



**Effectiveness of current policy frameworks in mitigating climate-induced risks relating to human security and conflict – case study on Ethiopia**

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## 1. Introduction

This case study for Ethiopia is a contribution to the study “*Current policy frameworks for addressing climate-induced risks to human security and conflict – an assessment of their effectiveness and future perspectives*”<sup>1</sup>. It deals with research questions outlined in that study and is based on the methodology described therein. This case study presents:

- Country and policy background information for Ethiopia
- An evaluation of the existing Ethiopian and relevant international policy and initiatives, relevant for climate change, water, conflict and human security, in the view of Ethiopian interviewees,
- A review of interviewees’ expectations and demands for a future, improved policy framework addressing these policy areas.

It is based on the results of a workshop<sup>2</sup> held in Addis Abeba on October 28, 2011, and personal interviews with a total of 12 Ethiopian stakeholders<sup>3</sup>, conducted in Addis Abeba between October 31 and November 10, 2011.

Chapter 2 presents a background section on the country, a summary of the expected water-related impacts of climate change, and some comments on the awareness on the topic among Ethiopian stakeholders. Chapter 3 proceeds to present the policy framework on water and climate change in the country, the stakeholders’ evaluation of this framework, and their expectations and demands concerning future policy. Chapter 4 evaluates the results in terms of what insights can be derived for the link between climate change, water, and both human security and conflicts, and in terms of the insights for current and future policy frameworks.

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<sup>1</sup> Clico Deliverable 4.2.

<sup>2</sup> The workshop convened academics, representatives of government authorities/international organisations, and consultants.

<sup>3</sup> Interviewees were representatives of government authorities, of international organizations, NGO representatives, and academics.

## 2. Background

### 2.1 Country Background Ethiopia

Ethiopia is one of the world's Least Developed Countries (LDCs) according to the United Nation's (UN) 2010 World Statistics Pocketbook on LDCs (United Nations, 2011). However, the country has witnessed strong economic growth over the last decade, with double digit growth rates that are expected to continue into the near future. Economic development is very prominent on the Ethiopian government's agenda.<sup>4</sup> Over the last two decades, agriculture has been considered as the key sector in the country's development, and it will continue to play this role during the present decade according to the current development planning strategies.<sup>5</sup> As Ethiopia is an LDC, and due also to a history of famine and food shortages, there is strong donor involvement in the country, and a long history of successful international cooperation.

Towards its centre, the country is dominated by flat-topped mountain ranges with altitudes between 1.500 and 3.000 metres a.s.l. These regions, called "highlands", constitute around 45% of the country's surface, have milder temperatures, significant amounts of orographic rainfall, and host the vast majority of the country's population, due to its comparatively advantageous conditions for agriculture. Lower lying parts of the country, known as "lowlands" (classified as those lying under 1.500 metres a.s.l.), are characterized by higher temperatures, and usually significantly less precipitation. There are essential differences between the highlands and lowlands in terms of climate, population distribution, economic activities, lifestyle, and more (Ethiopian Ministry of Water Resources, Ethiopian National Meteorological Services Agency, 2001).

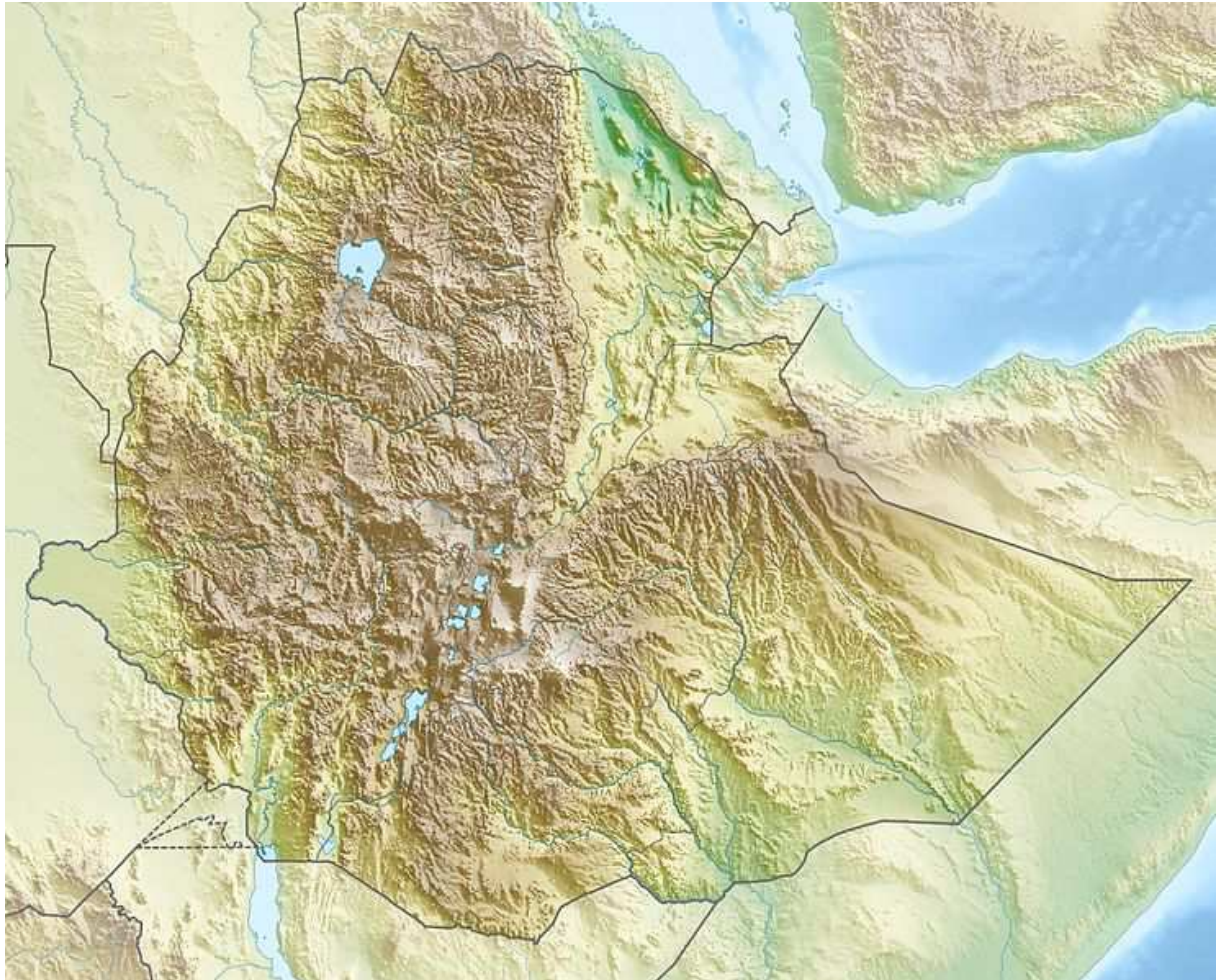
The country's population is estimated at 83 million people, which makes Ethiopia the second most populous country in Africa. Population growth is extremely high, with estimated growth rates between 2,5 and 3,1% per year. Only an estimated 16,7% of the population live in urban centres; the majority of Ethiopians live in the countryside and depend on agriculture and livestock farming for a living. The main form of livelihood is smallholder farming (often subsistence farming), and the vast majority of the farmers practice rain-fed agriculture, with only a small portion having access to irrigation.

