

Strengthening the humanity and dignity of people in crisis through knowledge and practice



Moving Up or Moving Out?

A Rapid Livelihoods and Conflict Analysis in Mieso-Mulu
Woreda, Shinile Zone, Somali Region, Ethiopia

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Abbreviations

ACTESA Alliance for Commodity Trade in Eastern and Southern Africa

BCG Bacille Calmette-Guérin tuberculosis vaccine
CAHW Community-based Animal Health Worker

CCM Community Case Management

CEWARN Conflict Early Warning and Response Mechanism

CHA Community Health Agent
CJTF Combined Joint Task Force

COMESA Common Market for Eastern and Southern Africa

CSA Central Statistics Agency
CSOs Civil Society Organisations

DFID (UK) Department for International Development
DPPA Disaster Preparedness and Prevention Agency

DPT Diphtheria, Pertusis, and Tetanus

DRMFSS Disaster Risk Management and Food Security Sector (of the MoARD)

EB Ethiopian Birr

EHNRI Ethiopian Health and Nutrition Research Institute

ELTAP Ethiopian Land Tenure Policy and Administration Program

EPRDF Ethiopian People's Revolutionary Democratic Front

FAO Food and Agriculture Organization

FEWSNET Famine Early Warning Systems Network

FMOH Federal Ministry of Health
GAM Global Acute Malnutrition
GCC Gulf Cooperation Council
GDP Gross Domestic Product
HEW Health Extension Worker

HSDP III Health Sector Development Plan

HSEP Health Sector Extension Programme

IGAD Intergovernmental Authority on Development

Ksh Kenyan Shilling

MDG Millennium Development Goal

MMR Maternal Mortality Rate

MoARD Ministry of Agriculture and Rural Development

MoE Ministry of Education
MoFA Ministry of Federal Affairs

MoFED Ministry of Finance and Economic Development

NGOs Non-governmental Organisations
ONLF Ogaden National Liberation Front

ORT Oral Rehydration Therapy

PACAPS Pastoral Areas Coordination, Analysis and Policy Support (Program)
PASDEP Plan for Accelerated and Sustained Development to End Poverty

PIPs Policies, Institutions, and Processes
PRA Participatory Rural Appraisal

RFE Rainfall Estimation

SCFUK Save the Children Fund UK

SCUK Save the Children UK SCUS Save the Children US

TBAs Traditional Birth Attendants

TFG Transitional Federal Government
UNICEF United Nations Children's Fund

UNOCHA United Nations Office for the Coordination of Humanitarian Affairs

USAID United States Agency for International Development

WHO World Health Organization

WSLF Western Somalia Liberation Front

SUMMARY

This report describes a rapid, combined livelihoods and conflict analysis in Shinile Zone, Somali Region of Ethiopia, conducted in March and April 2010. An underlying question for the analysis was the extent to which aid actors should integrate peace-building and livelihoods programming as part of long-term development strategies for the Zone. A strategic framework with explanation is presented in section 4 of the report and includes the following issues:

- The Issa pastoralist system extends beyond Shinile Zone, so that changes to the system have impacts in Afar and Oromiya Regions. The system is determined by the need for pastoralists to access natural resources, and it cuts across administrative borders, official or otherwise. Essentially, this is the system in the Rift Valley between the Hararghe highlands and the eastern escarpment. A harmonized cross-regional state approach, involving Somali, Afar, and Oromiya Regions, is needed to deal with both resource-based conflicts and conflicts arising from regional structural/border disputes.
- Peace-building and economic integration across regions are mutually supportive approaches, and are the core part of the framework; a 10- to 15- year time frame is proposed.
- Rationalization of land tenure and land use policies is central to both economic integration and peace-building. Policy and legal support to pastoralist communal land use, with protection of pastoral lands from appropriation by other users, is a crucial complementary process to capacity-building support in peace-building to government and community actors.
- More supportive land tenure arrangements will contribute to livestock development and marketing, and so mainly assist those people who stay in the pastoralist system. Currently this includes households which are not only staying, but are probably slowly "moving up" economically as they maintain or increase their herds and supply livestock markets. Commercialization trends are clearly evident in other Somali pastoralist areas and seem likely to take hold in Shinile Zone.
- Education and health are fundamental to economic and social development. While there

- may be increasing government commitment to improving health and education in Somali Region, the service delivery strategies will need further adaptation if basic health and education indicators are to improve. Both sectors seem to lack specific strategies for dealing with the cultural barriers to accessing services faced by women and girls. Education is particularly important as a means to support economic diversification and integration, especially for women and youth, but also for other people who may opt to "move out" of the pastoralist sector.
- Service delivery strategies need to examine possible cross-regional state border arrangements that might help to overcome some of the practical difficulties of service delivery through government alone. The proximity of urban centres in Oromiya Region to Shinile Zone and the position of Dire Dawa indicate that basic service providers in parts of the Zone could be supplied from these areas. To some extent, this is already happening. The private sector is often able to work more easily across administrative borders than government is, and federal-level health and veterinary policies support private sector involvement in service provision.
- Long-term development strategies need to anticipate natural disasters such as drought. Government guidelines and policy support livelihoods-based responses to drought such as commercial destocking, targeted livestock feed supplementation, and veterinary voucher schemes. These approaches require private sector involvement, indicating that economic integration within the framework covers both "development" and "relief" activities, and can include many of the same private sector and community partners.

Although commissioned by Mercy Corps, the study did not examine or evaluate Mercy Corps programmes. Mercy Corps' own strategies could draw on this report, but also might use independent evaluation of their current programmes, analysis of core organisational strengths and technical experiences, and dialogue with donors to assess funding opportunities.

1. INTRODUCTION

1.1 Livelihoods and conflict in pastoralist areas

The Somali Region of Ethiopia is characterised by many of the same development issues affecting other mainly pastoralist areas of Ethiopia, and the Horn of Africa more widely. A very longstanding and core problem has been conflict, which, in part, relates to the limited and variable natural resources in pastoralist areas and competition for resources between groups. However, conflict also has many other dimensions in these areas due to factors such as changing national political ideologies and structures, limited government capacities in more remote areas, and the frequent "cross-border" aspects of conflict. During the last 15 years or so, humanitarian and development aid organisations and donors have supported an increasing array of peace-building, conflictresolution, or similar programmes in pastoralist areas. When implemented by non-governmental organisations (NGOs), these programmes often focus on conflict resolution activities at the levels of local government and communities, including efforts to build local capacities to prevent conflict. A common finding from these programmes across different countries is that, while progress is often evident during implementation, local reductions in violent conflict are later undermined by higher-level actors and processes. Often running parallel to these programmes, and sometimes implemented by the same agencies with the same funding sources, are "livelihoods programmes." These vary considerably in their approach in pastoralist areas but, in one way or another, often focus on livestock and related areas such as water development, livestock marketing, or natural resource management. Variations in programming partly relate to diverse interpretations of the word "livelihood" and equally varied analysis around how livelihoods can be protected or strengthened.

In aid circles, livelihoods thinking is associated with the emergence of livelihoods analysis in the late 1990s and an analytical approach called the sustainable livelihoods framework. When applied in conflict-affected pastoralist areas, use of the livelihoods framework quickly highlights the major impact of conflict on livelihoods and how,

in certain circumstances, people's responses to conflict lead to behaviours or activities which perpetuate conflict. The framework also reveals the factors at multiple levels—from community to international processes and vice versa—that contribute to conflict. With these issues in mind, livelihoods analysis in conflict-affected areas should automatically include conflict analysis, leading to programming strategies in which livelihoods work and peace-building work are not separate entities but combined, mutually-reinforcing approaches.

1.2 Background to the analysis in Mieso-Mulu woreda, Shinile Zone

Shinile Zone in Somali Region has been characterised by conflict for many years, dating back to the period of imperial rule in Ethiopia and before. Historically, the main Somali clans gained and occupied territory by force, and the Issa clan in Shinile Zone is no different. The boundaries of its current position in Shinile are in part an outcome of the clan receiving arms from the Italian army in the early 1900s, which allowed them to expand their territory from around the Ethiopia-Djibouti railway into the Allighedi plain and towards the Awash River. While intra-clan disputes have occurred, as they do in other Somali pastoralist areas, the Issa have also been involved in longstanding conflict with the Afar to the west and with Oromo to the south. Both conflicts were relatively localized and resourcebased, with different groups aiming to secure access to water and grazing or, in the case of the Oromo, land for cultivation.

Following the introduction of regional autonomy in Ethiopia in the early 1990s, additional tensions were superimposed over the local competition for land, grazing, and water resources. These tensions arose from delineation of the border between Oromiya and Somali Regions, and Afar and Somali Regions, and were also related to regional governments making claims over key strategic or economic locations. Violent clashes between Somali Issa and Hawiya groups in Mieso-Mulu woreda occurred as recently as February 2009. They represent a distinct shift in conflict

dynamics relative to the more longstanding tensions between Issa and Oromo, and Issa and Afar.

Shinile Zone is also known for its high levels of food insecurity, especially among Issa pastoralists who occupy much of the Zone. For example, a health and nutrition survey conducted in Ayisha woreda between April and May 2009 concluded that there was a "... serious nutrition situation with global acute malnutrition (GAM) estimates falling between 15% and 20% and in the presence of aggravating factors such as acute water shortage affecting both the condition of livestock and size of herd ownership, low access to safe water, suboptimal immunization coverage, and childhood morbidity considered as high or very high" (EHNRI/UNICEF/ SCUS, 2009). The GAM cut-off used by the World Health Organization (WHO) for emergencies is ten percent.

For NGOs working in Shinile Zone, the challenges of strategic planning include how best to balance donor priorities around, for example, emergency assistance or conflict work, with more long-term strategic analysis, which views conflict and livelihoods not as separate entities but as closely linked. For NGOs such as Mercy Corps, these linkages are already recognised through activities such as participatory rural appraisal (PRA) with communities in selected *kebeles* of Mieso-Mulu *woreda*. These show opportunities for integrating peace-building with economic or marketing activities, under the notion of interdependence between Oromo, Issa, and Hawiya groups (Mercy Corps, 2009a).

The livelihoods analysis described in this report aims to build on the recent community-level PRA work and other analysis by Mercy Corps. It tests the use of the livelihoods framework as a tool for a) combining livelihoods and conflict analysis under a single analytical approach and b) assisting Mercy Corps to develop a long-term strategic framework for Shinile Zone.

1.3 Methodology and process

The use of livelihoods analysis in Shinile Zone was based on two main activities, viz. an

introductory training of Mercy Corps and government staff in livelihoods analysis, followed by actual use of the livelihoods framework to conduct an analysis in Shinile Zone. Both activities were to be limited to a three-week period during March 2010, and therefore the intention was to compile and structure existing information rather than collect new data. More details are provided below:

- An initial meeting was held with Mercy Corps staff in Addis Ababa to introduce the livelihoods framework as an analytical approach and plan the data collection and field work; a list of participants is provided in Annex 1.
- Sourcing and review of published and grey literature on livelihoods and conflict issues in and around Shinile Zone was conducted, and included
 - o academic studies on natural resource management, socio-economics, livestock production, and conflict and governance issues;
 - o development and humanitarian reports, including participatory field assessments and project reports produced by Mercy Corps, human nutrition and health assessments, household economy baseline reports; government statistics;
 - o policy and legal documents, including national development and disaster management policies related to pastoralist areas, poverty reduction strategy papers, policies on livestock development and marketing.
- Field work in and around Mieso *woreda* was done, focusing on
 - o collection of local documents and statistics, where available, e.g., on livestock marketing, health services;
 - o meetings with local Mercy Corps staff and government experts to introduce the livelihoods framework and gather up-to-date information on the district; this information-gathering focused on health and education services, natural resources, and infrastructure using mapping methods; a list of participants is provided in Annex 1.
 - o focus group discussions with elders, women, and youth in Mulu town.
- Further consultations were held with Mercy

¹ Woreda is an administrative unit similar to a district; kebele is a sub-unit of a woreda.

Corps based on a draft report, covering the livelihoods analysis and strategic framework.

These activities were designed with the intention of using the livelihoods framework to organise and analyze existing data, within the time available. A key problem here was that data specific to Shinile Zone or Mieso-Mulu woreda was limited, and frequently, the analysis assumed that information from other parts of Somali Region was relevant to Shinile Zone or that other woredas in the Zone were representative of Mieso-Mulu woreda. Some of the main reports used in the analysis were

- a livelihoods study in Somali Region in 2006, which included pastoralist areas of Shinile woreda in Shinile Zone (Devereux, 2006);
- a health and nutrition survey conducted in April to May 2009, which included Ayisha woreda in Shinile Zone (EHNRI/UNICEF/ SCUS, 2009);
- two studies on conflict in and around Mieso-Mulu *woreda*, both of which cover structural and governance aspects of conflict since the early 1990s (Ahmed Shide, 2005; Fekadu Beyene, 2009);
- an analysis of the Afar-Issa conflict (Markakis, 2003).

The study focused on Mieso-Mulu *woreda* due to time constraints and the limited availability of local government officials due to the forthcoming elections in Ethiopia (in May 2010). Focus group discussions were used to investigate issues which were not well described in existing reports and to cross-check the relevance of zonal or other data to Mieso-Mulu *woreda*.

The study focused on pastoralist areas of Mieso-Mulu *woreda*, while recognising the importance of relationships with neighbouring agropastoral Oromo groups in the *woreda*, and on the strong linkages between Issa communities in Mieso-Mulu *woreda* and those in other parts of the Zone, and in Djibouti and Somalia. Ecologically, conditions in the pastoralist areas of Mieso-Mulu *woreda* were similar to those in other parts of Shinile Zone. Therefore, to some extent, certain parts of the analysis in Mieso-Mulu *woreda* can be applied more broadly to the Zone.

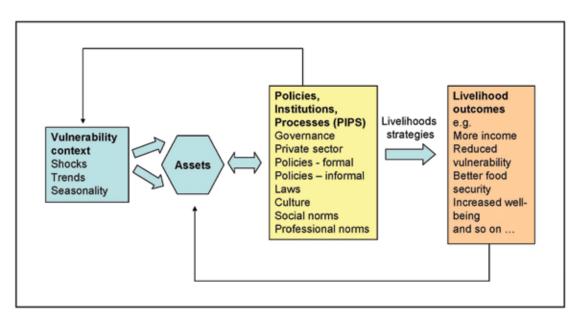
2. USING THE LIVELIHOODS FRAMEWORK TO INTEGRATE LIVELIHOODS AND CONFLICT ANALYSIS

2.1 The livelihoods framework

The livelihoods framework enables a description of local individual, household, or community "assets" to be positioned and analyzed against factors which contribute to vulnerability, such as seasonality, shocks, and trends. The framework also allows examination of formal and informal policies, institutions, and processes that affect the ways in which people are able to protect or develop their assets. This part of the framework

includes sub-national, national, regional, and international policies and institutions. From the perspective of defining and responding to poverty, pastoralist communities commonly explain poverty by reference to both their livestock holdings (financial assets) and access to indigenous social networks and support systems (social assets). The sustainable livelihoods framework allows both financial and social assets to be examined.

The sustainable livelihoods framework



A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base. (Scoones, 1998)

In a conflict-affected area, livelihoods analysis should automatically include analysis of conflict issues. Typically, conflict cuts across three core elements of the livelihoods framework, viz. assets, vulnerability context, and policies, institutions, and processes. While conflict might reduce assets or make certain strategies for managing assets very

risky, asset loss due to conflict and within certain policy or institutional contexts can also be a cause of conflict e.g., by encouraging illegal activities to acquire assets. Therefore livelihoods analysis covers both the factors which can cause conflict and how coping strategies can arise that perpetuate conflict in the absence of other livelihoods options.

Table 1. The impact of conflict on livelihoods assets in pastoralist areas of Africa

Livelihoods Impacts of conflict asset

Human

- The main victims of civil and international conflicts are civilians, not armed combatants—physical injury, mental trauma, death
- Localized livestock raiding possibly resulting in violent injury to livestock keepers and their families, the raiding groups, or local police and security forces
- Women and children are particularly badly affected by many forms of conflict—rape, mutilation, and forced marriage of women and girls are tactics of war and counter-insurgency; spread of HIV
- Use of child soldiers with related long-term, mental trauma, and wider societal impacts
- "Scorched earth" tactics with violent removal of communities from resourcerich areas e.g., oil, natural gas, minerals
- Destruction of health facilities and disruption of basic preventive health campaigns e.g., child vaccination
- Destruction of education facilities or disrupted access to education
- Destruction/damage to water supplies; water-borne disease outbreaks
- Injury and death after conflict due to landmines and unexploded ordnance

Financial •

- Direct and violent depletion of financial assets such as livestock is a tactic of war and counter-insurgency
- Restrictions on movement—seasonal labour migration and remittances
- Market closure or dysfunction, preventing sale or exchange of livestock for cash or grain
- Breakdown of veterinary services—no preventive or curative services, shocks due to disease epidemics and loss of assets
- Limited private sector investment—high risks of doing business and trade
- "War economies" with trade controlled by armed elites for personal gain and related incentives for maintaining conflict

Physical

- Destruction or damage to roads and physical infrastructure
- Destruction of government offices and records
- Breakdown of communication and transport
- Destruction or contamination of water sources as a tactic or war and counterinsurgency
- Breakdown of public security

Natural

- Restricted movement limits access to grazing areas; overgrazing of accessible areas; restricted cross-border movements
- "Bad diversification" e.g., excessive charcoal production
- "No man's land" areas between conflicting groups
- Landmines and unexploded ordnance preventing access to grazing areas
- Breakdown of traditional institutions for natural resource management

Social

- Forced migration—internal and international displacement; breakup of families and communities
- Breakdown of traditional safety nets/social support
- Breakdown of traditional leadership and institutions
- New and violent "social norms"

Political •

 Reduced political capital as pastoralists are portrayed as inherently violent or supporting insurgents, opposition groups, or religious extremists

Source: adapted from COMESA, 2009.

Conflict analysis is the systematic study of a conflict in given area and is structured around an examination of the profile, causes, actors, and dynamics of conflict (Saferworld, 2008). Much of

the content of a typical conflict analysis also falls into the main components of livelihoods analysis, as summarized in Box 1 below.

Box 1. Linkages between conflict analysis and livelihoods analysis in pastoralist areas

| Conflict analysis ¹ | Livelihoods analysis |
|---|---|
| Profile —A conflict profile provides a brief characterisation of the context of a conflict, looking at political, economic, and sociocultural contexts, issues that emerge from these, and the history of the conflict. | Conflict profiles are covered under vulnerability context and PIPs, which would also cover non-conflict factors and issues. Conflict histories fit naturally under trends in vulnerability context. Elements of livelihoods assets, such as natural, financial, and social assets can also be very relevant to conflict analysis. |
| Causes—Causes of conflict may be structural, pervasive factors built into the fabric of a society; for instance, if there is unequal access to natural resources or a discriminatory system is in place; | Structural factors fall mainly under PIPs, which include both formal and informal institutional issues and processes. |
| • proximate factors which contribute towards a climate of violence; for instance, a proliferation of illicit small arms; | Proximate factors fall under PIPs and/or trends (vulnerability context). |
| • triggers , being single events that may set off or escalate violence; for example, elections, coups, or sudden currency collapses. | Triggers fall under shocks in vulnerability context. |
| Actors—Thinking about people is central to conflict analysis. "Actors" refers to all those individuals, groups, and institutions contributing to or affected by a conflict. | Actors are covered by livelihoods analysis under PIPs and, for community-level groups, also under social and political capital. |
| Dynamics —The interaction between a conflict's profile, its causes, and actors can be described as that conflict's dynamics, how the conflict changes and develops over time. Understanding a conflict's dynamics will help identify "windows of opportunity" for peace-building and can help organisations plan future work. | Dynamics are covered by PIPs and trends in livelihoods analysis. |
| | |

¹ From Saferworld, 2008.

2.2 Policies, institutions, and processes: the PIPs analysis and conflict

In terms of household or individual assets, one reason conflict is so important in pastoralist areas is that it can impact negatively, and often

profoundly, on all types of assets (Table 1). Understanding these impacts is central to livelihoods analysis in these areas. Also, pastoralism is often noted for its vulnerability, and a mix of predictable and unpredictable factors threaten assets. These are outlined in Table 2.

Table 2. Conflict and vulnerability contexts in pastoralist areas

- Seasonality Marked seasonality of livelihoods in a normal year due to rainfall patterns and seasonal variation in food production, food access, and market conditions
 - Seasonal variation in grazing and water resources; seasonal peaks in resource competition—risk of conflict flashpoints

Shocks

Sudden onset and unpredictable events such as:

- Livestock disease outbreaks
- · Human disease outbreaks
- Floods
- Market bans
- · Conflict and raiding
- Border closures
- Food price increases

drought

Slow-onset "Drought" usually involves failures or marked reductions in two or more disasters— successive rains, and can be expected every five to seven year or so—therefore drought is predictable and slow- onset.

Drought is also characterised by

- high loss of livestock assets, with long recovery times for rebuilding herds, especially cattle and camels;
- human disease outbreaks as people congregate around water sources or relief
- **conflict** as herders compete for dwindling resources.

Trends

Long-term changes including:

- Protracted conflicts and political instability—complex emergencies
- Human population growth
- Increasing negative impact of drought
- Declining per capita livestock holdings among poorer households
- "Development displacement"
- Bush encroachment
- Inappropriate water development
- Erosion of traditional institutions
- Access to modern small arms
- · Commercialization of livestock rearing

Looking more closely at conflict and vulnerability, many NGO peace-building programmes work locally and gain an understanding of tensions between, for example, conflicting ethnic groups and the role of actors such as local politicians or government. However, attention to policies and institutions in livelihoods analysis places local issues in a broader context which can include sub-national, national, regional (i.e., groups of neighbouring countries), and international policies and processes. This wider analysis can be particularly useful in pastoralist areas, where conflict often has important crossborder or regional dimensions that in turn can point to the need for regional responses to conflict. For NGOs and donors in the Horn of Africa, this regional aspect of conflict often raises important challenges because, in general, these organisations are structured and managed nationally, not regionally. It follows, for example, that if conflict-sensitive programming includes balanced inputs to communities across borders, such programming can be difficult for aid organisations to design and implement.

Policy and institutional analysis in the livelihoods framework also covers informal policies and norms, which can reveal disparities between formal policies or laws and their interpretation or enactment among different actors. This type of analysis can show how some policies are well thought out and articulated on paper, but not implemented. In contrast, bad policies can be

ignored locally, with communities and local private sector developing systems which fit a local context. Institutions include informal institutions such as the traditional social units and leaderships of pastoralist communities, but also socio-cultural norms and practices. While peace-making is often an important function of traditional leadership, so is the mobilization of youth and organisation of livestock raids. Therefore, at one level, livelihoods analysis can show that people can suffer the impacts of conflict while also being a cause of conflict. Among policy makers in government, pastoralist areas are often described as problematic due the apparently violent tendencies of pastoralists and frequent clashes over, for example, raids or natural resources. At another level, the same analysis might argue that if one of the main functions of a state is to protect its citizens, then ultimately the responsibility for resolving conflicts and maintaining civil order lies with government.

In terms of vulnerability, formal and informal policies and institutions have a major influence on the extent to which seasonality, shocks, and trends result in vulnerability. Some examples are provided in Box 2. In summary, conflict can be instigated by pastoralists and prolonged by strategies to control resources by self-arming and use of physical force in preference to negotiation. However, deficits in formal government policies, laws, and capacities create the space for violence-based strategies and behaviour to take place.

Box 2. Formal and informal polices and institutions, and pastoral vulnerability

Seasonality—Seasonal, resource-based conflicts reflect inadequate formal institutions to define and enforce user rights and, in these situations, the tendency for one group or another to claim control of resources by physical force. Therefore formal institutional weaknesses increase the risk of resource-based conflicts. Government policies and laws may deliberately marginalise pastoralists in favour of settled farmers, or can be well-meaning but evolve from limited understanding of pastoral livelihoods. Traditional peace-making mechanisms tend to be stronger within ethnic groups rather than between groups, and tend to react to conflict rather than prevent conflict.

Shocks—Livestock raids are a type of shock. For those involved in raiding, risks such as imprisonment or other punishments are lessened in situations where local police forces are weak or where commercial or contract raiding is led by actors who can bypass the police or judiciary. Again, weaknesses in formal institutions create environments that support raiding. At

the same time, raids are well-planned events which can be condoned or even actively led by the same traditional leaders who also have peace-making responsibilities. Traditional leadership, like formal political leadership, is variable, with some individuals using their positions for individual economic gain. Therefore there can be important weaknesses in traditional institutions as well as in governments.

Slow-onset disasters—The well-established, formal institutional response to drought is food aid. Procedures within governments and aid organisations focus on assessing food aid needs and delivering food aid. Drought cycle management and related livelihoods-based programming, i.e., risk-based drought management, is poorly institutionalized. One result is excessive loss of core livestock assets by pastoralists, with long recovery times and use of theft/raiding to rebuild herds.

Trends—Various trends combine to increase the risk of both seasonal conflicts and shocks, and the impact of drought. Trends such as bush encroachment lead to reduced availability of useful vegetation for livestock grazing and therefore increase pressure on already-scarce resources. Similarly, the continuing appropriation of pastoralist lands for commercial farming often excludes pastoralists from key dry season grazing and water resources, thereby increasing the need to access these resources elsewhere. Therefore formal land administration and land use planning processes are central to long-term development planning and indirectly to conflict prevention.

During the last 20 years or so, considerable effort has been expended in resolving and managing conflict in the Horn of Africa, through diplomatic means, government interventions such as forced disarmament, and through various conflict early warning systems and local conflict resolution programmes supported by NGOs and other actors. Analysis of these interventions points to at least four important challenges:

- The persistence of internal conflict is essentially a governance issue and relates very much to government systems and capacities both centrally and in pastoralist areas.
- Inappropriate development policies and strategies can fuel conflicts e.g., through the construction of new facilities such as water points in conflict-sensitive locations or the unlawful allocation of pastoralist land for agriculture.
- Simply ignoring pastoralist areas can lead to weak or harmful livelihoods diversification, including activities which may hurt the physical environment and social fabric of society; when people respond to limited livelihoods options by resorting to illegal or environmentally damaging activities, this can cause or perpetuate local conflicts.
- The political economy of certain forms of

conflict indicates that conflict can be initiated and maintained by individuals for personal gain, and that the same individuals may undermine attempts to resolve conflict in the long term. If a core function of government is to ensure the safety and protection of its citizens, in many pastoralist areas this function is not achieved.

This brief list of conflict-related policy and institutional constraints indicates the links between development policies and strategies, and conflict. Land, environment, and service delivery policies all impact on livelihoods options and, when not well-conceived, can directly or indirectly encourage violent conflict. In pastoralist areas, policy and institutional barriers also often occur at different levels, from local to international. These can include policies on cross-border movements and trade, policies around financial systems which enable (or not) remittances, and so on. Conflict is also often multilayered and multidimensional, and includes a complex and dynamic set of actors and relationships. Levels of conflict vary from international or inter-state conflicts, internal political conflicts (sometimes linked to inter-state "proxy wars" and arming or support to insurgents), and local ethnic conflicts. At times,

and especially in Somali pastoralist areas, different types of conflict are interlinked. As indicated above, an understanding of the political economy of conflict is important, including the economic incentives for some actors to sustain conflict over time.

2.3 Conflict and livelihoods programming

In terms of joined-up conflict and livelihoods programming, conflict work is expected to lead to peace and therefore improved livelihoods by reducing the negative impact of conflict on various assets, e.g., see Table 1. Similarly, livelihoods programmes may include conflictrelated objectives. For example, a programme might aim to develop land policy and legislation that supports pastoral mobility and clarifies user rights. Indirectly, this could result in reduced conflict over natural resources. In general, conflict-sensitive livelihoods programmes include particular attention to the appropriate distribution of inputs between conflicting groups so that greater acquisition of assets or services by one group does not then become a cause of conflict. Within this general principle is the notion of economic inter-dependence and the mutual benefits arising from cooperation around activities such as trade or the shared use of certain resources. While intuitively this type of programming logic makes sense, sustained peace and related benefits probably depend on the root causes of conflict. For example, these causes can be entirely localized and arise from reactive, violent behaviours. In this case, facilitation of peace-making with traditional institutions, and with complementary livelihoods support across groups, may lead to sustained benefits.

