200ha is soil bund, halfmoon, trench, herring bone; and 300ha is bush clearing;	• PSNP; PCI; ASE; incense trees (<i>Boswellia papyrifera</i>); and collection and production of resin in a traditional manner • They said they would get seedlings from the government nursery site • This site was selected by PSNP and Watershed committee	• (due to time constraints, we never saw this and verified it existed or had tree and the 6 varieties they said they would plant)	

REVIVE Site Observations ²⁹					
Site	What was visited? ³⁰	What interventions were observed	What was done well	What was not done well	Additional comment
			• They plan on planting moringa, Rhodes grass- they hope these 2 will survive the dry spell • The area will be managed by a cooperative (50m/50w) after the work is done • Modern beehives are to go to this cooperative • WE groups will use the enclosure as there are incense trees	• Point was made here that enclosures need ponds to help support tree survival rates through the first dry season • We see evidence that they used the incense tree as fencing (bad practice)	
Irrigation/Water harvesting					
Dalo Mana-Melka Mana	Small scale irrigation	Watering plants under shade - nursery: vegetable seedlings such as cabbage, tomato, pepper, onion are growing on raised bed (in a form of a nursery).	• These are said about two weeks old since planting • 75 people will benefit from this (3 WE groups- Heriri, Wali Pala, Hide Gudina) • 1 person each day is responsible for coming to the site to take care of the nursery- this rotates between the groups • Generator is present, group has hired a guard to protect the asset • It is reported that training the groups received (although not specifically all 75 of them, sometimes it was just representatives from the 3 groups) • The WE group member at the site said that a buyer will come to the field or they will carry to market to sell--- seems no link to market is made) • The work began 3 months ago. They first tilled with oxen (the husbands of the WE members). Then they tilled with a tractor (WE group paid for this) Hundee provided inputs such as vegetable seeds, generator and training; the evaluation team are told there is a management committee to manage the process and that the business plan has taken into account diesel for generator, guard costs, etc.	• They received business skills training, they have made a business action plan (however, we have not seen this- not validated) • Received training on how to bring crops to market (it is unclear if there is any actual market linkage)	River, spring, well? What is the pump for?

REVIVE Site Observations ²⁹					
Site	What was visited? ³⁰	What interventions were observed	What was done well	What was not done well	Additional comment
			Received training on how to manage the generator (3 people from each group)		
Mada Walabu-Kerjul	Hand pump/hand dug well	Hand dug well fitted with hand pump: fenced with barbed wire and gate,	- Good outward drainage to leave the water point tidy - Hundee provided concrete, wire- non-local materials - Community provided local materials - stone, sand, wooden fence, etc. - Woreda water office supplied a new pump - When asked what makes this a quality hand pump, they said - They choose experts who knew how to construct them - o Raised the level of the pump - concrete base - o Community participation - o That there is a water management committee - o Fence around source - o And a trough for spill off - o Work on the trough started 2 months ago - The pump is open twice a day, in the morning and at night – keeping it open only at certain times is a way to monitor its use - There is a guard that in charge of protecting the source, has the key to access it. The community selected this person - Their comments are: • We get quality water no • They do not boil this water • They have yet to see a change in health - Expert said the capacity was for 25 households, but 300 households use it as the quality is so good it is attracting more people	The people at the water pump are unaware of a committee	
Mada Walabu	Pond	Community pond connected to a ramp system	- Pipe is fixed - Cattle trough incorporated by Hundee - Not clear what the standing trough is fo	Cattle trough is cracked already	CCOPI sign post is around?

REVIVE Site Observations ²⁹					
Site	What was visited? ³⁰	What interventions were observed	What was done well	What was not done well	Additional comment
				• Not clear what the standing trough is for	
Dalo Mana-Wabaro	Hida Kumbi spring	Spring protection	• Spring box connected to a water collection point • There is a management committee which is confirmed by people at the site collecting water • They said they were selected by the community • Before the Activity they used very dirty water with insects in it • They have seen a change in water borne diseases and are benefiting greatly b/c the water is now a good quality • They have confidence to drink the water • Hundee plans to build a cattle trough for the runoff water, as now it is being lost and creating an unfit area around the protected source		
Rayitu-Dhadacha Farda	Pond	Community pond	• Fenced with lockable gate • Technical and material support from the Activity (working tools for desilting) • Sustainable b/c it is managed by the community		
Mada Walabu-Kerjul	Ela	Ela or manually dug-well	• 3-4 meters' depth • Bucket lifting • Cattle trough made from mud (Hundee)	It is not clear if it has been supported by the Activity or traditional?	Deduction made from the picture
Technology- livelihoods (beehives/ FES)					
Rayitu- Arda Kaldho	Beehive	Improved beehive boxes	• Waiting for the bee colony to be in • Meant for the VE groups		
Agriculture Technologies (seed producer groups, Keyhole gardens)					
Technology- Water/irrigation					

Findings from Site Observations in REVIVE - Positive Side

I. In general, there is a positive side - leveraged resources and collaboration with PSNP

2. A number of interventions of enclosures have been visited in the four Woredas of REVIVE (See the above table)
3. Almost every single REVIVE NRM site had enclosures. There are a lot of area enclosures in REVIVE than REAAP (167ha for REAAP and more than thousands for REVIVE)
4. The benefits of rangeland planning have been well documented across the region/zone.
5. They are demonstrations of how degraded land can be reclaimed
6. Within the area closures there is much effort taken to incorporate Soil and Water Conservation (SWC) measures. These SWC measures are:
 - a. Soil and stone bunds with trenches
 - b. Stone faced soil bund with trenches
 - c. Half-moon terrace
 - d. Herring bone terrace
 - e. Infiltration basin with planting pits
 - f. Gully plugging using loose stone as well as stone filled gabion boxes
 - g. Maintenance of community ponds (by desilting and incorporation of fencing and some incorporated with ramps)
 - h. Hand dug well fitted with hand pump
 - i. Spring protection activities
 - j. Vegetable growing nursery in Dalo Mana Woreda, Malka Mana KA
 - k. Bush thinning within the enclosures

The concern is:

1. The SWC interventions carried out using stones (the stone bunds, stone-faced-soil bunds, loose stone checkdams and stone filled gabions need more quality (see the above table)
2. All enclosures only had physical SWC structures and have not been tested in terms of their performance through the rainy seasons
3. Yet no integration with biological measures yet
4. Timing for trees/seedlings preparations and planting
5. Water availability and survivability of seedlings - need for pond inside enclosures
6. Evidence for concern for more bush thinning/rangeland management
7. In a general sense, it was mentioned to the evaluation team (several times) that the appropriateness of NRM intervention using a watershed approach is questionable
8. The evaluation team has noticed that there is a growing debate about how the watershed approach can suit the pastoral and agro-pastoral communities and their landscapes in the ridge-to-valley approach that is being followed in the highlands.