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<sup>4</sup> See for instance the differences in the titles and introduction statements for the previous 5-year development plan, PASDEP ("A Plan for Accelerated and Sustained Development to End Poverty"; available at: [http://siteresources.worldbank.org/INTETHIOPIA/Resources/PASDEP\\_Final\\_English.pdf](http://siteresources.worldbank.org/INTETHIOPIA/Resources/PASDEP_Final_English.pdf)) and for the current GTP ("Growth and Transformation Plan"; available at: <http://www.mofed.gov.et/English/Resources/Documents/GTP%20English2.pdf>). (Any weblinks where readers could obtain these documents)?

<sup>5</sup> For instance, the strategy of the country's current 5-year plan "Growth and Transformation Plan 2010/2011 – 2014/2015" specifically aims for agriculture to be the main source of economic growth for the next five years. P. 22-23, Ethiopian Ministry of Finance and Economic Development, 2010.

In the lowland areas there is a predominance of nomadic pastoralism. Approximately 10 mio. people belong to the pastoralist community; however, due to the aridity and low carrying capacity of much of these lowlands, nomadic pastoralists cover 61% of the country's total land mass (PFE, IIRR and DF, 2010).



**Figure 1:** Physical relief map of Ethiopia. License: User Carport, Wikimedia Commons, licensed under the “Creative Commons Attribution-Share Alike 3.0 Unported” license.

Food security has traditionally been a major problem in Ethiopia, and the country has a history of huge famines with a large number of fatalities – recent examples are 1972/73, 1984, and 2002/03. Famines are driven by both rain-fed agriculture and pastoralism being highly vulnerable to droughts (World Bank, 2010b). There have been huge improvements over the last years in terms of drought preparedness and prevention of food shortages. For instance, whereas the current drought in the Horn of Africa has had catastrophic effects on lives and livestock in Somalia, the effects have been much less felt across the border in the Somali region of Ethiopia. Nonetheless, food aid and chronic food aid dependency, still play a large role in the country, particularly for pastoralists



(but not limited to these).<sup>6</sup> Strong population growth and degraded natural resources in many areas of the country mean that the subsistence livelihoods have limited resilience regarding risks such as droughts. As an illustration: the population of Borana, a pastoralist region, was about 300,000 in the 1980s, but reached almost a million in 2007. In pastoralist regions, more people implies more livestock; this growth thus implies further deterioration of the environment (Temesge, 2010).

Ethiopia is comparatively rich in water resources and has been called the “water tower” of North Africa (NMA, 2001, 4). The country has twelve major river basins and annual surface water resources of close to 122 billion cubic meters (World Bank, 2006, 3). Water resources are somewhat concentrated, however, with 90% found in four of these basins, which are home to only 40% of the population (World Bank, 2006, 7). Ethiopia’s resources and varied topography, where waters drain down from the highlands, imply a vast hydropower potential, although to date, the contribution of hydropower to domestic energy production is minimal. Hydropower generates about 5% of domestic energy supply annually and the main sources of energy production continue to be biomass and fuelwood (World Bank, 2006, 27). Annual rainfall varies within geographic regions both in timing and patterns of distribution and averages between approximately 250 mm in the northeast and southeast, to 2000 mm in some areas of the southwest (NMA, 2001, 4; World Bank, 2006, 7). Generally, the three major climatic seasons are the ‘bega’ (dry season from October to January), ‘belg’ (short rainy season from February to May), and ‘kiremt’ (long rainy season from June to September).

## *2.2 Water-related impacts of climate change*

### **2.2.1 Physical impacts**

Ethiopia’s natural climate is already characterized by a high degree of rainfall and hydrological variability. Rainfall is marked by uneven spatial and temporal distribution both inter-annually and intra-annually (World Bank, 2006, 1). This high variability makes Ethiopia prone to frequent extreme drought and flood events, and it is not uncommon to experience both in the same year. It is anticipated that climate change will result in increases of temperatures, changes in precipitation patterns, increased rainfall variability, and increased hydrologic variability. These changes are considered likely to increase the frequency of drought and flood events in the country (World Bank, 2010b).

Droughts are considered the “single most important climate related natural hazard” in the country (NMA, 2007, 5). Droughts have increased in recent decades and are expected to continue to increase in the face of climate change, particularly in the

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<sup>6</sup> Dr. Fassil Reda, Pastoralist Research Division, Ethiopian Agricultural Research Organisation. Personal communication.



country's arid, semiarid and dry sub-humid regions (NMA, 2007, 5). Floods are already common as well and are similarly expected to increase alongside rainfall variability due to climate change. IPCC climate models have predicted both increases and decreases in annual precipitation resulting from climate change, although models consistently show increases in precipitation intensity, and in frequency of floods and droughts. (World Bank, 2010b, 9). Some studies indicate that rainfall has declined in recent years, particularly for belg rainfall, which is critical for crop and livestock production (Oxfam, 2010, 16-17).

Climate change is predicted to increase mean annual temperatures from between 0.9 and 1.1 °C by 2030, and from between 1.7 and 2.1 °C by 2050 (NMA, 2007, 23). Already, some sources indicate that temperatures in Ethiopia have begun to rise, increasing 0.37°C every ten years since 1955 (World Bank, 2010a, 16). Groundwater resources are likely to meet increased demand as climate change reduces surface water availability (NMA, 2001, 4; World Bank, 2006, 3).

### **2.2.2 Human security impacts**

The main impacts of climate change in Ethiopia pertain to food security. According to different sources, between 75% (McKee, 2007) and 85% (U.S. Dept. of State, 2011) of the country's population is dependent on agriculture (including livestock farming) for their livelihoods, the vast majority practicing either smallholder, subsistence agriculture or pastoralism. 87% of rural households farm less than two hectares of land, and 64,5% farm less than one hectare. Small farm size correlates with households being generally poor in cash income and having low access to extension services, fertilizer, improved seeds, animal drugs and vaccines, improved breeds of livestock, water, and credit (Oxfam, 2010).

With the vast majority of smallholder agriculture being rain-fed and with pastoralism depending largely on natural pastures, both these livelihoods are highly vulnerable to the onset of droughts or to greater climatic (e.g. seasonal) variability. In the words of one interviewee, in Ethiopia *"there is a direct relationship between livelihoods and climate."*<sup>7</sup>

Droughts in Ethiopia impact agricultural performance and have devastating effects on household food security and poverty levels. The country's natural climatic variability, combined with the dependence on rain-fed subsistence agriculture and grazing lands, low economic development, population growth, and inadequate infrastructure, combine to create a high level of vulnerability that is expected to worsen with the onset of climate change (NMA, 2007, 5).

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<sup>7</sup> Kassu Kebede, World Food Programme, personal communication.

Ethiopia's National Adaptation Plan of Action (NAPA) identifies as the major adverse impacts of climate variability food insecurity due to increased droughts and floods, land degradation from heavy rainfall, flood damage to roads and infrastructure, and outbreak of diseases (NMA, 2007, 25). Increases in hydrologic variability, temperatures, and aridity are predicted to increase agricultural vulnerability and may result in lower crop yields, decreased food supplies, and reduced economic output. These impacts will be most prominent for poor, rural populations and for smallholder, rain-fed farmers and pastoralists, who lack sufficient infrastructure or alternative livelihoods and sources of income.

The most commonly reported response mechanism to drought is migration (Oxfam, 2010, 31). Both temporary and permanent internal migration are already common to Ethiopia, due to factors such as varying agricultural productivity, seeking seasonal agricultural work or work in urban centers, and an increase in commercialized farming. Temporary migration is usually carried out by the male head of the household, and implies an increase in uncertainty from the human security perspective both for him and for the family left behind.

