From Conflict to Coping:

Evidence from Southern Ethiopia on the contributions of peacebuilding to drought resilience among pastoralist groups

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Acknowledgements

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Executive Summary

Purpose

The idea of promoting resilience has gained increased attention in the wake of recent drought in the Horn Africa – the worst in 60 years. Humanitarian and development actors, keen to avoid the need for massive relief assistance, are looking toward programming that can mitigate the effects of future shocks and speed recovery from them. However, there is little reliable evidence on strategies, interventions and policies that work to strengthen resilience, especially among pastoralist groups who are among the most vulnerable to climate-related shocks.

In mid-2011, Mercy Corps received anecdotal evidence from local officials that drought-affected communities that had benefited from Mercy Corps-supported peace processes were better able to cope in the face of these harsh conditions than other pastoralist groups in the Somali-Oromiya areas of Ethiopia. While recognising that peacebuilding initiatives are only part of broader efforts needed to address pastoralists' vulnerability and resilience (see Pavanello, 2009), Mercy Corps undertook this study to examine if and how its peacebuilding programmes have affected key factors associated with drought resilience. Through this research, Mercy Corps sought to generate greater insights and evidence on the extent to which peacebuilding efforts that rely on skills building and sustained dialogue among conflicting parties can serve as an effective form of disaster risk reduction.

Methods

The study employed a mixed methods approach to understand the extent of apparent drought resilience among households in both Mercy Corps' program target and non-target communities, and to produce insights into if/how the peacebuilding program contributed to any differences observed. Data was collected through representative household surveys and focus group discussions of men, women, and youth using participatory impact assessment techniques. Comparative and correlation analyses were conducted in an attempt to isolate the effects of Mercy Corps' Strengthening Institutions for Peace and Development (SIPED) project, and to determine the factors most closely associated with drought resilience within the context of the Southern Ethiopia.

Key Findings

The efforts of the SIPED program to improve peace and security appear to have contributed to creating conditions that enable greater freedom of movement and access to important resources that pastoralist groups depend on to cope with and adapt to severe drought.

The prevalence of conflict related barriers to accessing productive resources was found to have significantly decreased over the past two years in communities where SIPED has operated, while remaining high in other areas that the program did not reach. Fewer territorial disputes have meant that pastoralist households' can more easily migrate with their animals to utilize the grazing land and water resources of other communities that have been less depleted by the drought. In addition, women are less fearful than in the past of traveling to the markets they depend on to sell their livestock products to meet their families' food needs.

The findings strongly indicate that the greater access to productive resources in SIPED target areas was program related, rather than being due to a more general trend of improvement in the

area. From past studies, SIPED's work to facilitate peace dialogues, develop peace accords and agreements governing the management of natural resources, and strengthen the capacities and linkages between customary and government institutions, stand out as having made important contributions to bringing about the more peaceful conditions.

Pastoralist groups in Somali-Oromyia areas of Ethiopia who have greater freedom of movement and access to natural resources are less likely to have to rely on distressful coping mechanisms in response to extreme drought and more likely to be able to employ adaptive capacities, compared to groups without such access.

This study confirmed the existence of strong links between pastoralist households' freedom of movement (and by extension, their ability to access productive resources) and their use of coping mechanisms that indicate vulnerability to shocks. Among the different types of productive resources measured, access to pasture and water for animals proved to be the most closely linked with households' apparent drought resilience. Pastoralist households that had faced conflict-related barriers to accessing pasture and water for their livestock were significantly more likely to have had to reduce their food consumption and prematurely slaughter their livestock during the recent drought than households who did not face such barriers. These findings support previous studies that have shown that the adaptive capacity of pastoralists relies on greatly on their mobility (Proud, 2008).

While target communities did resort to distressful coping strategies in response to the drought, they reported doing so at lower levels than during previous droughts of equal severity, and less frequently than non-target communities. Less reliance on distressful coping strategies, especially those that involve the depletion of productive assets, is believed to put households in a position to recover from drought quicker and more easily (HPG 2009; ACF et al, 2010). These findings lend validity to the following broad theory of change examined by the study: Pastoralists in areas that have seen increased peace and security are more likely to have opportunities to employ effective livelihoods coping strategies, thus reducing their vulnerability to and aiding their recovery from extreme droughts.

Conclusions

This study shows that effective peacebuilding interventions can contribute to creating conditions that foster greater drought resilience among pastoralists in Southern Ethiopia. Such efforts can further the objectives of disaster risk reduction projects, and mitigate the need for large scale humanitarian relief during periods of severe drought. Based on this evidence, greater consideration and dedicated resources should be provided for conflict management within disaster risk reduction policies and programs in Ethiopia, including in the Government of Ethiopia's Disaster Risk Management Strategic Programme and Investment Framework.

This study points toward a number of recommendations for programming intended to strengthen resilience among pastoralist communities in the Horn of Africa:

- Interventions that increase access to pasture and water should be prioritized when designing programs that aim to support pastoralist communities afflicted by drought. This will reduce the likelihood that households will engage in distressful coping mechanisms while refraining from fostering aid dependency.

- Peacebuilding activities that improve security and increase access to natural resources must be a core component of any program that aims to strengthen pastoral livelihoods and drought resilience in conflict-affected environments.

The experience from Mercy Corps' SIPED project highlights the importance and benefits of working on peacebuilding and disaster risk reduction simultaneously in order to harness peacebuilding activities to reduce vulnerabilities to external shocks. In regions where chronic, violent conflict is present, activities to promote peace appear to be a pre-requisite for strengthening resilience since livelihoods diversification, market integration, and other forms of risk reduction and adaptation among pastoralists are directly dependent on security and freedom of movement. To have an impact on these factors, conflict management programs need to take an integrated approach, such as that employed by Mercy Corps' SIPED project, which strengthens the local governance structures and social cohesion that underpin communities' resilience to disasters, conflict, and other shocks.

1.   Introduction

1.1.   Rationale

Peace and drought resilience are interconnected challenges in Ethiopia where vulnerable communities face cycles of violence, drought and poverty. The frequent conflicts in the Somali-Oromyia border areas of Ethiopia have negative impacts on livelihood strategies and assets in the region (Mercy Corps, 2010). In addition to the direct impact through the loss of human lives and livestock, violent conflict restricts pastoralist groups' migration, economic activities such as trade, and their abilities to peacefully negotiate access to water, pasture, and markets. These are all key coping strategies for pastoral communities in times of drought (Cately and Iyasu, 2010; Devereux, 2006).

In this context, Mercy Corps has been working in Southern and Ethiopia since 2004 with local institutions and leaders to build conflict management capacity and alleviate tensions through a blend of peacebuilding and livelihoods activities. Through these activities Mercy Corps seeks to improve mechanisms for conflict prevention and resolution by building institutional capacity, creating ties between traditional leaders and local government officials, and empowering them with the tools and skills they need to identify and address tensions before they turn violent.

At this time, when much of the Horn of Africa is still struggling to recover from the effects of the worst drought for 60 years, Mercy Corps has initial evidence that drought-affected communities that have benefited from Mercy Corps supported peace processes have been better able to cope in the face of these harsh conditions. While recognising that peacebuilding initiatives are only part of broader efforts needed to address pastoralists' vulnerability and resilience in Ethiopia, Mercy Corps undertook this study to examine if and how its peacebuilding programmes have affected key factors associated with drought resilience.

Promoting resilience is a new focus for many development actors, especially in the Horn of Africa. This stems largely from increased recognition of the need for "drought-related policies and plans that emphasize on risk reduction (prevention, mitigation and preparedness) rather than reliance on drought relief" (COOPI, 2011*).* However, to date, the potential contributions of peacebuilding to drought preparedness and resilience has not been widely considered or studied [1].

Theoretically, peacebuilding interventions appear to follow the same pathways to change as those that seek to reduce communities' vulnerability to risks and shocks more widely. As a recent study commissioned by CARE puts it, peacebuilding and disaster risk reduction "share the same mechanisms and are mutually reinforcing…. [they] aim at improving community governance, social cohesion and resilience in unstable and weak countries to make societies less vulnerable to disaster as well as conflict" (Walch, 2010, p3). However, these synergies are not automatic. Past efforts to improve security and economic opportunities in pastoralist communities have been shown to do harm to wider livelihood systems and adaptive capacities, most often due to a failure to properly assess and address the broader vulnerabilities that these communities face (Catley and Iyasu, 2010).

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[1] Among the few studies that have explored these topics are COOPI, 2011; Nicholson and Desta (2010); and Walch, 2010.
[2] Examining the influence of specific types of peacebuilding activities (among all those being supported by

Mercy Corps' peacebuilding programs in Southern Ethiopia have differed from other interventions to promote stability in the region, mainly in their investment in promoting social cohesion and in developing the human and institutional capacities required to resolve disputes and manage shared resources. As such, research into Mercy Corps' programming offers an opportunity to better understand how peacebuilding can be done in a way that promotes pastoralists' resilience to drought and other risks.

1.2. Research Objectives and Questions

The principal purpose of this study was to explore the validity of the following *theory of change*: Pastoralist groups in areas that have seen increased peace and security are more likely to have opportunities to employ effective livelihoods coping strategies, thus increasing their resilience to extreme droughts. Through this research Mercy Corps sought to generate greater insights and evidence on the extent to which peacebuilding efforts can serve as an effective form of disaster risk reduction. In addition, the study was intended to produce greater clarity on how to accurately measure and evaluate drought resilience among pastoralist groups.

The specific research questions examined by this study were:

1) **Program outcomes:** How have communities where MC-supported peace processes have been (successfully) implemented coped with the current drought situation compared to: a) similar non-targeted communities/areas where conflict levels remain high; and b) compared to during previous droughts of a similar magnitude?

2) **Contributing factors:** What are the main factors that have contributed to any differences or changes identified to households' or communities' apparent drought resilience?

The findings from this study are intended to be useful input for crafting Mercy Corps' program strategies for its response to the current and future droughts in the Horn. The research is also aimed at influencing donor and policy makers' thinking in the Horn regarding the role of conflict management in contributing to drought risk reduction among pastoralist groups.