ANNEX 9: WATER POINTS/IRRIGATION SCHEMES CREATED, REHABILITATED, MAINTAINED IN REAAP/REVIVE

REVIVE Water Point Information

Total waterpoints that the Activity supported: 33 completed/ 24 planned before Activity end.

(Rows in blue indicate where work has been completed on water points)

SN	IP	Woreda	Kebele	Scheme type	Activity	Quantity	Status of water point-completed, in progress, planned	Water Mang't Committee in place at water point?	WMC Established by Activity or revived by Activity?	WMC training received from Activity?
1	HUNDEE	Dalo Mana	Wabero	Spring	Development	/	Completed	Yes	By REVIVE	Yes
2			Wabero	Spring	Rehabilitation	1	Completed	Yes	By REVIVE	Yes
3			Wabero	Spring	Minor Maintenance	1	Completed	Yes	By REVIVE	Yes
4			Gongoma	Pond	Rehabilitation	/	Completed	Yes	By REVIVE	Yes
5			Nanige Dhera	Pond	Rehabilitation	/	Completed	Yes	By REVIVE	Yes
6			Melka Amana	S.S. Irrigation	Development	/	Completed	Yes	By REVIVE	Yes
7			Gongoma	Hand Pump	Maintenance	/	Planned to be completed in May	No	Not yet (the Activity will review the existence of WMC to strengthen or establish the new one)	Not yet
8		Haren a Buluk	Wabero	Spring	Extension	/	Planned to be completed in May	No	Not yet	Not yet
9			Malka Amana	SSI	Pump	/	Completed	Yes	By REVIVE	Not yet
10			Anole	Hand Pump	Maintenance	/	Completed	Yes	By REVIVE	Not yet
11			Bekayi	Spring	Maintenance	/	Completed	Yes	By REVIVE	Not yet
12			Melka Arba	Spring	Maintenance	/	Planned to be completed in May	No	Not yet	Not yet

13			Mekana Gobeles	Hand Pump	Maintenance	/	Planned to be completed in May	No	Not yet	Not yet
14			Shawe	Hand Pump	Maintenance	2	Planned to be completed in May	No	Not yet	Not yet
15		Mada Walabu	Warre	Spring	Rehabilitation	/	Planned to be completed in May	No	Not yet	Not yet
16			Oda	Hand Pump	Maintenance	/	Completed	Yes	By REVIVE	Not yet
17			Oda	Hand Pump	Maintenance	/	Completed	Yes	By REVIVE	Not yet
18			Oda	Hand Pump	Maintenance	/	Completed	Yes	By REVIVE	Not yet
19			Kerjule	Hand Pump	Maintenance	/	Completed	Yes	By REVIVE	Not yet
20			Kerjule	Hand Pump	Maintenance	/	Completed	Yes	By REVIVE	Not yet
21			Warre	Hand Pump	Maintenance	/	Completed	Yes	By REVIVE	Not yet
22	ASE	Dawe Kachen		Pond	Rehabilitation	/	Completed	Yes	By REVIVE	Not yet
23				Pond	Rehabilitation	/	Completed	Yes	By REVIVE	Not yet
24				Pond	Rehabilitation	/	Completed	Yes	By REVIVE	Not yet
25				Pond	Rehabilitation	/	Completed	Yes	By REVIVE	Not yet
26			Hantule Basaka	Motorized Bore Hole	Rehabilitation	/	Planned to be completed in May	No	Not yet	Not yet
27			Dibe Kilofta	Pond	Rehabilitation	/	Planned to be completed in May	No	Not yet	Not yet
28			Kubi Walda	Pond	Rehabilitation	/	Planned to be completed in May	No	Not yet	Not yet
29	PCI with Engineers without borders	Dawe Kachen		Diesel/ electric	Maintenance	/	Completed	Yes	By REVIVE	Not yet
30				Diesel/ electric	Maintenance	/	Completed	Yes	By REVIVE	Not yet
31				Diesel/ electric	Maintenance	/	Completed	Yes	By REVIVE	Not yet
32	PCI with Engineers without borders	Gura Dhamole	Jibri	Hand Pump	Maintenance	/	Planned to be completed in May	No	Not yet	Not yet
33			Yedi	Spring	Rehabilitation	/	Planned to be completed in May	No	Not yet	Not yet
34			Jibri	Hand Pump	Maintenance	/	Completed	Yes	By REVIVE	Not yet
35			Jibo Samo	Spring	Rehabilitation	/	Planned to be completed in May	No	Not yet	Not yet
36			Aleshena	SSI	Pump	/	Completed	Yes	By REVIVE	Not yet
37	ASE	Rayitu		Pond	Rehabilitation	/	Completed	Yes	By REVIVE	Not yet
38				Pond	Rehabilitation	/	Completed	Yes	By REVIVE	Not yet

39				Pond	Rehabilitation	/	Completed	Yes	By REVIVE	Not yet
40			Dadacha Farda	Pond	Rehabilitation	/	Planned in June	No	Not yet	Not yet
41			Aleshena	SSI	Pump supply	/	Completed	Yes	By REVIVE	Yes
42			Kare Tule	Pond	Rehabilitation	/	Planned in June	No	Not yet	Not yet
43	PCI with Engineers without borders	Laga Hidha	Harkiso	Hand Pump	Maintenance	/	Completed	Yes	By REVIVE	Not yet
44			Harkiso	Hand Pump	Maintenance	/	Completed	Yes	By REVIVE	Not yet
45			Haro	Hand Pump	Maintenance	/	Completed	Yes	By REVIVE	Not yet
46			Haro	Hand Pump	Maintenance	/	Completed	Yes	By REVIVE	Not yet
47			Oda	Spring	Rehabilitation	/	Planned in June	No	Not yet	Not yet
48			Hide Hunda	Hand Pump	Maintenance	/	Planned in June	No	Not yet	Not yet
49			Hide Hunda	Hand Pump	Maintenance	/	Planned in June	No	Not yet	Not yet
50			Hide Hunda	Spring	Rehabilitation	/	Planned in June	No	Not yet	Not yet
51			Goni	Hand Pump	Maintenance	/	Planned in June	No	Not yet	Not yet
52	PCI with Engineers without borders	Seweyna	Boditi	Motorized Hole	Maintenance	/	Completed	Yes	By REVIVE	Not yet
53	RCWDO	Seweyna	Dolcha	Pond	Maintenance	/	Planned in June	No	Not yet	Not yet
54			Gale	Motorized Bore Hole	Rehabilitation	/	Planned in June	No	Not yet	Not yet
55			Kasho	Pond	Maintenance	/	Planned in June	No	Not yet	Not yet
56	RCWDO	Dawe Serer	Dhenduba	S.S. Irrigation		/	Completed			Not yet
						57				