Flooding, too, disrupts and reduces agriculture production by inundating land, delaying planting, reducing crop yields and quality, and causing erosion and land degradation (World Bank, 2006, 10). In addition, flooding and sedimentation cause severe damage to roads, making many roads impassable and disrupting the country's transport system, thus cutting off farmers' access to markets, disrupting supply chains, and barring access to food and health supplies.

Ethiopia is home to one of the largest livestock populations in Africa. Livestock ownership contributes to the livelihoods of approximately 80% of the rural population and is the focus of pastoralist livelihoods (FAO/WFP, 2010, 16). Drought reduces available grazing land, already encroached upon by growing agriculture, and livestock often subsist on crop residues in drought affected areas when there is little natural pasture available.

Climate change may also alter the spread of diseases sensitive to climate and temperature conditions, and is predicted to increase the spread of malaria, dengue fever, cholera, acute water-borne diarrhea, and respiratory diseases (World Bank, 2006, 15).

### **2.2.3 Impacts on conflict**

#### ***Conflict background***

As in many Sahel countries, there is often friction and conflict over natural resources (typically pasture and access to water) between different pastoralist groups, as well as between pastoralists and farmers (Temesge, 2010). Some conflicts between pastoralist

groups date back several centuries, such as that between pastoralists of the Afar and the Somali regions of the country. Another more recent source of tension is the emergence of large-scale agricultural investment schemes or “land-grabs” happening in the country, which often result in the resettlement of communities (Fisher, 2011). These tend to occur in more sparsely populated pastoralist or agro-pastoralist areas.

Another often cited as a source of conflict is small-scale agricultural development schemes in regions which traditionally have been used by pastoralists (Temesge, 2010). Often these schemes are carried out by pastoralists abandoning traditional pastoralist livelihoods and becoming agro-pastoralists. The conflict can be over the land itself (e.g. over former grazing land turned to crop) or due to its location regarding water resources (e.g. hindering access to river water or watering holes). The country’s agricultural push (see sections 2.1 and 2.3) and programmes for voluntary settlement of pastoralist communities and pastoralist uptake of agricultural practices could be contributing to making these issues more prominent.

### ***Direct impacts of climate change on conflict***

A commonly held view of policy makers interviewed in Ethiopia is that climate change acts as an additional stressor on resources and livelihoods, adding to other pressures such as population growth, natural climate variability, and natural resources degradation.

*For me, there are these chronic problems, population growth, land-degradation, resources degradation, land-use change, lack of proper planning and management, weakening of the traditional system, etc. On top of this, climate change is an additional stressor, droughts become recurrent, etc. (Dubale Admasu Tessema, Pastoralist and Livestock Programs Coordinator, USAID Ethiopia Office)*

In this sense, climate change can be seen as exacerbating already existing conflicts or forms of conflicts over scarce natural resources. The increased frequency of droughts that is expected as a result from climate change may, for instance, increase the frequency of conflicts over natural resources. This would include drought-related conflicts over natural resources between pastoralists or between pastoralists and farmers, as well as conflicts arising between upstream and downstream users of river water or of irrigation infrastructure.

A more tenuous direct link to conflict can be posited regarding internal migration. Assuming increased internal migration (both temporal and permanent) as a response to the effects of climate change, one could presume that migration-related conflicts could ensue due to increased immigration to cities or conflict of old and new population groups over croplands/pastures. However, this hypothetical link was not identified in

practice: no migration-related conflicts in Ethiopia were identified when writing this case study. The closest to a climate-related conflict of this kind is pastoralists dropping out of the pastoralist system, their (partial) settling and uptake of agriculture. This would occur due to their being unable to sustain their livelihoods within the pastoralist system. A consequence would be the conflicts of agro-pastoralists with pastoralists over access to land and water described above.

### ***Indirect impacts of climate change on conflict***

Local interviewees were aware of no studies establishing which impacts (e.g. hydrological impacts) can be clearly attributable to climate change, versus which impacts are the effect of other stressors (e.g. natural climate variability). This means that phenomena such as droughts or reduced water flow in river basins can be either claimed as a result of climate change or attributed to the region's traditional climate variability. This is of relevance due to adaptation measures being closely related to development initiatives in Ethiopia. These development initiatives follow a government agenda, but in some cases there is no widespread agreement on their desirability, and some of them also affect the local politics of the regions where they are implemented. There is a difference to a measure being labeled "developmental", a well-known label for government measures which can have a history of local resistance to their implementation, as opposed to the same measure being labeled "adaptation to climate change", a new label referring to an unknown risk in the future, which conveys the necessity of implementation, and which doesn't have a history.

Pastoralism, for instance, is often seen as no longer a viable livelihood to support the full population practicing it, and the government is encouraging voluntary programmes to settle pastoralists in villages and provide them with services. Many pastoralist areas have been dependent on food aid and other forms of support for many years, and the opinion that the pastoralist system cannot support the current amount of people practicing was widespread among interviewees.

However, pastoralists themselves often do not recognize the central government, their allegiance lying with their clan or ethnic group (Temesge, 2010). Moreover, they see certain development initiatives as restricting their movement, and settlement efforts as having adverse impacts and increasing government control. There are several guerilla groups and separatist movements with strong pastoralist presence, the most relevant being the Ogaden Liberation Front in the Somali region of Ethiopia (CFR, 2007). In this way, whereas the settlement of and uptake of agriculture by pastoralists can appear as a reasonable development or adaptation measure to increase pastoralist food security, implementing such a measure may have political consequences (e.g. changing

livelihoods and culture, affecting balance of power in conflict, creating resistance to measure by pastoralists) which have no relationship with climate change.

Depending on how it is implemented, the uptake of agriculture in pastoralist areas can also worsen the prospects for pastoralism, by using up or restricting access to key resources. In this sense, the political implications of these adaptation initiatives, which can indeed positively affect human security by enhancing food security, are also strongly related to exactly how they are implemented (e.g. allowing for grazing corridors and access to river banks), as much as by the initiative in itself.

In sum, development and adaptation measures addressing climate change impacts and improved human security can play complex roles in existing conflicts. Climate change, and adaptation to it, can be instrumentalised by using them as rationales for certain initiatives which will have certain political results (even in situations where adaptation is indeed required). Depending on how these measures are implemented, they can in themselves exacerbate existing conflicts, even as they improve human security.

### 2.3 Awareness of climate change

As in many developing countries, Ethiopia has certain characteristics that limit the awareness of climate change among the broader population. Only a small percentage of the population lives in urban centres, and the educational level of the population and economic resources of households are often quite limited which also restricts access to media. In this context, reaching out to small farmers regarding complex concepts such as climatic change is considered to be no easy task.<sup>8</sup>

*There are attempts to reach the farmers, the grassroots level, but it is difficult. Most of the discussion is ongoing between intellectuals, awareness is more present in educated society. [...] The next phase would be to bring this discussion on climate change to the broad public, on the ground. (Ato Beyele Sebeku, African Climate Policy Centre)*

Interviewees suggested, however, that – bearing in mind these intrinsic difficulties – awareness of climate change in the country is actually very high. The interviewees themselves were all very aware of climate change and the risks it entails for Ethiopian livelihoods and the country's economy. Only one interviewee considered the issue to be overdramatized and instrumentalised, with the aim of furthering government agendas un-related to climate change.

Several interviewees mentioned how the fact that Prime Minister Meles Zenawi has had a prominent role in climate change negotiations within Africa (as the African Union's

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<sup>8</sup> Gebru Jember, Climate Change Forum – Ethiopia, personal communication.

spokesperson on climate change) and globally (e.g. chairing an Advisory Group on Climate Change Financing with previous UK Prime Minister Gordon Brown) had significantly helped to raise the awareness of the topic at the national level.