In reality, however, many conflict-prone pastoralist areas are characterised by diverse causes of conflict, with weak governance from central to local levels being a common factor. In part, this explains the fragility of aid programmes, which work only locally on conflict and livelihoods because local gains are easily undermined, consciously or unconsciously, by higher-level actors, disabling formal policies, or confusion over official boundaries.

3. LIVELIHOODS ANALYSIS IN MIESO-MULU WOREDA

Mieso-Mulu woreda lies in the southwest of Shinile Zone in the Somali Region of Ethiopia and is bordered by Afar Region to the west and Oromiya Region to the south. Shinile Zone borders Djibouti to the north and Somalia to the east. The Zone is occupied mainly by Somalis of the Issa clan, who also predominate in Djibouti (including the Djibouti government) and parts of northwest Somalia. The physical location of the Zone and distribution of the Issa immediately points to the cross-border nature of livelihoods in the area. Shinile Zone and Mieso-Mulu woreda are also occupied by smaller numbers of Somali Hawiyas and Oromos, who are mainly agropastoralists found in the relatively higher and wetter areas along the southern border of the Zone, at the base of the Hararghe highlands.

The geography of the area explains the pastoralist

economy of the Issa. Approximately 76 percent of the rural population in Shinile Zone is pastoralists, and around 80 percent of the rural population in Mieso-Mulu woreda (Table 3). Lying at the floor of the Rift Valley, between the Ethiopian highland escarpment running south to north and the Hararge highlands running west to east, Shinile Zone becomes progressively lower, hotter, and drier, especially near the border with Djibouti. Annual rainfall in the Zone is 557 mm, but this varies from relatively higher rainfall woredas of Mieso-Mulu (678 mm/year) and Dembel (670 mm/year) to the lower-lying, more northern woreda of Ayisha (404 mm/year) (see Figure 4). Temperatures in the Zone range from around 27 to 43°C. In the total zonal area of approximately 89,200 km², there are no permanent rivers, but there are three seasonal rivers running roughly south to north, down from the Hararghe hills.

Afar Region

Also Shirile

Shirile

Shirile

Dembel

Shirile

Dembel

Awybere

Dawa

Oromia Region

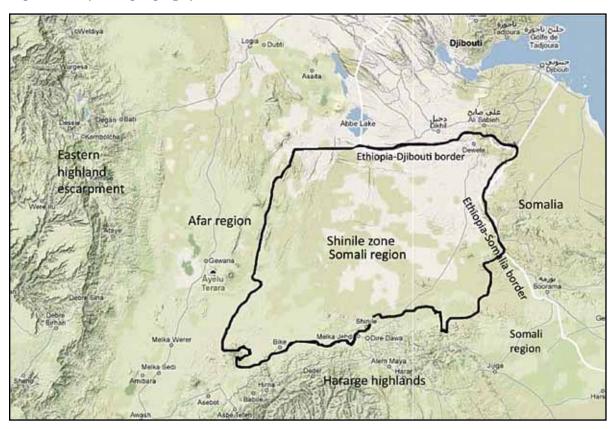
Ayybra

Kebribeyah

Figure 1. Shinile Zone in the Somali Region, Ethiopia

Notes: adapted from the unofficial maps produced by UNOCHA. The heavy blue line delineates administrative zones. Shinile is divided into six *woredas* (districts), viz. Mieso-Mulu, Afdem, Erer, Shinile, Ayisha, and Dembel. Mieso town is situated just outside Shinile Zone (Somali Region), to the southwest of Mieso-Mulu *woreda*.

Figure 2. Physical geography of Shinile Zone



Notes: the Shinile Zone border is approximate and unofficial. The gray-blue lines depict major roads. Mieso-Mulu *woreda* is situated in the southwest of the Zone—see Figure 1. Some informants described an extension of the northwest corner of the Zone westward into Afar Region and covering part of the main road to Djibouti, but this was an unofficial expansion of the Zone at the time of writing.

| Woreda | Rural population | Pastoralist population (% of rural population) |
|------------|------------------|--|
| Shinile | 96,988 | 77,591 (80%) |
| Dembel | 77,321 | 30,928 (40%) |
| Ayisha | 50,043 | 50,043 (100%) |
| Erer | 83,471 | 66,777 (80%) |
| Afdem | 31,991 | 31,991 (100%) |
| Mieso-Mulu | 45,570 | 36,456 (80%) |
| Total | 385,384 | 293,786 (76%) |

Source: DPPA/SCUK, 2008.

Despite its apparent remoteness and harsh environment, the physical position of Shinile Zone, adjacent to both Djibouti and Somalia, indicates its strategic importance for Ethiopia as a whole. For example, national economies depend on a country's transport system. Ethiopia is a land-locked country, and the Djibouti port is the major route for imported goods and an important channel for Ethiopian exports. The main road from Addis Ababa to Djibouti runs around the western border of the Zone, and, in April 2010, passed through an unofficial extension of the Zone occupied by Issa communities. At the same time, the Ethiopian government was planning to asphalt the road running through Dewele in the northeast of the Zone, making that road an alternative route to and from Djibouti. The northern Somali ports of Berbera and Bossaso are also important export routes, especially for livestock exported unofficially from Somali Region.

Both Djibouti and northern Somalia (Somaliland and Puntland) are part of the wider and regional political context, including Ethiopia-Eritrea relations, Ethiopia-Somalia relations (both northern and southern Somalia), and, internally, Ethiopian counter-insurgency strategies against the Ogaden National Liberation Front in the Somali Region. The regional politics are complex and dynamic, both currently and historically. As previously mentioned, the Issa are the dominant ethnic group in Djibouti, including in the Djibouti government. As they also occupy most of Shinile Zone, they represent an important cross-border socio-political grouping, which directly controls the Djibouti port while also having close proximity to the main Addis Ababato-Djibouti road and railway. Similarly, the Afar are a cross-border group, present in Djibouti, Eritrea, and Ethiopia.

Although the northern part of Shinile can be considered remote and inaccessible, more southern areas are relatively accessible if compared to other parts of Somali Region such as Warder or Gode. Two main roads run along the western and southern boundaries of the Zone, and the city of Dire Dawa lies around the midpoint of the southern border, just outside the Zone. The city of Harar is also relatively accessible. Within the Zone, Mieso-Mulu woreda is relatively small

(about 60 km from east to west and 70 km from south to north), especially if compared to the huge tracts of land that characterise many pastoralist areas of Ethiopia and other parts of the Horn of Africa. The *woreda* can be reached in about four hours by road from Addis Ababa.

3.1 Assets

3.1.1 Financial assets

Financial assets comprise the inflows of cash from income, gifts, or other sources, as well as stocks and savings held by a family or household.

Pastoralists commonly define wealth in terms of livestock holdings and elements of social capital, such as access to family members for loans, gifts, or other types of support. In any given pastoralist area, there are households which own relatively large numbers of livestock, measured in absolute terms in hundreds or even thousands of animals. Even households that are characterised locally as poor may own up to 30 or 40 small ruminants, and a few cattle or camels. These minimum numbers of livestock are needed to enable a pastoralist way of life and are sometimes measured under the concept of "minimum herd size." In terms of development strategies, understanding wealth groups is important because marketing behaviour varies by wealth group, with poorer households strategizing to build herds, and middle-wealth and wealthier households selling more animals and being the main suppliers of livestock to markets.

a. Livestock herds and household income

Background notes

For pastoralist communities, the main financial asset is livestock. Livestock holdings represent wealth and animals are used both as a form of savings and as assets to be exchanged for cash or grain as needed. The emphasis on livestock ownership and production in pastoralist areas is largely determined by environmental factors and especially the arid or semi-arid conditions with marked variability in rainfall.

In general, pastoralists keep mixed herds of livestock comprising combinations of large and small ruminants. The composition of herds in different areas is influenced by environment and particularly the drought tolerance of different livestock species. Market demands also influence the types of livestock reared, especially by wealthier households. As a general rule, camels and goats are prioritized in the most arid areas, with cattle and sheep also reared, but in areas with relatively higher rainfall. It follows that mixed herding is a logical strategy that allows risk management and flexible financial management. In terms of risk, different livestock species have different water and grazing needs, and to some extent, are affected by different diseases. Therefore it is likely that some animals will survive an adverse event such as a disease epidemic or drought. In terms of financial management, small stock such as sheep and goats are a convenient asset to be sold to meet basic needs such as food, medicine, or school fees, whereas larger stock represent more long-term savings.

From the perspective of relatively intensive or purely commercial livestock production systems, the types of livestock kept by pastoralists are sometimes viewed as "low producers" in terms of indicators such as milk production or reproductive performance. However, production should be viewed relative to the required outputs of the system and the cost of inputs. Livestock breeds in pastoralist areas have evolved over many hundreds of years and are generally well adapted to the local environment and disease risks. In part, this adaptation has been influenced by selective breeding by pastoralists to emphasize specific production characteristics such as milk production. Furthermore, seasonal variations in rainfall and grazing, and recurrent drought, mean that pastoralist livestock such as camels are able to produce milk in very dry conditions when other species have ceased production.

Income from livestock and other sources in Mieso-Mulu woreda

Income from livestock sales, renting of pack camels, and sale of ghee were the main types of income reported in the pastoralist areas of Shinile Zone for the year 1998 to 1999 (Table 4). Due to the contraband trade from Djibouti through the Zone, the renting of pack camels was an important source of income, representing 32 percent, 31 percent, and 48 percent of income for better-off, middle, and poor households respectively. No sources of income were reported for very poor households.



Renting of pack camels is an important source of income for pastoralists in Shinile Zone.

Other sources of income for pastoralist households were also associated with the close proximity of the Zone to Djibouti and Dire Dawa, and ties with Issa relatives there. For example, remittances from family members who had been sent to work in Djibouti, Dire Dawa, or other urban centres were reported at less than 10 percent of total income for poor and middle wealth groups, and between 10 to 20 percent for better-off households.

While the information above might apply to Mieso-Mulu *woreda*, reports by Mercy Corps and direct observation indicates the importance of other income generation activities such as sales of milk, charcoal, and firewood by those who can access Mieso town. At the time of writing this report, such access was limited to Hawiya communities due to conflict between Issa and Hawiya; this is described in more detail in section 3.1.1c.

Table 4. Contribution of livestock to annual household income in pastoralist areas, Shinile Zone

| Wealth group | Total annual income (EB) from livestock/total income (%) | | |
|--------------|--|------------------|--|
| | 1998-1999 | 2004-2005 | |
| Better-off | 6050/7000 (86%) | 9300/9300 (100%) | |
| Medium | 3978/4350 (91%) | 5800/6200 (94%) | |
| Poor | 1980/2200 (90%) | 2200/3950 (56%) | |

Source: DPPA/SCUK, 2002, 2008.

Notes: the data were collected from different pastoralist areas of Shinile Zone and therefore are not specific to Mieso-Mulu *woreda*. Sources of income were livestock sales, sale of ghee, and renting out of pack camels.

For the year 2004 to 2005, the DPPA/SCUK report noted a decline in income from renting of pack camels due to heightened government restrictions on the contraband trade. Whereas this income source accounted for between 31 and 48 percent of annual income in 1998 to 1999 (depending on wealth group), from 2004 to 2005 it was reported to be absent. During the field visits during the preparation of this report in March 2010, the use of camels as pack animals for movement of contraband goods was reported to be extensive and rental prices were increasing. Relative to 1998 to 1999, "...all households earned higher income from livestock sales as a result of rising livestock prices" (DPPA/SCUK, 2008).

The sources of income described above indicate that, to some extent, Issa communities in the *woreda* have already diversified their income. In common with other pastoralist areas, these activities can be categorised as "good" and "bad" diversification as follows (Little, 2009):

- "Good diversification" is closely linked to the pastoralist sector and keeps value added in the region; it includes milk and meat processing, tanning, trading, retail input suppliers, and local natural product gathering/processing. For Mieso-Mulu woreda, good or at least neutral diversification might include remittances. Officially, the use of pack camels to support the contraband trade is probably seen as a form of bad diversification by government, especially if smuggling of arms takes place, though for pastoralist themselves the practice represents a logical economic activity with high returns.
- "Weak or harmful diversification" may hurt the physical environment and social fabric of society and, in the long run, can undermine the main economic activity of pastoralism. For Mieso-Mulu woreda, it includes excessive charcoal production and firewood sales, and livestock raiding.

The strategy of sending family members to towns to seek employment would probably fall under "harmful" diversification in cases where people were exploited or abused by employers, or exposed to other risks. For example, girls sent to work as domestic servants in Djibouti might be at particular risk of physical or sexual abuse. Related to economic diversification in pastoralist areas is education and a deliberate strategy of educating family members with a view to either future income via remittances or greater capacity to engage in novel income–generating activities. Education is discussed further in sections 3.1.3b and 3.3.2.

b. Livestock herds and human foods

Background notes

An important characteristic of pastoralist systems is the direct, household-level consumption of livestock products and especially milk. Animal milk is a valuable food containing high-quality protein plus fat, vitamins, and minerals. A basic nutritional analysis of animal milk shows that two cups of milk per day (around 500 ml) can meet at least 50 percent of the recommended intake for many essential nutrients (Sadler et al., 2009). Therefore the ability of livestock to convert dryland vegetation into milk is one of the fundamental economic justifications for pastoralism. Milk is not only consumed fresh, but preserved in the form of ghee, butter, yogurt, and cheese.

A second important characteristic of pastoralist nutrition is the consumption of cereals and the use of livestock to sell or exchange for cereals. All pastoralists groups consume grain and therefore require markets to exchange livestock for grain. In terms of child nutrition and food security, it is important to note that grain alone is not easily digested by young children. However, when mixed with milk, cereal protein is more fully utilized for growth.

The high reliance of pastoralist groups on milk explains their good nutritional status during periods of high milk production, such as the main wet seasons. However, pastoralists—and especially their children—are very susceptible to periods of milk deficit, as occurs during long dry seasons or drought. This aspect of pastoralist nutrition explains seasonal and drought-related child malnutrition.

<u>Livestock herds and human foods in Mieso-Mulu</u> woreda

The DPPA/SCUK report for 2004 to 2005 for Shinile Zone noted a decline in household size, especially among middle-wealth and better-off households; middle-wealth households declined from 9 to 11 to 6 to 8 members, whereas better-off households declined from 15 to 17 to 8 to 12 members. This represented a 30 to 40 percent decrease in household size. This trend was explained by migration to towns or abroad, especially during bad years. One result is that it became relatively easier to feed remaining household members using livestock-derived foods. This is further evidence of livelihoods diversification in the area.

Table 5. Contribution of livestock to human food consumption in Shinile Zone, 1998 to 1999

| Wealth group | Food type | | | | |
|-----------------|--|----------------------------|--|--|--|
| | Cereals and sugar acquired through livestock sales | Milk from own livestock | Total food derived directly or indirectly from livestock | | |
| | 1998-99 2004-5 | 1998-99 2004-5 | 1998-99 2004-5 | | |
| Better-off | ~73% ~58% | ~25% ~42% | ~98% ~100% | | |
| Medium | ~65% ~60% | ~28% ~38% | ~93% ~98% | | |
| Poor | ~65% ~70% | ~15% ~12% | ~80% ~82% | | |

Source: SCUK/DPPA, 2002, 2008.

Notes: the data were collected from different pastoralist areas of Shinile Zone and therefore are not specific to Mieso-Mulu *woreda*. Deficits filled by gifts, relief food, wild foods, etc.

A health and nutrition survey from April to May 2009 noted that for Ayisha woreda: "The main sources of food for adults in the four weeks prior to the survey were rice (44%), sorghum (38%) and wheat (16%). The main source of food was cereal purchase (69%), own animal production (22%) and relief food (12%). The source of income in the last three months was mainly from the sale of livestock (86%), followed by sale of poles/charcoal (4%) and sale of relief food (9.5%). Cash source for the month ahead was predicted to be from the sale of livestock (82%, n=120). Access to markets is challenging in many parts of the woreda, with modal average distance to main market (on foot, return journey) ranges from 4 to 8 hours. The majority (81%) reported a round trip on foot of <8 hours, but for some remote communities sampled, >8 hr. walk was needed to make the return trip to the main market. A total of 64.5% (n=71) mothers reported feeding animal milk to their young child in the last 24 hours. It is suggested that the livelihood of communities in Ayisha is very dependent on the condition of their livestock for trade and home consumption of their produce (milk in particular)" (EHNRI/UNICEF/SCUS, 2009).

c. Markets and trade

Background notes

Data on sources of food and income in pastoralist households demonstrate that pastoralists are very dependent on markets, especially as a means to sell animals and acquire cereals. A vast body of research shows that certain livestock marketing behaviours are observed amongst all pastoral wealth groups, but this depends on seasonal conditions at the time of sale. In the wet seasons, there is herd growth and prices generally are good, and these conditions motivate sellers. However, pastoralists must attain sufficiently large herd sizes to allow them a comfortable margin to liquidate their animals through the market (e.g., Barrett et al., 2006). During dry seasons (or drought) prices are lower, herders often are pressed by immediate cash needs and thus do not have the luxury of timing sales according to periods when prices are most favourable. Here, the fundamental principle is to market what is considered surplus at a time when cash need arises, and price is not such a key factor in determining sales compared with wet season sales. Conversely, sales could be dictated by desperate situations when the decimation of livestock

becomes imminent, as in times of prolonged drought (Aklilu and Wekesa, 2001).

While certain behaviours hold true for all wealth groups, important differences exist in marketing behaviours by wealth status. Research shows that wealthier households use livestock markets more frequently to sell animals because these households have greater cash expenditures. For the poorer households, the key livelihoods strategy is herd growth because, in these environments, livestock provide the best economic returns relative to other available options.

From a cross-border perspective, many pastoralist ecosystems are cross-border systems and this includes marketing arrangements.

Markets and trade in Meiso-Mulu woreda and beyond

As Tables 4 and 5 indicate, pastoralists in Shinile Zone are highly dependent on markets to sell livestock to acquire cereals and other items. The 2002 report by DPPA/SCUK gives a good overview:

The main markets for the pastoral community in Shinile Zone are: Meisso, Beki, Dire Dawa and Djibouti. Other secondary markets are Bardode and Gadamaito (Garba Issa) in Shinile/Afar Zone border.

Mieso market is a relatively major market for livestock sale. Tuesday and Thursday are the main camel and cattle market day and shoats are sold every day. Traders from Addis Ababa and Djibouti buy all three species of livestock from Meisso market. Oromo farmers also buy young oxen for ploughing purposes. Traders are not able to buy livestock from Dire Dawa and take to Shinile Zone, as this is considered contraband. Traders therefore opt to buy livestock from Meisso and Beki for sale to other destinations including Djibouti. Beki market days are the same as Meisso market days. Beki market mainly sells cattle, shoats, camel and donkeys in that order. Traders buy livestock from this market and take them to Djibouti, Addis Ababa, and Dire Dawa. Dire Dawa is a major sheep and goat market but not for cattle and camels.

Djibouti market takes all three species – shoats, cattle and camels. The main source for Djibouti market is traders who purchase their livestock from Meisso, Beki, and other markets in the zone. These traders

have a double-advantage by selling in Djibouti—first from currency exchange (which favours traders who purchased in Ethiopian birr), and, second, by investing in relatively cheaper goods from Djibouti (mainly second-hand clothes, and foodstuffs and other goods) for exchange with other traders in Shinile Zone. These goods are considered contraband and therefore come through unofficial channels. When there is no ban on international livestock export, the main livestock market becomes Djibouti, which will absorb all species. However, this market is considered illegal and traders use unofficial means to export livestock. Main markets for foodstuffs and clothing are Meisso and Dire Dawa. The pastoralists mainly buy sorghum, sugar, tea, salt and other household goods, including clothing.

There is a significant traffic of unofficial cross-border trade going on in Shinile Zone. This trade is locally referred to as contraband – implying that it is

unlicensed by the government of Ethiopia. This is mainly trade in clothing — both used and new — but also non-food household items (known as bagaash), electronics and food items may be imported in this way. The main source for such goods is Djibouti, transiting through Dikhil in Djibouti, Abdulqadir and Harirat in Somalia, and the destination is in Shinile Zone, mainly Afdem district. A significant amount of these 'contraband' items are also transited through other parts of Shinile Zone, destined for neighbouring Regions/Zones of Ethiopia. Whether it is transshipped or expressly passed through the Shinile Zone, goods imported in this way would then get to several markets outside the zone.

Furthermore, Mieso market has been an import source of small ruminants for export abattoirs near to Addis Ababa (Hailemarium Teklewold et al., 2009), with agents from ELFORA and Mojo often present. In the past, exporters had also used



Young goats purchased by the ELFORA export company in Mieso market.

the railway to move animals to Djibouti, but at the time of this study in March 2010 the railway to Djibouti was not operating.

Metehara and Mieso markets are the two most important source markets for exportable livestock in the central Rift valley... Mieso is also a secondary market that sourced livestock from the surrounding primary livestock markets, such as Bedesa, Chiro, Hirna, Beroda, Asebot, Kora and other markets in the neighbouring Somali lowlands... Mieso is located in a strategic location for livestock export via Djibouti. Some live animal exporters like SHAG are using this opportunity especially for cattle and camels. SHAG has a collection/waiting centre at Mieso where it collects animals from Borena, Bale and Wello, conditions them, and passes them through the quarantine requirements and transports them to the port using railway (Getachew Legesse et al., 2008).

The regular use of the Mieso market by the Issa to sell livestock also had benefits for Oromo farmers, because the Issa were important buyers of cereals at the market. As noted in the PRA report of Mercy Corps in November 2009, the Mieso market had not been accessible to the Issa for some months, due to conflict with Oromo and Hawiya. Other markets for the Issa include Bikie, Afdem, and Gadamayito (Garba Issa) on the border of Shinile Zone and Afar Region. Due to their more distant location, Djibouti markets are a last resort.

Not well covered in marketing reports is the importance of Mieso market as a source of camels to other areas of Ethiopia, including the salt mines in Afar, the Raya plains, Minjar, and parts of Tigray (Yacob Aklilu, personal communication).

3.1.2 Natural assets

Natural assets are the natural resource stocks from which resources flow and services useful for livelihoods are derived.

a. Environment, rainfall, and mobility

Background notes

Pastoralists live in areas which are characterised by

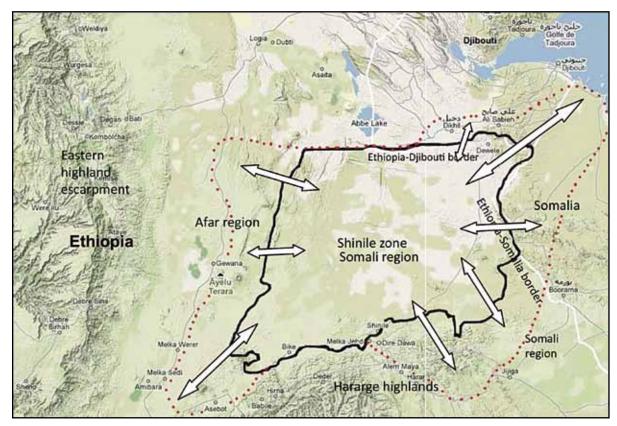
marked climatic variability, especially with respect to rainfall. This variability may be seasonal—as in the alternation between wet and dry seasons—or more serious, as in multi-year droughts. Livestock mobility is one of the most effective techniques African pastoralists have developed for both exploiting and coping with regular seasonal variability and droughts in these semi-arid and arid areas.

Although pastoralist mobility is often seen as a nonprogressive and unproductive way of life, economic analysis shows that herd movement is effective in preserving livestock production in variable climates. Research in this area dates back to the mid-1970s and produces consistent results using different methodologies in different areas (COMESA, 2009). Although the scientific evidence shows the efficiency of herd mobility in pastoral areas and the need for relatively large system boundaries to optimize land use, diminishing access to grazing areas is one of the most important long-term trends affecting pastoral livelihoods. Pastoralists face competition from farmers and agropastoralists, have their lands allocated to commercial rice, sugar, or cotton schemes, are displaced by large-scale dams or other development projects, are excluded from wildlife conservation areas, and, in some areas, are affected by bush encroachment that prevents grazing by livestock. These pressures on grazing land increase tensions and conflicts between groups, which in turn can limit access to communal grazing areas.

Environment and mobility in and around Mieso-Mulu woreda

Shinile Zone is characterised by three main types of rangeland, viz. closed savanna (bushland), open savanna (bush-grassland), and open grassland (Table 6). As in other *woredas* in Shinile Zone, Issa herders in Mieso-Mulu *woreda* practice seasonal movements of livestock to access water and grazing, including movements outside the *woreda* to other parts of Shinile Zone, to Afar Region, or to Djibouti or Somalia. Whereas the *woreda* is an administrative unit, a more useful way of looking at pastoralist movements is to understand the wider ecosystem boundaries that follow an environmental and economic logic, rather than administrative borders.

Figure 3. Dry season and drought-related movements of Issa pastoralists from Shinile Zone



Notes: the dotted red line approximates the boundaries of the most distant movements during dry seasons or drought. All borders shown are unofficial.

Issa dry season or drought movements with their livestock include

- movements westwards into Afar Region, especially towards the Awash river during dry periods, which are conflict-prone due to longstanding animosity between Afar and Issa over control of the Allighedi plain and Awash river (e.g., see Markakis, 2003);
- movements southwest towards Awash, again, towards the river and especially during drought;
- movements north into Djibouti, and further north and east as far as Zeila on the Somali coast;
- movements into Awbere and Jijiga woredas of Somali Region, moving as close as around 20 km from Jijiga town;
- at times of severe drought, movements south into Babile *woreda* of Oromiya, moving as far as Fafen.

These movements within the wider pastoral ecosystem are affected by factors such as

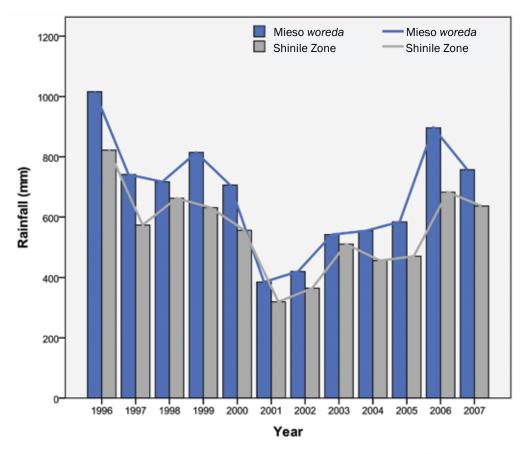
- rainfall, which determines the availability of water and vegetation both spatially and temporally. In general, lower rainfall within the overall system leads to greater movement, as water and vegetation are less available;
- access to specific types of graze or browse species, such as the salty bush species in the coastal areas of Somalia that are favoured for camels;
- access to minerals or salts for livestock;
- avoidance of areas infested by ticks or other parasites;
- trends in access to or use of grazing lands, such as
 - o allocation of grazing areas for crop production. This is a well-known trend in the *woreda* due to expansion of Oromo agropastoralism, and has been a

- longstanding and important cause of conflict; see section 3.2.3b;
- o bush or weed encroachment which reduces the availability and diversity of useful graze or browse species in a given area. This trend then increases the need to access alternative areas, thereby further contributing to conflict;
- an important set of policy and institutional arrangements such as those that
 - o legally or illegally assign land to one group of users in preference to another group;
 - o create a legal or policy vacuum or vagueness in terms of formal recognition of communal grazing areas and related user rights;
 - o enable or hinder movements across official boundaries, especially international borders;
 - o fail to prevent rangeland degradation, for

- example, by absence of policies on bush encroachment or through failure to enact policies;
- o attempt to provide basic services using fixed-point delivery systems that are not suited to pastoralist mobility;
- o can create incentives for certain actors to instigate conflict as means to sustain funding for conflict resolution activities.

The remainder of this section focuses on rainfall and rangeland issues, whereas policy and institutional issues are described in section 3.3. Annual rainfall estimates² for Mieso-Mulu *woreda* are shown in Figure 4. The average rainfall from 1996 to 2009 was 676 mm compared to a zonal average of 557 mm.

Figure 4. Annual rainfall in Mieso-Mulu woreda and Shinile Zone, 1996 to 2009



Source: FEWSNET (2010) rainfall estimates (RFE).