REAAP Water Point Management:
Total water points receiving Activity support: 71

SN	Woreda	Site location/water point name/Kebele	Type of water point	Was there a Water Management Committee for the site	Was it established by the Activity? Receive training	Are there bylaws you are aware for the water point?	Other comment/
	I. Water Supply						
	I.1. Spring Development						
1	Meta	Gorobiyo	Spring development	Yes	Yes	Yes	Completed
2	Meta	Mudhi Lenca	Spring development	Yes	Yes	Yes	Ongoing
3	Meta	Welensu#1	Spring development	Yes	Yes	Yes	Completed
4	Meta	Welensu#2	Spring development	Yes	Yes	Yes	Completed
5	Meta	Lelifu	Spring development	Yes	Yes	No	Ongoing
6	Oda Bultum	Kereyu	Spring development	Yes	Yes	Yes	Completed
7	Tullo	Buraysa	Spring development	Yes	Yes	Yes	Completed
Total		7					
	I.2. HDW Development						
1	Oda Bultum	Oda Biyo	Hand pump development	Yes	Yes	Yes	
2	Oda Bultum	Oda Roba	Hand pump development	Yes	Yes	Yes	
3	Oda Bultum	Goda Hora	Hand pump development	Yes	No	No	Activity re-established inclusive committee but training is on process
4	Oda Bultum	Burka Misoma	Hand pump Maintenance	Yes	No	No	Activity re-established inclusive committee but training is on process
5	Oda Bultum	Oda Roba	Hand pump Maintenance	Yes	No	No	Activity re-established inclusive committee but training is on process
6	Oda Bultum	Oda Biyo	Hand pump Maintenance	Yes	No	No	Activity re-established inclusive committee but training is on process
7	Tullo	Waltahi	Hand pump development	Yes	No	No	Activity re-established inclusive committee but training is on process

SN	Woreda	Site location/water point name/Kebele	Type of water point	Was there a Water Management Committee for the site	Was it established by the Activity? Receive training	Are there bylaws you are aware for the water point?	Other comment/
8	Tullo	Lubu Dekab	Hand pump development	Yes	No	No	Activity re-established inclusive committee but training is on process
Total		8					
	I.3. Pond rehabilitation and maintenance						
1	Meta	Ittisa Kolo	Pond rehabilitation and maintenance	Yes	No	Yes	On Provision of geo membrane
2	Meta	Burka jalala	Pond rehabilitation and maintenance	Yes	No	Yes	On Provision of geo membrane
3	Meta	Burka Gemechu	Pond rehabilitation and maintenance	Yes	No	Yes	On Provision of geo membrane
4	Meta	Dursitu Bilisuma	Pond rehabilitation and maintenance	Yes	No	Yes	On Provision of geo membrane
5	Meta	Gedira	Pond rehabilitation and maintenance	Yes	No	Yes	On Provision of geo membrane
6	Meta	Chelenko Lola	Pond rehabilitation and maintenance	Yes	No	Yes	On Provision of geo membrane
7	Meta	Biftu Oda	Pond rehabilitation (Includes silt trap)	Yes	No	Yes	Completed
8	Meta	Wiber	Pond (Includes silt trap)	Yes	No	Yes	Completed
9	Fedis	Belina Arba	Pond (Includes silt trap)	Yes	No	Yes	Completed
10	Fedis	Dinhaqa	Pond (Includes silt trap)	Yes	No	Yes	Completed
11	Fedis	Bidibora	Pond (Includes silt trap)	Yes	No	Yes	The Silt trap is ongoing
12	Fedis	Negya Bobasa	Pond (Includes silt trap)	Yes	No	Yes	The silt trap is ongoing
13	Fedis	Agudora	Pond rehabilitation and maintenance	Yes	No	Yes	Completed
14	Fedis	Iftu	Pond rehabilitation and maintenance	Yes	No	Yes	Completed
15	Midega Tolla	Lenca	Pond (Includes silt trap & cattle trough)	Yes	No	Yes	Silt trap is completed Cattle trough is ongoing
16	Midega Tolla	Bilisuma	Pond (Includes silt trap & cattle trough)	Yes	No	Yes	Silt trap is completed Cattle trough is ongoing
17	Midega Tolla	Barzala	Pond (Includes silt trap & cattle trough)	Yes	No	Yes	Silt trap is completed Cattle trough is ongoing

SN	Woreda	Site location/water point name/Kebele	Type of water point	Was there a Water Management Committee for the site	Was it established by the Activity? Receive training	Are there bylaws you are aware for the water point?	Other comment/
18	Midega Tolla	Mudhi Tola	Pond (Includes silt trap &cattle trough	Yes	No	Yes	Silt trap is completed Cattle trough is ongoing
19	Midega Tolla	Kerensa	Pond (Includes silt trap &cattle trough	Yes	no	Yes	Silt trap is completed Cattle trough is ongoing
20	Midega Tolla	Mudhi Bali	Pond (Includes silt trap &cattle trough	Yes	no	Yes	Silt trap is completed Cattle trough is ongoing
21	Midega Tolla	Roba	Pond (Includes silt trap &cattle trough	Yes	no	Yes	Silt trap is completed Cattle trough is ongoing
22	Midega Tolla	Kufa	Pond (Includes silt trap &cattle trough	Yes	no	Yes	Silt trap is completed Cattle trough is ongoing
23	Midega Tolla	Urji	Pond (Includes silt trap &cattle trough	Yes	no	Yes	Silt trap is completed Cattle trough is ongoing
24	Midega Tolla	Terkanfeta	Pond (Includes silt trap &cattle trough	Yes	no	Yes	Silt trap is completed Cattle trough is ongoing
25	Midega Tolla	Biyo Warabo	Pond (Includes silt trap &cattle trough	Yes	No	Yes	Silt trap is completed Cattle trough is ongoing
26	Oda Bultum	Shunko	1 Pond rehabilitation and maintenance	Yes	No	Yes	Activity re-established inclusive committee and training focused on adaptation was given
27	Oda Bultum	Haroreti	3 Pond rehabilitation and maintenance	Yes	No	Yes	Activity re-established inclusive committee and training focused on adaptation was given
28	Oda Bultum	Berbereti	3 Pond rehabilitation and maintenance	Yes	No	Yes	Activity re-established inclusive committee and training focused on adaptation was given
29	Mieso	Sirba	2 Pond rehabilitation and maintenance	Yes	No	Yes	Activity re-established inclusive committee and training focused on adaptation was given
30	Mieso	Goda Chelle	2 Pond rehabilitation and maintenance	Yes	No	Yes	Activity re-established inclusive committee and training focused on adaptation was given
31	Mieso	Agamsafichelle	1 Pond rehabilitation and maintenance	Yes	No	Yes	Activity re-established inclusive committee and