*Climate issues are well-known at high level. The Prime Minister is leading African countries in climate change conferences/meetings. (Alemayehu Tefesse, Ethiopian Ministry of Water and Energy)*

Whereas interviewees point to awareness of climate change at a high political level, in part due to many policy dialogues and initiatives in the country, they noted that efforts are still required to address mid-level experts (such as extension agents and experts at different levels in ministries). A mass awareness programme is in place for the broader population, which claims to have reached more than 400,000 people at the community level.<sup>9</sup>

### **3. Policy Framework on Water and Climate Change**

#### *3.1 Overview*

Climate adaptation and water use are crosscutting issues in Ethiopia, intersecting with major development, poverty, and agricultural policies. Existing government policies address the country's natural climatic variability and therefore "climate change and adaptation issues are often treated indirectly in sector specific policies and programmes since climate impacts are considered as a sub-component of the overall development goal particularly in relation to natural resources and environmental protection" (NMA, 2007, 32). As outlined here, measures dealing with climate change adaptation are integrated into a variety of policies and sectors, including water resources, agriculture, poverty reduction, economic development, food security, natural resources management, and population policy (NMA, 2007, 31).

Ethiopia is a federal democratic republic, comprised of nine regional states, two administrative cities, woredas (districts), and kebele (neighbourhoods). Major policies are formulated at the federal level, the government follows a policy of decentralisation of authority to regional administrations (NMA, 2001, 41, *citing ADLI as example*). Under the 1995 federal Constitution, ownership of land and natural resources is exclusively vested in the state and the people of Ethiopia.

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<sup>9</sup> Ibid.



### **3.1.1 Water policy**

Water resources development, management, and protection are guided by the national framework Ethiopian Water Resources Management Policy (Water Policy).<sup>10</sup> The 1999 Water Policy establishes the country's overarching goal of utilizing water resources efficiently and equitably, so as to contribute to the country's socioeconomic development on a sustainable basis. The policy was designed to help guide allocation and development to improve access to clean and safe water, irrigation and agricultural output, and hydropower production for domestic energy supply and export. Highest priority for water use is given to human and livestock needs, as well as the environment, and highest priority for allocation is designated for water supply (defined as human uses of water such as drinking water, water for livestock use, water for industrial use, and water for municipal use) and sanitation purposes, with the remainder being apportioned to uses and users that result in the highest socioeconomic benefits. The Water Policy sets forth general objectives and principles covering socioeconomic benefits, water allocation, drought and disaster management, flood regulation, conservation, and more. Specific sector policies address the three fundamental focus areas of water supply and sanitation, irrigation, and hydropower development.

A number of proclamations support the framework policy, such as the Water Resources Management Proclamation (Proclamation 197/2000), the 2001 National Water Sector Strategy, and the 2002 Water Sector Development Program (WSDP).<sup>11</sup> The Water Sector Strategy provides a road map for implementing water-related policy objectives and contains individual strategies addressing technical, economic, and institutional implementation for water resources, hydropower development, water supply and sanitation, and irrigation. The WSDP defines concrete interventions and targets for projects and programs to be implemented over a 15-year period.

Decentralization is a focal area of the Water Policy and the governing federal Ministry of Water and Energy (MoWE) (World Bank, 2006, 18; UNESCO, 2004, 243). Regional and local authorities manage water supply and sanitation operations for both rural and urban areas in the country (UNESCO, 2004, 243).

### **3.1.2 Agriculture and Development Policy**

Agriculture, development, and poverty reduction are intimately connected in Ethiopia and policies frequently overlap. The country's drive to achieve a middle-income economy rests in large part upon developing the agricultural sector so as to fuel growth and ensure domestic food security. These issues are also viewed as interlinked with

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<sup>10</sup> Available at: <http://www.mowr.gov.et/index.php?pagenum=10>.

<sup>11</sup> Available at: <http://www.mowr.gov.et/index.php?pagenum=10>

climate change, as increased economic and food security reduce vulnerability to climatic variability. Since 1994, the centrepiece of Ethiopian agricultural policy has been the Agricultural and Rural Development Led Industrialization Strategy (ADLI).<sup>12</sup> ADLI serves as the foundation for the country's agricultural policy, but is equally a core tenant of development policy. It emphasizes, *inter alia*:

- commercialization of smallholder agriculture
- support large-scale commercial agriculture development
- agricultural exports
- improvements in technology use and infrastructure
- food security and safety net programmes
- tailored programs for varied agro-ecological zones

ADLI takes a tailored approach for regions of varying climatic conditions and uses. In regions with adequate rainfall, efforts focus on efficient utilization of rainwater and irrigation. In moisture stress areas, activities are undertaken to enhance food security that include increasing off-farm income opportunities and voluntary resettlement to areas of higher productivity. In pastoral regions, ADLI focuses attention on livestock production, including water supply and animal health (ECOSOC, 2007).

The Sustainable Development and Poverty Reduction Program (SDPRP)<sup>13</sup> was based on the ADLI framework and was the first of three successive poverty reduction strategies by the federal government, covering 2002/03 to 2004/05 (Göteborg, 2008; World Bank, 2010a, 5-6). The second, the Plan for Accelerated and Sustained Development to End Poverty (PASDEP), was a five-year strategic framework covering 2005/06– 2009/10.<sup>14</sup> While the SDPRP centred on smallholder agriculture and stimulating rural growth, PASDEP shifted emphasis towards market-oriented agriculture and accelerated economic growth. PASDEP is viewed by the federal government as highly successful, and is cited as having increased access to potable water in rural areas from 35 to 65,8% through measures such as new wells, water fountain enhancement works, water harvesting, and irrigation development increased significantly (see e.g. MoARD, 2010, 4; MOFED, 2010, 15).

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<sup>12</sup> Available at: <http://webapps01.un.org/nvp/indpolicy.action?id=124#analysis>

<sup>13</sup> Available at: [http://siteresources.worldbank.org/INTETHIOPIA/Overview/20207639/2002\\_07\\_prsp.pdf](http://siteresources.worldbank.org/INTETHIOPIA/Overview/20207639/2002_07_prsp.pdf)

<sup>14</sup> Available at: [http://siteresources.worldbank.org/INTETHIOPIA/Resources/PASDEP\\_Final\\_English.pdf](http://siteresources.worldbank.org/INTETHIOPIA/Resources/PASDEP_Final_English.pdf)

The third and most recent strategy is the Growth and Transformation Plan (GTP) for 2010/11–2014/15. The five-year GTP creates an agenda for poverty eradication that again emphasizes agriculture as a pillar of growth, stressing commercialization of smallholder farming and increased private investment in large-scale commercial farming. Objectives are a high and sustained real GDP growth rate, attainment of Millennium Development Goals (MDGs), expansion of social services, infrastructure development, and promotion of investment. The GTP notes Ethiopia’s sensitivity to climate change and variability, and climate change adaptation has been mainstreamed into the GTP, which recognises “Environment and Climate Change” as one of its cross-cutting sectors (Ethiopian Ministry of Finance and Economic Development, 2010). Measures to promote multiple cropping, expand irrigation schemes (prioritizing small-scale but also giving attention to medium- to large-scale), enhance water management and moisture retention, increase technology and services access, and build infrastructure are planned to promote climate resilience and food security.

On the heels of the GTP, Ethiopia released its Climate Resilient Green Economy (CRGE) strategy<sup>15</sup> in November 2011, intended to push for growth and attainment of an economy that is both middle-income and low-carbon by the year 2025. Focusing primarily on green growth and climate mitigation, the strategy also includes adaptation initiatives for reducing exposure to extreme climate events such as droughts, floods, and vector-borne diseases. There are plans to establish a CRGE Investment Plan and Facility to support implementation.