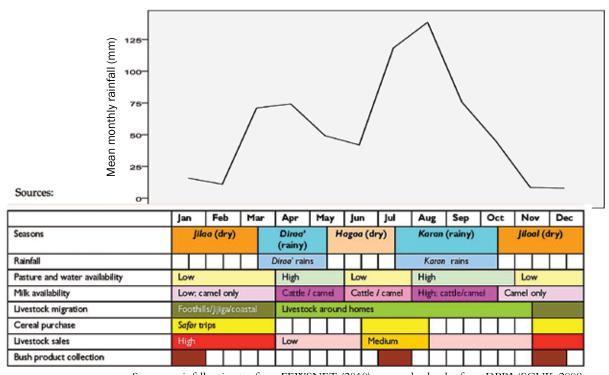
² Rainfall Estimation (RFE) imagery used by FEWSNET is an automated (computer-generated) product which uses Meteosat infrared data, rain gauge reports from the global telecommunications system, and microwave satellite observations within an algorithm to provide RFE in mm at an approximate horizontal resolution of 10 km. Further details are available from Herman et al., 1997.

Figure 4 indicates a series of relatively dry years in the *woreda* and Zone between 2001 and 2005, suggesting that mobility issues may have been particularly important during those years; no long-terms trends are evident, partly because the data available covers only a relatively short 12-year period. In both drier years and wetter years, movement is a normal event from around mid-November to the end of March. These movements were mainly to the foothills in the south of the Zone and into Oromiya Region, to

Jijiga Zone, and to sub-coastal areas in Somalia.

Within any given year there is marked seasonal variation in rainfall. Average seasonal rainfall patterns for the period 1996 to 2007 are shown in Figure 5, together with the seasonal calendar from the DPPA/SCUK baseline report, which used a reference year of 2004 to 2005. The main rainy season (*karan*) falls between July and October, and the lesser rains (*diraa*) fall between March and May.

Figure 5. Mean monthly rainfall in Mieso-Mulu woreda, 1996 to 2007, and seasonal calendar for Shinile pastoralist areas



Sources: rainfall estimates from FEWSNET (2010); seasonal calendar from DPPA/SCUK, 2008.

Note the agreement between the actual rainfall data in the graph (above) and the rainfall patterns shown on the seasonal calendar (below).

Seasonal variability in rainfall in Mieso-Mulu *woreda* over the 14-year period between 1996 and 2009 is shown in Figure 6, and reflects typical variations in pastoralist areas. For example, note the marked changes in rainfall over time during March, April, May (the *diraa* rainy season), and July, August, September, and October (the *karan* rainy season).

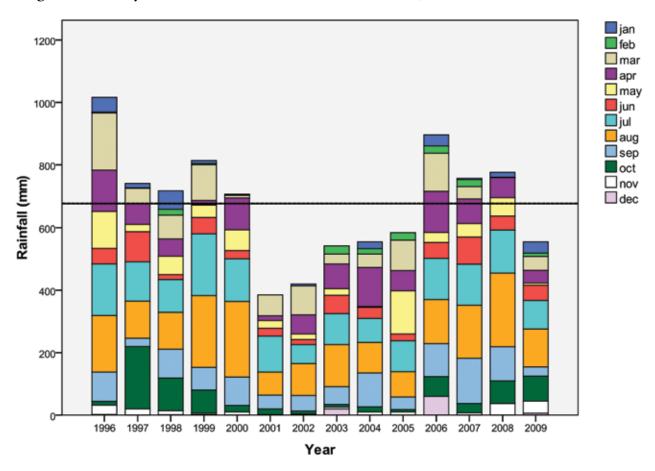
Given the importance of mobility for pastoral livestock production and the role of rainfall in determining movement, analysis of rainfall should

include the wider ecosystem within which Issa herders might have access. For example, good rainfall outside of Shinile Zone in neighbouring areas of Afar Region, Jijiga Zone in Somali Region, Djibouti, and northwest Somalia would, in theory, provide options for Issa to move into these areas should rainfall within the Zone fall below normal. Similarly, reduced rainfall in neighbouring areas would lead to reduced movement options and increased pressure on resources within the Zone.

In summary, the available rainfall data indicate that, in Ethiopia, the rainfall data from FEWSNET date back only to 1996, so long-term trends cannot be analyzed. The 14-year period from 1996 to 2009 shows a common pattern across Shinile Zone and neighbouring areas of Afar Region and Somali Region, viz. a relative decline in annual rainfall between 2001 and 2005, with an upwards trends towards pre-2001 levels

in 2006 and 2009. In 2009, rainfall was relatively poor and similar to 2004. In Mieso-Mulu *woreda*, there was typical variability in monthly rainfall from 1996 to 2009 (Figure 6). Data from areas adjacent to Shinile Zone, such as Awdal in Somalia (Somaliland), indicate that this variability tends to smooth out across longer time periods, from the 1920s onwards.

Figure 6. Monthly variation in rainfall in Mieso-Mulu woreda, 1996-2009



Source: FEWSNET (2010) rainfall estimates (RFE).

The reference line at 676 mm is the mean total rainfall in the *woreda* over the 14-year period, 1996 to 2009.

Livelihood zone maps produced by DPPA/SCUK (2008) indicate that agropastoralism by Oromo or Somali Hawiya communities accounts for around half of Mieso-Mulu woreda by land area, suggesting that approximately 50 percent of the woreda to the south is not accessible to Issa herders. At the same time, Oromo or Hawiya agropastoralists may try to access pastoralist grazing areas, especially during dry periods.

Grazing areas in neighbouring Afar Region to the west may also be difficult to access for Issa due to conflict. This situation explains why Issa mobility includes Jijiga Zone of Somali Region and sub-coastal areas of Somalia.

Superimposed on the rainfall and seasonal mobility patterns are issues of rangeland quality, and, in particular, bush and weed encroachment

in relatively higher and wetter closed savanna areas (Table 6). These changes indicate that not only is some Issa pastoralist land being allocated to crop production by non-Issa groups, but the remaining pastoralist land is being degraded by woody species and weeds.

The changes shown in Table 6 are supported by data on livestock herd composition, recording

changes over 60 years in Erer and Ayisha woredas. These data show a slow shift towards greater ownership of camels and goats, and ownership of fewer cattle. This was explained by declining grasslands and the capacity of browsers to make use of encroached bushland (Amaha Kassahun Gezahegn, 2006). These changes are discussed in more detail in section 3.2.3e.

Table 6. Rangeland types and trends in weed and bush encroachment in Erer and Ayisha woredas, Shinile Zone

| Ayisha woredas, Shinile Zone | | |
|-------------------------------|---|--|
| Type of rangeland | Description | |
| Closed savanna (bushland) | Rainfall 300-450mm; temperature 27-43°C; altitude 700-1200m; area 27,700km² or ~30% of Shinile Zone Over-cutting of useful tree species for charcoal production, firewood, and house construction by non-pastoral groups, plus clearing of trees for crop production "Acacia nubica and A. mellifera have been observed not only as encroaching woody plants but ever expanding across the closed savannas. Based on the current trend it could be anticipated that the woody plants would expand to most of the canopy covers of the closed savannas in Shinile Zone. Both species are found to be ecologically unfriendly causing a tremendous decline in the productivity of important grass species." | |
| Open savanna (bush-grassland) | Rainfall 300-350 mm; temperature 25-40°C; altitude 600-850 m; area 25,500 km² or ~30% of Shinile Zone Greater encroachment of weeds <i>Xanthium abyssinica</i> and <i>Parthenium hysterophorus</i> by 50% more and 20% more relative to open grassland <i>Acacia nubica</i> categorised as an aggressive woody encroacher, invading more than 50% of the open savanna "In general the open savannas are under serious threat from encroachment by unpalatable and noxious woody plantswhich may further lead from a partial to a total failure of the rangelands to produce enough forage for livestock." | |
| Open grassland | Rainfall 300-350 mm; temperature 27-42°C; altitude 500-700 m; area 36,000 km² or ~40% of Shinile Zone Dominated by grass species, especially perennials of the genera Panicum, Dactyloctenium, Eleucine, Cenchrus, Leptochloa, Sporobolus, Brachiaria, Cynodon, Cyperus, Phalaris, and Polypogon; around 49 grass species identified and 11 non-grass species Tribulus terrestris, Xanthium, and Parthenium encroaching more than 50% of the grazing lands and a threat to productivity | |
| | Source: adapted from Amaha Kassahun Cazaharn (2006) | |

Source: adapted from Amaha Kassahun Gezahegn (2006).

Notes: see Figure 1 for locations of Erer and Ayisha *woredas* relative to Mieso-Mulu *woreda*. The types of rangeland shift from closed savanna (bushland) in the higher south of the Zone to open grassland in the lower north of the Zone (also see Figure 2).

3.1.3 Human assets

Human assets represent the skills, knowledge, ability to labour, and good health that together enable people to pursue different livelihood strategies and achieve their livelihood objectives.

a. Indigenous skills and knowledge

Background notes

Pastoralists live in some of the harshest and risk-prone environments in the world, with severe limitations in the availability of water and vegetation. Their ability to adapt and survive in these areas is in part due to a very rich understanding of their environment and knowledge of water sources, plants, wildlife, and livestock. Pastoralists are skilled livestock herders and have developed extensive knowledge of livestock husbandry and health, including selective breeding strategies, prevention and treatment of diseases and parasites, and grazing practices based on the quality of vegetation and mineral sources in different areas. This knowledge is documented extensively in the anthropological, rangeland, and livestock husbandry literature on pastoralist areas and represents a vast intellectual resource.

In terms of food security crises in pastoralist areas due to drought, it is increasingly recognised that drought-response programmes should build on the strategies that pastoralists try to use during drought (e.g., Morton, 2006; MoARD, 2008). These strategies are based on the protection of a core breeding herd of mainly adult females to maximize herd growth and recovery after drought. Therefore, as drought progresses, pastoralists do not necessarily aim to maintain their entire herds and will sell off or even slaughter certain types of animals to focus resources on the core breeding stock. Drought strategies include splitting herds and moving to distant grazing areas (which can include the use of private trucks), purchase of livestock feed and water, and veterinary care. These expenses will be covered through sale of selected animals, assuming that traders are accessible and prices are perceived as reasonable.

Indigenous skills and knowledge in Mieso-Mulu woreda

Somali indigenous knowledge on livestock and rangeland is well documented for Somali Region, with accounts of ethnoveterinary knowledge dating back to the 1970s and with more recent descriptions specific to Shinile Zone also available (Amare Dejenu Tadele, 2004). Accounts include local livestock disease names, accurate descriptions of the clinical signs, and, in some cases, causes of disease. Issa knowledge on rangeland is described by Amaha Kassahun Gezahegn (2006) and fits well with accounts from Ethiopia on the ability of pastoralists to describe and track rangeland resources (e.g., Gufa Oba et al., 2000).

Although good knowledge of the landscape and its water and plant resources help the Issa to rear livestock, such knowledge probably also plays a role in conflict. The planning of livestock raids requires knowledge of neighbouring groups and their livestock and of routes for moving raided livestock as quickly as possible to "safe" areas or markets. Good local knowledge also allows the Issa to use their camels for moving contraband goods through the Zone, a practice which makes sense in terms of the income derived from the practice but which officially is not condoned.

b. Basic services—education

Background notes

Education is generally viewed as fundamental to human development, with an educated population contributing to economic growth and diversity, as well as leading to broader societal and cultural benefits. In pastoralist areas, the limited education facilities relate directly to the opportunities for "good" economic diversification in these areas and for wealth creation.

In contrast to indigenous knowledge and skills, formal education services in pastoralist areas are very poorly developed. Within a given country, pastoralist areas often rank lowest in terms of the physical presence of schools, school enrolment, literacy levels, and other indicators.

The provision of services in pastoralist areas is constrained by those factors which are typical of relatively large, remote areas with small human

populations (Swift et al., 1990). These situations increase the transaction costs of service provision due to the large physical distances involved, leading to a high cost per person serviced. Pastoralist mobility hinders access to conventional fixed-point schools, and formal mobile schooling has met with limited success. Professional workers such as teachers are also less willing to work in these areas due to their physical remoteness, limited facilities or infrastructure, and language and cultural issues. These constraints are exacerbated when conventional fixed-point delivery systems are used, which do not take account of pastoral mobility, and, therefore these systems often have limited accessibility for pastoralists.

Education in Mieso-Mulu woreda

Compared to other regions of Ethiopia, Somali Region has the second-lowest school enrolment rate of only 39 percent (Figure 7). Livelihoods studies in selected areas of the Region indicated that the literacy rate among pastoralists in Shinile *woreda* was only 13 percent; across the Region as a whole, 50 percent of pastoralists described education services as "very poor" and 25 percent described education as "poor" (Devereux, 2006).

The enrolment rate for Somali Region reflects the number of children registered at schools, rather than the number of children who actually attend school and receive education. Therefore the figure is higher than the actual level of formal educational attainment. This disparity was confirmed by informants in Mulu. Most of the schools in pastoralist areas of the woreda were located far from the majority of the population. Village schools in Mencha and Kulmiye kebeles, for example, were located a two- to four-hour walk away for many pastoralists. Naturally, those who live in villages with nearby schools find it easier to attend school, while those who live farther find it difficult, especially during times of conflict. Compounding the problem of distance is poor roads.

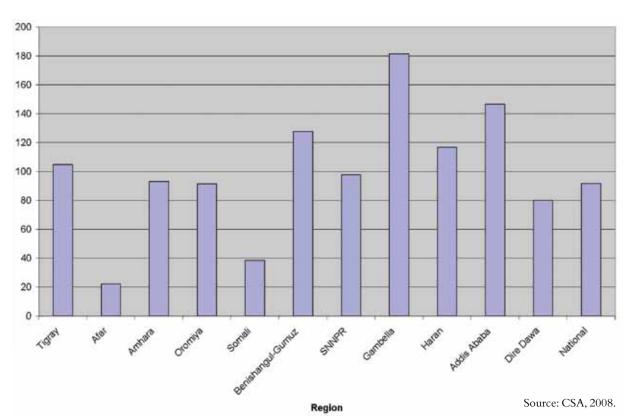


Figure 7. Gross school enrolment in Ethiopia by region, 2006 to 2007

Note: Enrolment for Tigray, Haran, Benishangul-Gumuz, Addis Ababa, and Gambella is more than one hundred percent due to the time difference between census and the data collection.

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Not surprisingly, the literacy rate in Meiso-Mulu *woreda* was reported to be very low. Informants from Kulmiye, Mencha, and Hulqadoba stated that

over 80 percent of their community did not read or write in any language. These estimates match data for Somali Region as a whole (Table 7).

| Table 7. Educational attainment in Somali Region | | | | | | |
|--|--|--|--|--|--|--|
| Area | Proportion of males with no educational attainment | Proportion of females with no educational attainment | | | | |
| Ethiopia national | 52.4% | 66.8% | | | | |
| Somali Region | 82.4% | 88.8% | | | | |

Source: Kipuri and Ridgewell (2008).

Information from other woredas in Shinile Zone showed a similar picture. For example, in Ayisha woreda in April to May 2009, "Primary school attendance was reportedly low. Out of the total 70% (n=102) households with a child/children aged 6 and above 6 years, only 24% (n=27) currently attend. Of those responding, 13 attend formal government schools, 12 attend Alternative Basic Education facilities (ABE) and 2 attend Koranic schools. The main reason for nonattendance was given as 'other' with reasons such as school does not have teachers, school is too far, child busy herding livestock given" (EHNRI/UNICEF/SCUS, 2009).

Since 2007, there have been attempts to improve education in Mieso-Mulu. For example, four primary schools were constructed in Kulmiye and Mencha *kebeles*. However, the physical construction of schools can obscure the problems of teacher availability and teaching quality. Due to the remoteness of pastoralist areas and limited

basic infrustructure and facilities, teachers (like other professionals) are less inclined to move to these areas, including Shinile Zone. A survey by the Ministry of Education in 2008 on Certified Primary Teachers for grades 1 to 4 showed a 90 percent certification rate for the Somali Region (MoE, 2008). However, this data overlooked the possibility that certified teachers did not actually teach in the Region after qualifying, as many certified teachers prefer to teach in urban towns like Jijiga, the regional capital.

Problems with teacher availablity were confirmed by the Meiso-Mulu *woreda* education office, where records showed that only fifty-nine teachers were teaching in the *woreda* in March 2010. To put this figure into context, Meiso-Mulu *woreda* has 44 *kebeles* divided among ten zonal (administrative) areas (*Woreda* Education Office).

Box 3. Food for teachers

A group of women in Hulqadoba *kebele*, Meiso-Mulu *woreda*, explained how they organised a community mobilization task force and raised enough money to build a school. Shukri, 25 years old and a mother of three, explained that "Once we built the school we needed to find teachers. We offered teachers from neighboring kebeles food and other commodities so they can come and teach our children. Unfortunately, after only a few months, the teachers found the area too remote and isolated, and the compensation not enough, so they simply left. Now we have no one to teach our children" (field interviews, March 2010).

Regarding the availability of higher-level teachers, teacher certification in the Somali Region falls significantly to only 4.2 percent for grades 5 to 8, the lowest level in the country (MoE, 2008). Partly in recognition of this problem, the government introduced mobile schools, which are essentially "lessons under a tree" or a tent. According to local informants, this is an attempt to bring education to remote areas without forcing teachers to relocate to these areas.

While the notes above indicate problems with the supply side of education, there are also issues around the demand for education from pastoralists in the Region and mixed attitudes among parents

towards educating children in general and girls in particular (Devereux, 2006). Clearly, some girls and boys do attend school, indicating that some parents support education when facilities are accessible and available. In contrast, many pastoralists are probably still skeptical about educating their children and do not see the value in education.

According to women in Mulu, more women see the benefit of educating their children than do men, although children in general are viewed as a source of labour. Boys help their fathers in herding livestock and other field-related work, while girls help their mothers with domestic



Although some girls attend school in Mulu, girls' enrolment in schools in Mieso-Mulu woreda is lower than boys and follows a similar pattern to other parts of Somali Region.

work. Women informants indicated that, although they would like to send their children to school, their husbands do not allow it, and that women do not have an independent source of income to pay for their children's education.

Gender disparity in school enrolment and literacy rates in many pastoralist areas is linked the highly patriarical nature of society. According to women in Mulu, they are often not allowed to own livestock or earn independent income from the sale of milk and other products.

Women bear responsibility for household work such as cooking, cleaning, collecting food and water, and raising children. From a young age, girls are expected to help their families until they get married which is usually at the young age of around thirteen years old. A young girl's marriage is a source of income for her family, via bride price (usually livestock) and infant girls as young as two years old are already 'spoken for', especially if from a good family. The suitor's family provides milk for her family so she can grow strong until she is old enough to get married. Therefore, a married girl is not only a source of income to her family but is also one less mouth to feed after she moves into her husband's household. Education is seen as disrupting this process, especially among fathers. (field interviews, March 2010)

Women estimated that about 90 percent of girls were not enrolled in the schools in their four kebeles. According to Ministry of Education reports, enrolment for girls in Somali Region is around 29 percent, compared to 39 percent for boys. Recognising this gender bias in education, the Somali regional government has established a school which doubles as a feeding centre in Meiso-Mulu woreda, with assistance from the World Food Programme. Children are provided with one meal a day and girls who have an attendence record of 80 percent or more per semester are rewarded with cooking oil. This approach has encouraged more families to send their children to school, and the enrolment rate for girls is particularly high at this school (personal communication, Mohammad Haji, Mercy Corps, March 2010). However, it is not known how long these incentives will remain in place or what will happen after they are withdrawn.

c. Basic health services

Background notes

In common with formal education facilities, health services in pastoralist areas are extremely weak. Even the most basic, preventive primary health care programmes are poorly delivered in these areas relative to other parts of a given country.

The main causes of morbidity and mortality among pastoralists are similar to those affecting other poor communities in tropical areas, viz. malaria, diarrhoea, pneumonia, measles, and neonatal tetanus. While health service provision is a priority development issue, in humanitarian crises in pastoralist areas, the limitations of health care become even more apparent. Not least, high human mortality during drought is often associated with disease outbreaks and congregations of people around diminishing, and contaminated, water sources. In the Somali Region, measles outbreaks were also an important cause of death in children during drought and famine in 2000; 77 percent of deaths occurred before any major relief operations began (Salama et al., 2001).

Generally in the Horn of Africa, a substantial proportion of pastoralist children remain at risk of death due to preventable diseases, and this risk is heightened during drought or large-scale displacement due to conflict. This situation helps to explain the very high vulnerability of pastoralist communities in the region.

<u>Health services in Mieso-Mulu woreda and Shinile</u> <u>Zone</u>

Although the government of Ethiopia has made significant changes in the provision of primary health services in the country as a whole, pastoralist areas like the Somali Region lag behind. Table 8 provides figures for physical infrastructure, but more useful are the utilization and coverage figures in Table 9. For example, nationally Somali Region has the lowest potential service coverage at 43 percent and the lowest outpatient visits per capita per year at 0.09 (Table 9). These figures reflect the inadequacy of fixed-point service delivery approaches to reach small, mobile populations in large geographical areas.

According to 2003/4 data from the Ministry of Health, the doctor/patient ratio is 1:79,019 in Somali Region, which is more than eight times

below the WHO standard. The nurse/patient ratio was 1:10,673, below half the WHO standard of 1:5,000 (FMOH, 2004).

Table 8. Regional distributions of health facilities and ratio to population, 2003 to 2004

| Region | Number of people per hospital | Number of people per health centre | Number of people per health post | Number of people per private clinic |
|--------------------|-------------------------------------|--|--|---|
| Tigray | 342,750 | 128,531 | 25,079 | 137,100 |
| Afar | 665,000 | 147,778 | 22,542 | 443,333 |
| Amhara | 1,067,235 | 157,765 | 16,084 | 103,674 |
| Oromiya | 865,448 | 150,287 | 57,041 | 51,012 |
| Somali | 684,833 | 241,706 | 42,361 | 2,054,500 |
| Ben-Gumz | 297,000 | 59,400 | 9,900 | 59,400 |
| SNNPR ³ | 880,313 | 110,906 | 17,584 | 91,461 |
| Gambella | 234,000 | 29,250 | 5,571 | 33,429 |
| Harari | 37,000 | 92,500 | 26,429 | 9,737 |
| Addis Ababa | 93,500 | 103,889 | 35,962 | 7,248 |
| Dire Dawa | 123,333 | 74,000 | 16,087 | 18,500 |
| National | 564,016 | 136,929 | 24,514 | 54,708 |

Source: CSA and ORC Macro, 2006.

Table 9. Estimated health service coverage and utilization by region, 2003 to 2004

| Region | Population | Potential service coverage (%) | Outpatient visits per capita |
|-------------|---------------|--------------------------------|---------------------------------|
| Tigray | 4,113,000 | 83.4 | 0.77 |
| Afar | 1,330,000 | 72.9 | 0.75 |
| Amhara | 18,143,000 | 46.9 | 0.37 |
| Oromiya | 25,098,000 | 60.9 | 0.38 |
| Somali | 4,109,000 | 43.6 | 0.09 |
| Ben-Gumz | 594,000 | 198.7 | 0.69 |
| SNNPR | 14,085,000 | 75.6 | 0.15 |
| Gambella | 234,000 | 226.5* | 0.10* |
| Harari | 185,000 | 148.7 | 0.84 |
| Addis Ababa | 2,805,000 | 86.5 | 0.47 |
| Dire Dawa | 370,000 | 100 | 0.34 |
| National | 71,066,000.00 | 64.0 | 0.36 |

Source: CSA and ORC Macro, 2006.

³ Southern Nations, Nationalities, and People's Region.

More detailed information on health service accessibility is provided by a livelihoods survey that included selected pastoral areas (Devereux, 2006). For example, while 96 percent of urban respondents reported a health clinic in their community and within 1 km distance, only 12 percent of pastoralists reported a health clinic in their community and at a nearest average distance of 36 km. Similarly, in pastoral areas only 24.4 percent of children were immunized compared with 49.4 percent of children in urban areas. In other districts of the Region, child immunization coverage varied from 17.8 to 34 percent (EHNRI/UNICEF/SCUS, 2009). A survey by Save the Children UK in Shinile and Dembel woredas in 2005 to 2006 reported that "Vaccination coverage was poor, particularly for BCG (5%) and health services in general are lacking in the communities surveyed. Consequently, long distances have to be covered to reach functioning facilities" (Mayer, 2007).

In common with education, there were also gender differences in health care and health outcomes. For example, in the Somali Region, a male infant had a 22 percent higher chance of surviving to the age of five than a female infant, and crude life expectancy for pastoralist men was 41 years compared with 33 years for pastoralist women (Devereux, 2006). These findings on female mortality agree with much earlier studies conducted in pastoralist areas of Somalia (Aden et al., 1997).

Reviewing health services in the Somali Region in 2005, Hagmann (2005a) noted that "A number of new health clinics have been constructed and rehabilitated in recent years, some with support from international donors. However, few of them are operational, as qualified medical personnel are in short supply and most districts lack the necessary budget for recurrent costs. While the construction of health facilities involves awarding contracts, there seems to be no incentive to operate these facilities once they are built. Statistically, there is one health centre for 359,840 people and one health station for 45,549 people in region 5."

In common with educational facilities, the quality and availability of health services in pastoralist

areas of Shinile Zone are very poor. In Shinile woreda, 100 percent of pastoralist respondents reported no health clinic in their community and an average distance of 33 km to the nearest clinic; only 27.5 percent of children were reported to be immunized (Devereux, 2006).

Further information on health issues and services for Shinile Zone is available from the health and nutrition survey of April to May 2009, which included Ayisha woreda (EHNRI/UNICEF/SCUS, 2009). The survey included questions to mothers about health-seeking practices in response to serious illnesses in children during the previous two weeks. For reported cases of diarrhoea, fever, and cough, mothers used government health facilities in only 31 percent, 12.5 percent, and 10 percent of cases respectively.

Meiso-Mulu *woreda* has eight health posts and one health centre. Although two health centres are under construction, this still leaves a population of 91,435 with only eleven basic health facilities (source: *Woreda* Health Office). Again, the presence of health infrastructure obscures accessibility issues due to the physical distance between communities and facilities, the mobility of communities, and poor roads and public transport.

Due to the low utilization rate and the distances of health facilities from most kebeles, the government introduced mobile health clinics in Bootiji, Gedugas, and Mencha kebeles. However, according to informants from these kebeles, the mobile clinics were unpredictable or unreliable, with many people having no prior knowledge about the arrival of the clinics in their areas until it was too late. For example, an informant in Mulu explained that "When (the mobile clinics) are in our areas, they only stay for one hour. For most of us it takes us more than an hour to get to the clinics or to get back from where we were. By the time we get there, the mobile clinics are gone and we do not know when they will be back." Another informant added, "Even if we hear the mobile clinics are coming and we wait for them (at the said location), sometimes they do not even show up and we simply return home" (field interviews, March 2010).

d. Maternal health care and child vaccination

According to UNICEF statistics, the under-5 mortality rate in Ethiopia for 2008 was 109 deaths per 1000 live births. This figure meant that Ethiopia was ranked twenty-seventh out of 193 countries globally in terms of high child mortality. For Somali Region, the comparable under-5 mortality rate is 179 deaths per 1000 live births. This figure is difficult to verify; if true, it places the situation in Somali Region closer to the bottom of the world rankings. If Somali Region were a country, it would be ranked ninth globally in terms of high child mortality.

Universal immunization of children against six preventable diseases (tuberculosis, diphtheria, whooping cough, tetanus, polio, and measles) is viewed by international health agencies as crucial to reducing infant and child mortality. According to WHO, children are considered fully vaccinated when they have received vaccination against

tuberculosis (BCG), three doses each of the DPT and polio vaccines, and a measles vaccination by the age of 12 months. However, a survey in 2005 showed that in Somali Region only 2.8 percent of children aged 12 to 23 months had been fully vaccinated and 78 percent of children had received no vaccination at all (Table 10).

In terms of future expectations for child vaccination, the Mieso-Mulu *Woreda* Health Bureau target for providing full immunization for children ages 12 to 23 months is only 33 percent coverage. In other words, the target was to leave 67 percent of infants without full immunization against preventable diseases. The measles vaccination target is 41 percent, although WHO recommends at least 90 percent coverage of successive birth cohorts for measles eradication. Therefore the objectives of measles vaccination in the *woreda* are unclear. If the intention is to reduce measles morbidity or mortality, no baseline or target figures were available.