1.3. Context and Program

Despite their significant contribution to the national economy, pastoralist livelihoods in Ethiopia are under threat from repeated cycles of drought, degradation of the natural resource-base, high and widespread prevalence of livestock diseases, limited options for economic development, and recurrent conflicts. Other drivers of change that affect pastoralist livelihoods include increased population pressure, restricted access to key resources, land annexation, and marginalization from political and economic processes. The cumulative effects of these factors have depleted the resilience of pastoralists to disasters, such as the current drought, and threaten the sustainability of the pastoral production system.

While conflict among pastoralists exacerbates their vulnerability, it has also traditionally served as a strategy that people adopt to cope with livelihood pressures, for example through engaging in cattle raiding and banditry (Nyariki, et al, 2005; Lind and Eriksen, 2004). However, in recent years the nature of violence in pastoralist areas in the Horn of Africa has changed. Competition among local groups is on the rise as populations grow, resources shrink, and the effects of climate change increase. At the same time, factors such as weapons proliferation, lack of sustainable economic opportunities, identity politics, and weakening local governance structures

are limiting the abilities of traditional dispute resolution mechanisms and local government mechanisms to resolve conflicts. As such, conflict is no longer a viable coping mechanism.

The frequency and magnitude of conflict in the border areas of South Oromiya and Somali region in Ethiopia have been increasing in recent years. Major conflicts involving the Borena, Gabra and Gari communities took place between mid-2008 and early 2009 over water resources, grazing land, and territorial disagreements. The violence resulted in massive loss of assets including livestock, the deaths of hundreds of people, and significant displacement of thousands of others.

In response to the conflicts, Mercy Corps initiated a peacebuilding process with these communities in May 2009 as part of its Strengthening Institutions for Peace and Development (SIPED) project, funded by USAID. The project covers the Southern Nations, Nationalities, and People's Region (SNNPR), Oromiya and Somali Regional States of Ethiopia, and builds on Mercy Corps' previous experience implementing conflict prevention and resolution projects in these and other parts of the country.

Major conflict mitigation and reconciliation activities that SIPED has supported in the South Oromiya and Somalia regions to date have included:

- Strengthening of government and customary institutions;
- Community dialogues, including clan leaders, elders, women, and youth;
- Joint livelihood activities;
- Formation of peace committees; and
- Development of peace accords and resource use plans.

The negotiation and development of the Negelle Peace Accord has been one of the most significant achievements of the SIPED project within the area covered by this study. The accord has been cited by local officials and community groups as leading to more peaceful co-existence between the Gari, Gebra, Guji and Borena clans (Mercy Corps, 2011b). Figure 1 shows the sequence of activities that led to the Negelle Peace Accord. These are illustrative of the peacebuilding processes supported by SIPED in other locations where it operates.
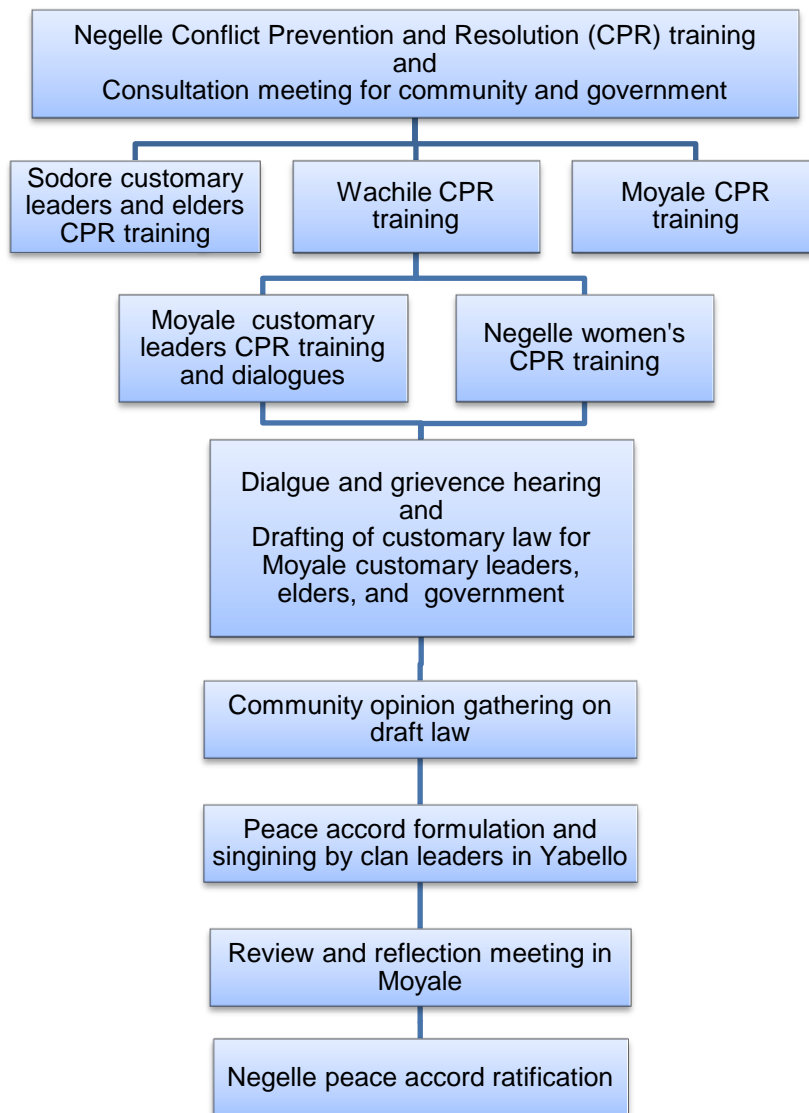
Due to two consecutive failed rainy seasons, much of Southern and Eastern Ethiopia were recently affected by severe drought in 2010-11. Pasture and water sources were severely depleted, leading to declines in the health and production capacity of livestock. For the majority of areas covered by the SIPED project, 2010/11 was the driest year since 1950/51 (FEWS NET, 2011). Many pastoralist households lost most or all of their livestock and other productive assets. A Mercy Corps' assessment in the Oromiya and Somali regions in July 2011 estimated a 50-60% reduction in cattle, 50-65% reduction in shoats, 50-60% reduction in donkeys and 20-35% reduction in camels since the drought began in early 2010. Failed crop production in many areas led to significant inflation in the prices of staple foods (FSNWG, 2011). The combined effects of the drought turned the chronic vulnerability of the population into one of acute food insecurity (Mercy Corps, 2011c).

The effects of the drought were not felt equally across the region. Certain areas where SIPED works, notably the districts of Arero and Yabelo, received some rainfall while others remained completely dry. As a result, communities with greener pastures and more surface water received abnormal livestock migration from surrounding areas, including from communities migrating from Kenya. More than 50,000 additional animals were reported to have concentrated

in Yabelo and Arero Districts as of September 2011 (FEWS NET, 2011). Despite the heavy livestock concentration critically depleting pasture and water resources in these areas, no increase in violence has been reported, as had been seen in past years (Mercy Corps, 2011b).

This lack of interference and hostility around migration may be attributable to the "tradition of cooperation and solidarity" between pastoralists that some researchers such as Geri (2005) argue comes into effect during droughts and other periods of hardship (CHF, 2006, p30). However, such cooperation was not evident in other neighboring areas where peacebuilding initiatives had not taken place. This study set out to better understand the role of peacebuilding efforts in contributing to the sharing of very scarce resources such as grazing lands and water points during the recent drought.

Figure 1:   Negelle Peace Accord Process

Negelle Conflict Prevention and Resolution (CPR) training
and
Consultation meeting for community and government

Sodore customary leaders and elders CPR training

Wachile CPR training

Moyale CPR training

Moyale customary leaders CPR training and dialogues

Negelle women's CPR training

Dialgue and grievence hearing
and
Drafting of customary law for Moyale customary leaders, elders, and government

Community opinion gathering on draft law

Peace accord formulation and singining by clan leaders in Yabello

Review and reflection meeting in Moyale

Negelle peace accord ratification

1.4. Conceptual Framework

The conceptual framework for this research, presented in Figure 2, is based on the main assumptions believed to connect peacebuilding efforts to improved drought resilience among pastoral groups. It is acknowledged that this model is a simplification of the complex, multidirectional relationships between conflict, governance, livelihoods, and drought, and does not purport to take into consideration multiple other factors known to be linked to each of these concepts.

This study explored if and how the links between each of the levels in the conceptual framework manifest themselves within the context of Mercy Corps' SIPED program in the Somali-Oromiya areas of Ethiopia. The research attempted to identify where the linkages are the most pronounced, where they are the weakest, and in which areas Mercy Corps' programs have had the most impact.

The research explored the two major hypotheses that are reflected in the conceptual framework[2]:

Hypothesis 1: Improving social cohesion among communities and strengthening the capacity of local institutions to mitigate conflict can create conditions that enable greater access to natural resources and economic opportunities, and greater freedom of movement among pastoralist groups.

Hypothesis 2: Pastoralist communities with greater access to natural resources, market opportunities, and public services are less likely to resort to relying on distressful coping mechanisms and more likely to employ adaptive capacities during times of extreme drought, and thus be able to recover quicker and more easily than communities with less access to these resources.

Resilience in this study is examined mainly from a social perspective. Borrowing from the ecological definition (Walker et al, 2004; Holling, 1973), social resilience can be thought of as the ability of groups to absorb the impacts of extreme droughts and other shocks and employ adaptive capacities which enable them to effectively recover. For the study, drought resilience was mainly measured through the lens of coping mechanisms, which is a commonly used proxy (Bahadur et al, 2010; Nyariki et al, 2005). This measure, however, does not fully capture abilities to recover from shocks.

Coping mechanisms were categorized into two types, based mainly on the perceptions of members of pastoralist communities themselves:

- ***Adaptive:*** Strategies that pastoralist households employ to minimize risks in times of drought, but that are reversible and not thought to be detrimental to their abilities to recover once the drought ends (Alinovi, et al, 2010). These included migration, livelihoods diversification, and use of social support systems.

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[2] Examining the influence of specific types of peacebuilding activities (among all those being supported by SIPED) on drought resilience was outside the scope of this study. However, the intermediate outcomes of the SIPED project have already been well documented (see Mercy Corps, 2011b). This study builds on the findings from the past assessments and focuses specifically on the links between the project and the intermediate and longer-term outcomes believed to be essential to drought resilience.