The Agriculture Sector Policy Investment Framework (PIF) for 2010 - 2020<sup>16</sup> outlines strategic agricultural investment planning, closely related to the GTP’s policies and objectives. The ten-year roadmap for development identifies priority areas for investment and financing to contribute to achieving middle-income status by 2020 and seeks to sustainably increase rural incomes and national food security. The PIF aims to achieve a sustainable increase in agricultural productivity and production, accelerate agricultural commercialization and agro-industrial development, reduce degradation and improve productivity of natural resources, promote food security, and protect against natural disasters. As in the case of the GTP, climate change is considered a cross-cutting issue, to be addressed in all areas in the PIF. Significant attention is given to disaster risk management and food security, and a significant portion of government and agricultural spending is designated for disaster risk management and food security spending.

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<sup>15</sup>Available at: <http://www.epa.gov.et/Download/Climate/Ethiopia%27s%20Climate-Resilient%20Green%20economy%20strategy.pdf>

<sup>16</sup> Available at:

[http://gafspfund.org/gafsp/sites/gafspfund.org/files/Documents/Ethiopia\\_5\\_of\\_6\\_CAADP\\_Post\\_compact\\_Investment\\_Plan\\_%28PIF%29\\_0.pdf](http://gafspfund.org/gafsp/sites/gafspfund.org/files/Documents/Ethiopia_5_of_6_CAADP_Post_compact_Investment_Plan_%28PIF%29_0.pdf)

Policy regarding private investment also supports national objectives for development of commercial agriculture and the market economy. In 2009, the Ethiopian government shifted its agricultural policy to encourage greater private investment in large-scale commercial farms (US Dept. of State, 2011). Since it is believed that high levels of foreign direct investment are needed to achieve development goals, streamlined procedures and incentives such as tax and duty exemption are commonly provided for foreign investors (FDRE, 2011a, 1-2; Cotula, 2009, 80; Horne, 2011). Having an investment permit is a requirement for foreign nationals to undertake any commercial activities in Ethiopia. As land in Ethiopia is owned by the state, leases for large-scale agricultural investments are made by the appropriate federal or regional government agencies.

### **3.1.3 Land rights and resources use rights policy**

As noted above, land ownership is vested in the state and the people of Ethiopia and land cannot be privately owned. In 1975, major land reforms replaced existing systems with communal ownership of land (Horne, 2011, 11). State ownership of land was preserved in the 1995 Federal Constitution and in later constitutional reforms allowing for land rentals and leasing (Horne, 2011, 11). Land tenure and certification are determined by regional governments and practices vary. The Federal Rural Land Administration and Use Proclamation (Proclamation 89/1997) gives regional governments the power to issue directives for implementation and to administer land laws. As of 2011, it was reported that four regional governments have done so (Horne, 2011, 11; Tamrat, 2010, 3).

The Ministry of Agriculture and Rural Development (MoARD) governs land use at the federal level, while administration at the regional level varies between regions (Horne, 2011, 12). The federal government controls foreign land investment for all lands over 5,000 ha, and land is selected based upon soil suitability, water availability, and the lack of human settlement (Horne, 2011, 15, 26; Mosley, 2012, 9). At the regional level, lands are selected by *woreda*,<sup>17</sup> sometimes with the support and influence of the regional government (Horne, 2011, 28). There is no federal land use policy and regional land use proclamations provide the legal frameworks for land use planning (Horne, 2011, 25).

The Constitution and land administration laws protect the right of pastoralists and others having only possessory rights over lands used for grazing or agriculture not to be displaced against their wishes. The Constitution and land administration laws provide that peasants and pastoralists have the right to acquire use rights over rural lands free

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<sup>17</sup> *Woredas* or *weredas* are an administrative division, sometimes translated into English as “district”, managed by a local government. The federal states that make up Ethiopia are divided into zones, and these into *woredas*. They are themselves composed of *wards* or neighbourhood associations, which are the smallest unit of local government in the country.

of charge and without time limitations, with exceptions for public purposes subject to compensation. Nonetheless, security of tenure remains a concern for pastoralists who are targeted with voluntary resettlement programs that seek to move people to regions with more water and less susceptibility to climate variations. Among others, resettlement policies are included as part of ADLI and the GTP, which notes that, voluntary resettlement of pastoralists will be undertaken in areas suited for developing irrigated agriculture.

### **3.1.4 Disaster preparedness and response and food security policy**

Ethiopia has a number of programmes and institutions designed to deal with disaster prevention and early warning. Early warning systems in Ethiopia are relevant for floods, but more so for droughts, aiming to prevent food shortages and mitigate agricultural impacts. Food security and disaster management interventions are closely interlinked, as evidenced by policies and institutional structures. The Disaster Risk Management and Food Security Sector (DRMFSS), under the Ministry of Agriculture and Rural Development (MoARD), consists of an Early Warning and Response Directorate (EWRD) and Food Security Programme Directorate and “approaches disaster management based on vulnerability profiles, thus enabling it to target potential and impending disasters through a comprehensive response” (DRMFSS, 2012).

Beginning with one of Ethiopia’s worst famines in 1973/1974 and continuing through 1989, disaster management approaches centred on response, rather than on preparedness and prevention (Abebe, 2001, 243). Since 1990, however, policy has undergone reforms to instead focus on prevention and preparedness (Abebe, 2001, 243). The National Policy on Disaster Prevention and Management (NPDPM), established in 1993,<sup>18</sup> was part of this shift to address vulnerability to disasters and famine by linking relief assistance to projects that address the root causes of food insecurity through community-based projects and development programs, with measures for environmental protection, infrastructure development, water harvesting, and employment schemes for disaster victims (FDRE, 2011b, 10; Embassy, 2012). Ethiopia’s Early Warning System (EWS) has been in place since 1976 and closely monitors factors affecting food security at the household, woreda, regional, and national levels in order to help provide early warning and preventative measures (Embassy, 2012). Indicators of food security are monitored on a monthly basis and national pre- and post- harvest crop assessments are produced annually. Pastoral assessments are also made for livestock dependent regions. Long term disaster resilience is also clearly integrated cross-sectorally into policies such as the PASDEP and GTP (Embassy, 12).

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<sup>18</sup> Revisions to the National Policy on Disaster Risk Management were proposed for potential ratification in 2010.

Ethiopia's Food Security Strategy (FSP), issued in 1996 and revised in 2002, establishes a framework for food security interventions for increasing domestic food production, ensuring food access, and strengthening emergency response. It provides tailored responses for adequate moisture, moisture deficient and pastoral areas (FDRE, 2011b, 10; Embassy, 2012). The 2005 Food Security Program (FSP) is also designed to reduce dependence on short-term food relief. A key part of the FSP is the Productive Safety Net Programme (PSNP) in which food and cash are transferred to chronically food insecure households in return for labour on public works projects.

### **3.1.5 Environmental policy**

The Conservation Strategy of Ethiopia (CSE) involved a process lasting from 1989 to 1994 that helped formulate the Environmental Policy of Ethiopia (EPE)<sup>19</sup>, establish the federal Environmental Protection Authority, and encourage incorporation of environmental concerns in the Constitution and other federal policies (McKee, 2007, 50-51). The EPE is Ethiopia's framework policy on the environment and seeks to promote sustainable socioeconomic development through environmental management and resource use. Fairly broad in nature, the EPE emphasizes the need for environmental sustainability to be integrated into other policies and strategies (McKee, 2007, 51; NMA, 2007, 17).