Table 10. Child vaccination coverage in Ethiopia by region for children aged 12 to 23 months, 2005

| Region Proportion (%) of children receiving full vaccination course | | | | | Proportion (%) of children with no | |
|---|------|------|-------|---------|------------------------------------|-------------|
| | BCG | DPT | Polio | Measles | All diseases | vaccination |
| Tigray | 77.4 | 51.6 | 56.6 | 63.3 | 32.9 | 7.2 |
| Afar | 27.6 | 2.8 | 19.9 | 8.1 | 0.6 | 38.8 |
| Amhara | 62.3 | 31.5 | 45.6 | 34.8 | 17.1 | 20.6 |
| Oromiya | 57.8 | 28.5 | 41.1 | 29.4 | 20.2 | 25.5 |
| Somali | 17.1 | 5.6 | 10.2 | 6.4 | 2.8 | 78.0 |
| Benshangul | 53.5 | 30.7 | 36.7 | 33.4 | 18.5 | 28.5 |
| SNNPR | 64.2 | 33.2 | 50.2 | 37.7 | 20.3 | 21.7 |
| Gambella | 49.3 | 20.3 | 41.4 | 30.7 | 15.9 | 31.9 |
| Harari | 67.4 | 45.8 | 52 | 39.9 | 34.9 | 23.7 |
| Addis Ababa | 93.5 | 83.8 | 85.5 | 78.8 | 69.9 | 2.3 |
| Dire Dawa | 75.4 | 61.4 | 65.1 | 55.7 | 43.4 | 18.2 |

Source: CSA and ORC Macro, 2006.

⁴ http://www.unicef.org/rightsite/sowc/statistics.php.

UNICEF statistics indicate that the maternal mortality ratio (MMR) for Ethiopia in 2005 was 720 deaths per 100,000 live births. No specific MMR data for Somali Region or areas within it could be found, although the survey by Devereux (2006) provides important insights into the problems of maternal care. Combined male and female data on causes of mortality in pastoralist areas of the survey showed that death during childbirth accounted for a massive 21 percent of all deaths. Furthermore, and especially relevant to the aims of this study, this figure was more than ten times the proportion of deaths attributed to conflict (which caused 2 percent of deaths).

Access to maternal health care in Somali Region is illustrated in Table 11, with an estimated 92 percent of women having no assistance from a recognised care giver during birth. According to the Meiso-Mulu *Woreda* Health Office, out of 2,626 eligible pregnant mothers in March 2010, none had been tested for Prevention of Mother-to-Child Transmission diseases and none had received tetanus toxoid injections, which are given during pregnancy for the prevention of neonatal tetanus, an important cause of death among infants.

Table 11. Proportion (%) of women who had a live birth in the previous five years and received antenatal care for the most recent birth, Ethiopia, 2005

| Region | Health professional | Trained traditional birth attendant | Traditional birth attendant/other | No assistance |
|-------------|------------------------|---|-----------------------------------|---------------|
| Tigray | 35.3 | 0.4 | 1.8 | 62.5 |
| Afar | 15.0 | 1.7 | 0.3 | 83.0 |
| Amhara | 26.5 | 0.2 | 0.3 | 73.1 |
| Oromiya | 24.8 | 0.2 | 0.4 | 74.5 |
| Somali | 7.4 | 0.0 | 0.4 | 92.0 |
| Benshangul | 24.5 | 0.2 | 0.2 | 74.3 |
| SNNPR | 30.3 | 0.4 | 0.7 | 68.5 |
| Gambella | 36.6 | 0.6 | 1.6 | 61.0 |
| Harari | 40.7 | 0.9 | 0.4 | 58.0 |
| Addis Ababa | 88.3 | 0.3 | 0.0 | 11.5 |
| Dire Dawa | 52.9 | 0.0 | 1.4 | 45.7 |

Source: Somali Regional State Health Bureau, 2010.

The federal government Health Service Extension Programme (HSEP) produces sixteen preventive, promotional, and basic curative health services, which include disease prevention and control for tuberculosis, malaria, and HIV/AIDS, family health services like maternal and child health care and immunization, and general health awareness guidelines in water supply safety measures and food hygiene. In many parts of the country, the programme has been applied with training and deployment of Health Extension Workers (HEWs), whose main responsibility is to deliver

the HSEP in rural areas where health service access is very poor. Packages with health guidelines have been developed and printed, and at the time of this study were available in two languages (Amharic and English), with distribution to HEW technical and vocational training institutions. Despite these efforts, in Somali Region only 1 percent of households had received these packages and graduated from the accompanying "Health Extension Package Training" (source: *Woreda* Health Office). No household in Meiso-Mulu *woreda* had received

the package and the accompanying training. Under the *Woreda* Health Bureau's "New Plan," 5,328 households were identified to receive the package and training (Somali Regional State Health Bureau, 2010). Women from four *kebeles* in Meiso-Mulu *woreda* all said they have not received any package or training but "We know that there are these sixteen health related issues which are important for us and our children, especially during pregnancy. However, to date, no one has told us anything about them and we do not know what we should and shouldn't do especially when we are pregnant (field interviews, March 2010).

As outlined previously, health service provision in pastoralist areas of Ethiopia is hampered by mobility of communities in large geographical areas, remoteness, limited infrastructure, and the associated relatively high transaction costs of conventional fixed-point delivery systems. In Somali Region, there is also a 65 percent budget deficit at the level of regional government (CSA and ORC Macro, 2006).

In common with education, health care challenges are characterised by supply and demand issues, and important gender disparities in terms of access to health facilities. Cultural norms are such that men may prevent women and girls from travelling alone to health centres, especially if health staff are all men. Similarly, when health access for women incurs costs, men may refuse to pay for transport, health costs, or the cost of staying near the health facility during treatment. Women also feel pressured in terms of their domestic duties and the time needed to visit health centres. Women from Hulgadoba, Gedugas, Bootijji, and Mencha kebeles in Meiso-Mulu woreda indicated that they did not have time to go to health centres unless they were on the "verge of death." They explained that "We simply have too much work to do and it takes a whole day to go and come back from a health centre" and "Even if I want to go to a clinic, my husband does not give me money or he is too busy with the livestock so I cannot go" (field interviews, March 2010). Conflict exacerbates the accessibility problem, with increased risk of injury or abuse of women and girls wanting to access health services.

In Somalia in the 1980s, gender disparities in mortality in rural areas were attributed by Somali

researchers to female discrimination (Aden et al., 1997). This discrimination was explained by reference to the traditional system of blood money (*dia*) compensation in Somali areas, which valued the life of a man at 100 camels but a woman at only 50 camels. In 2006, the survey by Devereux reported compensation payments by 14 percent of surveyed households, although the practice was not reported in Shinile *woreda*.

3.1.4 Social assets

The social resources—networks, membership of groups, relationships of trust, access to wider institutions of society—upon which people draw in pursuit of livelihoods; the exchanges that facilitate cooperation, reduce transaction costs, and may provide the basis for informal safety nets amongst the poor.

Background notes

The livestock and natural resource management practices used by pastoralists require well-organised collective action, especially in the harsh environments in which they live. Pastoralists organise themselves to split herds and move animals to distant grazing areas, to control access to communal grazing areas, to manage the watering of livestock, and to provide security. Partly for these reasons, pastoralists have very strong social organisations and leadership.

The social assets of pastoralist groups also include the indigenous social support systems which, to varying degrees, are intended to assist poorer members of the community. These systems may target households with relatively few animals or those which have suddenly lost animals due to disease, flooding, or other causes. Female-headed households may also be targeted. These local systems are based on loans or gifts of livestock or livestock products and, in Muslim pastoralist areas, the giving of alms includes richer households donating livestock to poorer households. These systems are often elaborate and complex, and include the buusaa gonofa' social safety net of the Borana community in Ethiopia (Hassen, 2009) and systems of restocking in Somali areas (Catley, 1999).

Although often described as traditional, the social organisation and social support systems of

pastoralist groups are not static. In some areas, traditional leadership faces pressures from government administrations or disaffected youths, while local safety nets can be weakened when overall livestock holdings are reduced due to major disease outbreaks, drought, or conflict. Another important societal weakness, common to many pastoralist groups, is the low status of women (Kipuri and Ridgewell, 2008). Social-cultural discrimination against women and girls is evident through statistics such as their relatively high mortality and poor access to health care (e.g., Devereux, 2006), limited education, and lower level of control or ownership of financial assets relative to men.

Social capital in Mieso-Mulu woreda

An important aspect of social capital among Somali pastoralists is the fundamental link between traditional social organisation and conflict, and the need for collective action for tasks such as raiding. Somali pastoralist society is patriarchal and clan-based, with personal identity and allegiances dictated by kinship, not by physical location or ties to land. This arrangement fits with mobility and changing territorial boundaries over time. Historically, the main Somali clans took occupation of land and related water and grazing resources by force, and these areas now represent the main "home territories" of the clans. One of the strongest, if not the strongest, social units are subdivisions of the clan, which are sometimes called dia-paying groups. The members of these groups are related and share responsibility for compensation payments (dia) in the event that one of their groups kills or injures a member of another dia-paying group. Such payments are usually in the form of livestock and traditionally involve camels. Should dia payments not be agreed or delivered, the close relatives of the murdered or injured person, i.e., members of that person's dia-paying group, may take retaliatory action. In summary, the diapaying group is a social unit that evolved as a result of the frequent tensions, violence, and death in Somali pastoralist areas. All Somali men are members of a dia-paying group by birth, and the group represents their primary social identity on a day-to-day basis. At any one time, numerous compensations are being negotiated, with negotiations often being protracted over many

years. In some cases, violent responses to perceived nonsettlement take place decades after a group member was killed or injured.

The traditional system of compensation payments within Somali pastoralist areas indicates that localized conflicts between sub-clans or individuals are dealt with internally, albeit sometimes over many years, and in a somewhat non-linear manner. For conflicts between Somalis and non-Somalis, traditional peace-making processes may depend, at least in part, on the extent to which compensation can be agreed upon. In the case of Issa-Afar conflicts, "There is no traditional conflict resolution mechanism that binds the two groups" (Markakis, 2003), and this partly explains the protracted animosity between these groups. In terms of the risk of conflict, intra-clan Somali conflicts and raiding carries the clear risk for the aggressors that deaths or injuries caused by them will incur compensation (dia) payments in the form of livestock. These risks are far lower when aggression is directly towards non-Somali groups because no automatic compensation process kicks in. Therefore there are incentives for the Issa to direct planned conflict outwards, towards the Oromo and Afar, and especially if formal mechanisms to control conflict, such as local police and judiciary, are weak.

Following this type of analysis, local conflict between Issa and non-Issa groups is primarily resource-based and takes place in the absence of formal systems to agree upon and enact user rights to land and water and includes, when needed, the use of police and judiciary to maintain the rule of law. Formal user rights favour one group over another if cultivation is perceived as a productive use of land compared to pastoralism. Unfortunately, more recent conflicts have arisen due to disputes over regional boundaries, which are defined ethnically. This creates a situation where a cause of conflict can be ill-defined administrative boundaries, but with government having responsibility for delineating areas along ethnic lines. These issues are discussed further in section 3.2.3b.

In summary, the traditional social organisation of Somali pastoralists and their compensation mechanisms around violence have evolved primarily to deal with internal Somali-Somali conflicts and a life on harsh rangelands with variable, uncertain resources. These systems deal less well with non-Somali actors and, in some circumstances, may provide incentives to direct aggression towards groups where no clear compensatory mechanisms are in place.

Other forms of social capital include the numerous forms of loans, gifts, and other assistance in Somali communities. These are summarized in Box 4 and are common, everyday transactions, but with certain types of support increasing during or after crises such as drought.

Box 4. Informal transfers in Somali Region

Redistribution of food: food or grain gifts; *ciyi* (distribution of meat to neighbours after a slaughter); *Allah bari* or *sab* (sacrifice made to feed the poor); *awino* (cooking food for the hungry); *qharan* (contribution of food or animals to relatives); zero-interest grain loans

Redistribution of cash: remittances (from relatives living temporarily or permanently abroad, especially in the Middle East, Europe, and North America); *dhibaad* (cash gift to married daughters); other cash gifts (e.g., *sadaqa*); zero-interest cash loans

Redistribution of productive resources: free use of pack animals (camels or donkeys); *irmaansi* or *maal* (donation or loan of milk animals); free use of oxen or plough; *xoologoyn* (restocking of poorer relatives); *kaalo* (gift of livestock to newlyweds); *goob* (watering livestock or tilling a farm for a day's food); free labour; seed loans or gifts

Source: Devereux, 2006.

In the Devereux survey in Somali Region (2006), 73 percent of these informal transfers in pastoralist areas involved livestock: distribution of slaughtered meat; a donation or loan of milk animals; sacrifice to feed the poor; loan of pack animals (camel, donkey); restocking poorer relatives; gift of livestock to newlyweds; free use of oxen or plough; and *zakat*.

While most types of informal transfer might be termed "traditional" and are common among different pastoralist groups in the Horn, zakat is a compulsory contribution according to Islam. For Somali pastoralists, it involves the collection of livestock from wealthier households and redistribution to poorer households, with minimum livestock ownership of around 5 camels, 30 cattle, and 40 sheep and goats required before a household is required to pay zakat. According to Devereux (2006), payment and receipts of zakat are therefore proxy indicators of wealth and poverty. In Shinile woreda, around 15 percent of households were reported to have never paid zakat and a further 10 percent of households had not paid zakat during the previous four years (2002 to 2006).

As discussed later in this report, there is evidence in Shinile Zone of changing livestock ownership by wealth group over time (Table 14). While wealthier and middle-wealth groups maintain (or sometimes even increase) their livestock assets, poor households lose assets and so become poorer. This trend indicates that traditional systems of informal transfers are not sufficient to prevent asset loss among poorer households. Population growth is also a factor (see section 3.2.3a) and creates limitations in the extent to which the livestock assets of the better-off might support an apparently increasing population of poorer people.

3.1.5 Physical assets

The basic infrastructure and producer goods needed to support livelihoods, including changes to the physical environment that help people to meet their basic needs and to be more productive, and the tools and equipment that people use to function more productively.

Background notes

Generally, pastoralist communities have very

limited access to, or ownership of, physical capital. This situation is partly an outcome of the pastoralist way of life, where mobility can require the transportation of all possessions; this is easier if possessions are minimal. However, weak facilities and infrastructure such as schools (section 3.1.3b), health clinics (section 3.1.3c), roads, and communications reflect the high transaction costs of service delivery per person, including public safety, and the political isolation of many pastoralist areas. Political capital is discussed further below, but limits the capacity of these communities to make claims on government for the kinds of infrastructure and services that are present in relatively highly populated non-pastoral areas.

Very weak road networks in pastoralist areas are not only a development problem, but also hinder options in terms of drought management and response. Relief programmes incur high transaction costs when attempting to deliver drought assistance to these areas, meaning that for a given budget, fewer people or fewer areas can be reached. For programmes that aim to work with the private sector, traders or input suppliers find pastoralist areas unattractive even if aid programmes subsidize transport costs.

Most pastoralist communities probably obtain water from hand-dug wells, bore-holes, seasonal rivers and ponds, and, in some areas, small-scale water storage facilities such as concrete-lined berkads in Somali areas. The general situation in Somali Region in 2004 was outlined by Hagmann (2005a), who compared the "dramatic expansion of telecommunications and internet technology since the mid-1990s" in Somalia with neighbouring Somalia Region in Ethiopia and proposed that "Ethiopia's Somali hinterland remains digitally disconnected with only five out of 70 towns possessing automatic telephone communication. The extension of the mobile phone network to Jijiga in mid-2004 hardly measures up to the gigantic task of providing basic communication to region 5 (Somali Region). According to data provided by the region's Investment Office, the region's road network currently exists of 1,629 km of all weather roads and 2,844 km of dry weather roads. As a result of the expanding distribution network of the booming khat trade the off-road network is constantly growing."

In common with most other basic services and

facilities, electricity access is lower in pastoralist areas compared to other rural areas. Wood is the most common source of fuel for cooking, lighting, and heating.

Physical assets in Mieso-Mulu woreda

Roads, communications, clean water supply, and electricity are very poorly developed in the *woreda*. The quality of the road network was shown by the planning process used for this study, in which Mercy Corps transported informants to Mulu town for interviews. A round-trip of around 80 km took eight hours of driving time in a 4WD vehicle. The poor condition of the roads was made more apparent by the presence of good asphalt main roads around the edge of Shinile Zone, but then the difficulties of moving off these roads into the Zone itself.

Regarding access to safe water, there was no clean piped water in the Zone or woreda. According to a health and nutrition survey in Ayisha, "Access to safe water is very low. From community discussions, response to source of water for human consumption is listed as follows: other (25%), pond (21%), borehole (21%), hand dug well (12.5%), river (10%), pump (8%), covered berkad (2%). The mean distance is nearly 5 hours round trip. Water scarcity and in particular safe water for human consumption, is a core problem affecting both the human health and the livelihood of these pastoral communities" (EHNRI/ UNICEF/SCUS, 2009). Indirect measures of the quality of water supply and sanitation are available. The same survey in Somali Region reported that between 25 and 53 percent of child deaths were attributed to diarrhoea in the previous 90-day recall period (EHNRI/ UNICEF/SCUS, 2009). During drought, child mortality due to diarrhoeal diseases is a special concern as population congregate around diminishing and contaminated water sources. While boreholes might improve water quality, they can also disrupt traditional grazing patterns and become a source of conflict.

3.1.6 Political assets

Background notes

Pastoralist networks and other social relations have been developed to encourage survival in

dryland environments where people are highly dependent on variable resources. For this reason, social relationships tend to be strongest in terms of how groups organise themselves internally and in the arrangements that they make with neighbouring groups. They tend to be weakest in terms of pastoralists' ability to deal with government and those other institutions outside pastoral society that have a more distant but nonetheless crucial bearing on their welfare. This can be described as limited political capital, which is reflected in pastoralists' general marginalisation within countries. The political representation of pastoralists partly reflects the history of governance in the countries concerned, and here there is considerable variation in past and current political structures, ideologies, and types of democracy in those countries with substantial pastoralist populations. Similarly, the status of civil society organisations, media, and academic institutions varies by country, with different degrees of freedom permitted either formally or informally.

Political representation in Mieso-Mulu woreda

The clan is the most important political unit in Somali areas. Therefore traditional social mechanisms that aim to protect or build clan resources such as livestock, grazing resources, water, or trade points have direct political implications. Furthermore, traditional leaders are also political leaders or have a role in nominating political representatives. In common with social and political leadership elsewhere, the integrity of Somali leadership is variable, with some individuals using positions of status for personal gain.

Although ethnic Somalis are part of Somali Region, the Issa in Shinile Zone are part of the wider Issa clan, which is often described as having some distinctive features in terms of culture and social organisation relative to other clans. For example, the Issa have a single traditional leader, the *Uqaz*, who leads Issa in Ethiopia, Djibouti, and Somalia and, for pastoralists, has authority that supersedes that of any official political leadership. The Issa are represented in terms of senior positions in the Somali Region government (e.g., some line bureau heads and deputy heads) and federal government (e.g., the

current Minister of Tourism). In terms of pastoralist representation at the parliamentary level, Ethiopia has a Pastoral Affairs Standing Committee; the background and capacity of this group is described by Morton et al. (2007). Further information on topics such as election processes and membership of political parties is available in Hagmann (2005b).

3.2 Vulnerability context

Vulnerability is normally defined as the likelihood that group or individual welfare will decline (i.e., fall below a certain benchmark of welfare) due to exposure to a certain condition or event, such as a shock.

As explained in section 3.1.1 on financial capital, livestock are the main economic asset of pastoralists and wealth status depends mainly on livestock holdings. However, although pastoralists may be relatively asset-rich (compared to say, settled farmers in the same country), they are also highly vulnerable to herd (asset) losses and food insecurity. This vulnerability relates to the risk environment of rainfall variability, conflict and governance issues, weak services and infrastructure, limited economic options other than livestock production, trends in population growth, environmental changes, and displacement and reduced access to grazing lands (Table 2). Looking specifically at Mieso-Mulu woreda and Issa pastoralists, key aspects of vulnerability are summarized in Table 12.

3.2.1 Seasonality

a. Seasonality of production and market patterns

Dryland areas in the Horn of Africa have distinct wet and dry seasons, with very low or no rainfall during the latter. Typically, pastoralists manage their herds so that offspring are produced during the rainy season. This strategy aims to ensure that peak milk yield coincides with peak demand for milk from young stock, and consequently the precise breeding management for different species varies according to their gestation period. Lactation period also varies according to species; while small ruminants produce milk for a few months, camels can continue to lactate for over a year. In pastoral production systems, livestock are

Table 12. Vulnerability context in Mieso-Mulu woreda

Seasonality

Normal or expected seasonal changes in resources, production and markets

- Marked seasonality of livelihoods in a normal year due to rainfall patterns and seasonal variation in food production, food access, and market conditions
- Seasonal variation in grazing and water resources; seasonal peaks in resource competition; risk of conflict, especially with agropastoralists

Shocks

Sudden onset and unpredictable events

- Livestock raiding—also see Trends
- Competition between regional governments for strategic or economic resources and territory—conflict in response to referendum results
- · Reduced market access due to conflict
- Human disease outbreaks, exacerbated by weak preventive or curative health services
- Livestock disease outbreaks exacerbated by weak preventive veterinary services
- Unpredictable responses of authorities to contraband trade

Trends

Long-term changes

- Declining per capita livestock holdings among poorer households, human population growth and related trend of pastoralist "dropouts"
- Increasing impact of drought
- "Bad diversification," including excessive charcoal production and sales; firewood harvesting and sales; and livestock raiding, prompting more retaliatory raiding—also see Shocks
- Bush and weed encroachment since the 1970s; changing preference for browsers as grasslands decline
- Increasing use of, and addiction to, khat
- Slow development of education options, with persistently low education and literacy statistics
- Slow development of basic health care
- Slow development of credit facilities tailored to pastoralist areas
- Policies continuing to emphasize crop production and settlement over communal use of rangelands and mobility; policy-endorsed private enclosure of land; increased competition for use of communal land with increased risk of conflict

used not only to produce foodstuffs such as milk and meat, but are also exchanged for cereals. In normal periods, the latter activity can be extremely favourable for pastoralists in terms of food energy conversions, because the livestock-cereal exchange rate is usually in the order of 1:2 to 1:15. In this situation, a pastoralist can consume up to 15 times the energy derived from a single animal by exchanging that animal for cereals.

Related to these seasonal variations are market conditions. For poorer pastoralists, herd growth is the optimal economic strategy (section 3.1.1), and animals are only sold when food (cereals) or cash is needed. However, as a dry season advances, livestock lose body condition and their market value falls. At the same time, cereal prices increase due to rising demand and sometimes to stockpiling by traders. Therefore the terms of trade for pastoralists worsens during the dry season. These trends are amplified during drought, because the

supply of livestock to markets increases even further as their body condition falls, and therefore livestock prices reach their lowest level. In contrast, cereal prices peak because of reduced availability (because there is a drought) and heightened demand. Food security at a given point in time very much depends on these trends and the terms of trade for livestock and cereals.

b. Seasonal variations in nutrition and the impact of drought and conflict

Seasonal variations in the diet of Issa pastoralists are similar to other Somali pastoralist areas (Sadler and Catley, 2009). The consumption of milk peaks during the wet season(s) and falls off during the dry season(s). Research studies and nutritional surveys confirm this pattern, with access to milk linked to seasonal variations in nutritional status, especially children (Sadler et al., 2009). As dry seasons progress, more of the diet comprises purchased cereals. When milk is available, it is mixed with cereals and improves the palatability and digestion of cereal-based foods. As milk supplies fall, cereals are prepared using water and the nutritional value, especially for young children, is much reduced. For poorer households with fewer milking animals and less capacity to purchase grain, cereal stores may become depleted before the onset of the next rains. Even in a normal year, such households experience a "hunger gap" in which limited food is expected. Superimposed on these trends are disease risks during periods of nutritional stress, which are exacerbated by limited health care and limited access to clean water.

A common finding in the literature on famine and emergency relief in pastoralist areas is high mortality in children compared with other age groups. In Shinile, for example, an infant mortality rate of 615/1000 was recorded among Issa herders during the 1974 famine (Seaman et al., 1978). Among the various reasons cited for this differential mortality pattern are:

 Children consume relatively more milk than adults (who consume more cereals) and infants (who are breast-fed). In the dry season, the diet of children often comprises porridge made from cereals and milk. During drought, milk is less available and cereals are less digestible for children when not mixed with milk.

- Water shortages during drought are linked to increased incidence of enteric diseases.
 Diarrhoea is an important factor in the development of acute malnutrition in children.
- During drought, the labour demands and hence the food energy needs of children may increase as livestock are trekked to remote areas in search of grazing and water.

In 2009, the vulnerability of pastoralists and ex-pastoralists to drought and conflict, especially their children, was evident from nutrition and health surveys in the Somali Region, including Ayisha woreda of Shinile Zone (EHNRI/ UNICEF/SCUS, 2009). Even in the absence of conflict, nutritional deficits are evident in pastoralist populations towards the end of dry seasons and early wet seasons, especially in children. Given that resource-based conflicts over water or grazing also occur mostly during late dry seasons, conflict further exacerbates food security problems at this time of year. In other words, a conflict shock can be superimposed on a seasonal trend, leading to particularly serious food insecurity.

3.2.2 Shocks

Important shocks to pastoralist livelihoods include events which cause sudden loss of human life or injury, loss of financial assets—especially livestock—or which interrupt markets and trade. Livestock losses are not only important due to the immediate effects such as reduced availability of milk or animals to sell but also because the rebuilding of livestock assets takes years to achieve.

Causes of human death in selected pastoralist areas of Somali Region, including Shinile Zone, are reported by Devereux (2006). The most common cause of death was "short illness" (32 percent) followed by childbirth (21 percent). The data indicated that the combined deaths (shocks) due to short illnesses and child birth (total 53 percent) were more than 25 times the rate of deaths (shocks) attributed to conflict (2 percent). Approximately 10 percent of unnatural deaths were caused by malnutrition. During drought, deaths due to short illnesses are likely to increase, especially in children, due to outbreaks of diseases such as measles and cholera. The risk of outbreaks

and associated mortality increases if standard immunization programmes are inadequate, as is the case in Shinile Zone.

a. Conflict

Background notes

As violent conflict can occur suddenly, without warning, and can be large-scale, it can be considered a shock. Such events cause direct loss of human life and injury, destruction of property and physical infrastructure, loss or theft of assets, and disruptions to basic services such as health and education (see Table 2). Local conflicts can involve neighbouring pastoralist groups, or pastoralists and more sedentary communities, and may involve competition for resources and disputes over land or water. Therefore such conflicts are more common during drought, when pastoralist lands have been encroached by farmers, or when livestock trekking routes have been blocked. Local conflicts can also be triggered by development activities such as the construction of new facilities near to disputed administrative borders.

In addition, livestock raiding is common in some pastoralist areas and can involve well-organised and well-armed groups comprising several hundred individuals. Attacks by such groups can result in hundreds of human fatalities and the theft of thousands of livestock. Such events are not uncommon in certain areas which are poorly policed and where the proliferation of small arms continues to increase. They often occur during post-drought periods when groups attempt to restock through raiding. Livestock raiding is not only a "traditional" behaviour, but can be motivated by political actors, the military, or others for personal gain. So-called "commercial raiding" reflects the high value of livestock, with the raided animals often channelled rapidly into local or export markets.

Conflict and livestock raiding in and around Mieso-Mulu woreda

Conflict has a long history in Mieso-Mulu woreda, dating back to at least the early 1930s. Initially, most of the conflicts were reported to be between the Issa and Ittu Oromo, and the Issa and Afar. Conflicts were often resource-related. However, since 1991, conflict has become more complex due to the introduction of ethnic federalism and disputes between Oromiya and Somali regional governments over key resources, such as Mieso town (and market), and over the provisional designation of Mulu as the administrative centre for Mieso-Mulu woreda. Similarly, the regional border between Somali Region and Afar Region, along the approximate western edge of Shinile Zone, was not defined when regional autonomy was introduced (Markakis, 2003), and today still remains subject to negotiation between the two Regions. Therefore a set of structural governance issues and two disputed boundary demarcations have added new dimensions to conflict in the area. Arguably, yet another relatively new factor has been the importance of conflict resolution as an activity funded by government and aid donors. An economy has emerged around conflict which, in certain circumstances, can provide incentives for conflict to be reignited. Some important events in the history of conflict in and around Mieso-Mulu woreda and Shinile Zone are summarized in Table 13 below, and draw heavily on the studies of Markakis (2003), Ahmed Shide (2005), and Fekadu Beyene (2009).