SN	Woreda	Site location/water point name/Kebele	Type of water point	Was there a Water Management Committee for the site	Was it established by the Activity? Receive training	Are there bylaws you are aware for the water point?	Other comment/
							training focused on adaptation was given
32	Mieso	Tedecha	1 Pond rehabilitation and maintenance	Yes	No	Yes	Activity re-established inclusive committee and training focused on adaptation was given
33	Mieso	Oda Keneni	2 Pond rehabilitation and maintenance	Yes	No	Yes	Activity re-established inclusive committee and training focused on adaptation was given
34	Mieso	Obensa	2 Pond rehabilitation and maintenance	Yes	No	Yes	Activity re-established inclusive committee and training focused on adaptation was given
35	Mieso	Sabula	2 Pond rehabilitation and maintenance	Yes	No	Yes	Activity re-established inclusive committee and training focused on adaptation was given
36	Mieso	Gorbo	5 Pond rehabilitation and maintenance	Yes	No	Yes	Activity re-established inclusive committee and training focused on adaptation was given
37	Mieso	Takuma	1 Pond rehabilitation and maintenance	Yes	No	Yes	Activity re-established inclusive committee and training focused on adaptation was given
38	Mieso	Gumbi	1 Pond rehabilitation and maintenance	Yes	No	Yes	Activity re-established inclusive committee and training focused on adaptation was given
39	Mieso	Walda Jalela0	2 Pond rehabilitation and maintenance	Yes	No	Yes	Activity re-established inclusive committee and training focused on adaptation was given
40	Mieso	Hayu	1 Pond rehabilitation and maintenance	Yes	No	Yes	Activity re-established inclusive committee and

SN	Woreda	Site location/water point name/Kebele	Type of water point	Was there a Water Management Committee for the site	Was it established by the Activity? Receive training	Are there bylaws you are aware for the water point?	Other comment/
							training focused on adaptation was given
41	Mieso	Dire Kalu	3 Pond rehabilitation and maintenance	Yes	No	Yes	Activity re-established inclusive committee and training focused on adaptation was given
Total		41	57				
	Small scale Irrigation						Area in ha
1	Meta	Welensu#1	Spring	Yes	Yes	Yes	15
2	Meta	Leliftu	Spring	Yes	No	No	24
3	Fedis	Kufa Bobasa	Spring	Yes	Yes	No	248.5
4	Oda Bultum -	Sakariga	Spring	Yes	Yes	Yes	104
TOTAL		4					391.5
	Spate Irrigation flood diversion						
1	Mieso	Hayu Site 1	Flood diversion	Yes	No	Yes	175
2		Hayu Site 2	Flood diversion	Yes	Yes	Yes	100
3	Mieso	Agemsa Chelie Site 1	Flood diversion	Yes	No	Yes	35
4		Agemsa Chelie Site 2	Flood diversion	Yes	No	Yes	95
5	Mieso	Tedecha Guracha	Flood diversion	Yes	No	Yes	90
6	Mieso	Weltane	Flood diversion	Yes	No	Yes	260
7	Mieso	Sodoma Goro Misra	Flood diversion	Yes	Yes	Yes	121
8	Mieso	Buri Mulu	Flood diversion	Yes	No	Yes	83
9	Mieso	Oda Keneni	Flood diversion	Yes	No	Yes	42
10	Mieso	Oda Roba	Flood diversion	Yes	No	Yes	30
11	Mieso	Sebula	Flood diversion	Yes	Yes	Yes	116
Total		11					1,147

ANNEX 10: LIST OF KIIS

CMDRR KIIs			
REVIVE KIIs			
	Date	Location	KII
1	9-Mar	Robe Town	KII- PSNP Zonal Office
2			PCI Chief of Party
3	10-Mar	Dola Mena Woreda	Dola Mena Woreda NRM/Livestock/Water
4			Dola Mena Woreda- Food Security
5			Dola Mena Woreda - Women's Affairs
6	11-Mar	Dolo Mena, Deyu Kebele	Kebele DA
7			WE facilitator
8			Hundee NRM Officer
9	12-Mar	Dola Mena	Hundee acting PM
10	13-Mar	Dolo Mena, Haya Oda Kebele	Kebele DA
11	14-Mar	Meda Walabu	Mega Walabu Woreda NRM/Livestock/Water
12			Mega Walabu Woreda-EW /Food Security
13			Mega Walabu Woreda - Women's Affairs
14	15-Mar	Meda Walabu, Kerjul Kebele	Kebele DA
15	17-Mar	Rayitu, Adala Kebele	Rayitu Woreda NRM/ livestock/Water
16			Rayitu EW/Food Security
17			Agri-service Program Staff- WE/livelihood Officer
18			Adela DAs NRM & CAHW
19			PCI D-RISK Advisor
20	18-Mar	Rayitu, Ardo Kalo Kebele	Kebele DA
21			Agriservice WE Facilitator
22			Group of men who started their own savings group