Environmental policies at the national level also include the 2002 Environmental Impact Assessment (EIA) Proclamation, requiring an EIA for any planned development project or public policy likely to have a negative impact on the environment. Any licensing agency empowered to issue an investment permit or a trade or operating license must ensure that the federal Environmental Protection Agency or relevant regional agency has authorized the project prior to the issuance of a permit.

### **3.1.6 Other policies**

Energy consumption in Ethiopia is still predominantly based on traditional sources such as fuel wood, charcoal, dung-cakes, and agricultural residues (NMA, 2001, 92). Development of hydropower is also targeted within water policy; for example, the Hydropower Policy aims to meet the demands of domestic energy needs and export energy for foreign markets, while the WSDP's hydropower development plan aims to achieve national socioeconomic goals through efficient and sustainable development of water resources to produce hydro-electricity (World Bank, 2006, 39). The GTP focuses on pushing development of hydropower, with targets of 6,000 to 8,000 MW in additional generation capacity (World Bank, 2010a, 88). The CGRE plans to expand electric power

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<sup>19</sup> Available at:  
<http://www.epa.gov.et/Download/Proclamations/ENVIRONMENT%20POLICY%20OF%20ETHIOPIA.pdf>



supply through use of hydro, geothermal, solar and wind power at a rate of more than 14% per year, for both domestic needs and export.

Population growth increases land use pressures and competition for resources; Ethiopia's population is expected to more than double by 2050 (Kidanu, 2009, 4). Demonstrating awareness of these implications, Ethiopia's 1993 National Population Policy notes how population increases in the country had begun to outpace environmental carrying capacity, and were contributing to resource degradation and food insecurity. The policy seeks to promote welfare by harmonizing population growth with carrying capacity, reducing the fertility rate (at the time, of 7.7 children per woman to 4 children by 2014), and increasing contraceptive use eleven-fold to 44% (NMA, 2001, 91). Ethiopia also has a 2006 Reproductive Health Strategy and addresses the impacts of population in other policies such as the PASDEP.

### *3.2 Interviewees' evaluation of policy framework*

In Ethiopia, where the water-relevant human security threats are more related to rainfall than to managed forms of water (see Chapter 2), it is not the water policy, but rather other policies such as those pertaining to agriculture and development, that have the main impact on these human security threats. The following provides an evaluation, based on interviewee statements, of the different policy areas outlined above, prioritised according to their perceived importance to mitigate these threats.

#### **3.2.1 General evaluation**

The Ethiopian policy related to climate change and human security generally received exceptionally high praise from the interviewees. They generally evaluated the policy developments as sincere, counting with strong political will and government backing, as well-designed, and having potential to deliver. Frequently, interviewees gave statements such as the following.

*I have no additional suggestions to the current programmes. The current policies, if implemented, will deliver the adaptation efforts that are required by the country. (Dr. Bateno Kabato, FAO Ethiopia Office)*

*The only thing that is required in the future is the implementation of the currently existing policy. The policy that is now in place in Ethiopia is extremely good, because of the direct relationship between livelihoods and climate. The government is taking the issue very seriously. Still, there are limitations. However, I am optimistic about the results that will be achieved in the implementation of the current policy. (Kassu Kebede, World Food Programme)*

On the one hand, interviewees provided their statements in the context of strong economic and social development over the last several years, which has seen social

resilience, government resources, and capacity improve. Efforts to address the country's problems seem to be improving in implementation and delivery of results. On the other hand, and as the previous section outlining Ethiopian policy showed, the country's policy is in many fields relatively recent, and has responded to the threat of climate change through mainstreaming it into various policies. The recent nature of many of these initiatives, coupled with the impending nature of climate change impacts, means that potential problems are largely not identifiable still.

*The programmes are also very new, so there are bound to be problems that will have to be addressed. (Kassu Kebede, World Food Programme)*

By and large, most interviewees were unable to identify gaps in the current policy framework.

### **3.2.2 Agriculture and Development**

Many interviewees highlighted the benefits of improved market access<sup>20</sup> for smallholder farmers and for pastoralists. Commercialisation of smallholder agriculture is seen as a means to improve livelihood resilience; this view is expressed not only in the government plans and policies, but also by actors working in the development sector such as international NGOs. Commercialisation is hoped to improve farmers' access to agricultural inputs as well:

*There are significant gaps. [...] There is a lot of need for [agricultural] inputs and markets. (Seleshi Bekele, African Climate Policy Center, UNECA)*

Commercialisation of livestock produce and improved market access are also seen as means to decrease conflict in pastoralist areas:

*So we provide non-formal education, different alternative livelihood diversification activities, business-development skills, etc., so they can diversify their livelihood into different diversification options. [...] Another area is livestock marketing. We build through our implementing partners market facilities in key areas, standard livestock markets, with compartments, waste facilities, water facilities, etc. The idea is that these will be safe areas for buyers and sellers to meet, because these are conflict prone areas, in the bush or wherever there are conflict hazards for buyers, sellers, and brokers. So these are well-secured areas, they have security service, market days, the sellers can go there and buyers, transporters. (Dubale Admasu Tessema, Pastoralist and Livestock Programs Coordinator, USAID Ethiopia Office)*

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<sup>20</sup> Whereas interviewees did not specify whether this related to domestic or international markets, there is significant export of pastoralist produce (mainly meat) and smallholder agricultural produce such as coffee, implying that improved market access would be relevant for both domestic and international markets.

Livelihood activities which provide support to traditional livelihoods were identified as key to increasing the resilience of smallholder farmers and pastoralists.

*For me, rather than waiting for the international community to provide funding, we should build local capacity, strengthen their coping mechanisms, implementing livelihood activities, increasing resilience. [These kind of activities] are more important, and if they get the international mitigation support, it is added value. We need to support these kind of activities that address people's coping mechanisms. (Dubale Admasu Tessema, Pastoralist and Livestock Programs Coordinator, USAID Ethiopia Office)*

### **3.2.3 Disaster preparedness and response and food security policy**

Interviewees saw strong improvements in this policy field over the past few years. The capacity of the government to react to food shortages is seen as significantly better than in the recent past. Still, some interviewees expressed the opinion that in the long-term, food security that is not dependent on emergency food aid is becoming more and more difficult to achieve, due to pressures such as population growth and environmental degradation.

Relating to the 2011 drought in the south of the country, interviewees commented:

*The policies have positive impacts on human security. In this year there has been drought, but no hunger. This is the result of the good management currently in place. (Mulatu Tikrit, Ethiopian Investment Agency)*

*Of course, the problems have not been as hard as in Somalia and Kenya, but that doesn't mean that people haven't had food shortage problems. Food was transported from other areas. But the government managed it very well, and you didn't see people dying, etc. And it also happened to rain, which brought relief. The capacity of the government in this respect has improved very significantly. But the situation with food security is deteriorating in this region. The government can tackle the problem, but it can't improve the [long-term] situation. (Ato Abtamu Tsegaye, GIZ Ethiopia Office.)*

Safety-net policies (e.g. providing food assistance in periods of droughts) are linked to natural resources rehabilitation activities. Soil erosion is a particular environmental problem.