As the timeline shows, local conflicts have occurred within wider national and regional-level contexts and conflicts. In March 2010 some of the key issues and questions were

- the need for Ethiopia nationally to have access to sea ports, and related road networks for imports and exports, and hence the importance of relationships with Djibouti (the Issa and Afar) and Somaliland, and the relative stability of these neighbouring governments;⁵
- the importance of sovereignty and national borders, and related tensions and conflicts, noticeably between Ethiopia and Eritrea, and Ethiopia and Somalia;
- · regionally, the highly dynamic nature of

⁵ Although no country has recognised Somaliland's sovereignty, South Africa has formally stated that Somaliland fulfils the Montevideo criteria for statehood and also accepts Somaliland passports (Hansen and Bradbury, 2007). The African Union continues to debate the Somaliland recognition issue.

- regional politics and international interests; and the importance of ONLF counter-insurgency and links to regional politics;
- the fact that both the Issa and Afar are crossborder socio-political groups and, as such, although present in Ethiopia, are directly subject to political influence from neighbouring countries;
- internally in Ethiopia, the challenges of ethnic federalism and firmly demarcating regional borders in pastoralist areas, some of which have long histories of resource-based conflicts and political conflicts;
- the acknowledged capacity weaknesses of regional governments in pastoralist regions;

- and for Oromiya Region, the need to engage with numerous neighbouring regions simultaneously on border issues;
- internally in Ethiopia, the extent to which pastoralist areas remain politically marginalised, subject to policies which do not support pastoralism (e.g., settlement and land appropriation) or which attempt to deliver services by inappropriate fixed-point delivery models;
- the political economy of informal trade and conflict, and the incentives to maintain the informality for some of those who gain economically from the trade.

Table 13. Timeline of conflict-related events in and around Shinile Zone

Time period Events Early 1900s Migration of Oromo Ittu into Mieso from western Hararghe highlands to access grasslands for livestock production occurs. Ittu are mainly pastoralists at this time. Construction of the Djibouti-Addis Ababa railway begins, with Issa from Djibouti employed as workers and guards who later occupy areas around the railway in what is now Shinile Zone. Government allocates around 500 ha of land in Mieso to two private investors **Imperial** Early 1930s for cultivation and livestock production; large pasture lands are fenced. Although armed guards are used to protect the area, Ittu and Issa collaborate to destroy the farms and raid the animals. October 1935, Italy attacks Ethiopia from Eritrea and Italian Somaliland. The Issa are recruited by the Italians and receive modern arms and training, which they use against the Afar to control parts of the Allighedi plain—a key grazing resource for livestock, with access to the Awash river. **Imperial** Government gives concessions to foreign and domestic investors along the 1960s Awash river for commercial irrigation, mainly cotton, without consultation or compensation to the Afar. Some Afar leaders also appropriate land for irrigation. Pastoralists lose access to large stretches of the river and dry season pastures, with impacts on livestock. **Imperial** Commander of armed forces in eastern Ethiopia encourages Oromo and Afar 1970-74 to attack the Issa; gains from livestock raids are distributed to raiders. Some Issa youth leave the country. Both Issa and Afar are very badly affected by drought and famine, without much assistance from government. Infant mortality of 615/1000 is recorded among Issa during the 1974 famine (Seaman et al., 1978). Issa wells are reported to be deliberately poisoned by army, with livestock and human deaths, which leads to Issa and Oromo becoming enemies.

Socialist Mengistu 1974-1991

1974 land reform puts all land under state ownership. Landlords are dispossessed and land instead is allocated to Ittu, leading to a growing trend for private enclosure of land, i.e., the Ittu become more agropastoral. The Issa resist the expansion of cultivation, e.g., they organise attacks during the planting and harvesting seasons to try to secure extensive communal grazing land.

The Siad Barre regime in Somalia trains the Western Somalia Liberation Front (WSLF) in preparation for invasion of Ethiopia. Issa who had previously fled Ethiopia are organised by Hamud Farah. In 1977, they cooperate with Siad Barre in the war launched against Ethiopia and rejoin clan members in Ethiopia to fight against the Oromo and Afar, pushing deeper into Afar areas. Although Ethiopia repels the invasion in 1978 with Afar support, the Issa occupy settlements along the main Djibouti road, Gadamaitu, and Adaitu. As well as trade and contraband, the Issa use the settlements as entry points for livestock movements further north into Afar.

The period is characterised by supply of automatic weapons. The Oromo Ittu are supplied by the Ethiopian government; Somalia and Djibouti supply the Issa.

In 1984, the Ogaden National Liberation Front (ONLF) is established, with leaders drawn from the WSLF.

EPRDF and Regional Autonomy from 1991 to 2000

Formation of the Somali Regional State occurs, bordered by Oromiya and Afar Regions, but with borders in key areas left undefined; e.g., the western edge of Shinile Zone and Afar Region. **Somali-Oromiya issues**—Oromiya and Somali Regions are to jointly administer Mieso woreda, but a dispute emerges over control of Bordede, a customs and tax collection point connecting the eastern region to the centre of the country. Although an administrative dispute between regions, there is continued violence between the Issa and Ittu. Somali Region later claims that 21 *kebeles*, including Bordede, should fall within its borders. These events lead to a referendum in November 2004, which allocates 20 of the 21 of the contested *kebeles* to Oromiya. As a result, the Issa "undertook indiscriminate retaliatory attacks on non-Somalis, to punish the ethnic groups that favoured Mieso administration under Oromiya. Many people were displaced or lost assets" (Ahmed Shide, 2005). Up to 2005, conflict intensifies, with frequent incidents of indiscriminate killings when federal army is not present in the area.

Increasing Issa attacks occur to prevent Ittu use of grazing areas. Ittu expansion of cultivated land is supported by land tenure policy which favours private use of land for cultivation and is further supported by agricultural development policies such as supportive property rights for communal grazing land.

Ittu are increasingly disarmed due to government concerns about their support to the Oromo Liberation Front. Issa are more difficult to disarm due to their mobility and cross-border access and within a context of weak control of firearms proliferation in the wider region. This leads to imbalance in terms of physical power and puts the Ittu more at risk of large-scale or "commercial raiding." Issa are able to sell raided stock at local markets or move them across border to Djibouti to avoid repossession. Income from sales is partly invested in better weapons.

Continued on next page

EPRDF and Regional Autonomy from 1991 to 2000 (continued)

As conflict reaches the level of territorial expansion by government entities (the regions) and dispute between regions for resources, customary institutions are less able to overcome conflict. Afar-Somali Region—continued conflicts between the Afar and Issa, essentially resource-based and around control of grazing resources and access to the Awash river. The Afar-Shinile Zone border remains unclear, and Issa acquire a third settlement, Undofo, along the Djibouti main road. The occupation of the three settlements becomes a specific and intractable point of dispute between the two regional governments. 1988-1991—Somalia civil war and overthrow of Siad Barre. The self-declared independent Republic of Somaliland is established in the northwest; the onset of protracted political instability and humanitarian crises in the south occurs. 1991-1992—Civil war in Djibouti is linked to the representation of the Afar in the Issa-dominated Djibouti government. 1998-2000—Ethiopia-Eritrea war starts over disputed border, followed by long-running tensions to present day and proxy support from Eritrea to insurgency groups in Ethiopia.

2001-2005

The 9/11 terrorist attacks in the US in 2001 lead to shifts in the foreign and development assistance policies of major aid donors, towards "aid for security." Somalia is increasingly perceived as harbouring Islamic fundamentalists.

The US establishes the Combined Joint Task Force (CJTF) in Djibouti in early 2003 as part of counter-terrorism measures; in Ethiopia, activities are conducted around Dire Dawa (adjacent to Shinile Zone), Gode, and other areas.

Somaliland holds multi-party elections in December 2002, followed by presidential elections in April 2003. A stable system of government continues to evolve which "fuses traditional forms of social and political organization with Western-style institutions of government" (Bradbury et al., 2003). Somaliland is not recognised internationally.

2006-2010

The Transitional Federal Government (TFG) in Somalia is increasingly under pressure from the militarized Islamic Courts Union. Ethiopia views the rise of Islamic groups as a threat to national sovereignty and the Ethiopian army moves into Somalia in 2006 to support the TFG.

In April 2007, the ONLF attacks a Chinese-run oil field in Abole, Somali Region, killing approximately 65 Ethiopians and 9 Chinese nationals. A large-scale counter-insurgency operation is launched by the Ethiopia, with military operations focusing in Fik, Deghabur, Warder, Korahe, and Gode Zones, and related restrictions on humanitarian agencies.

In June 2008, a military clash occurs between Eritrea and Djibouti; the French Foreign Legion and CJTF are still present in Djibouti.

Ethiopian army officially starts to withdraw from Somalia in January 2009. In Shinile Zone, a new conflict develops between Issa and agropastoral Hawiya in 2009 over informal designation of Mulu town as the administrative centre of Mieso-Mulu *woreda* (Mercy Corps, 2009b). Mulu is located in the Hawiya

2006-2010 *(continued)*

area. Access of Issa to Mieso livestock market is curtailed and is still restricted in March 2010 (also see section b. below).

Negotiations continue between Afar and Somali regional governments over the border demarcation; Afar rejects a proposal for the Issa-occupied settlements along the Djibouti road to be designated a "special *woreda*" under Afar Region.

Plans are announced to improve the road from Djibouti via Dewale, through Shinile Zone. This would create a main highway for Djibouti-Ethiopia traffic through official Issa areas.

b. Reduced access to formal and informal trade and markets

Background notes

The Somali Region of Ethiopia can be categorised as a "high livestock export area," although most of the export trade to Somalia and then the Gulf States is often described as informal (Aklilu and Catley, 2009). The importance of the trade to the pastoralist economy is well known and described in various studies and the DPPA/SCUK household economy surveys. What is less well known is the extent to which different pastoralist wealth groups benefit from the export trade and the extent to which the trade affects vulnerability e.g., in the face of market bans.

According to a recent study commissioned by the Intergovernmental Authority for Development (IGAD) and FAO, the immediate concern for the very poor and the poor in these areas is to dispose of animals once they have made a decision to sell. It is the middlemen, the better-off, some middleincome groups, and those residing close to market centres who can differentiate the demand and better time their sales for export and domestic markets. More importantly, the very poor and the poor sell animals from time to time on the basis of urgent cash needs, rather than at an opportune time when livestock prices increase; for example, in peak export seasons (Aklilu and Catley, 2009). These findings indicate that livestock export markets benefit poorer pastoralists (more foodinsecure), but not as much as better-off pastoralists (less food-insecure). Compared with domestic or cross-border trade, while export trade may lead to higher prices, the extent to which poorer

producers benefit from these price differences is highly variable by area and marketing system. Furthermore, any benefits due to the higher value of export trade in some areas are offset by the risk of trade bans imposed by Gulf countries. This risk is high. Since 1998 at least 11 trade bans have been imposed, either on individual countries in the Horn or on the region as a whole. Livelihoods analysis indicates that, as a shock, livestock trade bans have a disproportionately high negative impact on poorer herders. As a general rule, households with more assets are better able to withstand shocks. The unpredictability of trade bans is a particular problem for poorer households because once they have identified a need to acquire cash, they then need to sell livestock quickly. Compared to domestic markets or cross-border markets where bans are relatively rare, export markets are high risk from poverty-reduction and food-security perspectives.

Market and trade issues in Mieso-Mulu woreda and beyond

As already noted, one outcome of the administrative disputes between Oromiya and Somali Regions was the positioning of Mieso town—with its important livestock market—within Oromiya. Prior to this, the market in Mieso town had been a location for violent conflict between Issa and non-Issa (Ahmed Shide, 2005), perhaps reflecting the importance of the market both economically and politically. Different market days were used as a means to minimize contact or conflict between Oromo and Issa (Getachew Legesse at al., 2008).

More recently, the ramifications of the Oromiya-Somali Region's territorial claims and referendum results led to yet another new dimension to conflict in the area, this time linked to the informal designation of Mulu town, in Mieso-Mulu *woreda*, as the new district capital. Occupied mainly by the minority Somali Hawiya clan, the Issa reacted violently to the news and attacked the Hawiya (Mercy Corps, 2009b).

At the time of producing this report in mid-March 2010, the situation was calm and the 12 km stretch of dirt road from Mulu to Mieso town was open, but being used only by Hawiya, not Issa, to access the Mieso market. Interviews at the time indicated that market activity was much reduced due to both the absence of Issa herders and the related reduced use of the market by agents of important livestock buyers from Addis Ababa and elsewhere. This situation illustrates how a conflict event can quickly turn an active market, with all the associated benefits to various actors, into a market which becomes inaccessible to the group that hitherto had supplied most of the livestock to the market. At the same time, some livestock exporters were still visiting the market in March 2010, as apparent from the purchase of goats by the ELFORA export company.

The Mercy Corps PRA study in November 2009 noted that Issa could access other markets, including Djibouti (section 3.1.1c), but presumably, the Mieso market was preferred in the past and would be used again if tensions between the Issa and Hawiya could be more fully resolved.

In terms of the contraband trade through Shinile Zone, imported commodities can be viewed as transiting through the areas en route to other parts of Ethiopia. If this is so, the major economic benefits of the trade are not captured within the Zone, but by other actors in other parts of the country. For pastoralists, the main benefit may be through the income acquired by renting out pack camels, which may account for around 25 to 35 percent of annual household income. One feature of the trade over many years has been periods of heightened government restrictions, followed by periods of limited control. When clampdowns occur, these seem to be often unpredictable and

so can be viewed as shock in terms of income. The study could not ascertain whether the confiscation of contraband goods by the authorities extended to the confiscation of camels carrying the goods, and if so, what efforts (if any) were made by the owners to recover their animals.

Issa pastoralists in the woreda are also part of the livestock export trade system and therefore are affected when the trade is disrupted. Livestock import bans were imposed on the Horn of Africa in 1998 and 2000. The 1998 ban was imposed by Saudi Arabia but relaxed in 1999, whereas the ban in late 2000 involved Bahrain, Oman, Qatar, Saudi Arabia, UAE, and Yemen and was far longer lasting. The export data in Figure 8 shows a dramatic decline in livestock exports in both 1998 and 2001 as a result of bans, confirming a severe shock to the markets in those years. But, as soon as 2002, Bossaso port was exporting around 1.5 million livestock, and, despite the ban, exports have increased between 2002 and 2007. Trade also increased out of Berbera port during this period despite the ban; to some extent, traders were able to circumvent official restrictions from Gulf States by redirecting exports to Yemen.

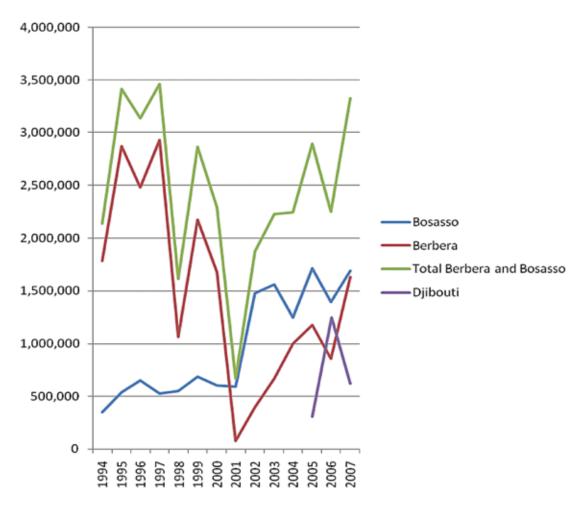
Much of the Issa livestock trade is absorbed by the domestic market in Djibouti, and therefore as a group they are probably less affected by export bans. At present, the limited presence of Issa in the Mieso market will have a substantial effect on the supply of camels internally in Ethiopia, especially to the northern parts of the country (Yacob Aklilu, personal communication).

c. Livestock diseases

Livestock diseases continue to have major impacts on pastoral livelihoods, either through direct loss of livestock and reduced production or through reduced access to the livestock export market due to bans imposed by importing countries. Some diseases are characterised as epidemics, implying relatively rapid onset and, in some cases, high mortality of livestock. Further details are provided in Annex 2, and specific diseases in Shinile Zone are listed (Amare Dejenu Tadele, 2004).

Livestock bans were imposed regionally due to

Figure 8. Livestock exports from northern Somali and Djibouti ports, 1994 to 2007



(source: COMESA, unpublished data)

outbreaks of Rift Valley fever in northern Kenya. The disease has not been reported in Ethiopia, and surveys conducted by the MoARD, including in Somali Region, indicate that the disease is not present.

Other diseases are endemic, with a more constant presence. These diseases include important chronic diseases such as trypanosomosis, helminth infections, and tick infestations and related health problems. Many of the epidemic diseases can be prevented by vaccination and, in general, vaccines are inexpensive relative to the economic value of livestock. Therefore the importance of livestock diseases as a livelihoods shock reflects weak veterinary services and capacity to implement preventive health programmes in the *woreda*. These issues are discussed further in section 3.4

on policies and institutions.

3.2.3 Trends

In livelihoods analysis, trends are long-term changes, particularly those which increase vulnerability, either directly or indirectly. The important trends in Mieso-Mulu *woreda* are listed in Table 12; many are already described in previous sections of the report. In this section, further information of some of the key trends is provided.

a. Human population growth

Accurate census data is not available for the *woreda*. For pastoralist areas, it might be assumed that with increased settlement by poor and

ex-pastoralists and their higher birth rates, human population growth would in the order of 3 percent per annum for more settled populations and about 2 percent for mobile pastoralists (Fratkin and Roth, 2004). As indicated below, the livestock holdings of poorer households are declining, so that an increasing number of people are required to live off diminishing assets. These growth rates are equivalent to a doubling in population every 25 to 36 years.

b. Conflict histories and trends

Although conflict has been mentioned as a shock to pastoralist livelihoods, many of the protracted conflicts in the Horn of Africa have deep historical roots that make these conflicts more difficult to resolve. From livelihoods and food security perspectives, intractable and violent conflict is probably the single most important factor for the continuation or worsening of conditions in pastoralist areas. Therefore, when describing the vulnerability context of foodinsecure pastoralist areas, conflict cuts across shocks, trends, and even seasonality. While conflict's effects cause distinct shocks to pastoral production systems, for example through the raiding of livestock, conflict cannot be regarded as an unusual event, since different forms of conflict have been endemic in the region for decades.

The analysis in Mieso-Mulu woreda shows that certain types of conflict in the area are typical of the problems seen in other parts of Ethiopia and in other countries. For example, conflicts between farmers or agropastoralists and pastoralists occur where formalized institutional arrangements for the shared use of communal grazing areas are either nonexistent or vague, or are outweighed by stronger policies and trends supporting land use for crop production. These trends have existed in Mieso-Mulu for many years and are well documented (e.g., Fekadu Beyene, 2009). However, conflict issues in the district have been further complicated since 1991 by its physical location not only in Somali Region but also on the border of Oromiya and Afar Regions. The behaviour of Oromiya and Somali regional administrations in terms of the control of key strategic or economic resources and territory added new dimensions to the conflict (Ahmed Shide, 2005). Although the regional governments

are formalized entities under the system of regional autonomy in Ethiopia, the shifting control of Mieso town, Mulu town, and specific kebeles has led directly to violent conflict between Issa and non-Issa groups. It follows that part of the conflict trend analysis includes government capacities and strategies at different levels, from federal to regional. Also, as the Issa are a crossborder social and political unit with presence in Djibouti and Somalia, strategies for dealing with Issa-related conflicts will be influenced, directly or indirectly, by higher-level political and economic relations between Ethiopia and these countries. Some analysts would also point to the Afar dimension of the conflict. At a local level, this can be described in terms of dry season and drought-related access to grazing and water resources along the border areas of Shinile Zone and Afar Region. But these local clashes relate to a long history of intense animosity between the Issa and Afar more widely and also have a similar dimension of regional ethnicity as the Issa-Oromo problem. For example,

One social factor that "breathes life" into the different types and levels of conflict in the region is the unsettled Afar-Issa conflict. Though the basis of the conflict is economic (competition over resources, territory, contraband trade routes, etc.), the conflict has ethnic overtones and is expressed as animosity and hatred. Communication between both groups is literally "broken." Informants expressed their rage, stating that the Haile Sellassie I, Derg, and the present governments did little to settle the issue. They remarked that: "The forceful occupation of the land of Afar by the Issa community is apparent; the federal government knows that now the sporadic fighting and retaliation have continued. Both federal and regional governments also know the flash points: Adaytu, Ambule, Gedamaytu, and Undufu, which were originally the Afar land, now being claimed by the Issa. No lasting solution has been provided so far...." (Berhe and Adaye, undated)

Like the Issa, the Afar are a cross-border group extending into Eritrea and Djibouti. Therefore resolving conflict between the Afar and Issa has international connotations on both sides. While certain trends are longstanding, such as tension between Afar and Issa, and Issa and Oromos, other trends are dynamic and unpredictable.

These include economic and diplomatic relations between countries and the foreign policies and strategies of foreign states (outside the Horn of Africa region).

At the time of this analysis in March 2010, Issa herders and traders were not accessing the main market in the area in Mieso town and therefore were unable to sell livestock at the market or purchase cereals or other commodities.

c. Bush encroachment and rangeland degradation

Trends in bush encroachment and rangeland degradation in Shinile Zone are summarized in Table 6. As discussed later, these trends relate to the changing composition of herds by livestock species (Table 14) over 60 years, lower livestock holdings for poorer households, and the creation of a "very poor" pastoralist wealth group, with livestock holdings which would not be sufficient to maintain a pastoralist way of life. While the trend in rangeland quality seems to be clear, quantified measures of changes over time were not available.

d. Enclosure of land for crop production

The enclosure and use of communal land by farmers or agropastoralists can provide dual benefits to these groups. The practice enables them to benefit from wider communal land access during wet seasons but restrict access to the enclosures to their own animals during other periods, e.g., to graze on crop residues. In contrast, pastoralists can suffer from this trend as their overall access to grazing resources is reduced.

In many countries, the growing trend towards enclosure of pastoralist land is associated with a myriad of quasi-legal arrangements (e.g., Behnke, 1985). The trend also reflects a weakening of traditional pastoral institutions in terms of their ability to negotiate with agropastoralists or government actors.

In Mieso-Mulu *woreda*, the trend towards agropastoralism by Oromo Ittu and Hawiya in the south of the *woreda* is well documented in qualitative terms but so far not quantified in terms of land areas. The trend will likely continue to

such a point that violent confrontation with the Issa limits the expansion of cultivation or agroclimatic conditions prevent cropping; the *woreda* is lower and drier in the northern areas and less amenable to cultivation.

e. Increasing impact of normal dry seasons and drought

Some pastoralist areas in the Horn of Africa are subjected to repeated bouts of humanitarian assistance due to drought. Furthermore, the need for such assistance appears to be increasing in areas such as northeast Kenya, and southern and eastern Ethiopia. While some analysts attribute these humanitarian crises to climate change and increasing variability of rainfall, pastoralist areas have always been characterised by marked variation in rainfall between years. When combined with limitations in rainfall data temporally and spatially and the need to view pastoralists systems in terms of ecologicaleconomic system boundaries (rather than administrative units with official borders), these experiences indicate a need to carefully examine objective rainfall measures before assuming that drought is becoming more frequent or more severe in pastoralist areas and before assuming that drought is defined according to rainfall measures. Analysis is complicated because different actors and reports use different definitions of "drought" or fail to define the term. From the perspective of humanitarian and food security programmes, drought is usually a reduction or failure of successive rains rather than failure of a single rainy season.

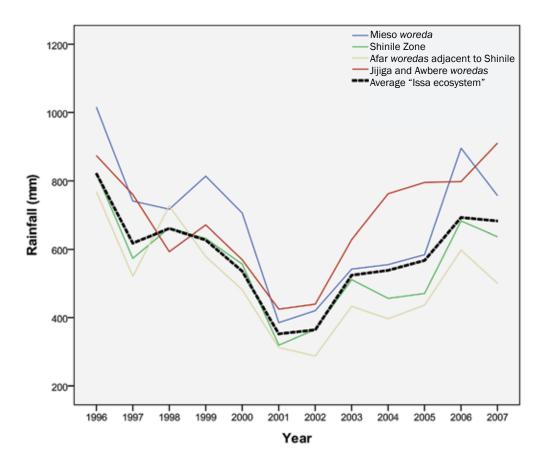
Rather than declining rainfall being the main cause of food insecurity in pastoralist areas, it seems that periods which might previously have been viewed as a "normal dry season" are now having a far greater negative impact on pastoralist livelihoods. This trend is explained by a combination of related and, in some cases, reinforcing factors, including human population growth, conflict, rangeland degradation, decreasing livestock holdings among poorer households, and increasing competition for land or displacement from traditional dry season grazing areas. This mix of factors differs by area, but nevertheless exacerbates the harshness and livelihoods impact of dry seasons. It follows that while rainfall in these areas may not be changing

very dramatically (or might even be increasing in some areas), poorer pastoralist households are finding it more difficult to maintain their livelihoods during dry seasons. When drought does occur, its impact is felt by larger numbers of poorer households, with consequent increases in levels of food insecurity and pastoralist destitution.

In Mieso-Mulu *woreda*, annual rainfall data indicate a marked reduction in rainfall relative to average from 2001 to around 2005, but an increase to levels above average in 2006 to 2007 (Figure 4). However, for pastoralist systems, it is also necessary to understand rainfall in terms of seasonal (temporal) and spatial variability with the broader system boundary. This system includes parts of Afar Region to the west and north, Jijiga Zone to the southeast, Somalia to the east, and Djibouti to the north.

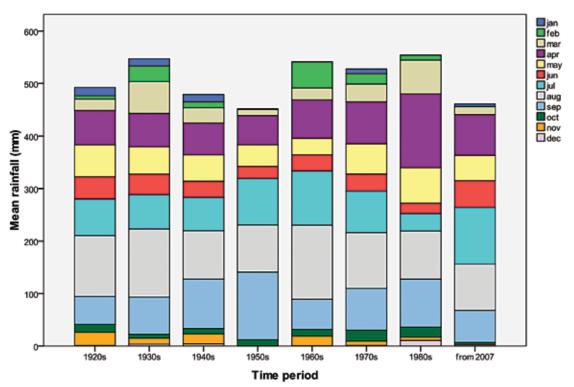
Within Ethiopia, the neighbouring Afar woredas to the west and north of Shinile Zone are Amibara, Gewane, Mille, Dubti, and Afambo. The neighbouring Somali woredas to the southeast are Awbare and Jijiga (in Jijiga Zone). Figure 9 compares annual rainfall in these woredas relative to Mieso-Mulu woreda and Shinile Zone. The data show similar trends in annual rainfall in Shinile Zone and adjacent pastoralist or agropastoral woredas. For Issa movements from Shinile Zone into Awdal of northwest Somalia (Somaliland), rainfall data from the 1920s are available from Borama (Figure 10), but with gaps in the data from the late 1980s to 2006; also Borama is more agropastoral than pastoral. The data has some value because Awdal directly borders Shinile Zone and in part is part of the wider "Issa ecosystem." The data are arranged into 10-year intervals and show typical variability of rainfall by month and no marked changes in total rainfall over 83 years.

Figure 9. Annual rainfall patterns in pastoral and agropastoral woredas adjacent to Mieso-Mulu woreda and Shinile Zone



Source: FEWSNET (2010) rainfall estimates

Figure 10. Mean monthly rainfall in 10-year intervals in Borama, Somalia, 1924 to 2007



Source: Somalia Water and Land Information management website,6 rain gauge measurements.

e. Shifting livestock ownership patterns and commercialization trends

In recent years, various pastoralist areas of the Horn of Africa have been characterised by two apparently contradictory trends. On the one hand, there are reports of increasing levels of pastoralist destitution which, in part, have influenced accounts of a "crisis in pastoralism." On the other hand, major livestock markets in the region, which source animals from pastoralist areas, show constant or increasing levels of livestock sales, indicating that pastoralist systems are not only able to supply market but can increase this supply over time.