23	20-Mar	Lege Hida, Hara Goro Kebele	Lega Hida NRM/ livestock/Water
24			Lega Hida EW/Food Security
25			Lega Hida Women's Affairs
26			RCWDO Program Coordinator
27			RCWDO WE facilitor
28			Kebele DA
29			Agriservice PM
			TOTALS
REAAP KIIS			
	Date	Location	KII
1	9-Mar	Dire Dawa	HCS Program Manager
2	9-Mar	Dire Dawa	HI Program Manager
3	10-Mar	Fedis, Iftu	HCS Fedis Coordinator
4	10-Mar	Fedis	Fedis Woreda GoE staff
5	12-Mar	Meta, Wayber	HCS Meta Coordinator
6	13-Mar	Meta	Meta Woreda GoE staff
7	14-Mar	Midhega Tola, Terkafeta	Midhega Tola Woreda GoE staff
8	14-Mar	Midhega Tola, Terkafeta	Midhega Tola Kebele DA
9	14-Mar	Midhega Tola, Terkafeta	Midhega Tola DRR Facilitator
10	15-Mar	Tulo, Chafe	Tulo Woreda GoE staff
11	15-Mar	Tulo, Chafe	HCS Tulo Coordinator
12	15-Mar	Tulo, Hirna	HCS Tulo EW Officer
13	16-Mar	Oda Bultum, Bedessa	Oda Bultum Woreda GoE staff
14	16-Mar	Oda Bultum, Oda Biyu	HCS Oda Bultum Coordinator
15	16-Mar	Oda Bultum, Oda Biyu	Oda Bultum FA/SILC Agent
16	16-Mar	Oda Bultum, Oda Biyu	Oda Bultum WASH Agent
17	17-Mar	Oda Bultum, Sabele	Oda Bultum HEW Agent
18	17-Mar	Oda Bultum, Sabele	Oda Bultum Local Forecaster

19	17-Mar	Oda Bultum, Sabele	Oda Bultum PWDs
20	18-Mar	Mieso, Oda Roba	HCS Mieso Coordinator
21	18-Mar	Mieso, Oda Roba	Mieso Woreda GoE staff
22	28-Mar	Addis Ababa (phone)	East Hararghe PSNP Coordinator
23		Addis Ababa	CRS M&E Manager
24		Addis Ababa	CordAid PM
Totals			24
Federal KIIs			
	Date	Location	KII
1	23-Mar	Addis Ababa	USAID CMDRR Team members (PSNP and livelihoods)
2	23-Mar	Addis Ababa	Oromia Regional DRM Commission
3	23-Mar	Addis Ababa	Early Warning and Response Directorate Federal DRM Commission, Senior DRM Officer
4	23-Mar	Addis Ababa	Federal DRM Commission, NGO Coordinator
5	24-Mar	Addis Ababa	Federal DRM Commission, DRR Directorate, Director of DRR
6	24-Mar	Addis Ababa	Federal DRMC, DRR Directorate, DRM Senior Official,
7	28-Mar	Addis Ababa	Ministry of Agriculture- PSNP Coordinator
Totals			7

ANNEX II: BASELINE INDICATORS V. ENDLINE INDICATORS

REAAP Baseline Indicators	REAAP		REVIVE Baseline Indicators	REVIVE	
	Baseline	Endline		Baseline	Endline
Number of stakeholders with increased capacity to adapt to the impacts of climate change as result of USG assistance (GCC), disaggregated by:			Percent of households who owns livestock. EL	56.2%	90.0%
Using climate change information in their decision making.	54.7%	22.9%	Percent major reasons for livestock loss by households.	Pasture: 74.1% Water: 63.4% Disease: 80.0% Theft: 39.9%	Pasture: 60.7% Water: 31.0% Disease: 34.5% Theft: 7.4%
Implementing risk reducing practices/actions to improve resilience to climate change.	56.2%	22.9%	Percent of households experienced crises in last 5 years, that led to loss of income and assets.	74.7%	84.9%
With increased knowledge of climate change impacts and response actions.	74.7%	71.7%	Percent of different sources of information that guided the livestock movement.	Previous experience: 47.7% Scout reports: 70.4% Other Informal Sources: 6.7% Other: 6.4%	Previous experience: 27.9% SAPARM: .4% Scout reports: .1% Other Informal Sources: 12.8% Other: 0%
Percent of beneficiaries reporting their livelihoods restored within three to six months after receiving support (OFDA). 306 <i>End line asked: "After the impact of the disaster, how many months had it taken/will it take the household to recover from the impact of the most recent disaster?"</i>	w/out external assistance: 11.5 months with external assistance (PSNP): 4.45 months	w/out external assistance: 42.1 months with external assistance (PSNP): 27.3 months	Percent of the common water sources for people and livestock consumption, by source.	Protected water distribution point: 13.8% Unprotected well: 24.8% Protected well: 4.7% Protected spring: 2.4% Unprotected spring: 12.8% Pond: 11.5% River: 29.8% Roof water: .1%	Protected water distribution point: 21.0% Unprotected well: 13.4% Protected well: 22.7% Protected spring: 3.7% Unprotected spring: 7.4% Pond: 4.4% River: 27.4% Roof water: 0%
Percent of stakeholders using climate information in their decision making (CRS).	54.7%	22.9%	Percent of households applied new technology or new management practices in last 3 years	14.4%	43.0%
Percent of community members who received at least one early warning message	Question not asked in end line				

from at least one source prior to a disaster occurring (OFDA).					
Number of farmers and others who have applied improved technologies or management practices as a result of USG assistance (FtF). 317-320	30.4%	79.4% (REAAP self reported)			
Number of institutions with improved capacity to address climate change issues as a result of USG assistance (GCC indicator).	40	190 (REAAP self reported)			
Number of people implementing risk-reducing practices/actions to improve resilience to climate change as a result of USG assistance (FtF).	56.2%*	22.9%*			

ANNEX 12: PERFORMANCE INDICATORS BY SO

Performance Indicators under Strategic Objective 1:

Improved access to science and analysis for community-based DRR and resiliency decision-making

	Performance Indicator	Unit	Baseline Value	Target	Achieved	Comment
REVIVE						
SOI	Percent of respondents who can identify at least three community risks and actions being undertaken to address them (PCI, I-a)	%	0	75%		Question not asked in Endline Survey
SOI	Percent of pastoral respondents who report using SAPARM data to make migration decisions (PCI, I-b)	%	0	70%	15.42%	
IR 1.1	Number of woredas continuously disseminating SAPARM maps to kebele representatives (PCI 1.1-a)	#	0	9	8	Grazing maps were not integrated with NVDI data for Dawe Serer woreda due to boundary disputes in the woreda
LLR 1.1.1	Number of communities with traditional grazing areas mapped (PCI 1.1.1-a)	#	9	9	9	
LLR 1.1.2	Number of community grazing maps integrated with NVDI data (PCI 1.1.2-a)	#	9	9	8	
LLR 1.1.3	Number of woredas that have established SAPARM dissemination protocols (PCI 1.1.3-a)	#	9	9	8	
IR 1.2	Percent of Kebele Food Security Task Forces (KFSTF) who report using WDRPs/CMP for decision-making (PCI 1.2-a)	%	0	70%	0%	
LLR 1.2.1	Number of kebeles developing community resource and risk maps (PCI 1.2.1-a)	#	0	168	167	I could not be reached due to road conditions
LLR 1.2.2	Number of community resource and risk reports developed based on maps layered with secondary data sources (PCI 1.2.2-a)	#	0	168	150	18 not completed due to boundary dispute in Dawe Serer
LLR 1.2.3	Number of kebele CMPs developed or improved (PCI 1.2.3-a)	#	0	168	167	
LLR 1.2.3	Number of woreda CMPs developed or improved (PCI 1.2.3-a)	#	0	9	9	6 have been completed, 3 are to reported to be completed by April 2017
REAAP						
IR 1.1	Number of people receiving training in global climate change as a result of USG assistance disaggregated by sex	#	0	2,238	1,583	
IR 1.2	Number of people trained in disaster preparedness, mitigation, and management disaggregated by sex (OFDA	#	0	2,238	1,583	