*There are attempts [to tackle soil erosion], e.g. building terraces, but the topography is not easy, we have a lot of mountains, we have a lot of livestock and huge population. These factors are aggravating the soil erosion problem. [...] You know the Safety Net Intervention in this country. There is a lot of food coming for people who are in shortage, but they don't take the food freely, they will do conservation activities [that inter alia fight soil erosion] in their locality to get it. Those interventions have contributed a lot, made a big difference. But the issue is complex, because we need the cattle, we need the people, we cut the trees for*

*firewood, we use the animal dung for firewood... there are complexities. (Ato Beyele Sebeku, Early Warning Department, Disaster Prevention and Preparedness, Ministry of Agriculture)*

### **3.2.4 Environmental policy**

Natural resources degradation is one of the primary environmental problems of Ethiopia, and there are significant efforts addressing restoration. As mentioned above, safety-net policies are being linked to natural resources restoration programmes.

*There is a strong trend to protect natural resources and to rehabilitate them in the different ecological regions. Policies and programmes are also there, and very good. (Kassu Kebede, World Food Programme)*

There is hope that these programmes will prove their value for farmers on their own, and that farmers that are aware of improvements made through these programmes will voluntarily participate in these schemes. However, the need for knowledge and technology support persists.

*The farmers need to improve productivity. [...] Last year they did a lot of land management activities. During the rainy season they planted a lot of trees. They use their free time, they are not stopping what they have to do at the farm level. Before they were spending more time on different activities, now less so. [...] It's through awareness. Once you create the awareness people may not require resources. [...] If you were to pay, it would cost you billions, but if you do mass awareness creation, people will do it without any need for special resources. (Gebru Jember, Climate Change Forum – Ethiopia)*

### **3.2.5 Water policy**

The 1999 Water Policy, as well as the Energy Policy, were singled out as being outdated and requiring updates. However, revisions are reported to already be in the pipeline.

*There is need to update the energy policy. The same is valid for the water policy: the current water policies date from 1999. However, as already mentioned, new policies for both topics are being developed currently. (Alemayehu Tafesse, Ethiopian Ministry of Water and Energy)*

One interviewee saw possibilities for avoiding conflict through water policy:

*Water policy could have a good potential, a good strategy to avoid conflict would be to prioritise uses. (Seleshi Bekele, African Climate Policy Center, UNECA)*

### 3.3 Stakeholder expectations and demands concerning future policy

#### 3.3.1 Expectations regarding the national level

As highlighted in section 2.4, most interviewees had a highly positive view of the policy framework in place, and did not see any requirements for policy reforms at the national level.

Only a few interviewees highlighted gaps, these being:

- Appropriate land-use policy: Such a policy would ensure cultivation of land according to its carrying capacity, addressing issues such as cultivation of steep slopes (conducive to erosion and natural resources degradation), and limitation of free grazing.
- Adequate seed policy (however, one interviewee reported that this policy is currently in the pipeline).

While interviewees largely expressed satisfaction with the policies as designed, they highlighted that the challenges are in meeting the implementation goals of these policies. Implementation often occurs significantly slower than planned. The most frequently mentioned implementation challenges were:

- Human resources capacity, technical capacity, institutional capacity
- Knowledge transfer
- Financial means
- Knowledge management and coordination (among organisations working within country, including ministries and donors)
- Integration of climate aspects into other policies, mainstreaming

The last point, regarding the effective integration with other policies, mainstreaming, and its actual implementation in practice, was mentioned by 4 of the 12 interviewees as a limiting factor for policy development in the country, and as a particular challenge for developing countries:

*What we lack is the capacity and technical expertise in terms of how to mainstream this [climate issues in sectoral policies]. [...] Maybe you need to consider cross-sectoral issues also. Because water is impingent on hydro, energy, agriculture, health, infrastructure... There is a need to consider cross-sectoral issues in sector-specific policies. How to plan together. How are both vertical and horizontal interlinkages among institutions. This is a huge gap in most developing countries. The Ministry of Water and that of Energy now became one, because before they were planning independently of each other. If this Ministry of Water and Energy*

*plans together with the Ministry of Agriculture, that of infrastructure, etc, there will be more progress. (Gebru Jember, Program Officer, Climate Change Forum for Ethiopia).*

A further challenge identified relates to scientific capacity for policy formulation. A few interviewees highlighted that additional research capacity was needed that can focus on the local context (e.g. climate, plant growth conditions) and which would support creation/revision of policy, leading to research-based policy.

### **3.3.2 Expectations for international level**

Many interviewees highlighted that even though Ethiopia's greenhouse gas contribution to global warming has been close to non-existent, the country is at the "high end of vulnerability"<sup>21</sup> to climate change, and that those countries that caused this problem have a moral obligation to assist in adapting to climate change effects. Most funds currently available are targeted towards climate change mitigation, and do not cover adaptation.

*The developed world always wants to pay you for mitigation. But we are facing issues because of the changed patterns of precipitation, we need to invest for adaptation. This is not for doing nothing, this is to face the issues that we are currently facing, because of the changes in the climate. But this kind of funding is not forthcoming from the developed world, who are responsible for the changes we are living now. We didn't bring this onto ourselves. (Ato Abtamu Tsegaye, GIZ Ethiopia Office)*

*Financing is not adequate. The means that are made available at the international level are addressing mitigation and not adaptation. (Seleshi Bekele, African Climate Policy Center, UNECA)*

Several interviewees also expressed the view that promises made through past world summits had not been held, and there is a gap between the "noise" heard on climate initiatives at the international level and what actually arrives on the ground in countries.

*In practice, things are not as expected. However, if you follow up the media, etc, there seems to come a lot of support, but what is coming in practice is not very much. [...] I don't know how we can remind donor society to fulfill their promise. [...] The developed countries should pay their part, and must be committed to accept the rules and regulations. If they only give some money, and continue meeting, you don't solve the problem, you don't get out of the problem area. (Ato Beyele Sebeku, Early Warning Department, Disaster Prevention and Preparedness, Ministry of Agriculture)*

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<sup>21</sup> Wondwossen Sintayehu, Ethiopian Environmental Protection Agency, personal communication.



Expectations for support from developed countries took different forms in the interviews. By far, the majority of expectations were related to funding for implementing adaptation activities. Technical support was also a frequently mentioned expectation; in this regard, assistance in mainstreaming climate change adaptation into different policies was mentioned in several interviews. The wish for guidance from the international level on different activities, coming from a “global kind of architecture”, was expressed by 2 interviewees.

## **4. Evaluation of results**

### *4.1 Insights on climate change, water, and human security*

In Ethiopia, climate change is seen as an important threat on many levels, a view that is in line with the generalised perception of the country’s high vulnerability to droughts. In recent years, Ethiopia has seen a robust development of new policies and varied kinds of measures and efforts to improve resilience to droughts and to climate change. Due to the strong links between livelihoods and rainfall, the vast majority of the country’s population is extremely exposed to climate events. Measures that help achieve food security in this context are not restricted to water-related measures, but also include development approaches such as improving productivity and commercialisation of agriculture, with the aim of improving income and thus household resilience in drought years. Although much of the relevant policy is new (e.g. PIF, GTP, CGRE) and therefore has yet to be evaluated based on its implementation and on-the-ground results, most interviewees were highly optimistic about the policies’ (future) performance, probably based on the country’s and government’s positive performance results over the last decade and the considerable political will on the topic.

In this way, and in spite of the large steps still needed for achieving food security in the country, the general perception of interviewees is of satisfaction with policy, which is covering practically all possible areas and actions, as well as with government efforts, which is “doing everything it can do”.

Due to the alignment between initiatives that further development and those that further adaptation, and because climate change adaptation is seen as a means to secure achievement of economic development in the country, the uptake of climate change adaptation onto the policy agenda in Ethiopia can be seen as being comparatively easy and painless. It is a clear win-win situation, and addressing climate change adaptation could even be the source of new funding: at the time climate change adaptation was beginning to be pushed in the country (in the run up to the COP-15 in Copenhagen,

2009), it promised to be a topic which would have significant amount of funding made available for it at the international level (nowadays there is less optimism among interviewees on this point).