There are two factors that explain these changes (Aklilu and Catley, 2009). First, marketing behaviour varies by pastoralist wealth group. Poorer households emphasize herd growth and only sell animals to meet subsistence needs. Their herd growth strategy is economically rational and aims to produce a minimum herd size for survival

on the range; livestock sales from these households are minimized. In contrast, wealthier households with more livestock can meet household food and other needs far more easily, and even when they comprise more people (more wives and children), they tend to sell more animals. These households can be more strategic in terms when they sell (e.g., when prices are good) and the number of animals sold. They also buy animals from the poor, especially during stress periods such as drought. In general, livestock supplied to domestic, regional, or export markets are supplied by relatively wealthy households. Second, the combined impact of human population growth, reduced mobility, losses due to drought, urbanization, and increasing demand for livestock products (and therefore increasing prices) leads to a gradual shift towards greater commercialization of pastoralist systems. This trend is characterised by a slow redistribution of livestock from poorer to richer households. The poor then risk dropping out of pastoralism, whereas the wealthy continue to own large herds

⁶ http://www.faoswalim.org/thematic_areas/climate/climate_of_somalia/rainfall_information_northern_somalia.

and supply markets. In some areas, business people based in towns within pastoralist areas invest in commercially-orientated livestock production, with contracting of herders to manage these herds.

These trends are important because they indicate that pastoralism is not necessarily in crisis, but that, as commercialization changes take hold, poorer households become less viable. There are winners and losers over time. Furthermore, this kind of analysis shows the need to examine pastoralist livelihoods by wealth group. With these issues in mind, the question of trends in livestock (financial) assets in Mieso-Mulu *woreda* by wealth group becomes important. Table 14 shows livestock holdings by pastoralist wealth group in Erer and Ayisha *woredas*, over a 60-year period between 1944 and 2004.

Table 14. Changing livestock ownership by wealth group among Somali pastoralists in Erer and Ayisha Districts, Shinile Zone, over a 60-year period (1944-2004)

| Wealth ranks over time | Average | livestock o | wnership 1 | er househo | ld (n=300) |
|-----------------------------|---------|-------------|------------|------------|------------|
| | Cattle | Sheep | Goats | Camels | Donkeys |
| 30-year period before 1974: | | | | | |
| - wealthy households | 400 | 200 | 250 | 50 | 20 |
| - medium households | 200 | 100 | 150 | 20 | 10 |
| - below-medium households | 80 | 50 | 80 | 10 | 5 |
| 30-year period after 1974: | | | | | |
| - wealthy households | 100 | 350 | 500 | 120 | 10 |
| - medium households | 50 | 150 | 300 | 60 | 5 |
| - poor households | 3 | 10 | 22 | 1 | 2 |
| - very poor households | 0 | 5 | 12 | 0 | 1 |

Source: Kassahun et al., 2008.

Notes: data based on interviews with 300 households. The year 1974 separates the two time periods as this was a year of particularly bad drought and famine among the Issa and therefore easy to recall as a point of reference among informants.

Some of the key points from Table 14 are:

- Between 1974 and 2004, there was a replacement of the "below-medium" wealth group with the "poor" and "very poor" wealth groups. For both of these new wealth groups, the possession of livestock holdings probably fall below a pastoral minimum herd size, especially for very poor households. This indicates that these pastoralist households were on the verge of dropping out of pastoralism (poor wealth group) or were already no longer existing through pastoralism alone (very poor wealth group).
- · Medium and wealthy groups possessed high

- livestock holdings throughout the 60-year period, despite droughts and conflict.
- A shift in the species composition of herds among the medium and wealthy groups occurred, with less preference for cattle and donkeys over time and a greater preference for camels, goats, and sheep. The researchers attributed this change to environmental conditions such as reduced grasslands and greater tree cover; hence the preference for browsers over grazers. However, other factors may also have been at play, such as market demand for different livestock species (wealthier herders tend to sell more animals

than poorer herders and are more strategic in terms of selling behaviour), and the potential for income generation from pack camels.

A brief focus group discussion with Issa and Hawiya elders in Mulu supported the earlier research in Erer and Ayisha (field interviews, March 2010). For example, the shifting preference for browsers was explained by reference to rangeland changes (also see Table 6). It was also confirmed that better-off households were the main suppliers of livestock to markets, relative to poorer households.

Other data are available on livestock ownership trends over time, albeit for a much shorter time period from 1998 to 1999 and from 2004 to 2005, and for pastoralist areas of Shinile Zone as a whole (Table 15). These data show a decline in livestock ownership for all wealth groups and differ from Table 14 in terms of absolute numbers of animals owned and the main trends. However, a common trend was the relatively higher decline in cattle ownership relative to other species.

Table 15. Livestock ownership in pastoralist areas of Shinile Zone, 1998 to 1999 and 2004 to 2005

| Wealth ranks, year | Livestock Cattle | ownership per he Sheep and goats | ousehold Camels (pack camels) | Donkeys |
|-------------------------|---------------------|--|-------------------------------------|---------|
| 1998-1999 | | | | |
| - better-off households | 50-70 | 160-180 | 30-45 (3-4) | 3 |
| - medium households | 20-30 | 80-90 | 10-15 (2-3) | 3 |
| - poor households | 8-12 | 35-55 | 4-6 (1) | 2 |
| - very poor households | 0-5 | 20-25 | 0-1 (0) | 1 |
| 2004-2005 | | | | |
| - better-off households | 15-25 | 130-170 | 20-40 | 2-3 |
| - medium households | 8-10 | 70-100 | 8-16 | 2-3 |
| - poor households | 3-5 | 30-60 | 3-5 | 1-2 |

Source: DPPA/SCUK (2002, 2008).

Notes: pack camel ownership was not reported for 2004 to 2005 due to a clampdown on the contraband trade. Data derived from 12 focus group discussions by wealth group in the Zone, for each of the two reference year periods.

f. Terms of trade

The terms of trade between livestock and non-livestock foods are crucial to pastoralist economies if it is recognised that all pastoralist households need to exchange livestock or livestock products for cereals.

Some initial insights into the terms of trade over time are provided by trends in livestock prices in markets in Oromiya Region that source animals from pastoralist areas. Prices from 2003 to 2008 from three markets are shown in Table 16. Depending on the market, the grade of the animals, and species, livestock values increased from 125 percent (~25 percent increase/year) to

⁷ Note the different methodologies for measuring livestock ownership. The longer 60-year study used a retrospective approach, with questionnaires administered to 300 households in two *woredas* during a single survey, supported by individual interviews with elders. The shorter six-year data were derived from 12 focus group discussions for each of the three wealth groups for all pastoralist areas of Shinile Zone and compared the results of two surveys conducted six years apart; in this case it's not clear whether the same areas/villages or people were interviewed during the two surveys.

243 percent (~49 percent increase/year). Increased values were most evident for small (low price) goats in all three markets. Therefore the preferences for livestock species over time shown in Table 14 and the increased ownership of goats

by wealthy and medium households might be explained not only by changing rangeland condition but also market prices and demands. Goat ownership doubled in these households over 60 years.

Table 16. Approximate trends in livestock market prices in Mieso, Asebot, and Bordede, 2003 to 2008

| Market and livestock species | Year 2003 | High price | Year 2008 Low price | High price | Percentage from 2003 Low price | to 2008 |
|------------------------------|-----------|------------|------------------------|------------|--------------------------------------|---------|
| Mieso | | | | | | |
| - sheep | 250 | 800 | 450 | 1000 | 225% | 125% |
| - goat | 150 | 700 | 350 | 900 | 233% | 129% |
| - cattle | 1800 | 3500 | 2600 | 6000 | 144% | 171% |
| - camel | 2000 | 5000 | 2800 | 7000 | 140% | 140% |
| Asebot | | | | | | |
| - sheep | 245 | 790 | 440 | 980 | 180% | 124% |
| - goat | 140 | 650 | 340 | 850 | 243% | 131% |
| - cattle | 1700 | 3400 | 2500 | 5500 | 147% | 162% |
| Bordede | | | | | | |
| - sheep | 260 | 850 | 460 | 1100 | 180% | 129% |
| - goat | 155 | 750 | 360 | 1000 | 232% | 133% |
| - cattle | 1800 | 3400 | 2500 | 5500 | 139% | 162% |

Source: data provided by Mercy Corps staff, March 2010.

Trends in the terms of trade depend on both livestock prices and cereal prices over time. The information for Mieso market is provided in Table 17. Although the data for March 2010 are a snapshot of prices rather than an annual average, the data indicate the importance of the shoat-milk/sugar-sorghum terms of trade for pastoralists. For example:

- The increasingly favourable terms of trade for herders between 1998 to 1999 and 2004 to 2005 related to a 255 percent increase in the value of sheep and goats (cf. Table 15) and a 150 percent increase in the value of milk, compared to sugar and sorghum prices rising by only 120 percent and 121 percent respectively.
- The wide range of sheep and goat values in March 2010 shows how the terms of trade vary considerably by the size of the animal and

- season. Whereas the range of sheep and goats values was from EB 150 to EB 600 (a factor of four), the range of sorghum prices was from EB 275 to EB 325 (a factor of 1.2).
- Despite the ups and downs of the terms of trade, the overall trend over 13 years from 1998 to 2010 was positive for sheep and goat exchanges for sorghum or sugar, but negative for milk exchanges for the same foods.

The study was not able to verify the cost of pack camel rental, although local informants offered price ranges of EB 1000 to 2000 per trip.

Assuming a midpoint estimate of EB 1500 per rental, this income could purchase around 250 kg of sorghum in March 2010. These figures show the importance of camel rental income. For example, in terms of nutritional energy requirements, 250 kg of sorghum would meet the

calorie needs of one adult for about 400 days, i.e., more than a year.⁸

Trends in the terms of trade can also be viewed from the perspective of wealth group and marketing behaviour. For example, for poorer households, the main economic strategy is herd growth. They tend only to sell when cereals or other items are needed. When a decision to sell has been made, they may sell at times when the terms of trade are not optimal. Wealthier households have greater flexibility in terms of when they sell and how many animals to sell. They are better able to sell when the terms of trade are most favourable; they can also purchase from poorer households when prices are low and retain those animals for sale later on, when prices increase. Therefore, although the terms of trade are important for all pastoralists, they are especially important for poorer households.

| Table 17. Terms of trade for pastoralists in Shinile Zone | | | | | | |
|---|--------------------------------|------------|-------------------------|--|--|--|
| Indicator | Year 1998-1999 ^a | 2004-2005a | March 2010 ^b | | | |
| Terms of exchanges: - purchasing power of 1 local quality shoat for sugar | 15 kg | 29 kg | 11-43 kg | | | |
| - purchasing power of 1 local quality shoat for sorghum | 50 kg | 98 kg | 27-109 kg | | | |
| - purchasing power of 1 litre milk for sugar | 0.4 kg | 0.5 kg | 0.3 kg | | | |
| - purchasing power of 1 litre milk for sorghum | 1.5 kg | 1.8 kg | 0.7 kg | | | |
| - income from 1 camel trip rental | EB 300 | None | EB 1000-2000 | | | |
| Prices (EB): | | | | | | |
| - local shoat | 65 | 166 | 150-600 | | | |
| - milk/litre | 2 | 3 | 4 (3-5) | | | |
| - sugar/kg | 5 | 6 | 14 | | | |
| - sorghum/50 kg | 70 | 85 | 275-325 | | | |

a Sourced from DPPA/SCUK (2008).

b Data provided by Berhanu Eshete, Mercy Corps, March 2010.

3.3 Policies, Institutions, and Processes

In livelihoods analysis, policies and institutions can be formal and informal and can provide enabling or disabling environments for household-level management of assets. As shown in section 3.2, the vulnerability context is directly influenced by policy and institutional arrangements at different levels. Whereas conventional policy analysis might focus only on official policies and legislation, livelihoods analysis can show how formal policies might not be

implemented due to informal professional norms or attitudes, the potential for personal gain, or due to cultural or behavioural factors within communities. This approach can be particularly useful when analyzing livelihoods in pastoralist areas, because informal processes often outweigh formal policies. Unfortunately, many of these informal elements are also politically sensitive and can relate, for example, to security agendas, border and sovereignty issues, and the political economy of contraband trade. The PIPs analysis also covers traditional institutions and leadership.

⁸ Assuming energy content of sorghum of 329 kcal/100 g and a daily calorie requirement for an adult of 2100 kcal/day.

Looking generally at pastoralism in the Horn of Africa region, a set of policy and institutional constraints has been commonly expressed since the early 1990s, and before. These include

- issues around the political representation of pastoralists, often framed in terms of weak political voice and political marginalisation;
- a set of issues around pastoral mobility, with researchers and NGOs aiming to raise awareness of the ecological and economic basis for mobility against contrasting views of pastoralism as backward and inefficient—the latter have influenced various formal and informal disabling policies for pastoralists, including
 - o appropriation of land for commercial sugar, rice, or cotton production, preventing pastoralist access to important dry season water and grazing resources;
 - o policies which favour cultivation and which allocate land to farmers or agropastoralists;
 - o the promotion of livestock ranching schemes (e.g., in Kenya and Uganda) as a means to modernize pastoralism, but now largely discredited on economic, environmental, and social grounds;
 - o exclusion of pastoralists from wildlife conservation areas, e.g., national parks in Kenya, Uganda, and Ethiopia;
 - o the forced displacement of pastoralists in the face of large-scale dams.
- the conflict problem, with pastoralist areas often subject to chronic conflict and insecurity; conflict often influenced by the policy issues listed above but also due to complex political instability at national and regional levels;
- the challenges of delivering basic services in pastoralist areas, with a general tendency for governments to transfer systems from nonpastoralist areas and policy rigidity around fixed-point delivery systems in the face of logistical and funding constraints;
- problems with institutionalizing risk-based drought cycle management in governments and aid agencies, coinciding with the persistence of food aid as the dominant emergency response to drought despite its

- limited impact relative to livelihoods-based programming;
- issues around regional, cross-border
 harmonization of policies and legislation,
 especially those which enable mobility and
 seasonal movements of pastoralists and
 livestock—in many areas, this problem is a
 legacy of the colonial era during which
 coherent socio-economic pastoralist groups
 were split into two groups (or three) by new
 national borders;
- related to the above, livestock marketing policies; livestock trade is among the most heavily-taxed trade in the region and the issue of informal cross-border trade remains and is perceived by pastoralists as essential and by governments as illegal.

3.3.1 Regional policies and legislation

The list of policy issues outlined above are described in more detail by COMESA (2009) in its draft Policy Framework for Food Security in Pastoralist Areas⁹ and the emerging regional livestock marketing and related disease-control policies of IGAD.¹⁰ These policies indicate that African regional organisations are beginning to look more seriously at pastoralism and livestock and, in line with their mandates, to promote harmonization of national policies. Both organisations are actively promoting regional economic integration and follow similar thinking on the issues.

The COMESA policy was developed under the Comprehensive Africa Agriculture Development Programme and so has regional and national components. As an Africa-wide programme led by the African Union, it is likely to receive continued donor support. Under COMESA, the Alliance for Commodity Trade in Eastern and Southern Africa (ACTESA) seems set to support intra- and inter-regional livestock trade in Africa and strengthen links with the Gulf States. Of particular relevance to livestock trade from pastoralist areas is the COMESA/ACTESA support to "commodity-based trade" as an

⁹ Funded mainly by USAID under the Pastoral Areas Coordination, Analysis and Policy Support project; see http://programmes.comesa.int/index.php?view=article&catid=5%3Anewsletters&id=184%3Apolicy-framework-for-food-security-in-pastoralist-areas&format=pdf&option=com_content&lang=en.

¹⁰ Supported by the Livestock Policy Initiative of IGAD-FAO; see http://www.igad-lpi.org.

approach that follows international standards but avoids the need to eradicate livestock diseases¹¹ (COMESA 2009b). The COMESA Green Pass is a certification system intended to enable regional trade in agricultural commodities and could be adapted for livestock and livestock products. In April 2010, COMESA signed a Memorandum of Understanding with the Gulf Cooperation Council,12 and livestock trade issues are likely to be central to that relationship. Ethiopia is a key member of IGAD; the IGAD regional livestock trade policies had strong Ethiopian participation in its development. Relative to COMESA, IGAD has a long track record of engagement with peace-building in the region, including the establishment of the Conflict Early Warning and Response Mechanism (CEWARN).13

An important aspect of these regional policy processes is the emphasis on economic integration

and growth. This relates directly to renewed attention to the economic value of pastoralism by researchers and NGOs. Here the thinking is that pastoralism is often misunderstood by policy makers because the economic benefits, locally and nationally, are rarely measured. In particular, the widespread use of Gross Domestic Product (GDP) to measure economic activity leads to a drastic undervaluing of pastoral areas, whereas tools such as Total Economic Value produce a more accurate inventory and value of livestock and non-livestock economic goods and services (Hesse and MacGregor, 2006). Furthermore, estimates of contribution to GDP are often based on very weak data sets from pastoralist areas and do not take account of informal cross-border livestock trade, which is perceived as difficult to measure.

Box 5. The IGAD NGO and Civil Society Forum

In its Khartoum Declaration, the 8th Summit of Heads of State and Government of the Intergovernmental Authority on Development has drawn attention to the aspirations of the peoples of the region for "stronger and cohesive unity transcending cultural, ideological, ethnic and national differences," and recommended a number of concrete measures to be taken by Member States. These included "encouraging regional associations among civil society institutions at the national level to enhance their contribution to the effort of promoting participatory democracy across the region."

The Khartoum Declaration thereby opened the way to a major step forward, the building of a meaningful interface between the Secretariat of IGAD and the civil society organisations of the peoples of the IGAD region. The interface thereby authorized will provide a mechanism for interaction and exchange of information and experience between the IGAD Secretariat and civil society and among civil society organisations in the region. This offers the possibility of greatly enhanced cooperation at all levels within and across countries to pursue the common interests of the peoples of the region towards unity and development for all.

In this light, Civil Society Organisations (CSOs) and Non-Governmental Organisations (NGOs) are serving as "valuable and cost-effective intermediaries between central agencies and community groups." The self-organised efforts of NGOs and CSOs to improve the situation of the people, promote their interests, and defend their rights are a vital element in the region's economic and social progress.

¹¹ The research supporting commodity-based livestock trade was heavily supported by DFID, initially through programmes with the African Union.

¹² http://about.comesa.int/attachments/080_e-comesa_newsletter_245.pdf. The Gulf Cooperation Council is a common market for Arab states.

¹³ http://www.cewarn.org/.

For NGO practitioners working on the ground, regional bodies such as COMESA and IGAD may seem rather distant and somewhat nebulous, with limited direct impact on local people. However, over time the regional policies and legislation developed by these organisations will support regional economic integration and the formalized but free movement of goods, services, and people. As this report shows, these concepts have considerable relevance to cross-border pastoralist livelihoods, such as the Issa who occupy Ethiopia, Djibouti, and Somalia (Somaliland). Also important is that both IGAD and COMESA regard civil society organisations as key stakeholders in policy development and want to hear directly from NGOs on lessons learned from their programming. For example, the process for developing the COMESA pastoralism and food security policy involved consultations with NGOs and field visits to NGO projects (COMESA, 2009). In IGAD, there is an "NGO and Civil Society Forum," as summarized in Box 5. The caveat is that economists and sectoral experts in regional bodies also need evidence of the impact of NGO activities, but the evaluation and impact assessment of aid programmes generally remains weak.

3.3.2 Pastoralism, policies, and institutions in Ethiopia

Pastoralism in Ethiopia is one of the most researched livelihood systems in the country, with a mass of economic, anthropological, environmental, political science, and other studies available from the 1960s and before. However, and in common with other countries in the region, there are serious disparities between evidence and formal policy. Many of the debates and policy processes around pastoralism seen across the Horn of Africa region also apply to Ethiopia, and so, comparatively, Ethiopia is probably no more or less anti-pastoralist or pro-pastoralist than elsewhere. In common with other countries, Ethiopia allocates land in pastoralist areas to commercial investors, thereby excluding pastoralists from their key dry season grazing and water resources, and then encourages settlement as way to overcome the apparent

inefficiencies of mobile livestock-keeping. In common with other countries, basic service provision is weak in pastoralist areas of Ethiopia and fixed-point delivery models are used, with limited coverage or impact. Localized insecurity and livestock raiding takes place in areas with weak police and justice systems, and where local officials, police, and military are poorly paid. Substantial informal trade takes place, for which pastoralists are blamed and other actors remain nameless.

Weak policy in pastoralist areas is often attributed to weak data, and, as this report indicates, there are often important gaps in basic statistics. However, there are also major problems with making best use of the available data and information and with organisational memory loss in government, donors, and NGOs. For example, while noting the limited number of studies or surveys in Somali Region, few researchers acknowledge that many studies in neighbouring Somalia and Kenya are highly relevant to the Region. These areas are cross-border entities with many similar social, economic, and ecological characteristics, and with movement of people and livestock across borders. Similarly, there has been a large-scale pastoralist development project in Somali Region—the South-East Rangelands Project—which from 1989 to 1996 conducted extensive surveys of water, vegetation, livestock, and other resources but much of this information was lost when the project ended.¹⁴ It follows that an important problem is weak institutional memory of projects and programmes, and poor archiving and accessibility of information. More data collection per se will not overcome these problems. Ultimately, much policy process in many countries is characterised by uncertainty, gaps in information, and different actors interpreting data according to personal and organisational perspectives and politics. It follows that there is sufficient information already available to improve policies in Somali Region and more widely.

While researchers and NGOs often approach policy dialogue from the position of some

¹⁴ For example, in the mid-1990s, the South-East Rangelands Project in Somali Region conducted plant use surveys and produced an electronic database with more than 12,000 entries describing the economic uses of plants in the region. Today, neither federal nor regional government ministries have a copy of the data or are even aware of its existence. Nor is the African Development Bank, which funded the work.

government actors not understanding pastoralism, it is probably also true that pastoralists often do not understand government. There are problems on both sides. In addition, over time NGOs and UN agencies have become more-or-less permanent actors in some pastoralist areas, with economies and mindsets evolving around this presence. For those implementing NGOs that rely heavily or entirely on official development assistance, it is inevitable that new projects are developed in line with donor strategies and the policies of donor states. Despite many years of presence in pastoralist areas, some large international NGOs seem to lack coherent, long-term strategies for guiding their work in pastoralist areas. Opportunities here include participatory visioning or planning processes with pastoralists at community level, supported and triangulated with the available scientific information, where useful.

a. Government structures and policies

As previous sections of this report show, recent conflicts in and around Shinile Zone have mixed causes. Longstanding causes with deep historical roots include the traditional behaviour of pastoralist and non-pastoral groups to use physical force to gain access and control of natural resources. Conflict then becomes protracted, often seasonal, and somewhat predictable when policies and laws governing user rights are vague or support one group in favour of another. This is the case when Oromo-Ittu cultivation is supported over Issa communal pastoralism (from the mid-1970s), and when Afar land is appropriated for commercial irrigation schemes (from the 1960s). Policy and law in these cases has not drawn on or even acknowledged the traditional institutions and laws of pastoralist groups. Since 1991, disputes between regional governments over border demarcations have exacerbated local conflicts, and created new forms of conflict, which can only be resolved by government. At the same time, regional government capacities to handle these issues are weak. At times, good intentions can also seem to go astray. An often-reported but unverified concern was the extent to which conflict management has itself become a cause of conflict. For example, when government budgets are allocated for conflict resolution, there may be a

risk that funding will be reduced or withdrawn in the absence of conflict. In these situations—and when expenses are non- receiptable—there is also a risk that conflict will be encouraged by certain individuals in order to access the resources to respond to it (or appear to respond to it).

While the introduction of federalism may have resulted in numerous regional border disputes, there are also benefits of regional autonomy, and major changes to the system/structure seem unlikely in the near future. In terms of federallevel involvement in regional border disputes, this seems to be most evident when the dynamics reach the level of national security. A seemingly unexplored area is the extent to which federal government regards localized resource-based conflicts in pastoralist areas as a priority relative to, for example, the high rates of violence and murder in non- pastoralist areas, especially associated with land disputes. In terms of NGO involvement in peace-building, the recent Proclamation for the Registration and Regulation of Charities and Societies (the "CSO law") lists "the promotion of conflict resolution and reconciliation" as a charitable purpose.

Looking at specific policies related to pastoralism in Ethiopia, these have been subject to a recent review commissioned by DFID and reporting to the Prime Minister's Office. The review documents focus on the economics of pastoralism and related land use, land policy, and livestock development policies, including livestock marketing (Little et al., 2010). These reviews are comprehensive and cover issues such as

- the economic value of pastoralism and how GDP-based measurements and problems with data quality lead to a drastic undervaluing of pastoral systems;
- the mandate and capacity of the Ministry of Federal Affairs, its coordination role over other line ministries and its policy position on pastoralism, especially the narratives around settlement;
- the persistent misunderstandings over pastoralist mobility, and its economic and ecological rationale according to disequilibrium models of rangeland science;
- the challenges of land use planning and land policy, including policies which support the private acquisition of pastoral lands over

- communal management and access to land, cultivation and settlement over livestock production, and exclusion of pastoralists from wildlife conservation areas;
- the institutional constraints facing livestock marketing, ranging from the structure and capacity of government agencies such as the Livestock Marketing Authority and Animal and Plant Health Regulatory Directorate, through to the myriad of formal taxation and informal payments incurred by traders and the bureaucracy around livestock exports;
- the importance of risk-based drought management policies and related contingency funds.

Overall, these studies show some positive (albeit slow) trends in terms of policy and legislative support to specific technical areas such as the legal recognition of community-based animal health workers (CAHWs) and the publication of government guidelines for emergency livestock interventions in pastoralist areas. In contrast, land use and land tenure policies remain supportive of land use for non-pastoralist purposes relative to customary pastoral land use.

Land use and land tenure

Land use and land tenure policies in pastoralist areas have a complex history and are currently characterised by contradictions between different bodies of law, and between specific laws and the Constitution. Some of the key issues are described by Flintan (2010), with the 1994 Constitution stating that pastoralists are guaranteed the right to land for grazing and cultivation and have the right not to be displaced from their own lands. Furthermore, "The Constitution is said to be supreme over any law, decision of an authority or practice of any nature, be it religious or traditional." The Federal Rural Land Administration and Utilization Proclamation No.89/1997 states that both peasants and nomads are secure against eviction and displacement from holdings on any grounds, other than total or partial distribution of holdings effected pursuant to a decision of the Regional Council. However, Proclamation 456/2005 contradicts the earlier Proclamation and the Constitution and "...encourages private investors in pastoralist areas where there is tribe based communal land holding," and Article 5(3) states that

"Government, being the owner of rural land, can change communal rural land holdings to private holdings as may be necessary."

In their recent review, Little et al. (2010) sum up the situation in Ethiopia as follows: "Without legal guarantees, pastoralists have no security of tenure if individuals or outside interests wish to use their land. Previously pastoralists may have been protected from losing land by their remoteness, but this is no longer the case. Commercial development, extensions to the road network, improved security, and population pressure that has forced farmers to leave the highlands have steadily eroded the isolation of pastoral areas and increased the ability of outside interests to appropriate pastoral property. Without legal protection, the increased accessibility, commercial and conservation value of pastoral land has accelerated pastoral land loss in recent decades." In specific areas and including the Afar pastoral system neighbouring the Issa, these views are supported by substantial bodies of research (e.g., Gebre and Kassa, 2009). Discussing conflict between the Issa and Oromo Ittu from the 1970s, the issue of communal land allocations to the Ittu for cultivation are clearly evident (Fekadu Beyene, 2009).

Less apparent than large-scale commercial enterprises or resource-based conflicts is the slow process of land acquisition and enclosure of rangeland by local individuals. In some cases, local administrations assign land according to proposals for cultivation, but, as outlined above, within a vague legal context. In general, it is often the wealthier, politically-connected, or elite individuals who are able to negotiate these deals, with poorer herders excluded from the process. Once enclosed, the initial intentions can be overlooked and the land may be used by the owner for dry season grazing for their own livestock, exclusively. This results in something of a "win-win" for these people, with access to shared communal grazing during wet seasons but a retreat into the enclosures, with their restricted access, when grazing declines. It also reflects the diminishing power of traditional institutions, which hitherto might have prevented private enclosures. At times, traditional leaders themselves can use their positions to claim exclusive rights to land. This is not a new phenomenon. In 1960, the Afar Sultan made claims over areas adjacent to the Awash River and assigned other areas to Afar elites (Markakis, 2003).