	Percentage of attendees at joint planning meetings who are from the local community (OFDA)	%	0	20%	20%	
	Percentage of community members who received at least one early warning message from at least one source prior to a disaster occurring (OFDA).	%	58%	76%	60%	
	Number of hazard risk reduction plans, strategies, preparedness, and contingency plans developed and in place (OFDA)	#	0	100	100	

Performance Indicators under SO 2:

Improved household and community measures to adapt to climate change vulnerability, change, and resulting shocks

	Performance Indicator	Unit	Baseline Value	Target	Achieved	Comment
REVIVE						
SO2	Number of individuals who have received USG supported short-term agricultural sector productivity or food security training (FtF 4.5.2-7,2-a)	#	0	33850	17928	
	Number of people implementing risk-reducing practices/actions to improve resilience to climate change as a result of USG assistance (FtF 4.5.2-34,2b)	#	0	34,926	366,324	
	Number of people who will benefit from proposed hydro meteorological activities (OFDA Sector Natural and Technological Risks; Subsector Hydro Meteorological Hazards) (OFDA 2-b)	#	0	203,102	216771	
	Average time to fetch household water (PCI 2-e)	Hours	1.9	1.9	1.6	
IR 2.1	Number of hydro meteorological policies or procedures modified as a result of the activities to increase preparedness for hydro meteorological events (OFDA Sector Natural and Technological Risks; Subsector Hydro meteorological Hazards) (OFDA2.1-a)	#	0	54	54	
	Number of people directly benefitting from the water supply infrastructure program (OFDA Sector Water, Sanitation and Hygiene (WASH); Subsector Water Supply Infrastructure) (OFDA 2.1-c)	#	0	101,552	31,168	
	Number of communities with watersheds mapped and analysed (PCI 2.1.1-a)	#	0	54	54	
	Number of hectares of land closed and undergoing encroachment (bush) clearing through Activity support (PCI 2.1.2-a)	#	0	19250	3737	9,625 to be completed in year 3
	Number of kilometers of soil and water conservation structures constructed (PCI 2.1.2-b) in Km	#	0	1081	404.04	540 to be completed in Year 3
	Number of water sources developed / improved (PCI 2.1.3-a)	#	0	75	57	

	Percent of water sources that have been developed/improved through the program that are appropriately maintained (PCI 2.1.3-b)	5	0			
IR 2.2	Number of people assisted through new livelihoods development activities, (OFDA Sector Economic Recovery and Market Systems; OFDA Sub-Sector New Livelihoods Development) (OFDA 2.2-a)	#	0	18,000	17,015	WE group members
	Number of Community Animal Health Workers (CAHWs) trained (PCI 2.2.1-a)	#		203	159	
	Number of people benefiting from livestock activities, (OFDA Sector Agriculture and Food Security; ODA Sub-Sector Livestock) (OFDA 2.2.1-c)	#	0	139,482	109,249	Number of households (5 benefeceries per household) who CAHW serve
	Number of people benefiting from seed systems/agricultural input activities, (OFDA Sector Agriculture and Food Security; OFDA Sub-Sector Improving Agricultural Production / Food Security) (OFDA 2.2.1-f)	#	0	1680	400	
	Number of woredas where viable alternative livelihood options have been defined (PCI 2.2.2-a)	#	0	9	9	
	Number of WE groups formed (PCI 2.2.3-a)	#	0	900	867	
	Number of WE group members (PCI 2.2.3-b)	#	0	18000	17,015	
	Proportion of female participants in USG-assisted programs designed to increase access to productive economic resources (assets, credit, income or employment) ADS 205.3.7.2,2.2.3-c	%	0	25%	99%	
	Number of new MSEs started that support climate adaptive income generating activities (OFDA 2.2,3-d)	#	0	18	3	
	Percentage of financial service accounts / groups supported by USAID/OFDA that are functioning properly (OFDA Sector Economic Recovery and Market Systems; OFDA Sub-Sector Microfinance) (OFDA 2.2.3-e)	%	0	75%	100%	863 groups out of the formed 867 groups by WE component of REVIVE are functioning
REAAP						
SO2	Number of farmers and others who have applied improved technologies or management practices as a result of USG assistance	#	13,965	16,758	26,950	Yr 1 + Yr 2 reported
IR 2.1	Hectares under new or improved/rehabilitated irrigation and drainage services as a result of USG assistance (FtF)	Ha	-	65	901	
	Number of vulnerable households benefiting from USG assistance (FtF)	#	-	22,575	9,391	Remainder are planned to be reached in Year 3

	Number of hectares of biological significance and/or natural resources under improved natural resource management as a result of USG assistance	Ha	-	800	249	Yr 1 + Yr 2+ Yr 3, Qr 1 reported
IR 2.2	Number of communities involved in the development of plans and strategies (OFDA)	#	-	100	100	
	Number of DRR action plans which have addressed the needs and concerns of PWDs	#	-	100	100	
	Number of people benefiting from irrigation activities (OFDA)	#	-	2,375	4,724	
	Number of people, disaggregated by sex, or MSEs newly receiving financial services or continuing to receive financial services due to USAID/OFDA support (OFDA)	#	-	12,000	12,607	
	Number of people assisted through new livelihoods development activities, by sex (OFDA)		-	4,840	4,449	Remainder are planned for Year 3

Performance Indicators under SO 3:

Systems for planning, implementation, M&E around DRR and climate change adaptation are established and strengthened through working with government and other stakeholders.