- ***Distressful:*** Coping mechanisms that pastoralists use only as a last resort, that are considered irreversible, and from which it is difficult for them to recover from after the drought (Maxwell and Caldwell, 2008). These included: reduced and changed food consumption (as measured by the Coping Strategies Index); slaughtering livestock or selling them at distress prices; and depletion of other productive assets.

Households and communities were said to be more resilient if they employed mainly adaptive and few distressful coping mechanisms during the recent drought. This interpretation is supported by previous studies which have concluded that drought coping capacity is essentially synonymous with the ability to adapt, and that resilient households and communities are those most capable of coping with and recovering from drought and other climate-related shocks (Elasha, 2006).

Figure 2:   Conceptual framework linking peacebuilding efforts to drought resilience[3]

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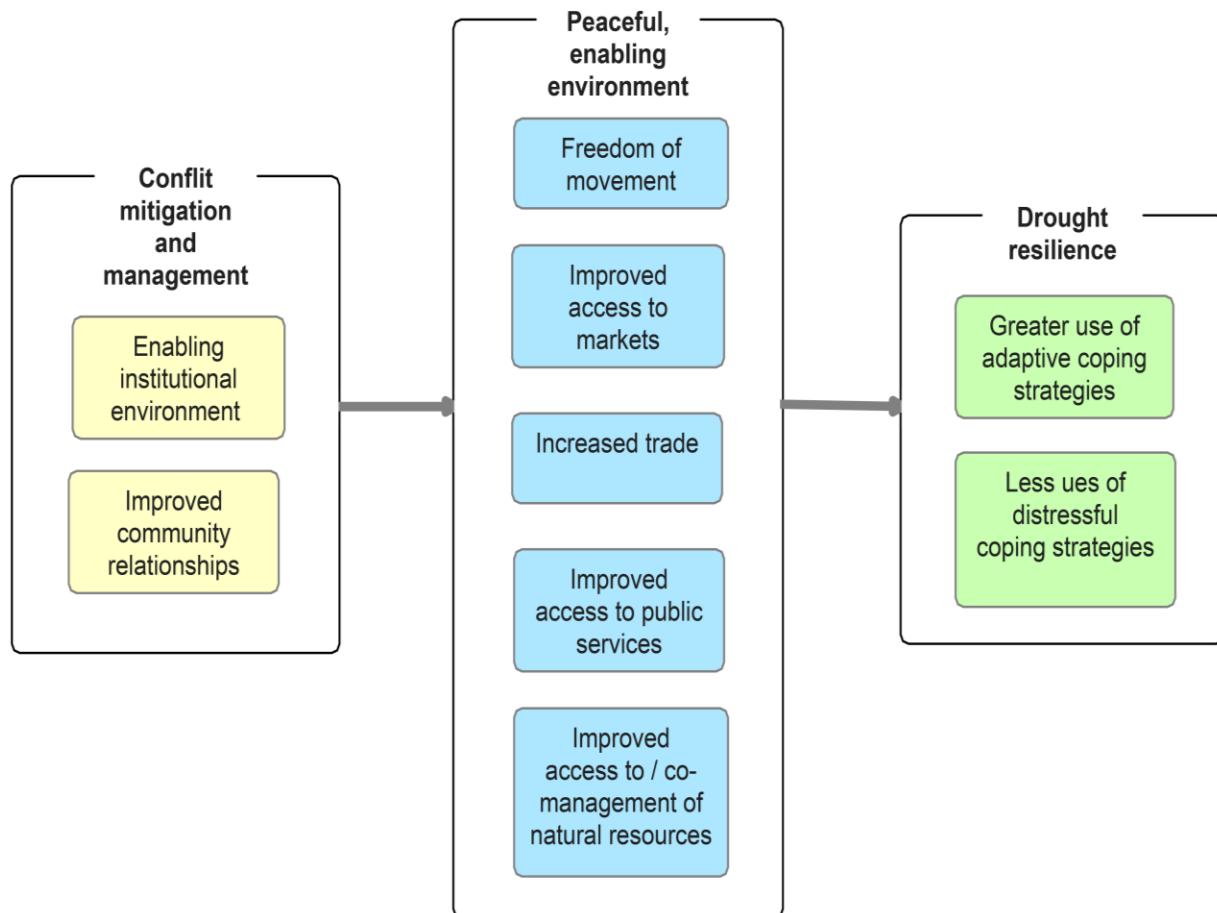
[3] Definitions of the key concepts within the conceptual framework can be found in Annex 1.

Presumed links between the key concepts

The assumptions reflected in the conceptual framework are based on the observations and experience of Mercy Corps' staff, and a review of previous studies that have examined the links between peacebuilding and drought resilience. The most salient arguments for these links are summarized below.

Freedom of movement: As Yirbecho et al (2004, p3) argue, ""The inherent spatiotemporal flexibility of pastoralism enables herders to avoid conflict [and other shocks] and to manage it when it does occur more effectively than do other, more sedentarized communities that rely increasingly on crop cultivation and the non-agricultural economy". In this context, lack of freedom of movement directly limits migration and economic activities such as trade and farming, which constitute key livelihood and coping strategies for pastoral communities (HPG, 2009; IISD 2005; Lind and Eriksen, 2004). Freedom of movement is measured in this study as the extent to which people have not had to avoid going to common areas (e.g. to the market, school) due to insecurity. Mercy Corps has initial evidence of the impacts of its programs on freedom of movement and free flow of commerce in Ethiopia's internal border regions. This progress may be mitigating the impact of the drought on these communities, given that constraints on the free flow of people and commerce tend to aggravate the humanitarian impact of severe drought.

Access to pasture and water for livestock: The pastoral livelihood system is based on mobility in search of pasture and water. As such, many conflicts in the pastoralist areas are directly caused by the restriction of access to key resources needed by livestock. Pressures on these resources become intensified during drought, leading to overgrazing of some areas. Ineffective use of water points and pasture in other areas where mobility is restricted by insecurity also aggravates land degradation through under-grazing. The ability to peacefully negotiate for access to pasture and water in times of scarcity is thus a prerequisite for both social and ecological resilience to drought.

Access to diverse livelihood opportunities: The level of diversity of household livelihood activities has been shown to be closely linked to disaster resilience among pastoralist groups (Frankenberger, et al 2007; Nyariki, et al, 2006). For example, pastoralists that are able to diversify into agricultural livelihoods tend to cope with droughts better those who are anchored only to pastoralism (Alinovi, et al, 2010). Access to markets, land, and water are essential prerequisites to engaging in more diverse livelihood strategies. Conflict and insecurity often hinder such assess, as described above.

Access to markets: Conflict prevents markets from operating by blocking market trade routes, and disrupting the social and economic services they provide. Yet access to formal markets has been found to reduce pastoralist households' vulnerability to shocks and seasonal crises (IISD, 2005). Functioning markets make it possible for households to employ effective risk management mechanisms such as de-stocking at moments when the prices are still favorable (Alinovi, et al, 2010; Pantuliano and Wekesa, 2008).

Access to public services: Pastoralists in Ethiopia are the most disadvantaged in terms access to basic services. Conflict, which restricts movement to and from towns, further denies communities access to schools, health clinics, and other essential public services found there. Access to such essential services has been shown to affect pastoralist household's capacity to manage risks and respond to shocks, and thus influence their resilience (Alinovi, et al, 2010).

2. Methodology

The study employed a mixed methods approach, which included a pre-test post-test comparison of project groups and post-test only comparison with a non-equivalent control group. This design enabled the research to work within the time and resource limitation to generate a rich picture of the extent of apparent drought resilience among households in both target and non-target communities, and to produce insights into if/how the program contributed to any differences observed.

Sampling

The four target communities included in the study were purposively sampled based on the apparent level of success of the SIPED project, i.e. where existing evidence points to significant improvements to violent conflict in the area over the course of the project. Two non-target communities were selected to reflect similar characteristics as the selected target communities, especially in terms of socio-demographics, livelihood strategies, and the impact of the current drought.

Separate focus groups were organized for men, women, and youth in each of the six communities included in the study. For each group, a cross-section of community members was purposively selected to represent households with different income levels and livelihoods strategies. Efforts were made to avoid having the group composition dominated by the local elites or by specific interests groups. Respondents for the household survey were identified using simple random sampling, based on a quota in each of the four target communities, and using kebele[4] level household lists as a sampling frame.

Data Collection[5]

Literature and secondary data review: A search was conducted for previous studies that have examined the contributions of peacebuilding towards disaster risk reduction, and drought resilience in particular, to identify research frameworks and outcome measures that may of use to this research. Existing assessment data was also sourced and compiled to get an initial sense of the impacts of the current drought on households in both target and non-target areas.

Participatory impact assessment (PIA): PIA techniques were used to collect primary data from focus groups of men, women, and youth in both target and non-target communities. Several PIA tools used during the SIPED baseline in target communities were reapplied to enable comparison of change over time. Additional tools were also developed and used to explore new topics, including the coping mechanisms and the relative contributions of project and non-project factors towards mitigating the impact of the drought. The PIA tools were employed in a systematic manner across each of the focus groups to enable valid inferences to be made to the broader population of the communities being studied. The PIA tools focused on similar topics as explored through the household survey, and were used to triangulate, substantiate, and help explain the survey findings.

HH surveys in select communities: A standardized survey was administered to a representative sample of 140 households in the selected target communities. The survey

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[4] Kebeles are the smallest administrative unit in Ethiopia, equivalent to communities or villages.
[5] See Annex 2 for the data collection tools used.

included both questions from the baseline survey to enable comparisons, and new questions that enabled the researchers to gauge the impacts of the drought and allowed for correlation analysis between the intermediate outcomes, such as access to resources and the measures of drought resilience.

Data analysis

Content analysis: Key themes were distilled from the qualitative information gathered, and the findings were organized around each of the primary research questions. Where possible, the qualitative information was quantified across groups to generate 'participatory numbers' (Chambers, 2007).

Comparative analysis: Comparisons between pre-post and treatment-control were made in an effort to isolate the project effects of SIPED and identify key contributing factors. This involved post-hoc analysis of key outcomes among target communities compared to a similar group of non-target communities, and retrospective analysis of the impact of the current drought on target communities compared to that of the previous drought.