In terms of land use planning, while much research has been conducted on rangeland and water resources in Ethiopia, there are important gaps. These include up-to-date and systematic inventories of natural resources and analysis of trends over time, with quantification of changes in vegetation types, bush encroachment, and so on and related trends in herd composition. Such surveys lend themselves well to participatory research approaches, given the vast experience in Ethiopia with these techniques and the validation of indigenous knowledge on rangeland vegetation (e.g., Oba and Kotile, 2001). At present, support to traditional institutions and participatory land use planning has made considerable progress with recent guidelines launched by a State Minister of the MoARD in April 2010 (Flintan and Cullis, 2010). However, to date, the application of these approaches has been relatively small-scale. For Shinile Zone, there are also opportunities to support established universities such as Haramaya University to work further in these areas, while also engaging Somali researchers at the newer Jijiga University and government research institutes in Somali Region. Other opportunities include engagement with the Ethiopian Land Tenure and Administration Project, which has started to supported land tenure policy reform in pastoralist regions.15

Consideration of land use options also includes economic analysis and comparing the economic benefits and costs of different options; some initial research findings are included in the recent reviews by Little et al. (2010). Further work could also build on the field-level carbon finance studies and how carbon sequestration by pastoralist rangelands and forests might attract carbon financing (Niles et al., 2009).

Livestock development

Regarding veterinary services, legislation to support CAHWs was released in 2002 (Proclamation No. 267/2002) and later supported by MoARD minimum standards and guidelines for the selection, training, supply, and monitoring of CAHWs. Compared to other countries in the

region, Ethiopia has been progressive in support of CAHW systems by NGOs and in linking them to the private sector. The concept of private veterinary pharmacies with associated CAHW networks is slowly growing in pastoralist areas, whereas over the border in Kenya, for example, CAHWs are still not recognised by government. The initial piloting of private CAHW networks and pharmacies in Somali Region took place in the mid-1990s and was supported by a policy statement issued by the Somali regional government in 1996. 16 Assessments in 2002 indicated that 14 private veterinary pharmacies were supplying medicines to the Region, which amounted to around ten times the volume of drugs ever supplied by the government veterinary service (Bekele, 2002).

In Shinile Zone, 89 CAHWs were trained and deployed by the Hararghe Catholic Secretariat between 2001 and 2003, with 14 people trained in Mieso woreda; 85 CAHWs were still active in 2004 (Amare Dejenu Tadele, 2004). Vaccination and treatment figures were reported across the Zone for the 10-month period from November 2002 to August 2003 and amounted to an average of 38,355 vaccinations per month and 37,354 treatments per month. In areas with CAHWs, these workers were preferred over other service providers in terms of accessibility, availability, affordability, acceptance, and quality. In areas without CAHWs, the main type of veterinary care was sourced from illegal drug dealers, black market, and herder service. This system needs reviewing, not least because private veterinary pharmacies and CAHWs are now an accepted type of veterinary para-professional in Somali Region and are supported by legislation. An important question may be whether CAHWs could be better supplied by existing or new private veterinary pharmacies that are located outside the Zone and Region e.g., in Oromiya Region or Dire Dawa. Experiences from the use of CAHWs in conflict situations also indicate that community-based systems are far more resilient to conflict relative to, say, government delivery systems or programmes which use professionals employed by NGOs. Local CAHWs are far better

¹⁵ http://eltap.net/default.asp.

¹⁶ This was a project of Save the Children UK, funded by the Overseas Development Administration (UK).

able to determine when and where conflict will erupt and avoid or deal with local belligerents.¹⁷ Across the Horn, there seem to be few if any reports of CAHW programmes being causes of conflict or cases where CAHWs have been targeted. These systems are also highly relevant to the design of community-based human health services in pastoralist areas (see below).

Although livestock marketing policy in Ethiopia has often been seriously flawed (Akilu, 2006), recent trends include the emergence of export abattoirs around Addis Ababa (especially in Mojo); the price of meat remains high in domestic markets. The Issa have benefited from these trends via Mieso and other markets, as have the Oromo, who benefit indirectly by selling grain to the Issa. While conflict now hinders access to Mieso market for the Issa, livestock marketing policy remains relatively supportive should access be resumed. That said, there are still a myriad of taxes at different levels, both formal and informal, which affect the trade and need to be rationalized and streamlined.

Less clear is the extent to which current policies on the export of live animals to Djibouti or Somalia (Somaliland) are feasible and likely to be supported by traders and other actors. At a practical level, the physical geography of the region makes control of livestock movements and conventional quarantine and certification systems extremely costly. At a technical level, the livestock disease situation in the Somali Region of Ethiopia is similar to that in Somalia (Somaliland) and Djibouti. If quarantine is intended to reduce the risk of exporting diseases elsewhere, this seems immaterial when the diseases are already endemic in the importing country. Should such animals be re-exported from Djibouti or Somalia, which is commonly the case, the concern for importing Gulf States is that new diseases will be introduced. Again, some of the Gulf States already have the same diseases, in endemic form, which are present in the Horn of Africa. If imported animals go directly to slaughter and have limited contact with indigenous stock, the risk of disease transmission is reduced.

For these reasons, the risk-based certification systems being developed by COMESA could help to both rationalize and formalize livestock exports, especially if these systems are developed jointly with COMESA Member States and the GCC. Similarly, the IGAD policy frameworks on livestock trade and animal health are in line with the COMESA initiatives, and IGAD follows the technical lead of COMESA in these areas. In time, such developments might help the Issa become more formally integrated into livestock export marketing systems.

Humanitarian policies, managing risks, and drought management

More than 20 years ago, an analysis of the humanitarian response to the 1984 to 1985 famine in Darfur, Sudan, showed how most people affected by famine survived not because of aid but due to their own resourcefulness and survival skills (de Waal, 1989). Food aid may have played a part in reducing impoverishment, but it was suggested that other relief interventions would have been more effective in preventing destitution. Recognising the importance of livestock to farmers and pastoralists, it was proposed that the early purchase of animals and the use of "fodder aid" rather than food aid would have helped people to better protect their primary resources and way of life. In Ethiopia, the importance of safeguarding livestock assets in pastoral areas during drought was recognised in the National Policy for Disaster Prevention, Preparedness, and Management, prepared soon after the fall of the Mengistu regime (Transitional Government of Ethiopia, 1993). In the policy, each district was required to respond to drought by preparing an action plan describing interventions to save livestock, including the supply of feed and water, veterinary inputs, livestock purchase centres, and mobile abattoirs. However, these types of emergency livestockrelated interventions were not widely applied and food aid has remained the dominant response in pastoral areas since emergency interventions began in the 1970s.

¹⁷ At least if experiences in Somalia (Bishop et al., 2008) and South Sudan (Catley et al., 2008a) are transferable to Ethiopia.

Since 2005, the Pastoralist Livelihoods Initiative in Ethiopia has helped to refocus attention around livelihoods-based programming and has supported drought responses such as commercial destocking, slaughter destocking, and targeted livestock feed supplementation. Selected interventions were assessed in terms of livelihoods impact and benefit-cost analysis, with results feeding into the MoARD national guidelines (MoARD, 2008). This work fits with a shift within government towards more risk-based approaches to managing drought (and other natural disasters) and the emerging policies of the MoARD Disaster Risk Management and Food Security Sector. Other programmes such as the 15-year Pastoralist Community Development Project implemented by the MoFA include capacity-building support to government in areas such as drought cycle

management and contingency planning, but seem to fall within the overall MoFA policy narratives around settlement of pastoralists.

Despite progress towards more livelihoods- and drought management-based thinking and policy and associated "non-food" responses, food aid still dominates the scene and is an institution in itself. Although the language of livelihoods has worked its way into needs assessments and appeals, for most actors the overriding and accepted procedures focus on assessing food aid needs and delivering food aid. There is of course a huge amount of analysis and literature on these issues in Ethiopia but relatively little on the comparative benefits and costs of food aid compared with livelihoods-based support. Box 6 makes the economic case for early commercial destocking during drought.

Box 6. The costs of food aid versus early livelihoods-based responses to drought

Imagine that a pastoralist in a drought-affected area of Ethiopia has 15 cattle. He decides to sell one bull as he knows that with the income he can buy enough maize to feed his family of six people for two months. He wants to retain his best breeding cows to help him recover after the drought. His decision is also based on the fact that he can sell a thin bull for Ethiopian birr 440 (US\$50) and with that money can buy 200 kg of maize (cost Ethiopian birr 160/100 kg). He knows that each person will eat around 0.5 kg of maize a day, and so he'll need 180 kg of maize to feed the family for two months.

Now imagine that the pastoralist is unable to sell his bull. This is because no traders are available in his area, which is remote. The roads are bad and the traders are unwilling to move their trucks. They're worried about high fuel and repair costs, and hear rumours of insecurity. The drought progresses and the pastoralist's cattle all die, as do most of his sheep and goats.

Images of dead livestock appear on websites and TV screens. Soon after, a team from the World Food Programme arrives and does an emergency assessment. They decide to provide food aid to keep the pastoralist and his family alive. But how much does this food aid provision cost relative to the cost of facilitating commercial destocking? Using actual costs to aid agencies for assisting commercial destocking in Ethiopia in 2006 (Abebe et al., 2008), the following simple calculations compare the costs:

- Assume that for an NGO or government department, the relative cost of linking a private trader to the pastoralist is US\$1. For a relative cost of US\$1, the pastoralist is assisted to sell his bull and feed his family for two months. The cost is derived from the communication activity of driving the trader into the drought-affected areas and introducing him to pastoralist representatives and local officials. Several hundred people are linked to the trader, hence the low cost per person.
- In comparison, all the cattle die and local food aid is used to feed the family of six people for two months during the drought. In relative terms, the cost would be US\$97—97 times

Continued on next page

- *more expensive than commercial destocking*. This factor does not include the cost of rebuilding the herd e.g., through a restocking programme after the drought, nor does it include the cost of feeding the family during the recovery period.
- In a second comparison, imported food aid is used to feed the family for two months. In relative terms, the cost would be US\$165—165 times more expensive that destocking.
 Again, this cost does not include the cost of rebuilding the herd, or the cost of feeding the family during the recovery period.

Source: adapted from Catley et al. (2008b).

If applied to Shinile Zone, then options for livelihoods-based support during drought clearly relate back to specific assets during normal periods, as described earlier in this report. These include infrastructure, especially roads to access drought-affected areas, and access to markets or traders. It follows that conflict resolution work which allows easy access to markets for the Issa (e.g., to Mieso market) is not only a development benefit but also relates to drought response.

The other major questions around humanitarian assistance include the extent to which the Productive Safety Net Progamme will meet its objective of reducing vulnerability in pastoralist areas and the ways in which the programme may need to be adapted to suit the particular social systems and livelihoods options in these areas. A review of the programme was underway at the time of writing this report. Similarly, the emerging Household Asset Building programme is being designed for pastoralist areas. At present, neither programme is being implemented in Shinile Zone.

Primary health care

The Government of Ethiopia's health strategies, outlined in the Plan for Accelerated and Sustained Development to End Poverty (PASDEP) and the Health Sector Development Plan (HSDP III), prioritize rural health services, with a focus on extending services from health facilities out to villages and households. With two-thirds of the rural population more than 5 km away from any kind of health facility and 77 percent more than 20 km from a hospital (MoFED, 2006), the role of community-based health workers is key to achieving the government's MDG-related goals

in the health sector. These goals include: reduce under-five mortality from 123 to 85/1000 live births; increase DPT 3 vaccination coverage from 61 percent to 80 percent; increase share of births attended by skilled health personnel from 9 percent to 32 percent; increase primary health services coverage to 100 percent by 2009 to 2010. Central to the health extension programme is the training of Health Extension Workers (HEWs) at the kebele level who are attached to government health posts and who are responsible for delivering basic sanitation, immunization, and other health services such as personal and environmental hygiene and family planning. Community health workers such as Community Health Agents (CHAs) and Traditional Birth Attendants (TBAs) are supposed to work under the HEWs to provide support to households for behavioural change (e.g., breastfeeding, immunization, use of bed nets, clean delivery, etc.).

While these general approaches in the health sector seem laudable, there are also questions about whether the system can or should be applied in pastoralist areas. For example, CHAs are the main community-level service provider in the system, but officially their duties are restricted to providing health advice and provision of oral rehydration therapy (ORT). For communities located considerable distances from any other health care provider, it is unclear if or how people are supposed to access clinical services for diseases other than diarrhoea. The need for communitybased health workers to deliver a reasonable range of clinical services (not just offer advice) was recognised in Somali pastoralist areas many years ago. For example, when designing the community health programme in Somalia in the

1980s, the Ministry of Health and UNICEF recognised that locally-accessible health workers needed to provide curative services for diseases such as malaria, diarrhoea, and pneumonia, and that "No one would listen to education messages about diarrhoea prevention delivered by health workers unable to answer the immediate needs of the child with pneumonia, or the pregnant woman with malaria. The lack of (functioning) infrastructure and referral points also make it necessary that health workers should be provided with antibiotics as necessary, particularly for treatment of acute lower respiratory tract infections" (Bentley, 1989).

Professional concerns are often an important institutional constraint to community-based delivery systems. In the case of CHAs, a concern is the potential misuse of medicines, especially antibiotics. However, between 2001 and 2006, pilot studies in pastoralist areas of Liben woreda in Oromiya Region used community case management (CCM) to diagnose and treat pneumonia, malaria, and diarrhoea in children. An evaluation of the system showed that trained CCM workers successfully treated pneumonia cases in children using antibiotics, and that the availability and quality of CCM workers was high. The evaluation recommended scaling up CCM for the three illnesses (Degefie et al., 2009). A step forward was the drafting of a national plan for use of CCM (FMOH, 2009), but this plan does not cover pastoralist areas and restricts CCM activities to HEWs.

The limitations of the current CHA approach in Somali Region and their restricted role were borne out by an impact assessment of primary health services in Dollo Bay and Afdher woredas (Catley et al., 2008c). Although preferred by pastoralists in terms of their accessibility, availability, and acceptance, they were perceived as not providing a good quality of service due to the limited range of medicines at their disposal. Furthermore, CHAs were especially appreciated by women who found it difficult to travel to health centres relative to men. As described previously in the report, there are gender-related cultural barriers to health care. An improved CHA system and introduction of CCM would potentially have particular benefits for women and children.

Looking more specifically at maternal health care, "death during childbirth" accounted for 21 percent of all deaths in pastoralist areas in Somali Region, or around ten times the deaths caused by conflict (Devereux, 2006). The government approach for improving maternal care at community level is to improve the quality of TBAs and widen their use, and provide a referral service at health centres. In terms of serious problems before or during childbirth, TBAs are required to refer women to higher-level facilities with more professional staff. Indeed, their official role is to attend normal births as it is known that they don't have the requisite skills or treatments to deal with oedema, anaemia, mal-presentations, or other birth-related complications. Therefore, in terms of live-saving interventions, the referral system is essential. But does this system work? Again, impact assessments in the south of Somali Region indicate major problems. Although 79 percent of births in study areas were reported to have been attended by a trained TBA between 2002 and 2007, the referral rate for complications was zero percent. Yet problems such as malpresentations or haemorrhage probably resulted in high case fatality rates (Catley et al., 2008c). The explanations for the zero referral rate were mixed. The TBAs reported that women refused to go to health centres due to the poor quality of service and facilities available, staffing by health workers who were not culturally acceptable (men rather than women), and transport problems. Health centre workers reported that TBAs exceeded their responsibilities and capacities by trying to treat cases that should be referred while at the same time the health centres visited were illequipped and filthy.

In summary, a positive trend is government commitment to address primary health care needs and meet targets. But pastoralist areas require adaptations or even complete revision of health delivery systems which are developed for other areas, and there are questions whether the limited resources available are being invested in the right model of service delivery for pastoralist areas. Community health workers in Somalia showed good impact in the 1980s, and these lessons need to be revisited. CCM needs to be further applied and evaluated; the federal plan to support CCM (FMOH, 2009) needs to be extended to pastoralist areas and further adapted for these

areas. Life-threatening complications during childbirth will not be treated by TBAs but by referral systems which are at least accessible, available, and acceptable. Here there seem to be major challenges still and a need for NGOs, UNICEF, and others to work with government to innovate and develop alternative approaches.

Education

It is generally assumed that education is fundamental to development, supporting economic and cultural growth and diversity. More specifically, in pastoralist areas, education is often seen as a core strategy for encouraging livelihoods diversification or at least, less dependency on livestock as the sole source of financial capital. There is limited hard evidence to

show this benefit, partly because it needs longterm research to track households over time. However, research from pastoralist areas in Kenya makes the case very clearly (Table 18).

In Ethiopia, many of the policy and institutional issues around pastoralist education follow similar themes to health care. On the one hand, there are clear government commitments and policies which aim to improve education nationally while also recognising some of the special logistical and related delivery constraints in pastoralist areas, and levels of education which fall way below national averages. On the other hand, there are questions as to whether well-intentioned policies can be implemented regionally due to various budgetary and management capacities (Mohammed Habib, 2007).

Table 18. Impact of secondary education on pastoralist households in Baringo District, Kenya, 1980-2002

| Livelihoods indicators | Homesteads "with secondary education" | Homesteads "without secondary education" |
|---|---------------------------------------|--|
| Households with member in salaried employment | 57% | 2% |
| Households receiving remittances | 78% | 30% |
| Annual expenditures assisting relatives (Ksh) | 4,441 | 1,670 |
| Annual food expenditures (Ksh) | 16,9953 | 10,2303 |
| Households claiming "good" food availability | 70% | 49% |
| Households using food aid | 23% | 66% |
| Average number of animals owned | 9.8 cattle, 41 sheep/goats | 6.4 cattle, 30 sheep/goats |
| Number of animals lost in drought | 19.5 | 12 |
| Losses as proportion of total cattle owned | 67% | 65% |
| Annual cash savings (Ksh) | 56,343 | 9,993 |

Source: Little et al. (2009).

At the level of the Constitution, a guiding principle is "To the extent the country's resources permit, policies shall aim to provide all Ethiopians with access to public health and education, clean water, housing, food and social security" [Article 90]. The federal government policies such as the Education and Training Policy (April, 1994) and Education Sector Strategy (September, 1994) lay out

national sector-wide approaches and aim to define minimum uniform standards and quality, but do not specifically refer to pastoralists (Mohammed Habib, 2007). However, a more recent federal government policy issued in 2007 acknowledges the limitations of previous strategies, including poor quality of education due to inefficiencies in teaching and school administration, and the use of

non-pastoralist languages as the medium of instruction. Further constraints are summarized in Box 7.

The 2007 policy seemed to draw heavily on alternative approaches to education developed and tested by NGOs and governments in other parts of the world. It includes mobile schools, distance learning, radio learning, and the provision of hostels for children travelling from remote areas who need accommodation. The policy included re-orientation of teachers to ensure familiarity with pastoralist cultures and languages, and incentives for teachers who performed well.

When critiquing the policy in 2007, Mohammed Habib described four main areas of concern:

- First was that beyond the broad, positive strategies outlined at federal level, the policy omitted the detailed "nuts and bolts" or procedures needed to implement the policy. In the event that regional governments were to develop these details according to regional contexts, the capacity to carry out this task was open to question.
- Second was a set of questions about whether

- budget allocations were sufficient and, given their capacity at the time, the ability of regional governments to manage additional resources.
- Third, the policy made no provision for gender disparities in education or ways to improve the enrolment or educational status of girls.
 Strategies were needed at regional level to address cultural biases and develop services which were socially acceptable. For example, hostel facilities for girls would need to be very carefully located, designed, and staffed. The additional resources for developing and implementing these specific areas of work were not mentioned.
- Fourth, there was an absence of analysis or reports to explain the low use of existing facilities, including provisions for adult and non-formal basic education.

In common with primary health services, then, the overall picture was one of a strong intention to provide policy support but various questions about the relevance and likely impact of the service delivery models being proposed, levels of funding, and whether limited funds might be better directed at alternative approaches.

Box 7. Challenges to education provision to pastoralists in Ethiopia

At point of delivery:

Funding: Building and maintaining schools in harsh and remote rural areas is costly.

Staffing: Difficulties in securing school staffing in harsh and remote rural areas

Training: Difficulties in securing quality teaching in schools in pastoral areas (Well-trained teachers often go elsewhere or leave at the first opportunity.)

Equipment: Difficulties in providing adequate teaching and learning materials to remote locations

Legacy: Difficulties in overcoming a legacy of antagonism to nomads' livelihoods, where formal school-based education was allowed to be instrumental to policies of cultural assimilation and forced sedentarisation (therefore posing a threat to pastoral production strategies)

At point of reception:

Mobility: Although key to the production strategy of the nomadic household, mobility poses a serious challenge to a system heavily reliant on school-based education.

Scattered populations: Often an advantage for production but a problem for realising economies of scale in school-based education

Continued on next page

Unpredictable disruptions of service: On top of routine mobility for production, insecurity and environmental events of great magnitude, such as floods and prolonged droughts, can significantly disrupt the rigid routine of school-based education.

Children's work commitments: Children's involvement and responsibilities within the household's economy from an early age competes with the requirements of school calendars and timetables.

Resistance to schooling girls: Apart from labour requirements, parents are particularly reluctant to send girls away from the familiar contexts where they can be protected and controlled.

Non-literate parents: The fact that adults/parents often lack basic education means that children cannot receive help at home as far as formal education is concerned.

Liquidity: Even relatively small school-related costs are perceived as difficult to meet as pastoral households usually have little liquidity and the economic benefits of schooling are not easily evident.

Source: adapted from Krätli and Dyer, 2009.

b. Tradition, clan, leaders, and youth

For pastoralists, there is a fairly robust economy based on mobile livestock rearing and strong indigenous knowledge and skills. Around this core livelihood strategy, Somali pastoralists have been diversifying for decades, and much of this activity is explained by the long coastline of Somalia and travel by sea for trade or to seek employment and send money home. Somalis also have a long traditional of travelling to Mecca and so were familiar with foreign countries. In the colonial period, Somalis worked on British and Italian ships, and some settled in Europe. The oil boom in the 1970s saw Somalis settling and working in the Gulf States, and Somalis continue to migrate, resettle, and set up businesses in Europe, the US, Canada, and elsewhere. Remittances are now supported by a wellorganised and efficient international money transfer system. In 2006, the Somali diaspora was estimated at over one million people and their remittances were valued at US\$825 million per year (Economist Intelligence Unit, 2006); other reports value remittances at up to US\$1 billion (Lindley, 2005). The importance of remittances was also shown by household surveys indicating that remittances accounted for up to 20 percent of the income of poor households in some pastoral livelihoods zones in Somalia (FSAU Somalia, 2006). A similar contribution of

remittances to the income of poor pastoralist households was also noted in Shinile Zone in 2008 (DPPA/SCUK, 2008), with migrations from pastoral households to find work in towns in Ethiopia or Djibouti. These trends show that to some extent, the Somali economy has been diversified for a long time, and some pastoralist households are accustomed to practices around migration and remittances. Also, money transfer systems rely on high levels of trust and kinship ties, i.e., the traditional clan system.

More locally, the Somali tradition of sharing resources is still strong, as shown by the high levels of informal transfers which take place within communities, and the zakat system, although these systems are under pressure as levels of poorer households lose their livestock or are forced to sell out (e.g., see Table 15). The ability of Somali communities to organise themselves around development activities which they've prioritized and helped to design is well documented and in Somalia Region dates back to the mid-1990s. Examples include restocking programmes in agropastoral areas of Jijiga Zone, which draw on traditional restocking systems, community-managed water supply, and CAHW systems (SCF UK, 1997), and restocking in pastoralist areas around Fik (Wekesa, 2005). All of these experiences indicate the value of social capital for development in these areas.

In contrast to these positive aspects of Somali pastoralist society are a set of socio-cultural norms which can also hinder local development. These include deeply-engrained gender discrimination and related inaccessibility to basic services for women and girls. While inappropriate service delivery models from government and at times NGOs, partly explain the very low health and education statistics for women and girls, cultural gender bias is also very evident. The normality of violence on the rangelands also contributes to the problems, not least by triggering a constant round of traditional compensation negotiations which, if nothing else, reminds men that their lives are twice as valuable as women's. Among health and education professionals, concerns over insecurity affect their willingness to live and work in these areas.

The traditional compensation response to Somali-Somali injury and death may also influence the ways in which conflict with neighbouring groups occurs. When outsiders are killed, traditional Somali compensation mechanisms do not automatically kick in, making it more likely that perpetrators will not be punished or lose the livestock acquired through force. In the absence of traditional forms of compensation-negotiation between ethnic groups, or when these systems are weak, violent retaliation or revenge seems to be more likely. Alternatively, stand-offs between groups become long term and difficult to reconcile. This can lead to the emergence of "no man's lands" which could potentially be useful grazing areas for both sides. In general, resourcebased conflict in and around Somali Region is not within or between clans but at the borders of the Region where Somalis interface with other groups such as the Oromos or Afars.

While traditional leadership has an important role in development programmes, it is probably also important not to romanticise the capacity of local leaders. Not only are these leaders all male, but traditional leadership and representation of Somali communities, like formal or informal representation anywhere, is highly variable. "Traditional leaders" can fall anywhere along a scale of strong moral integrity to corrupt or even criminal. While traditional elders and other leaders are involved in peace-making, they also condone attacks and livestock raids and benefit

from such raids. New aid programmes can also encourage self-interest, notably by creating relationships which require repeated payments (e.g., per diems) to individuals for their participation in programme activities.

Although elders may initiate and plan violent attacks, much of the fighting is done by young men or teenagers. According to CHF (an USbased NGO), only around 15 percent of youths in Somali Region attend school, and there is high unemployment. Although it seems that more youths are leaving pastoralist areas for urban centres, such as Jijiga and Gode, the job opportunities are very limited (CHF International, 2006). While some may find work such as shoe shining, loading and unloading trucks, or minor construction, many fail to find work. As such, CHF proposes that youths can be a source of conflict because they lack income and are frustrated, disillusioned, and easily mobilized. According to Devereux (2006), "Together with anecdotal evidence ... that the aspirations of Somali youth might lie increasingly outside pastoralism, we might predict that levels of urbanization (within Somali Region) and migration (to destinations outside the region) will rise, while the proportion of Ethiopian Somalis who remain engaged in livestock-dependent livelihoods will decline." Related to these issues is easier access to khat in urban centres and khat addiction, which in turn can encourage crime as a means to buy khat. It seems that little attention has been given to youth groups in development initiatives.

For youths who stay in the pastoralist system, there is the need to acquire livestock as both financial capital and for marriage. As in other pastoralist areas of the Horn, the prospect of marriage also presents a formidable problem for the youth in Somali Region, as marriage requires a bride price to the bride's family in the form of livestock. Many young men are unable to pay the bride price and so may raid or steal animals from neighbouring groups (Mercy Corps, 2009b). Youth are also reported to ambush people carrying guns such as AK-47s so they can steal the weapons and sell them. In the Ogaden, youth issues are complicated by anti-terrorism narratives and the apparent recruitment of youths by insurgency groups. In Shinile Zone, this seems to be far less of an issue at present.

4. STRATEGIC DEVELOPMENT OPTIONS IN MIESO-MULU *WOREDA* AND SHINILE ZONE

4.1 Strategic issues

4.1.1 Livelihoods-conflict cycles and governance

For NGOs working in conflicted-affected pastoralist areas, analysis of either livelihoods or conflict tends to point to circular causal pathways. In one sense, deficits in livelihoods assets (especially financial capital) or weak elements of social capital (traditional institutions, societal behaviour) are causes of conflict. Here the use of physical force to acquire and keep assets (livestock, water, grazing) can become normative. But violence and force have consequences. For example, markets and services may be disrupted, or specific natural resources may become inaccessible, with implications for livestock production and food security. As certain assets increase through the use of conflict, other assets decrease, thereby prompting more conflict, and the cycle repeats itself. In dry pastoralist areas with high and sometime critical variability in grazing and water, physical force is normal.

While resource-based conflicts are part of the livelihoods-conflict cycle in Mieso-Mulu woreda, the situation has become more complicated due to governance factors. These include the uncertainties around the delineation of the border between Somali and Oromiya Regions, and the informal designation of Mulu town as the administrative centre of Mieso-Mulu woreda. In addition to these conflict triggers are the more longstanding, resource-based conflicts. A further complication is that in part, resource-based conflicts are due to land tenure policies and laws which favour the private acquisition of land and cultivation over communal, pastoralist use of land. In other words, formal policy is itself also a cause of resource depletion for pastoralists and therefore a source of conflict.