Performance Indicator		Unit	Baseline Value	Target	Achieved	Comment
REVIVE						
IR 3.1	Percent of local organizations adhering to disability plans for vulnerable groups in Activity activities (PCI 3.1-a)	#	-	100%	100%	
	Number of local partner capacity assessments conducted (3.1.1-a)	#	-	3	3	
	Number of local partner organizations that complete their capacity change (PCI 3.1.1-b)	#	-	3	3	
	Number of people trained in disaster preparedness, mitigation, and management (OFDA Sector Risk Management Policy and Practice; OFDA Sub-Sector Capacity Building and Training) (OFDA 3.1.2-a)	#	-	1086	2387	
	Number of trainings conducted (OFDA Sector Risk Management Policy and Practice; OFDA Sub-Sector Capacity Building and Training) (OFDA 3.1.2-b)	#	-	151	149	As of Year 3, Q 1
	Number of people passing final exams or receiving certificates (OFDA Sector Risk Management Policy and Practice; OFDA Sub-Sector Capacity Building and Training) (OFDA 3.1.2-c)	#	-	869	2387	
IR 3.2	Percent of government and private nonprofit / for-profit entities that use WDRP/CMPs to inform community resiliency planning (PCI 3.2.1-a)	#	-	60	0	

	Number of government entities participating in coordination meetings on the WDRP/CMPs (PCI 3.2.2-a)	#	0	6	6	Disaster Risk Management Office; Pastoral Community's Development Office; Health Bureau; Women and Children's Affairs Bureau; Water, Mining and Energy Bureau; Finance and Economic Development Bureau
	Number of private non-profit / for-profit entities participating in coordination meetings on the WDRP/CMPs (PCI 3.2.3-a)	#	0	15	3	The 3 non-profit entities are the 3 IPs
REAAP						
SO3	Number of days of USG funded technical assistance in climate change provided to counterparts/ stakeholders (GCC)	#	-	686	578	Yr 1 + Yr 2 figures
	Number of institutions with improved capacity to address climate change issues as a result of USG assistance (GCC indicator)	#	40	190	190	
	Number of products made available by information management services that are accessed by clients (OFDA)	#	-	12	9	These are Qr and Annual reports
IR 3.1	Number of contextually relevant community resilience frameworks developed (CRS)	2	-	100	0	
IR 3.2	Number of special studies, program evaluations, applied research activities, sector assessments, or feasibility studies used to inform or guide improved programming (OFDA)	#	-	112	107	
	Number of people implementing risk-reducing practices/actions to improve resilience to climate change as a result of USG assistance (FtF)	#	13,965	16,758	26,950	Yr 1 + Yr 2 figure
IR 3.3	Number of data-driven reports generated by MEAL System (CRS)	#	-	112	107	
	GNDR-2: Proportion of female participants in USG-assisted programs designed to increase access to productive economic resources (assets, credit, income or employment	%	-	87%	87%	

ANNEX 13: GENDER/PWD DISAGGREGATED TABLE

REAAP DISAGGREGATED M&E DATA (as of 9/30/16)

ACTIVITY	TOTAL BENEFICIARIES	FEMALE	PWDs
Beneficiaries of 4 EWS tools	10,058	1,014	126
Beneficiaries of seasonal forums	10,141	1,037	132
Beneficiaries of DRRC campaigns on awareness of climate change	45,000	4,545	223
Beneficiaries of training materials on inclusion	500	250	100
Beneficiaries of meetings with Woreda authorities and DPOs	140	20	5
Refresher training for partner staff on PWD	40	3	0
Awareness dissemination for PWDs	82,365	41,183	0
Experience sharing with PWDs	55	15	10
DPO capacity building	30	10	30
SILC Groups	12,000	10,800	7
SILC Agent Certification	62	50	0
Promotion of appropriate crop technologies	5,334	300	95
Physical and SWC	37,330	3,733	186
Biological conservation	18,666	1,867	93
Gully treatment	6,000	4,800	208
FESG	550	440	
MUS	25,646	2,565	128
CHAST toolkits	8,000	3,500	19
Community hygiene promoters	71,150	35,149	21
Kebele ODF verification	16,800	8,400	21
Goat rearing	312	286	20
Poultry production	281	225	16
Beehive	18	3	2
Horizontal linkages with farming organizations	200	100	8
Joint meetings with kebele/woreda	280	140	13
TOT on ESDM	30	14	0

REVIVE DISAGGREGATED M&E DATA (as of 9/30/16)

ACTIVITY	TOTAL BENEFICIARIES	FEMALE
Dissemination of maps per protocol	618,626	306,082
Bush clearing	235,892	116,242
SWC – soil and stone bunds	235,892	116,242
Strategic water resource development	19,680	9,727
Bee Keeping	174	128
Ag research training/scouts	144	15
CAHW training	161	5
WE Groups	17,015	17,015
WE Training	93	40
WGP training	97	51
LCI and MIS refresher training	94	90
MIS refresher training	94	39
Advanced GIS and MIS training	5	0
Participatory M&E staff training	14	0
Quarterly review meeting with partners	30	1

ANNEX 14: DETAILS OF GROUPS

REAAP/ REVIVE	Activity	Number of groups/beneficiaries supported	Inputs supplied
REAAP	Improved seed varieties	7 seed producer farmer groups, 3 groups received training; improved seeds supplied to 20,016 people	Training Improved seed supply (10 varieties): 33,500 kg improved chick pea seeds were distributed to 3,182 beneficiaries (765F; 128 PWD) 78,700 kg seeds of different crops to 16,834 heads of households (3,198F; 299 PWD).
REAAP	Promotion of crop harvest technologies	512 people (200F)	5 technologies promoted: utilization of organic/manure fertilizer; rhizobium inoculation; inter cropping; hay making crop rotation-maize field with chick pea; 2 small-scale irrigation sites
REAAP	Key-hole gardens	1,557 gardens (households)	Seed support, training
REAAP	Homestead vegetable production	2,096 households	Seed support
REAAP	Fruit (Apple and Mango) crops production and management	forthcoming	Seed supply, training
REAAP	Training on livestock marketing, health and management	43 beneficiaries	Training
REAAP	support to irrigation systems	Year 2: 4,724 (1,967F; 133 PWD); Year 3: 532 (32 F; 16 PWD); Total- 5,253 beneficiaries	Technical support
REAAP	food preparation and preservation in REAAP	2,955 beneficiaries	Training
REVIVE	Support to irrigation systems	(Year 2) 10 WE groups, 201 beneficiaries (Year 3) 19 WE groups, 1,772 beneficiaries Total- 29 WE groups, and 1,973 beneficiaries	Training, diesel generators, seedling support, business skills training
REVIVE	CAHW training	161 CAHW trained from 71 kebeles	Training
REVIVE	PSNP beneficiaries-	XX	Food for work