Correlation analysis: Statistical tests were used to determine the factors most closely associated with drought resilience outcomes, and by extension the SIPED project components that appear to have contributed the most to them. The choice of the tests to use was based on the type of data for each variable, and included ANOVAs, independent sample t-tests, and chi-squared tests. The researchers considered several potential moderators of the relationships found, including location, ethnicity, family size, and education levels.

Limitations

The approach used to establish a comparison group may be subject to selection bias. While There may be pre-existing differences between the treatment and comparison groups that would influence the status of the indicators measured, and bring into question what changes can be attributed to the SIPED program.

In terms of drought conditions, historical data on rainfall and vegetation coverage (based on the Normalized Difference Vegetation Index) accessed from the Global Livestock Early Warning System indicated that the extent of the drought was similar, if not more severe in the target communities than the non-target areas. This implies that members of the target communities may have had to overcome even greater challenges than those in non-target communities in order to demonstrate resilience.

A potentially significant difference between the target and non-target communities is related to the type and strength the traditional institutions. Those in the target areas are believed to be stronger historically, which may have an influence on their abilities to manage conflicts, especially over natural resources. Another difference is the nature of conflict in these areas. Conflict is more localized in non-target areas, while in the target areas conflict is often cross-border in nature, adding to the complexity in finding resolution.

3.   Findings and Discussion

3.1.   Freedom of Movement and Access to Resources

Pastoralist communities where SIPED has worked show greater freedom of movement and fewer barriers to accessing productive resources due to insecurity since the beginning of the project, as well as compared to communities not covered by the project.

The findings of both the pre-post analysis in the target areas and comparisons between target and non-target areas point strongly to the contributions of the SIPED project in creating conditions that enable freedom of movement. Freedom of movement, defined as the extent to which people have not had to avoid going to common areas (e.g. to the market, school) due to insecurity, has increased by approximately 15% in the SIPED target areas since early 2010. The findings on perceptions of violence in target communities are consistent with this, with over half of respondents reporting their communities are more peaceful than a year ago.

Greater freedom of movement was identified by respondent groups as the most important factor that contributed to their increased access to the resources they identified as being critical to coping with and adapting to the effects of the recent drought. Based on the household survey findings, access to all of the productive resources measured has increased in SIPED target communities since the inception of the program, as illustrated in Figure 3.

Figure 3:   Change in inability to access resources due to insecurity in target areas
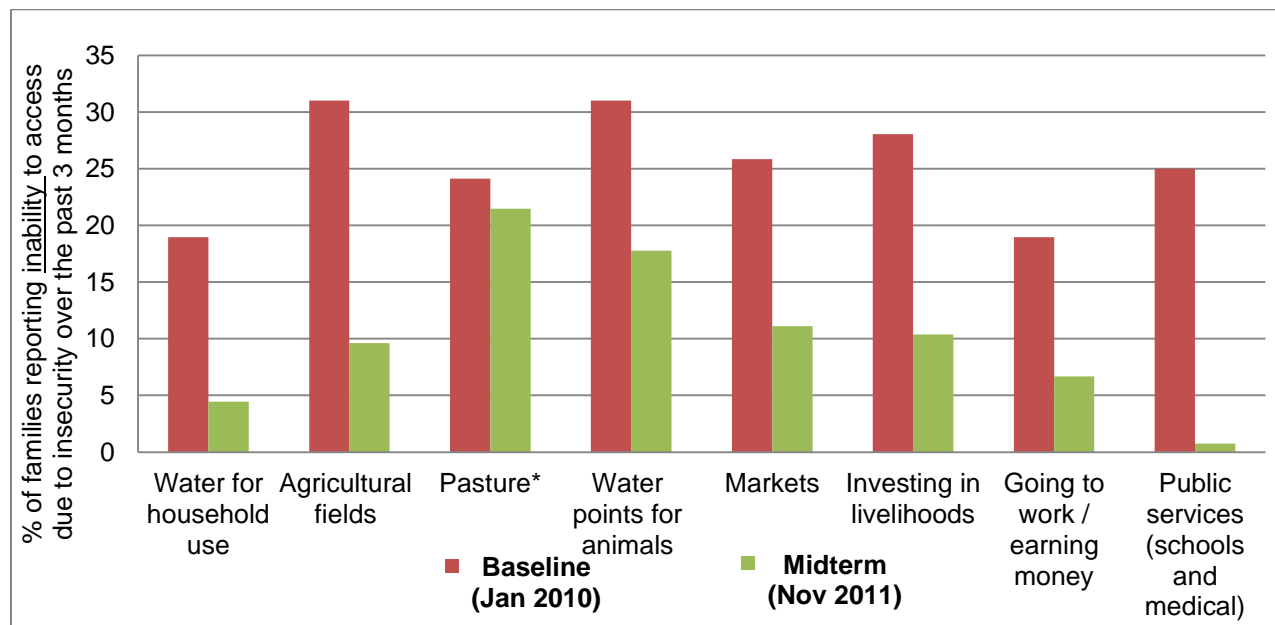
Source: SIPED household survey data from Jan 2010 and Nov 2011.
* The change in access to pasture between the two time periods was not statistically significant.

The improvements in access to key resources observed in SIPED project areas were not experienced by the comparison communities not reached by the project. Rather, in non-target communities, access to such resources deteriorated over the past year, as illustrated in Figure 4. This indicates that improved access to key resources in SIPED target areas were likely program related, rather than being due to a more general trend of improvement in the area.

Figure 4:   Change in reported access to key resources compared to one year ago[6]
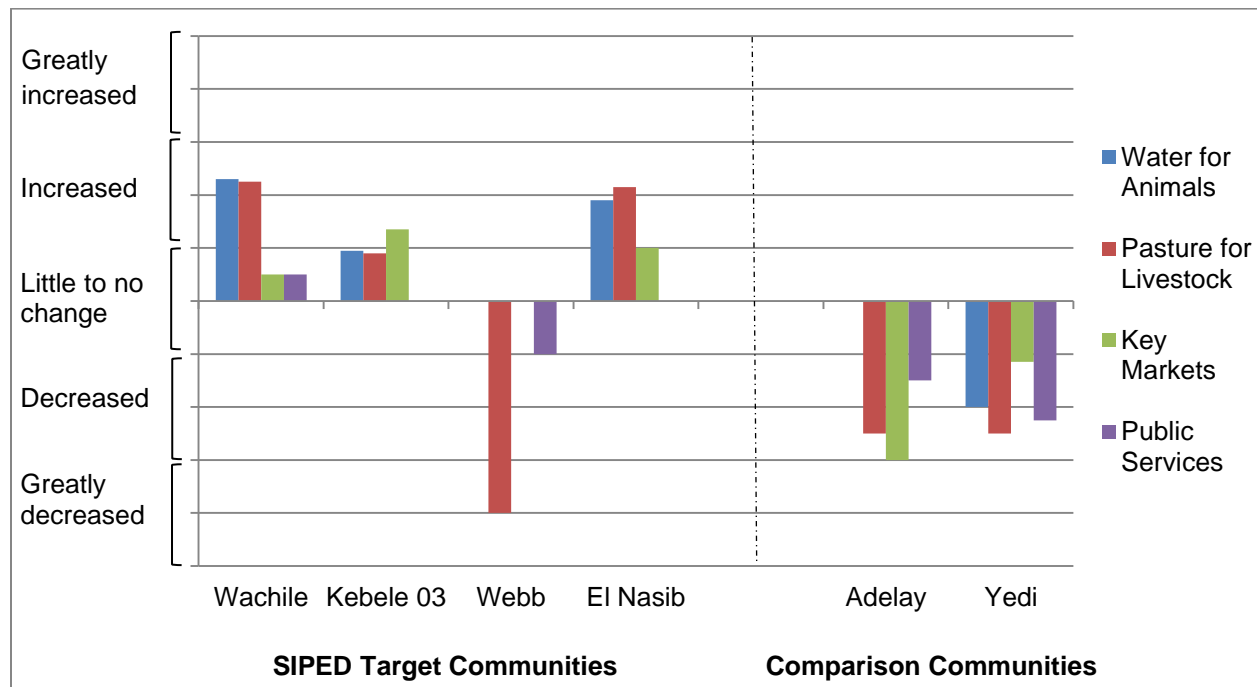
Source: Focus group discussion data from Nov 2011.

Access to pasture and water for animals

Respondent groups in communities where SIPED has worked consistently reported increased access to water points and grazing lands for animals over the past year. These resources were identified as among the most important for enabling them to effectively maintain their herds and thus cope with the recent drought. For livelihoods based on livestock assets, the quality and quantity of their herds can increase or limit access to cash and affect terms-of-trade for other goods. Households in target areas were found to be only half as likely to have faced conflict-related barriers to accessing water sources for animals compared to when the SIPED program began in early 2010. Improved access was reported for 10 of the 13 watering points for which the study could have detected a measurable increase, and in 7 of the 9 pasture areas mentioned by the four target communities. However, Somali communities in Kebele 03 and El-Nasib still face issues with accessibility to three key water points due to conflict, and access to the only key grazing area mentioned by the Borena community in Webb decreased dramatically over the last year.

The contributions of the SIPED project to improving access to resources are well illustrated by a statement from a respondent from Wachile kebele: "It is very difficult to use or access dry reserves (grazing areas) located in contending communities in a situation where there is no peace - whatever the intensity of the drought might be. The peace dialogues in the area have

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[6] Change in access for each resource was calculated as the difference in reported access between the current drought and one year prior, or as an average of these differences when more resource was mentioned in a given category (water, pasture, markets, public services). Where no score appears on the graph, this represents no change over the time period, rather than missing data. In some cases this was because access was already high and thus no improvement could be measured.

improved community interaction and helped us to access these resources. This, along with the high involvement of the local government, greatly reduced ambush attacks and cattle raiding."

In contrast, similar non-target communities reported significant decreases over the past year in access to water and pasture for animals. While the Somali of Adelay reported no change in their consistent access of the Dumal river for watering animals from one year ago up to the time of assessment, already limited access for the Oromo was found to have deteriorated to the point that respondents reported they could no longer access the river. They attributed their lack of access to these resources primarily to conflict and insecurity.