4.1.2 The Afar-Issa-Oromo dynamics and domino effects

If the Issa pastoralist system is mapped out, it becomes clear that conflict and change in one part of the system can have knock-on effects elsewhere. Depending on the level of pressure or threat, the Issa, like other Somali clans, have the capacity to act in unison as a single entity. For example, looking at Figure 3, pressures over grazing or water resources in the southwest of Shinile Zone would force Issa to look elsewhere. Given the current dynamics, an obvious choice would be to expand further into Afar areas in the west and northwest. Such expansion could happen gradually (as has already happened), but is likely to involve further conflict with the Afar. In the event that the Afar are then pushed further back into their lands, a knock-on effect would be tensions to the west and south of their territory and possible further conflict between the Afar and Oromo or Kereyou. To some extent, these trends are already a reality, as shown by the current stand-off between Somali and Afar Regions over the three Issa-occupied settlements along the Djibouti main road.

If this system-wide view is valid, it points to the limitations of resolving conflicts around boundaries or resources in the system through two separate bilateral processes, between Somali Region and Oromiya Region, and between Afar Region and Somali Region. Instead, a tripartite process is needed between the three Regions. In terms of more localized peace-building efforts, these may achieve short-term positive impacts, but successes are likely to be fragile unless an overall harmonization of regional state governance and resource issues takes place between Somali, Oromiya, and Afar Regions for the pastoralist area between the Hararghe highlands and the eastern highland escarpment. It follows that NGOs need to balance very localized peace-building activities with support to some kind of regional harmonization involving the three Regions.

In terms of livelihoods programming in these areas in relation to conflict prevention, a general and well-known principle is that balanced or proportional inputs are needed across opposing groups. At the level of Mieso-Mulu *woreda* at present, this means a balanced approach across Issa, Hawiya, and Oromo groups. However, if the system boundary is beyond Shinile Zone, it means a balanced programme across the Issa,

Hawiya, Afar, and Oromo groups. Furthermore, there may be certain types of asset creation which, if not carefully designed, could be conflict triggers. For example, a post-drought restocking programme targeted at only one group would be high risk.

4.1.3 Land issues

Related to the need to think about the wider Issa pastoral system beyond Shinile Zone are a set of specific policy and institutional constraints around land use and land tenure. In part, the development of any coherent plan for the Issa-Afar-Oromo pastoral and agropastoral system needs policy and laws which recognise pastoralist mobility and communal land use, and which prevent appropriation of land to the detriment of pastoralists. Land tenure policy in the Shinile Zone area and adjacent areas of Afar Region is directly related to conflict and will likely continue to be a cause of conflict if commercial use of riverine areas and cultivation is favoured over pastoralism.

Strategies here include working with pastoralists and researchers to quantify changes over time in vegetation and other rangeland resources, and access to these resources by different groups. Inventories and trend analysis need to be on an ecosystem (pastoral system) basis and not delineated by administrative boundaries. This work lends itself well to participatory research, but needs to be done at scale and across the entire system. It could also feed into two important complementary processes, viz. the economic evaluation of pastoralism and economic comparison of different land uses. As this kind of information emerges, it could help long-term planning and visioning activities with pastoralists which, at present, are very weak. The Ethiopia Land Tenure and Administration Project would be an obvious partner.

4.1.4 Economic integration

Looking across Ethiopia and other parts of the Horn of Africa, there are many areas with peaceful co-existence of different pastoral groups, or pastoralists and farmers or agropastoralists. Furthermore, these relatively low-conflict situations exist in formal policy environments which are as vague or disabling as those described for Shinile Zone. In part, lower levels of conflict in these areas are explained by the ways in which different groups develop local, practical livelihoods strategies and economic activities which are inter-dependent and which can often ignore formal boundaries. In Ethiopia, the synergies between highland Amhara or Tigrayan farmers and lowland pastoralists are well known, with around 20 percent of highland oxen being produced in lowland areas, and the Issa being an important source of camels to both Amhara and Tigray Regions. The lowlands are also used for grazing oxen at certain times of year, with pastoralists being paid to herd these animals. In some areas, there are integrated livestock finishing and marketing arrangements, with lowland livestock fattened on midland or highland farms off crop residues or other feeds and then sold on into domestic markets. Although illegal, the Issa already cooperate with non-Issa traders around the contraband trade from Djibouti into central and northern Ethiopia. People will trade across regional state or other boundaries if it makes economic sense to do so.

In Mieso-Mulu, mutual benefits for Issa and Oromo were evident at Mieso market before the most recent bouts of conflict, with Oromo cereals being bought by Issa, who sold livestock. Simply put, peace is more likely to be sustained if the economic benefits of cooperation outweigh the benefits of physical force to acquire assets.

Looking more closely at trends, it is likely that over time the Issa pastoralist system will become more commercialized. The data in Table 15 is indicative, with livestock assets increasingly in the hands of middle-wealth and wealthier groups, who tend to sell more animals. The Zone is also well placed in terms of market options. Looking centrally, the Issa can contribute to the export trade out of Addis Ababa, while also exporting via Djibouti or Somalia (Somaliland). Domestic markets are also likely to increase with growing urban populations in Dire Dawa and Harer, and towns across the border in Oromiya.

For poorer pastoralists and those already leaving the system, alternative livelihood strategies are a priority. Among these, education is central to long-term development and economic diversification (see section 4.1.5). In the short term, and particularly related to conflict prevention, is the need to test two broad groups of alternative livelihood activities with Issa youths and where possible, integrate these activities with non-Issa actors. The two main areas are activities related to livestock (e.g., marketing, fodder production) and non-livestock activities. In both cases, the integration process means looking across the Shinile Zone border into the towns and markets of Oromiya and Dire Dawa, and at the main highways. Similar activities for women are also important and might focus initially on milk marketing and added value to milk products.

At a very different level are processes around regional economic integration and the extent to which emerging policy frameworks and systems in bodies such as IGAD and COMESA can strengthen the economies of groups like the Issa and legitimize seasonal cross-border movements and trade. For IGAD, both economic integration and peace-building are priority and related areas.

4.1.5 Basic services

The analysis of basic services and related health and education statistics in Shinile Zone mirror the major problems seen in these sectors in Somali Region as a whole. Both sectors show progress in terms of government commitment to invest and move towards MDGs, but many questions remain over service delivery approaches, especially in health. One of the most striking findings derived from Devereux's study in the Region in 2006 was that the death rate due to childbirth in pastoralist areas exceeded deaths due to conflict by more than ten times. And of course the childbirth deaths are all women, teenage girls, and their children. Immunization levels of children still remain so low as to be almost irrelevant in terms of meetings international guidelines. More positively, there are lessons to be learnt and applied from CHW and CCM programmes in pastoralist areas, and there are spaces for NGOs to work with government to further adapt and evaluate these approaches. The critical point is that health probably won't improve substantially in pastoralists unless modern medicines can be delivered where they are needed and properly used after delivery.

Both health and education need more detailed situation analyses with government partners, which should include measures of the likely impact of existing delivery strategies according to accessibility, availability, affordability, acceptance, and quality. Part of the analysis should also examine government budgets and the overall amount of service which can be delivered relative to need or demand. Such analysis often shows that not only will the available budgets meet only a fraction of the required coverage but that the funds available might be better directed at alternative delivery models. This work also needs to examine, systematically, the barriers to health and education faced by women and girls, such as gender discrimination, and develop and test service delivery approaches which are specifically designed to overcome these barriers.

While improved health care can produce benefits very quickly, education is more of a long-term investment. However, if the economic trends evident in pastoralist area continue, then education should be a core strategy for supporting livelihoods diversification. Education also has other multiple benefits and over time can produce professionals and para-professionals from pastoralist areas who are more comfortable working in these areas and more acceptable to communities. To put this in perspective, one could ask how many female Somali physicians are currently working in Somali Region, and what would it take to educate and deploy them, if none are there at present?

In terms of situation analyses and options for improving services, the report makes the case that Shinile Zone is not as physically isolated as it may seem, especially in the southern areas of the Zone. Few other Somali pastoralist areas in Ethiopia have such proximity to main roads, and the Zone is reached within four hours by road from Addis Ababa. There are active urban centres relatively nearby, over the border in Oromiya Region, with economies driven by agriculture and khat; and there is Dire Dawa as a city with schools and hospitals. Therefore analysis of service provision—especially health—should include ways in which "outreach" from Oromiya Region and Dire Dawa might make more sense operationally than from urban centres in Somali Region. As an example, would it make sense for

a community health worker based in Mulu (in Somali Region) to be re-supplied with medicines from Mieso town (in Oromiya Region)? Within government, the administrative barriers to such a system could be prohibitive, but the private sector could probably respond. If so, service provision with more involvement of the private sector across regional state borders (under government regulation) might be another form of economic integration, while also improving basic services. Similar approaches also apply to veterinary services.

4.1.6 Humanitarian assistance and safety nets

During the last five years or so, there has been renewed interest and use of livelihoods-based programming in response to drought in pastoralist areas of Ethiopia, with MoARD support and publication of guidelines (a Somali version is in press)(MoARD, 2008). These approaches now also fit with the more recent risk-based thinking of the DRMFSS, not least by following the drought cycle management model. That said, there is still a long process of government capacity-building and institutional change ahead before these approaches become normative in government and aid organisations, and are applied early during drought. The challenge of making contingency funds operational is still very evident, as is the emphasis on food aid.

Despite the slow move towards livelihoods-based programming during drought, the principles of the approach are still sound. In summary, livelihoods-based approaches in disasters aim to not only help save lives but also to maintain (rather than undermine) the markets, assets, and services which are needed for recovery. In the case of pastoralist areas, this means interventions such as commercial destocking, livestock feed supplementation for core breeding stock, and veterinary care. Furthermore, the MoARD guidelines support the involvement of the private sector in drought response. In the case of commercial destocking, private trader involvement is self-evident and has proved to be very effective in Ethiopia (Abebe et al., 2008). For veterinary care during drought, voucher schemes with private CAHWs networks are being piloted, and the MoARD guidelines for CAHW support their private status if linked to higherlevel veterinary workers for supervision. For livestock feed provision, this already involves purchase of feed from private suppliers, although more local supply of feed could be more cost effective. All of these developments seem highly relevant to the general principle of economic integration, indicating that a long-term strategy would aim to align drought management and livelihoods-based responses with activities such as "cross-regional state" livestock marketing, private CAHW networks, and fodder production. The strategy would assume that a major drought is likely every five to seven years, and that the actors involved in marketing, input supply (fodder), and veterinary services—especially community-level and private sector actors—could be the same as those who help to deliver drought interventions.

The Productive Safety Net Programme has not yet been rolled out in Shinile Zone. A review of the programme in pastoralist areas was underway at the time of writing this report, and until lessons and evidence of impact start to emerge (or not), linkages with the programme are difficult to define.

4.2 A strategic framework

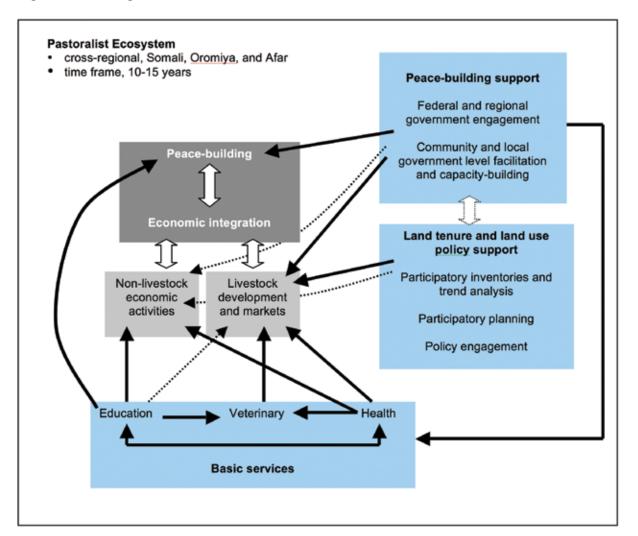
4.2.1 Outline of the framework

Based on the livelihoods-conflict analysis described in section 3 and the strategic issues outlined above in section 4.1, a strategic framework for development in Shinile Zone could

- comprise a core element of two inter-related and mutually-supportive principles, viz.
 peace- building and economic integration across regional state boundaries;
- support this core element with three interrelated thematic areas, again across regional state boundaries, viz. peace-building support, land tenure and land use policy support, and strengthening basic services;
- under the principle of economic integration across regional states, use the three thematic areas support two main types of economic activity, viz. livestock-related and nonlivestock-related.

The relationships between the different parts of the framework are shown in Figure 11.

Figure 11. Strategic framework for Shinile Zone



The numerous linkages (arrows) show how the different parts of the framework are mutually supportive. Some of the main linkages are as follows:

- Peace-building work with government and community stakeholders needs to link into land tenure and land use policy support, and vice versa.
- Both peace-building work and more supportive land tenure arrangements contribute to livestock marketing and livestock development, while also supporting future alternative livelihoods that are not dependent on livestock.
- Education has multiple benefits, impacting on livelihoods diversification and peace-building, while also contributing to the education of future professionals for service provision and policy influence.

• It is assumed that a healthy population is needed if children are to attend school and if labour is needed for economic activities.

The framework assumes that:

- Defining the system boundary is important, and this requires an understanding of the differences between administrative boundaries (real or unofficial) and the boundaries of pastoralist ecosystems (Figure 3) and the possible knock-on effects of working too locally. The analysis points to a system boundary which covers Shinile Zone and parts of Oromiya and Afar Regions, indicating that a harmonized approach across three Regions is needed.
- A long-term perspective is needed, of at least 10 to 15 years.
- In part, the strategy will depend on the impact



Supporting economic integration between neighbouring groups in Mieso-Mulu seems central to peace-making and sustaining peace.

of recent peace-building work and the options for reshaping or expanding this work.

- Simultaneous work across all three thematic areas (peace, land, services) is needed.
 Omitting any one area threatens progress in the other two areas.
- While economic integration might focus on "development activities," the framework can also position livelihoods-based drought-response planning and interventions under an economic integration objective. This assumes that livelihoods-based responses such as commercial destocking, livestock feed supplementation, and veterinary care could use many of the same actors, especially private sector actors, who are involved in the development activities, thereby further strengthening the overall approach.

Further details on each of the main thematic areas are given below.

4.2.2 Peace-building support

A review of the relevance or impact of recent peace-building activities by NGOs or government was not conducted under the analysis. However, the analysis shows that the question is not whether or not to support government and community capacities around peace-building. The need is clearly evident and conflict impacts negatively across all aspects of pastoralist livelihoods. While the analysis shows the mutually supportive relationship between peace and economic integration across regional states, it also indicates that the scale is important. Working in only one part of the wider pastoralist system means that possible negative long-term effects on the wider system can be inadvertently overlooked.

The benefits of peace are community-wide and relate to both livestock-related and alternative economic strategies. Important targets for peace work include government actors at different levels but particularly those who have designated conflict mitigation or resolution functions, or who are involved in regional border issues. Here it also seems that certain government systems may unwittingly cause conflict. The annual allocation of budgets for conflict response, with a system of non-receiptable expenses, may encourage some local government workers to use conflict to access resources. At the community level, elders (or other leaders) and youths are causes of conflict and behave according to a long-held tradition of acquiring assets by force. For youths, the trend towards decreasing livestock holdings among poorer households may exacerbate the tendency to raid and, at present, few non-livestock

economic opportunities are available and levels of education are very low. Peace work with youths therefore seems to need complementary livelihoods support, the design of which may depend on their aspirations for staying in or moving out of the pastoralist sector. Education also seems to be central to a long-term strategy.

Resource-based conflicts are caused in part by vague or non-supportive policies and laws for securing pastoralists access to land. Therefore the framework includes land use and land tenure policy support (see below) as directly linked to peace-building approaches.

The potential of peace and security on service delivery seems obvious, but perhaps should not be overstated. In terms of non-Somali professionals opting to work in places like Shinile, a more peaceful environment may help, but individuals will weigh this against a range of other factors (cultural, economic) and career and lifestyle aspirations.

Organisations such as IGAD and COMESA are likely to continue to promote regional economic integration in the Horn and recognise the importance of peace-building. These organisations want to hear from NGOs but especially need evidence that programmes provide benefits which can be sustained.

4.2.3 Land tenure and land use policy support

Land and water access and use is so fundamental to pastoralist livelihoods and such an important cause of conflict that a long-term strategy has to include efforts to rationalize the land and water issues. The framework assumes that a starting point could be a system-wide inventory of natural resources with analysis and quantification of trends in vegetation and livestock herds. The system should be the wider pastoralist ecosystem indicated in Figure 3 (but limited to the relevant areas of Somali, Afar, and Oromiya Regions of Ethiopia). Measurement of bush and weed encroachment over time would be part of the initial situation analysis.

The potential to apply participatory research to these questions is clear, given the experience with these approaches in Ethiopia. There are also experienced local research institutes and a need to feed information into economic analysis of pastoralism and into economic comparison of land use options, which in turn can feed into policy dialogue. The ELTAP programme would be an important partner and is already supporting Afar Region to develop regional land tenure policy.

Work around land use and land tenure directly supports livestock development and marketing and as such will probably provide most benefit to pastoralist households that stay in the pastoralist system over the next ten years or more. As Table 14 indicates, those people who are most likely to stay in are probably the middle and better-off wealth groups who have retained or even increased their livestock holdings over time and who supply most of the animals to domestic or export markets. These groups also buy off the poor as the poor drop out. If Shinile Zone follows a trend seen in other Somali areas, pastoralism there will become more commercialized. The Zone is well placed geographically in terms of market access. While trends in the commercialization of pastoralism might fit with a strategy of economic integration, there are also major questions about how to support people who are forced out or who opt out. As described below, the main strategies here are education and support to alternative economic activities, some of which may relate to livestock production or marketing.

4.2.4 Basic services

Education is seen as a key part of the framework, not only because of people's right to education under the Constitution, but also because education will support economic diversification and therefore economic integration. As such, education also contributes to peace. The analysis in section 3 shows progressive thinking and policy at the level of federal and regional governments. At the same time, there is a need to continue to examine the feasibility of government strategies for education in Shinile Zone against the realities of budgets and management capacities, while also developing clear strategies for improving education for girls. The cross-regional state issues include the extent to which children from pastoralist backgrounds in Shinile can access

higher levels of education in Oromiya Region or Dire Dawa.

Primary health services are still very weak in the Zone, as shown by the statistics for child immunization and maternal health care. As with education, while a level of government commitment is evident, there are flaws in fixed point delivery systems in pastoralist areas and in systems which support community-based workers but overly restrict the functions of these workers. Mobile clinics are an expensive option and depend on road access (which is seasonal) and good communication. The approach seems unlikely to have much impact on the high death rate due to childbirth. As with education, a rapid, systematic review of health strategies is needed, which includes an analysis of operational budgets against needs. While approaches such as CCM have been tested in other parts of Ethiopia and feature in a federal government national plan, this plan seems not to include Somali Region. Similarly, CHWs have an important role to play, but only if they are trained and equipped to deal with clinical cases in areas where no other service is available or accessible. A health situation analysis would also need to examine cultural barriers to health care for women and girls and develop specific strategies to overcome these barriers.

If experiences with veterinary service delivery are relevant, then reviews in Somali Region in the mid-1990s showed that government budgets are unlikely to cover more than a fraction of the demand. Despite the importance of livestock in pastoralist areas, regional governments invest relatively little in the sector. This situation led to the model of private veterinary pharmacies in urban centres supplying networks of trained CAHWs. Private sector involvement in human health care is part of the government health strategy but specific roles in (or adjacent to) pastoralist areas seem ill-defined. However, there may be ways to link workers such as CHWs more closely to private suppliers, and private systems work more easily across administrative borders than government systems do. The Hararghe Catholic Secretariat has already piloted primary veterinary service delivery system that links private veterinary pharmacies in Assefa Teferi (in Oromiya Region) to CAHWs in Mulu (in

Shinile Zone, Somali Region). These kinds of practical and economically sound linkages need to be further explored for other sectors.

4.2.5 Economic integration and diversification

While the justification for supporting economic diversification in pastoralist seems to be clear, at present there is little evidence to show that aid programmes in this area have much impact on financial capital or can be scaled up from relatively small and costly pilots. In contrast, there is at least some evidence to show the economic benefits of education (Table 18), although not in Ethiopia. The point here is that while there have been a wide range of projects in pastoralist areas supporting livestock marketing groups, women's groups, milk marketing, handicrafts, and so on, few seem to show sustained financial benefits, and those that do use approaches which are difficult to scale up.

The strategic framework includes non-livestock economic activities but, in terms of aid programming, would prioritize education above the various types of "income generation" or similar activities which are supported by aid organisations and donors. This is not to say that income- generating projects should not be piloted, but that they should be designed with future scaling-up issues far more in mind and the need to answer at least five groups of questions around local, household-level impact on financial capital; cost-benefit analysis; policy and institutional issues; area-based economic potential; and technical capacities (Table 19). In Shinile Zone, the main target groups for involvement in diversification activities are probably women and youths. Women have particular limitations on their current economic options, while also controlling milk marketing. Youth also have few options but are relevant in terms of their tendency for raiding and other violent behaviour.

Although specific economic opportunities were not examined in detail, three options include: integrated livestock-fattening schemes with Issa supplying livestock to Oromiya farmers; milk marketing with women, including added value to milk and milk products; and support to camel marketing from Issa areas through to the north and northwestern parts of Tigray.

Table 19. Information needs for scaling up income-generating activities in pastoralist areas

| Type of information and analysis | Notes |
|--|--|
| Local impact on livelihoods Quantitative and qualitative | Has the approach achieved its expected impact in terms of livelihoods benefits? For example, did a community-based health project achieve health outcomes (improved human capital)? Did a livestock marketing group increase the financial capital of group members? Other questions include the sustainability of the benefits, especially if the main external financial or technical support is withdrawn. |
| Cost-benefit analysis Quantitative | Community-based approaches often require considerable technical or financial support from NGOs during the pilot phase. Cost-benefit analysis helps to examine economic efficiency and the feasibility and economic rationale for scaling-up. A challenge here is that benefits related to social capital can be difficult to quantify or value in economic terms. |
| Policy and institutional issues Qualitative | To what extent does the approach complement or contradict government policy or legislation, whether formal or informal? Is the approach legal? Would formal procedures or laws need to be adapted for scaling-up, and if so, are such changes realistic? What is the risk of conflict undermining the approach? |
| Area-based economic potential Quantitative | For approaches which depend mainly on private sector activity, what volume of economic activity is likely to be supported in a given area? For example, how many private community-based workers can an area support? How many livestock marketing groups are needed? These types of questions assume that not everyone can be a small trader, run a teashop, or sell hides and skins, and that, in pastoralist areas, the key financial asset is livestock, not cash. |
| Technical capacities Quantitative and qualitative | Good community-based systems and services often depend on skilled and experienced development workers who are familiar with participatory approaches. Scaling-up requires these capacities to be institutionalized, with associated incentives. Are such changes feasible, and if so, what are the costs and level of technical assistance needed, and for how long? |

Source: FIC/Tufts (2009).

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ANNEX 1. PARTICIPANTS AT TRAININGS AND FOCUS GROUP DISCUSSIONS

Focus group discussion participants

| Name | Kebele | Target group |
|----------------|------------|--------------|
| Hussien Sebba | Gedugase | Elders |
| Semeri Maid | Gedugase | Elders |
| Eggie Farha | Gedugase | Elders |
| Aziza Mohamed | Gedugase | Women |
| Enbie Ali | Gedugase | Women |
| Jewara Abdi | Mencha | Women |
| Shequri Farha | Bootijji | Women |
| Fatuma Mohamed | Qullemey | Women |
| Halima Yousfe | Qullemey | Women |
| Raham Ahmed | Lelebba | Women |
| Ayisha Mohamed | Bootijji | Women |
| Inab Ali | Gedugase | Women |
| Adowe Gerri | Bootijji | Elders |
| Bouhe Wise | Bootijji | Elders |
| Ahmed Farha | Bootijji | Elders |
| Mohamed Mussa | Armemdobbe | Elders |
| Mussa Ali | Armmedobbe | Elders |
| Ahmed Abdi | Hurfalle | Youth |
| Awie Seide | Mencha | Elders |
| Mohamed Maline | Mencha | Elders |
| Siede Ibrahim | Qullemey | Youth |

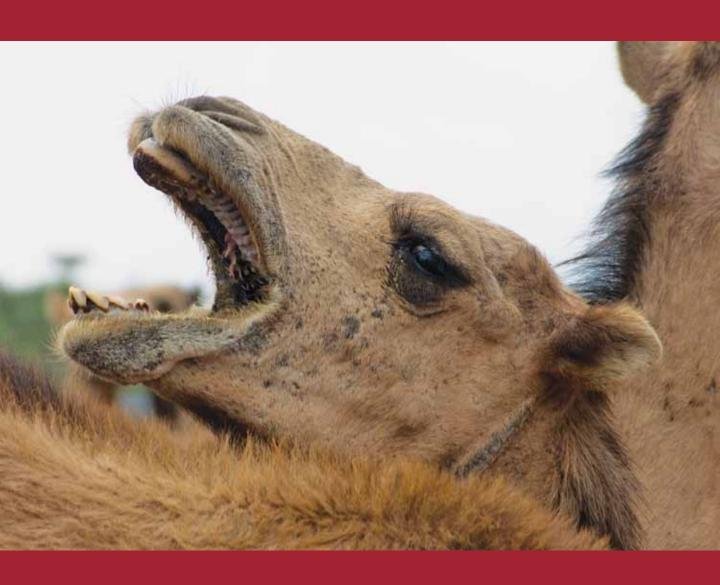
List of woreda-level participants

| Name | Woreda | Place of Work |
|-----------------------|--------|--------------------|
| Mohamed Dahir Umer | Mulu | Water Bureau |
| Yetm Geeta Silashi | Mulu | Water Bureau |
| Irmiyas Ishetu Ayele | Mulu | Education Bureau |
| Amir Hassan Yussuf | Mulu | Finance Bureau |
| Ismali Shek Ibrahin | Mulu | Health Bureau |
| Tadesse Gabre Charqos | Mulu | Agriculture Bureau |
| Robel Issaq Ishete | Mulu | Agriculture Bureau |
| Salamon Fasil | Mulu | Finance Bureau |
| Sahra Bakele Asfaw | Mulu | Health Bureau |
| Hassan Ali Mussa | Mulu | Spokesperson |
| Walee Mokonin Tasama | Mulu | Police |
| Adawe Usman Ahmed | Mulu | Militia |
| Mohamed Aden Umer | Mulu | |
| Hawa Aden Said | Mulu | Education Bureau |
| Musee Hassn Said | Mulu | Prosecutor |
| Musee Asowe buh | Mulu | Education Bureau |

ANNEX 2. EXAMPLES OF LIVESTOCK DISEASES AND SHOCKS TO PASTORALIST LIVELIHOODS, MIESO-MULU WOREDA

| Disease | Nature of shock |
|--|--|
| Peste des petits ruminants (goat plague) | A rinderpest-like disease affecting goats and sheep, with mortality reaching 90% in some herds. Can be prevented by vaccination. Impact will be particularly evident in poorer pastoral households, which tend to rely more on small ruminants. |
| Contagious caprine pleuropneumonia | A contagious pneumonia of goats with mortality up to 100% in some herds; can be prevented by vaccination or controlled with antibiotics. Impact will be particularly evident in poorer pastoral households, which tend to rely more on small ruminants. |
| Sheep and goat pox | A viral disease with mortality from 5 to 80%; preventable through vaccination. Impact will be particularly evident in poorer pastoral households, which tend to rely more on small ruminants. |
| Anthrax | High case fatality rate, especially cattle, approaching 100%. Common in pastoralist areas and preventable through vaccination. |
| Blackleg | High case fatality rate, especially cattle. Common in pastoralist areas and preventable through vaccination. |
| Contagious bovine pleuropneumonia | A contagious pneumonia of cattle, endemic in many pastoralist areas and therefore causes low mortality. However, outbreak mortality can still reach 10–50%. Vaccination programmes are commonly attempted in pastoral areas but rarely successful; alternative control strategies required. Other impacts include domestic movement bans and market closure. |
| Camel pox | A viral disease with case fatality rate of 5 to 30%; preventable through vaccination. |
| Acute trypanosomosis | In cattle and camels; less common than chronic form of trypanosomosis but acute disease has a very high case fatality rate approaching 100% if untreated. |
| Rift Valley fever | Not reported in Mieso District but outbreaks in neighbouring countries have led to export market bans and related livelihoods shocks. |

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