ANNEX 15: FULL LIST OF WOREDAS IN THE SAMPLE

REAAP			
Woreda	# Kebeles in sample	# Respondents	Livelihoods
Fedis	4	160	Agro-pastoral
Meta	4	157	Agriculture
Midhega-Tola	4	114	Pastoral
Mieso	3	115	Pastoral
Oda-Bultum	3	119	Agro-pastoral
Tulo	2	115	Agriculture
Total	20	780	
REVIVE			
Woreda	# Kebeles in sample	# Respondents	Livelihoods
Dolo Mena	4	472	Agro-pastoral
Lege Hida	8	342	Agro-pastoral
Meda Welabu	5	452	Agro-pastoral
Rayitu	7	182	Pastoral
Total	24	1,448	
Grand Total	44	2,228	

ANNEX 16: DESK REVIEW MATERIALS

Document Source	Type of Document (Illustrative list)
USAID/USG	USAID Regional DRR Framework USAID Climate Change Strategy USAID Gender Strategy USAID Community Resiliency Framework USAID GRAD Activity MTE FEWSNET data and reports OFDA Strategy and Implementation Feed the Future – Strategy documents USAID/Ethiopia CDCS
REAAP and REVIVE Implementing Partners	REAAP and REVIVE Technical Proposals REAAP and REVIVE Annual Plans REAAP and REVIVE Annual/Quarterly Reports REAAP and REVIVE PIRS REAAP and REVIVE Baseline Surveys REVIVE Mid-term Review REAAP Newsletters/Success Stories REAAP Assessments
Government of Ethiopia	Productive Safety Net Programme (PSNP) Disaster Risk Management and Food Security DRMFS Planning Guidelines and Strategy Ethiopia Food Security Survey Woreda Disaster Risk Profiles (WDRP) Participatory Watershed Devt Guidelines National Policy and Strategy on DRM-SPIF
International Donors	UNDP, FAO, World Bank, World Food Programme, DFID, Irish Aid, CIDA, European Community, Royal Netherland Embassy, Swedish International Development Cooperation Agency

ANNEX 17: PROFILES OF EVALUATION TEAM MEMBERS

Roberto Martin, Team Leader, is a versatile, multilingual senior international development professional working at the interface of social, economic and environmental issues. Over a 28-year trajectory, he has worked to improve decision-making in support of natural resource management (NRM), protected area and biodiversity conservation, forestry, sustainable tourism, clean energy, and climate change adaptation, covering the cycle of strategy development, program design, implementation and management, financial and contractual oversight, and monitoring, evaluation, and learning. He has extensive familiarity with bilateral and multilateral funding institutions, including USAID, Department of State, Department of Labor, World Bank, and Global Environment Facility (GEF), leading international conservation and development organizations, and local/national non-governmental and community-based organizations. He has successfully managed diverse field and headquarters teams and program partners; advancing collaboration in defining and achieving clear and shared objectives under often sensitive conditions. He combines diversified sectoral knowledge, cultural fluency, a robust technical and managerial toolkit, and deep commitment to transparent, inclusive and adaptive program implementation - making use of the best available quantitative and qualitative evidence to inform and communicate progress and support broad-based learning.

Lisa W. Baumgartner, International Expert, is an international development professional with 12 years of experience including 9 in East Africa successfully providing technical advice and guidance to senior management and government entities, leading strategic project development, managing, monitoring, and evaluating projects, and coordinating consortiums of development partners. Expertise in resilience, climate change adaptation, disaster risk management, livelihood strengthening (agricultural and market systems), water development, natural resource management, land tenure, and gender sensitive programming. Specific knowledge of dryland and pastoral environments, the resilience framework, and systems based solutions. She has conducted various consultancy assignments and prepared research reports on women's economic rights in Sudan and South Sudan, the application of parallel legal systems to the Oromo Women of Ethiopia, technology Report on various small-scale energy technologies that reduce fossil fuel and biomass use in East Africa for their potential inclusion in a Clean Development Mechanism (CDM) program of activities, and a policy brief on animal health preparedness and emergency disease response plans. She has additional skills and training in the Ecosystem Approach and Systems Thinking, Dryland Resilience, and in Pastoral Policy and Advocacy Options for East Africa.

Alebachew Adem, Local Expert, holds an M.A. in Geography & Environmental Studies (Addis Ababa University, 2000) and M. Phil in Development Studies (NTNU, Norway, 2007). He has over 15 years of experience in the fields of climate change, DRR, sustainable agriculture and food security. He specializes in sustainable agriculture setting up Global R&D and innovation. He is an expert in climate change, EWS/DRR, Gender and Climate-Smart Agriculture research, program design, policy advocacy and M & E. He has strongly contributed to the design of the Regional Climate Change Adaptation Plan of Afar Region, the Ethiopian Climate Resilient Green Economy Strategy (CRGE), and the mainstreaming of climate change, gender and environmental concerns in the Comprehensive African Agriculture Development Programme (CAADP). He was involved in the design and evaluation of a number of projects including in Early Warning, CM-DRR, Climate Change Adaptation, NRM, Food Security and Resilience Programming in Ethiopia and the Eastern Africa Region (Uganda, Kenya, Tanzania).

Lakew Desta, Local Expert, holds a B.Sc. in the field of Agricultural Engineering from Addis Ababa University, college of Agriculture (Alemaya - Ethiopia, 1984) and Soil and Water Engineering (M.Sc.) from University of Cranefield (Silsoe College - United Kingdom, 1992). He has more than 20 years of experience in the planning, implementation, management, coordination and M&E of rural development programs

(mainly in Participatory Watershed Development, Soil and Water Conservation, Water Harvesting, Small Scale Irrigation, Community Forestry, Food Security, Public Works, Environmental protection, Rural Feeder Roads and related Infrastructure Development programs).

Alemu Nurgi, Local Expert, holds a B.Sc in Agriculture from Haramaya University, Ethiopia and M.Sc. in Natural Resource Management specializing in Sustainable Agriculture, Twente University, the Netherlands. He has more than 20 year experience in agricultural development, extension services, livestock production, food security monitoring & analysis, Ethiopian Early Warning System, DRR, project design, Household Economic Analysis (HEA), PSNP Graduation Prediction System and project monitoring and evaluation in various positions (as senior expert, project coordinator and manger at Government offices, iNGO and the World Bank. He has conducted monitoring and evaluation of diverse types of projects including Food Security, Agriculture, Health, WaSH and Education. He has provided consultancy and advisory services on various topics related to Food Security, Early Warning, Project M& E. He leads baseline surveys, livelihood diversification studies, characterization of food & water security and commercialization of rural economy, seasonal food security assessments and HEA baseline data collection and interim analysis.

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