Access to markets

There were inconclusive results regarding the likelihood of contributions of the SIPED program to changes in access to markets. According to the survey data, the percentage of households in target communities who reported facing barriers in access to markets due to insecurity had dropped by over half since early 2010. However, analysis of the focus group data showed only one target community (Kebele 03) with a measurable increase in access to markets over the course of the program. In two other target communities, only slight increases in access to markets were reported. Yet even these were deemed to be significant improvements by respondents, as illustrated by a statement from a focus group participant in El Nasib: "Harobeke and Finchawa are very important livestock markets that are linked with export markets and abattoirs. Thus, difficulties in accessing markets have affected communities' abilities to sell at a reasonable price, or to sell livestock at all, as we do not have any other options".

Respondents from non-target communities reported significant decreases in access to five out of the six key markets in their area over the past year. Focus group respondents from the Adelay community explained that their movement to nearby towns has been restricted during the recent drought due to conflict. They have been unable to access Dellomena, Haro-Dumal, and Yadi, which are the locations of the main markets they depend on to sell their livestock, buy and sell staple foods, and access grinding mills, respectively.

Taken together, these findings point towards relatively improved or at least maintained abilities among target communities to access and utilize markets. This is essential for them to employ adaptive coping strategies, such as selling their livestock products in a timely fashion and at a fair price, and accessing consumable goods.

Access to public services

According to the household survey data, there has been significant improvement in access to schools and medical clinics in target areas, with less than 1% of respondents reporting instability hindering their access, compared to 25% in early 2010. Similar improvements were not found in the focus group data. This was due mainly to the already high reported levels of access to public services in target communities, which made it nearly impossible to show improvements. In Webb, it is worth nothing that access to school decreased over program period as did key road access, further evidence that access to some resources in this community deteriorated over the recall period. The effect of conflict on access to public services in Webb was made explicit by one of the focus group participants: "It was unthinkable in the past years to send children to school in Arero, as it is far from our locality and parents feared there might be ambush attack from the conflicting communities on their way to school."

In non-target communities, access was found to have deteriorated over the past year for the majority of public services they identified as important for coping with the drought. In this case, one community has consolidated access over previously shared resources with these resources being now inaccessible for other communities. The Somali community in Adelay maintains strong access to public services in the town center of Harodibe whereas access to Harodibe for Oromo in Yedi has deteriorated to the point where they now report the area as inaccessible.

3.2. Coping Strategies

Pastoralists communities where SIPED has worked appear less likely to have had to rely on distressful coping mechanisms during the recent drought and more likely to have been able to employ adaptive capacities, both compared to the previous drought and compared to communities not covered by the program.

The study's findings on use of coping mechanisms appear to support the assertion made by government officials and project staff that SIPED target communities have been better able to absorb and manage the impacts of the recent drought than other groups. While target communities did resort to distressful coping strategies in response to the drought, they reported doing so at lowers level than during the previous drought of equal severity, and less frequently than non-target communities. Use of adaptive coping strategies, such as herd splitting and migration of livestock, also increased among target communities compared to the previous drought, while decreasing among non-target communities. These and other results are illustrated in Figure 5.

Figure 5: **Reported change in proportion of families relying on major coping strategies (from the previous drought compared to the 2011 drought)**

Coping Mechanism		Distressful		Adaptive		
		Selling livestock at low prices	Killing calves to save mother	Herd splitting & livestock migration	Use of enclosures	Firewood collection & charcoal production
Community						
Target	Wachile	-5%	5%	25%	30%	40%
	Kebele 03	-30%	-30%	45%	40%	50%
	Webb	0	-15%	45%	0	30%
	El-Nasib	55%	-25%	55%	40%	55%
Non-target	Adelay	5%	n/a	-20%	n/a	-5%
	Yedi	40%	5%	-5%	50%	10%

Source: Focus group discussion data from Nov 2011.
Key: Green indicates greater resilience (decreased distressful coping or increased adaptive coping)
        Yellow indicates no change or no data available
        Red indicates less resilience (increased distressful coping or decreased adaptive coping)

Productive asset depletion

Selling of livestock at a low prices, killing calves (to save their mother), and slaughtering of adult animals were all identified as distress coping strategies – i.e. those which result in the depletion of productive assets. The household survey showed that the over 90% of households in target areas reported having had to rely on one or more of these coping strategies within the past three months. However, focus group discussions suggested that a lower proportion of households in target communities relied on these asset-depleting coping mechanisms during the drought of 2011 compared to the previous drought. Comparison communities, on the other hand, reported an increase in the proportion of families resorting to these coping strategies during this year's drought compared to the past one. Respondents in El-Nasib, a target community, recalled that during the previous drought nearly all families had to resort to slaughtering and eating their livestock, including their breeding stock, because they were unable to travel to Dubluk where the livestock market is located, thus making it very difficult to sell their animals. Currently, people in El Nasib can travel to Dubluk freely where they have been able to destock their animals, even if at a low price.

Migration-related coping strategies

Migration with livestock in search of water and pasture is a widely used and preferred coping strategy that enables pastoralists to maintain the integrity of their herds in terms of number and health. This is thus considered a 'positive' or adaptive strategy as it is reversible. As conditions change, pastoralists can change their location, and migrate in search of more favorable conditions. All Mercy Corps program target areas reported an increase in proportion of families which split herds and/or migrated to reserve pastures, while those in comparison communities reported a decrease in the proportion of families employing this coping mechanism. Three of Four SIPED program areas also reported an increase in use of enclosures, which are a traditional form of preserving rangelands and protecting pastures, especially during times of drought. Women considered enclosures especially important for coping with the drought as they are responsible for the cows and calves mostly kept there.

The increase in the proportion of livestock migration might be considered an indication of increased severity of drought and thus increased need to migrate. However these results, when taken together with communities reporting increased freedom of movement and access to resources suggest that this improved security in program areas created an enabling environment for pastoralist groups to be able to employ livelihoods options that depend on migration. A statement from a respondent in Yedi, a non-target community, provides some valuable insight into these connections: "The presence of conflict has highly restricted the ability of our community to move to other areas freely and share resources available in the nearby areas of Harodeba of Guredamole Somali. Also, the conflict has prevented our people from developing enclosures, or *kalo*, because we suspect our conflicting communities will burn the enclosures." In contrast, respondents from El Nasib, a SIPED target community, noted that their livestock would have perished, except for their ability to travel to other areas to access pasture and water for their livestock. This has been made possible by the ongoing peace dialogues among neighboring districts, which have helped to stop cattle raiding and ambush attacks.

Livelihood diversification

70% of families in target areas reported having to rely on collecting fuelwood or making and selling charcoal to cope with the recent drought. This was a significant increase compared to the previous drought for all the target communities. Collecting fuelwood and making charcoal are

considered socially non-preferred coping mechanisms by most of the communities, and the resultant deforestation certainly has negative effects on the environment, including hastening desertification. However greater reliance on this coping mechanism can also indicate an increase in the groups' abilities to adapt their livelihood strategies in response to drought.

Communities reported that in previous years people would not travel to the places where fuel wood could be collected and charcoal made, or to the markets where it could be sold. A respondent from Webb reported that: "In the conflict times, movement was restricted and families were unwilling to send its members for collection and selling of firewood, incense and gum, or making charcoal, as a more secure environment is needed to travel long distances. With peace there has been an emergence of income generating activities located far from this area."

The current environment of greater security has enabled families in the target communities to engage more in these and other economic activities, thus increasing their ability to generate income needed to meet their food and other basic needs during times of drought. The decision to interpret charcoal production as an adaptive coping mechanism was supported by data that showed it being significantly associated with greater freedom of movement and access to grazing land.

3.3. Contributing Factors

The comparisons of conditions before and after the SIPED intervention, and between target and non-target communities presented above speak to the effects that the SIPED project has had on target groups' freedom of movement, access to resources, and abilities to cope with the recent drought. Respondent groups in target areas largely attributed the improvements in these factors to the SIPED project's efforts to reduce the prevalence of conflict and violence, mainly ambushes and cattle raiding. Government officials working on the current drought response have also testified that the project has contributed to a noticeable increase in cooperation over resources (Mercy Corps, 2011b).

Program mechanisms

While this study demonstrates a link between the SIPED project and outcomes such as increased freedom of movement and increased access to resources, markets, and services, exploring the mechanisms linking program activities with these outcomes was beyond the scope of this study. However, from past studies two major aspects stand out as important. First, SIPED's work to establish peace dialogues and formal agreements over management of natural resources has been reported as effective (Mercy Corps, 2011b). A good example of such an agreement is the Negelle Peace Accord which helped establish greater security over an area of land from Moyale in the south to Arero in the north. The development of this agreement involved numerous trainings and dialogues, thereby building the negotiation skills of and increase communication between adversarial groups[7]. By facilitating the development of agreements related to the use of contested resources, the SIPED program may have addressed an underlying driver of local conflict while simultaneously building the skills and relationships that local actors need to flexibly revise such agreements and adapt resource use under conditions of increased scarcity.

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[7] Details on how this accord was developed are illustrated in Figure 1.

Second, SIPED's efforts to strengthen the institutional capacities and linkages between customary and government institutions at provincial, district and village levels have been, according to a recently commissioned COOPI (2011, p11) study "a key aspect of conflict prevention and mitigation that could be regarded as a best practice that can be replicated by other development partners". In the pastoralist context, the traditional institutions play a pivotal role in conflict resolution and management of natural resources. According to Proud, "Customary institutions manage access to rangeland both for internal groups and for 'outsiders' who want to negotiate for grazing rights. Or rather, they are the people outsiders should negotiate with, to share grazing land peacefully. To extrapolate - if customary mechanisms are engaged with, and their rules followed, drought resilience is stronger" (Proud, 2008). By reinforcing the capacities and linkages between customary and government institutions, SIPED appears to have contributed to creating a conducive environment for both governance systems to work together to prevent and manage conflicts.

Mediating factors

This study analyzed the factors believed to connect peacebuilding efforts to improved drought resilience among pastoral groups, in an attempt to identify the existence and strength of the relationships. Several such factors were identified *a priori,* as contained in the conceptual framework. In addition, the study undertook contribution analysis to understand, from groups within SIPED target communities, what factors have contributed to their drought resilience, and how the project has influenced these.

Respondents of the focus groups attributed their abilities to productively cope with the recent drought to the following factors, in order of priority:
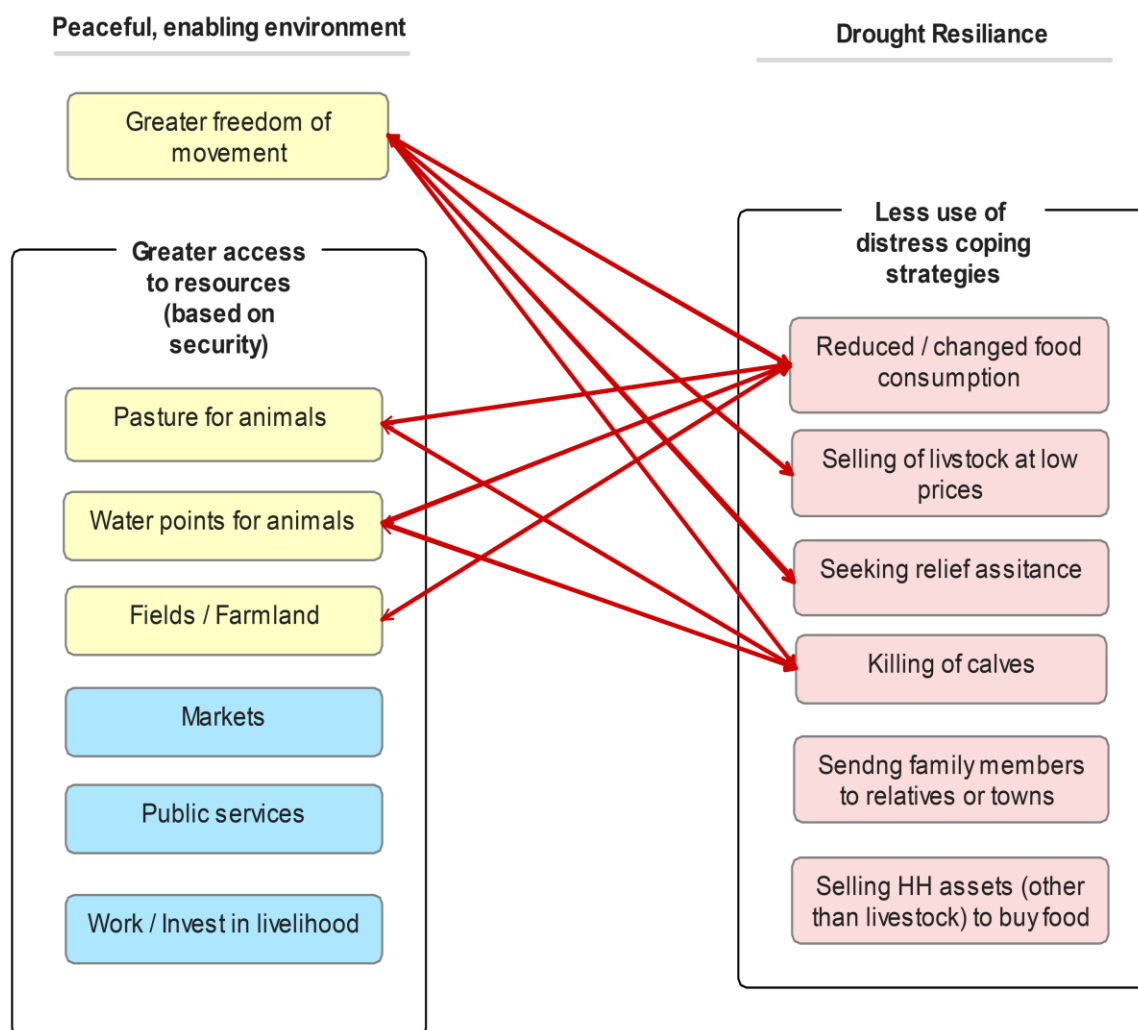
- Ability to access 'dry reserves' (grazing lands) that were previously 'no go' areas, made possible by improved security and freedom of movement
- Humanitarian support, mainly food assistance
- Use of enclosures
- Awareness of and ability to sell livestock early
- Engaging in petty trading and small business
- Borrowing or receiving gifts from relatives

Data from the household survey were analyzed to validate these findings, and further understand the factors that are linked to pastoralist households' need to rely on distressful coping mechanisms, and by extension their apparent resilience (or lack thereof) to the recent drought. These findings are summarized in Figure 6 below.

Freedom of movement

Greater freedom of movement was found to be strongly linked to lower levels of productive asset depletion among target households, including distress selling of livestock ($t(132)= -1.5$ $p<0.05$) and killing of calves ($t (129)=-1.882$, $p<0.001$). It is also closely associated with to lower reliance on consumption-related coping mechanisms among households in the week preceding the survey, including restricting consumption by adults in order for smaller children to eat ($t(34)=2.12$ $p<0.05$). However, no significant relationships were found between differences in households' freedom of movement and their overall Coping Strategies Index (CSI) scores, which was the most robust measure of reduced or changed food consumption used by this study.

Peaceful, enabling environment

Drought Resiliance

Greater freedom of movement

Greater access to resources (based on security)

Pasture for animals

Water points for animals

Fields / Farmland

Markets

Public services

Work / Invest in livelihood

Less use of distress coping strategies

Reduced / changed food consumption

Selling of livstock at low prices

Seeking relief assitance

Killing of calves

Sendng family members to relatives or towns

Selling HH assets (other than livestock) to buy food

Access to resources

Among the different types of productive resources measured, access to pasture and water for animals proved to be the most closely linked with households' apparent drought resilience. Specifically, households that did not face barriers to accessing pastures or water for their animals due to insecurity were nearly four times less likely to have resorted to killing of their calves during the recent drought ($\chi^2(1) = 3.46, p < 0.05$). Lack of access to these two resources, and to agricultural fields were all linked to greater reliance on consumption-related coping mechanisms, including eating less preferred foods, and restricting consumption by adults in order for smaller children to eat. Higher loss of access to water, grazing, or farmland over the

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[8] The diagram can be interpreted as follows: Changes in the levels of the variables on the left hand sides are significantly associated with changes in the opposite direction of the variables on the right hand side. For example, higher levels of household's access to pasture for animals is associated with lower levels of reducing food consumption and killing of calves. No associations were found for the factors in blue, while those in yellow all showed strong links to resilience-related outcomes.

past year due to conflict was also strongly associated with higher CSI scores, thus indicating a greater reliance changing food consumption and dietary behaviors for those lacking access to these resources. These findings echo respondents' statements that having the freedom of movement needed to migrate with their livestock to distant grazing land and water points made the largest difference in their abilities to successfully cope with the recent drought.

Access to several other types of resources that were expected to be significantly associated with use of distressful coping mechanisms, based on the qualitative data and the results of other studies, turned out not to be closely linked based on the analysis of the quantitative data. These included access to markets, public services, and opportunities to work. Disaggregating the access to markets by those used for livestock versus staple foods might have produced different results, as these can these can be geographically distant, regulated by different institutions, differ in terms of security, and serve different purposes when coping with drought. The limited influence of public services and employment opportunities on coping makes sense when considered in the context of pastoral social support networks. In Somali region of Ethiopia, traders often allow households to take goods – especially staple foods – on credit if they know the household will be able to sell livestock from their herds in the future to repay debt (Stull-Lane, 2009). They would not have that assurance if households only have access to public services or temporary employment, but will if they have access to herds grazing/watering in a distant place.

4.   Conclusions

This study set out to shed light on if and how peacebuilding efforts, such as those led by Mercy Corps, can strengthen pastoralist communities' resilience to droughts, thereby serving as an effective form of disaster risk reduction. Based on the findings, two main conclusions can be drawn:

1) **The efforts of the SIPED program to improve peace and security appear to have created conditions that enable greater freedom of movement and access to important resources that pastoralist groups depend on to cope with and adapt to severe drought.**

Perceived levels of conflict and insecurity were found to have significantly decreased over the past two years in communities where SIPED has operated, while remaining high in other areas. Fewer territorial disputes have meant that pastoralist households' can more easily migrate with their animals to utilize the grazing land and water resources of other communities that have been less depleted by the drought. People from target communities, and women in particular, are less fearful than in the past of traveling to the markets that they depend on to sell their livestock products to meet their families' food needs.

Peacebuilding encompasses a range of activities along the social, political, and economic spectrum. While all of these activities may contribute to improvements in security – and thus to increases in mobility and access to natural resources – some activities may be more effective than others in reducing vulnerabilities to climatic shocks. Based on past studies, SIPED's work to facilitate peace dialogues, develop peace accords and resource use plans, increase communication between adversarial groups, and strengthen the capacities and linkages between customary and government institutions, stand out as having made important contributions. These actions appeared to have built social cohesion, transferred the skills

necessary to resolve disputes and manage shared resources, and laid the foundations for livelihoods which are more resilient to external shocks, including droughts.

2) **Pastoralist groups in Somali-Oromyia areas of Ethiopia who have greater freedom of movement and access to natural resources are less likely to have to rely on distressful coping mechanisms in response to extreme drought and more likely to be able to employ adaptive capacities, compared to groups without such access.**

This study confirms the existence of strong links between pastoralist households' freedom of movement (and by extension, their ability to access productive resources) and their use of coping mechanisms that indicate vulnerability to shocks. Less reliance on distressful coping strategies, especially those that involve the depletion of productive assets, is believed to put households in a position to recover from drought quicker and more easily.

These findings lend validity to the overall of theory of change, with a minor change: Pastoralists groups in areas that have seen increased peace and security are more likely to have opportunities to employ effective livelihoods coping strategies, thus reducing their vulnerability to extreme droughts. This appears to hold true at least within the context of Mercy Corps' peacebuilding program in the Southern Somali and Oromyia border areas of Ethiopia. Similar studies in other locations are needed to determine the extent to which this theory may be more broadly generalizable.

Implications

It is widely recognized that drought and other climate-related disasters are increasing in both frequency and intensity in the Horn of Africa, and that pastoralist groups are among those most exposed and vulnerable to these shocks (Alinovi, et al, 2010). In response, national government, donors, and humanitarian agencies are increasingly prioritizing programming that can mitigate the effects of shocks and speed recovery from them. However, the humanitarian and development community is still working to identify strategies, interventions and policies that work to strengthen resilience. "The ultimate goal in this regard is having appropriate drought-related policies and plans that emphasize on risk reduction (prevention, mitigation and preparedness) rather than reliance on drought relief" (COOPI, 2011).

This study shows that effective peacebuilding interventions can contribute to creating conditions that foster greater drought resilience among pastoralists in Southern Ethiopia. The findings suggest that conflict prevention activities can have an equally if not greater impact on pastoral livelihoods in conflict affected environment than activities typically implemented in economic development programs. The results also point to the contributions peacebuilding efforts can make to furthering the objectives of disaster risk reduction projects, and to mitigating the need for large scale humanitarian relief during periods of severe drought. Based on this evidence, greater consideration and dedicated resources should be provided for conflict management within disaster risk reduction policies and programs in Ethiopia, including in the Government of Ethiopia's Disaster Risk Management Strategic Programme and Investment Framework.

This study points toward a number of recommendations for programming intended to strengthen resilience among pastoralist communities in the Horn of Africa:

- Interventions that increase access to pasture and water should be prioritized when designing programs that aim to support pastoralist communities afflicted by drought. This

will reduce the likelihood that households will engage in distressful coping mechanisms while refraining from fostering aid dependency.

- Peacebuilding activities that improve security and increase access to natural resources should be a core component of any program that aims to strengthen pastoral livelihoods and drought resilience in conflict-affected environments.

The experience from Mercy Corps' SIPED project highlights the importance and benefits of working on peacebuilding and disaster risk reduction simultaneously, to harness peacebuilding activities to reduce vulnerabilities to external shocks. This requires careful analysis of the conflict context as well as understanding of how conflict dynamics overlap with factors related to resilience, such as livelihoods opportunities, economic incentives for engaging in conflict, access to resources, and the capacity of local communities and government to respond to changing needs.

In regions where chronic, violent conflict is present, activities to promote peace appear to be a pre-requisite for strengthening resilience since livelihoods diversification, market integration, and other forms of risk reduction and adaptation among pastoralists are directly dependent on security and freedom of movement. To have an impact on these factors, conflict management programs need to take an integrated approach, such as that employed by Mercy Corps' SIPED project, which strengthens the local governance structures and social cohesion that underpin communities' resilience to disasters, conflict, and other shocks.

Further research required

Further research is needed to establish the specific mechanisms within peacebuilding programs such as SIPED that have the greatest efficacy in impacting vulnerability and resilience. The SIPED final evaluation should be used as an opportunity to examine this, by including and analyzing measures participation in various program activities to determine the strength of their relationship with key outcomes.

The development community is still searching for measures that accurately and reliably capture social resilience. To date, many of the approaches to measuring resilience have focused narrowly on various dimensions of socio-economic status, which do not go far beyond the traditional indices for assessing vulnerability (Tim Frankenberger, pers. comm.). Measuring households' use of distressful versus adaptive coping mechanisms, as done in this study, may not fully capture their resilience to drought, as resilience implies not only the ability to absorb shocks, but also the ability to effectively recover from them. A follow-up study that traces families over the drought recovery period would provide more insights into how well measuring coping mechanisms during severe drought serves as a suitable proxy for drought resilience.

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Annex 1: Definitions of Key Concepts

Concept	**Definition**
Adaptive capacity	Adaptive capacity is the "ability to design and implement effective adaptation strategies, or to react to evolving hazards and stresses so as to reduce the likelihood of the occurrence and/or the magnitude of harmful outcomes resulting from climate-related hazards" (Brooks, Adger, and Kelly, 2005). In social systems, the existence of institutions and networks that learn and store knowledge and experience, create flexibility in problem solving and balance power among interest groups play an important role in adaptive capacity (Berkes et al. 2002).
Disaster risk reduction	According to The International Strategy for Disaster Reduction (ISDR), disaster risk reduction is the "concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events". "DRR measures are designed to protect livelihoods and the assets of communities and individuals from the impact of hazards" – both natural and man-made (Concern, 2005, p 1).
Governance	"Governance is the exercise of economic, political, and administrative authority to manage a country's affairs at all levels. In includes the mechanisms, processes, and institutions through which that authority is directed. It also recognizes that governance is exercised by the state, the private sector and civil society" (UNDP, 2011, p66).
Peacebuilding	"Peacebuilding, as defined by the United Nations, involves 'a range of measures targeted to reduce the risk of lapsing or relapsing into conflict, to strengthen national capacities at all levels for conflict management, and to lay the foundations for sustainable peace and development. This understanding of peacebuilding reflects the growing consensus that peace requires more than the absence of direct or physical violence ('negative peace' as defined by Johan Galtung, 1996). Instead, it is a long-term process that should aim to achieve the absence of indirect or structural violence ('positive peace' as defined by Galtung, 1996). Positive peace incorporates notions of social justice and social cohesion" (Haider, 2009, p 100) Mercy Corps' approach to peacebuilding is built on three core strategies: 1) Working with local leaders and communities to help them gain the tools and skills they need to re-establish trust, rebuild relationships and talk about the difficult issues that have led to violence 2) Helping local partners implement development programs that address the underlying issues that are fuelling violence, whether competition over access to land or water, youth unemployment and alienation, or political and economic discrimination. 3) Actively seeking to measure the impact of our programs, learn which approaches work (and which do not) and disseminate our findings to the broader development and policy community.
Resilience	Resilience is the capacity to absorb disturbances and reorganize while undergoing change to retain essentially the same function, structure, identity, and feedbacks (Walker et al. 2004). Resilience in this study is examined mainly from a social perspective. Drought resilience was mainly measured through the lens of coping mechanisms – both adaptive and distressful.

Annex 2: Data Collection Tools[9]

Household Survey[10]

Part 5: Security

Now I'd like to ask you some questions about security and access to resources in your village.

5.1	In the last 3 months, were there any areas that you avoided going to or through because of insecurity?	1. Yes 2. No
	In the last 3 months, did insecurity ever prevent you or a member of your household from…	
5.2	….going to the market?	1. Yes 2. No
5.3	….getting water for household use?	1. Yes 2. No
5.4	….going to your field?	1. Yes 2. No
5.5	….moving your animals to new pasture?	1. Yes 2. No
5.6	….moving your animals to water?	1. Yes 2. No
5.7	….earning money or going to work?	1. Yes 2. No
5.8	….going to school?	1. Yes 2. No
5.9	….getting medical care?	1. Yes 2. No
5.10	In the last 3 months, has insecurity prevented you from investing in your livelihood?	1. Yes 2. No
5.11	Looking back, compared to twelve months ago has your Kebele become more violent, stayed the same, or become less violent?	1. Move violent 2. Stayed the same 3. Less violent
5.12	During the past year, have you lost or recovered any livestock, granary stocks or movable property to raids or conflict?	1. Lost 2. Recovered 3. Neither
5.13	During the past year, have you lost or recovered access to water, grazing, or farmland because of raids or conflict?	1. Lost 2. Recovered 3. Neither

Part 6: Coping Strategies

Now I'd like to ask you some questions about how your family has coped with and survived the current drought.

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[9] These were based on the tools developed and piloted by the Mercy Corps Evaluation and Assessment of Poverty and Conflict Interventions (EAPC) research project (Mercy Corps, 2011a).

[10] These questions were part of a longer survey. Only the measures used in this study are presented here. Standard demographic data was also collected from respondents.

	In the past 7 days, if there have been times when you did not have enough food or money to buy food, how many days has your household had to do the following?:	Number of days out of the past seven: (Use numbers 0 – 7 to answer number of days; Use NA for not applicable)
6.1	Rely on less preferred and less expensive foods?	
6.2	Borrow food, or rely on help from a friend or relative?	
6.3	Limit portion size at mealtimes?	
6.4	Restrict consumption by adults in order for small children to eat?	
6.5	Reduce the number of meals eaten in a day?	
6.6	*Coping Strategies Index Score*	*To be calculated during data entry*
	During the past 3 months, if there have been times when you did not have enough food or money to buy food, has your household had to do the following:	
6.7	Sell livestock to purchase food?	1. Yes 2. No
6.8	Sell other assets to buy food?	1. Yes 2. No
6.9	Send family members to find food or work with relatives, in towns, to Kenya or to IDP or refugee camps?	1. Yes 2. No
6.10	Borrow cash or food stuff from relatives?	1. Yes 2. No
6.11	Collect or sell fire wood or charcoal	1. Yes 2. No
6.12	Seek relief assistance from government or aid agencies (e.g. food aid or do food-for-work)?	3. Yes 4. No

Focus Group Discussion Tools

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Tool 1:
Conflict & Resource Mapping

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Description
Participants brainstorm resources important for coping with the drought, and identify those that are not accessible due to conflict. And then identify had access to resources has changed over the past year, and discuss the factors that have contributed to these changes.

Objectives
- To identify local resources that the community uses or needs/wants to use, especially for coping with the drought, but can't access
- To explore any changes the relationship between local resources and conflict that may have occurred over the life of the program
- To assess changes (e.g., from the baseline) regarding resource use and the impact of conflict on movement, and reasons for the changes

Key indicators to be measured using information gained from this tool
- change in availability of and access to resources needed to cope with the drought
- change in movement in previous "no-go areas"

Preparation
Make sure that you have all necessary materials. Arrange a meeting location with adequate space to facilitate the discussion where participants are unlikely to be disturbed by others.

Methodology
I.   Introduction
Thank the participants for coming. Explain that you would like to learn about resources in the area that the community uses or needs/wants to use but can't access. Explain what we mean by resources – i.e. things that people use to improve their lives and cope with challenges. Explain that we're especially interested in those that are the most important for helping you cope with the current drought. We'd like to discuss resources that are inside their community and district as well as in other areas if that is relevant for them.

II.   Develop the map key
Explain to the group that there are several elements that they should include on the map. Make a key of these elements on a flip chart. Ask the group to choose a symbol or simple picture to represent each element. Encourage participation by asking participants to draw the picture for the key. The facilitator can draw the key if the participants have a difficult time. The key symbols should be very simple and different from each other.

The map should include the following elements:
1. Main human settlements
2. Main roads
3. Kraals
4. Water points and rivers
5. Grazing areas
6. Farmland
7. Forestland
8. Markets and marketing routes
9. Schools
10. Health centers
11. Veterinary services

Review the key with the participants and confirm that they know what each symbol stands for by pointing at each symbol and asking them what it means.

III.   Develop the map

Draw a large rectangle on the paper that fills up most of the page but provides a margin on each side. (This will enable the group to indicate what communities and resources neighbor theirs.) Help to start the map by drawing 2-3 major landmarks on the flip chart, such as main roads, cities, rivers, or a mountain. Clarify that you want them to draw the area including all of the resources that they either use or need/want to use but can't access.

Emphasize to group members that accuracy is not the point of the exercise, and explain that all group members should participate and come to consensus on key features of the picture, even if one person is designated to draw it. Answer any questions group members have.

After all questions have been answered, explain that you will leave the group alone to draw the map and return in 15 minutes. Return in 15 minutes to check on the group's project. Ask about any challenges that the group has encountered or see if participants have any questions. Allow more time if the group needs it.

IV.   "Interview the map"

After all group members are satisfied that the map is finished, ask the group to "walk you through" the map. Ask the following questions:

1. **Identify the most important resources for coping with drought**
   1. What are the most important resources that people in this community need to help them cope with the current drought?" Explain that these can include resources that they are not currently able to fully access.

      Probe around the each of the major types of resources: Ask: "In the current drought situation:
      1a. What are the most important places you need to go to access water for your animals?
      1b. What are the most important places you need to go to access pasture for your animals?
      1c. What are the nearest, most important markets where you need to go to sell your goods, and buy or trade for the things that you need? Probe around both livestock markets and staple food markets.
      1d. What are the nearest, most important public services where you need to go to get health care, veterinary services or other types of assistance?"
      1e. Aside from these specific resources you have mentioned, are any other areas that people from this community need to travel to or through to cope with the current drought?" For example, important roads or towns.

      List the top 2-3 needed resources for each 'category' (water, pasture, markets, public services, and 'other areas') on a flip chart.

2. **Explore current access to essential resources and areas**
   Explain that: "We want to understand about the access that people from this community have to these resources right now. And in particular, how insecurity and conflict have affected your access to these resources.
   Access means being able to use a resource freely and without fear. We understand that access to some of these resources has been affected by the weather. For example, some water sources have run dry and rangelands have been depleted due to the drought. Or they may be inaccessible doe to floods and poor roads. However, we are interested in understanding how insecurity and conflict have affected your access to these resources."

   2a. Ask: "Is your community unable to access any of these resources due to conflict or insecurity? And are there any places you do not go due to fear of violence? If yes, which ones?"

2b. "How does your inability to (fully) access these resources and areas affect your abilities to cope with the drought?"

3. **Compare past and current access to essential resources and areas**
Explain that we want to understand how access to the most important resources and areas has changed over the past year. Make a matrix like the one below in the data entry form, using the most important resources and areas identified under point 1 (up to a maximum of 10). Give each participant 10 counters (beans, stones, etc.), and explain that they will use them to score their access to resources one year ago and at present. Explain that for each type of resource, they can use up to 5 counters for both the "before / one year ago" and "after /now" columns. Five counters indicates a fully accessible resource and zero means no ability to access at all.

3a. Explain: "Think about the time last year around Eid al-Adha. How was your access to each of these resources at that time?" Have each person place up to 5 counters next to each resource to indicate their level of access at that time.

3b. "Think about now. How is your access to each of these resources at present?" Have each person place up to 5 counters next to each resource to indicate their level of access now.

4. **Identify reasons for changes in access to resources and areas**
Summarize the information from questions under sections 2 and 3. For example: "It appears that over the past year that your access to grazing land and markets has gotten better. But that there are still many insecure areas."

4a. Ask: "Can you explain why? What have been the main reasons for the changes in your levels of access to resources?" Ask for examples related to specific types of resources.

4b. "How do the changes relate to conflict?" For example, has an increase or decrease in violence over the past year made some of these resources more or less accessible?

4c. "How do the changes relate to the drought?" For example, has the lack of rain made it easier or more difficult to accesses some of these resources?

4d. For the FGDs in the target areas, probe around possible project related factors: "Is there anything that the SIPED project did or achieved that contributed to improving your access to important resources?" For example, training the traditional authorities on dispute resolution, or facilitating the development of a peace accord.

Tool 2:
Coping Strategies and Contribution Analysis

Description
Participants identify drought coping mechanisms, and the extent to which they have had to use them during the current and previous droughts. Then identify factors – both project and non-project related – that enabled or constrained people from adapting the less severe / more reversible coping mechanisms.

Objectives
- To understand community levels of drought resilience / vulnerability, based on the coping mechanisms they have had to use
- To understand what has contributed to drought resilience / vulnerability, and how the project has influenced these

Key indicators to be measured using information gained from this tool
- Extent of use of negative / irreversible drought coping mechanisms

Preparation
In advance of the FGD, identify the most common coping mechanisms used by groups in the study area in response to the current and previous drought. List these out on a flipchart, and include a visual / picture of it, that you can use during the activity.

Methodology

1. **Generate / validate a list of drought coping mechanisms used in the area**
   - List the pre-identified drought coping mechanisms on a flipchart. Explain: "From our work in this area we understand that these are some of the ways that people in this area cope with the impacts of the drought."
   - Read through the list of pre-identified coping mechanisms. Ask participants to verify if these reflect what happens in their areas.
   - Ask participants: "In addition to these, what other coping strategies have you relied on during the current drought?"
   - Consolidate any similar coping mechanisms into one item.

   1a. Revise the list to reflect the most common drought coping mechanisms agreed upon. Try to limit the total number to no more than 10.

   1b. Where needed, ask for clarification and examples of how the coping mechanisms are important within the context of drought.

2. **Determine whether the coping mechanisms are considered positive / reversible versus negative / irreversible**

   2a. For the top coping mechanism identified above, ask participants to identify whether each of the coping mechanisms is either 'first resort / reversible' or 'last resort / irreversible'. Explain that:
   - First resort / reversible coping mechanisms are things families do to minimize risks in times of drought, but are not thought to be detrimental to their abilities to recover from once the drought ends. They are not considered least costly or severe.
   - Last resort / irreversible coping mechanisms are things that families only do as a last resort, and from which it is difficult for them to recover from after the drought. These are considered severe and costly in that it often involves selling of important assets.

   2b. Where needed, ask for clarification and examples of how the coping mechanisms are more or less severe / reversible.

3. **Compare coping mechanisms used during the past and current droughts**
   Explain that we want to understand how much people in this community have used the coping mechanisms identified above during this drought compared to previous droughts of a similar magnitude.

   Make a 'Coping Strategies Matrix' like the one below in the data entry form, using the most important coping mechanism identified under point 1 (up to a maximum of 10). Give 100 counters (beans, stones, etc.) to the group. Explain that they will use them to rank how much families in their community relied on each coping mechanism during the current drought, and then for the previous drought. Explain that they should use up to 10 counters for each coping mechanism. The 10 counter represent all the families in the village. As a group, they should indicate the proportion of families that had to rely on each coping mechanism. For example, placing 8 counters means that roughly 80% of the families had to do so.

   3a. Ask people to think about this current drought (give a timeframe of when it began, if needed).
   Ask: "Because they don't have enough food or enough money to buy food, what proportion of households in this community have had to rely on each of these strategies or behaviors during the current drought?"
   Have the group place up to 10 counters next to each coping mechanism to indicate the proportion of households who have had to rely on it during the current drought

   3b. Ask people to think about the last major drought (give a timeframe, if needed).
   Ask: "Because they don't have enough food or enough money to buy food, what proportion of households in this community have had to rely on each of these strategies or behaviors during the current drought?"

Have the group place up to 10 counters next to each coping mechanism to indicate the proportion of households who have had to rely on it during the current drought

4. **Identify reasons for better / worse abilities to cope with the drought**
Summarize the information from questions under sections 2 and 3. For example: "It appears that people in your community are having to rely on fewer / more of the most detrimental types of coping mechanisms as they did during the last drought."

- With the FGDs in the **target** areas, explain that: "Based on this, and on what we have seen and heard in other parts of the Region, it appears that that your community may be coping with the drought better than other communities. Do you agree?"

- With the FGDs in the **non-target** areas, explain that: "Based on this, and other what we have seen and heard in other parts of the Region, it appears that that your community may be coping with the drought worse than other communities. Do you agree?"

4a. Ask all groups: "Why do you think this is the case? What are the main reasons that your community is doing better / worse this time versus during the last drought(s), or compared to other communities?"

4b. Ask: "What are reasons that your community has / has not been able to adopt more the more positive / reversible coping strategies during this drought?"

4c. Ask: "How has conflict, or the lack thereof affected the coping mechanisms you have been able to use? Did conflicts within or between communities impact your abilities to adopt needed coping strategies? In what ways?"

4d. For the FGDs in the target areas, probe around possible project related factors that may not have been mentioned: "Is there anything that the SIPED project did or achieved that contributed to your abilities to cope with the drought?" For example, training the traditional authorities on dispute resolution, or facilitating the development of a peace accord.

5. **(For target groups only) Determine the relative contributions of factors towards drought resilience**

- Make a 'Contribution Analysis Matrix' like the one below in the data entry form. Summarize the most important factors identified under point 4 that have enabled people to cope with or survive the drought.

5a. Ask participants: "Are there any other important factors that helped you cope with or survive the drought?" Add these to the list (up to a maximum of 10).

5b. Give each participant 10 counters (beans, stones, etc.), and explain that they will use them to rank the factors that have contributed the most to their abilities to cope with the current drought. Ask each participant to distribute their 10 counters according to the factors that were the most influential. The greatest number of counters should be placed next to the factors they feel have made the most positive impact on their abilities to cope with the current drought.

5c. Ask for clarification or examples of how the factors ranked the highest contributed to enabling people to cope with the drought.