*The government by itself will not move back, because it is in our own interest. This is not an agenda that differs much from what the government was doing. If it were an agenda imposed by a donor, when the donor leaves it will stop. But this agenda, whether developed countries or donors give assistance or not, governments will continue the intervention. (Gebru Jember, Climate Change Forum – Ethiopia)*

#### 4.2 Insights on climate change and water-related conflicts

As explained above, there is often no clear distinction between adaptation and development initiatives in Ethiopia. This means that the threat of climate change and worsening climate conditions is seen by some as being used to justify development initiatives that are unpopular with some population groups.

This kind of logic (independent of its validity) justifies the settlement of pastoralists and the uptake of agriculture in traditionally pastoralist areas. Many pastoralist communities have had to rely to some degree on food aid for many years now,<sup>22</sup> and the official line is that climate change would only worsen this situation. However, this apparently non-political adaptation and development logic supports measures that are actually very political, because they are seen by some pastoralist communities (some in violent conflict with the government, which they don't recognise<sup>23</sup>) as eroding their rights (e.g. to land use), restricting their resource use, and as generally making pastoralism a less viable livelihood for pastoralists. Reduced livelihood viability has been associated with increased cattle-raiding between clans and thus increased internal conflict among pastoralists.<sup>24</sup> Rather than climate change affecting existing conflicts, in this case, it is the implementation of some measures that fly under the flag of development and/or climate change adaptation which have the potential to influence existing conflicts, in this case between the government and pastoralist communities.

Some projects being implemented in these pastoralist regions (e.g. USAID pastoralist projects) are trying to avoid these dangers, using intense consultations with all stakeholders, clearly defining areas and rights (e.g. balancing traditional usage rights

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<sup>22</sup> Dr. Fassil Reda, Pastoralist Research Division, Ethiopian Agricultural Research Organisation, personal communication, 09/11/11.

<sup>23</sup> A (possibly somewhat alarmist) version of events in these regions is the report by Internal Displacement Monitoring Centre and Norwegian Refugee Council, 2009.

<sup>24</sup> E.g. Temesge, 2010

with more modern rights systems), and achieving solutions that are acceptable for all parties, have buy-in in communities, and are transparent.<sup>25</sup> Although they require intense planning efforts and monitoring of agreements achieved, they have the potential to deliver results without generating new or affecting existing conflicts.

Economic development of the country as a whole is seen as a means to improve societal resilience to climate change impacts. Large-scale agri-business projects or “land-grabs”, as well as smaller developments, are part of the government’s development agenda,<sup>26</sup> and can be seen as furthering economic development and thus resilience. However, these developments imply the resettlement of communities and reduce the group’s resilience. There are some reports of conflicts related to land-grabs.<sup>27</sup>

No concrete examples of measures for reducing existing conflict were mentioned in the interviews.

### ***Box 1: Large-scale farming or “land-grabs”***

Large scale acquisitions of land in developing countries by foreign (sometimes national) governments and private firms (both national and international) have become ubiquitous in the last decade. These “land grabs” primarily stem from the incentive to secure future supplies of food and are considered a causal effect of global food security concerns, particularly those triggered by food price spikes in 2007 and 2008. Increased food prices have, in turn, brought about new economic and business incentives to invest in land and agricultural resources.

Proponents of large-scale land acquisitions argue that these deals reduce poverty in developing countries by bringing much needed rural investment, infrastructure, increased access to technology and markets, as well as improved on-farm productivity. On the other hand, extensive studies by the World Bank and other institutions point to the fact that huge pieces of land are being sold in mostly poor and food insecure countries in Sub-Saharan Africa where investors take advantage of “weak governance” and the “absence of legal protection” for rural communities, which are often pushed off their land.

In Ethiopia, a report by the Oakland Institute found that 3,619,509 ha of land have been leased since 2008 by the government to foreign and national investors, although the actual amount could be higher (The Oakland Institute, 2011). While these land deals are supported

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<sup>25</sup> Dubale Admasu Tessema, Pastoralist and Livestock Programs Coordinator, USAID Ethiopia Office, personal communication

<sup>26</sup> Cf. Ethiopian Ministry of Finance and Economic Development, 2010.

<sup>27</sup> E.g. Internal Displacement Monitoring Centre and Norwegian Refugee Council, 2009; Fisher, Steve (2011).

by the government and do provide much needed FDI in rural areas and the agricultural sector, there are several issues that critics have acknowledged: 1) interaction with food security and food sovereignty of Ethiopians, 2) local communities and their land rights, and 3) equitable benefits in terms of employment, compensation for land, and spill-over of technological knowledge/farm inputs.

Ethiopia's population is chronically food insecure with approximately 10 percent, or 7.8 million people, suffering from chronic hunger (The Oakland Institute, 2011). The 2010 Food Security Index has also found that Ethiopia is the 6<sup>th</sup> most vulnerable country, of 162 countries, to risk widespread and chronic hunger in the future. Many of the land deals in Ethiopia thus far are contracted to grow crops for biofuels and value added crops, such as cut flowers, which will be exported to European and western markets. Crops grown for export can boost foreign exchange, but they can also increase Ethiopia's dependence on food imports, making the country particularly vulnerable to volatile food prices which have been particularly unstable with price shocks in 2007, 2008, and 2011 (DG of External Policies of the Union, 2012).

Regarding the issue of land rights, rural small-holders, often have no formal land rights on which to state their claim. While the government can insist that only "unused" land has been leased, decisions regarding what is "used" and "unused" is often left to the discretion of the government or regional authorities, and remains ambiguous for all parties involved.

Moreover, the bulk of profit from crops grown for export by foreign firms will only contribute indirectly to the local economy, the same being valid for technology transfer. While many of these land acquisitions claim to provide benefits to the poor, such as employment, technology, and overall improved economic activity from which the population should benefit, many cases of land acquisitions in Ethiopia and elsewhere have not delivered on these stipulations. Whereas FDI in Ethiopia's rural and agricultural sectors is definitely desirable, the Oakland Institute states that, "There are widespread concerns that these land investments are not being undertaken in a manner that safeguards the social, environmental and food needs of local populations." Talking about land grabs in general, a 2010 World Bank report states:

*Many investments (...) failed to live up to the expectations and, instead of generating sustainable benefits, contributed to asset loss and left local people worse off than they would have been without the investment. In fact, even though an effort was made to cover a wide spectrum of situations, case studies confirm that in many cases the benefits were lower than anticipated or did not materialize at all. (World Bank, 2011)*

Land acquisitions are taking place across the world, and rather than oppose them outright it is necessary to consider the options that could help prevent the negative impacts. The World Bank and Transparency International among other institutions, have developed a

code of conduct for host governments and foreign investors to try to maximize on the benefits offered by such transactions and mitigate against the risks. Key elements of the code of conduct include 1) transparency in transactions 2) respect for existing land rights, including customary and common property rights 3) sharing of benefits (the local community should gain not lose from foreign investments in agriculture) 4) environmental impact assessments for improved sustainability, and 5) adherence to national trade policy, with for instance a legal obligation to provide domestic populations with food in an acute national food crisis (Joachim von Brawn, April 2009). This code of conduct has already been developed and proposed to the international community in 2009, but the code remains voluntary.

Large scale land acquisitions, therefore, require careful consideration and re-working to effectively fulfill the primary objective of economic growth while providing additional opportunities and improvements to the livelihoods of the poor, particularly rural smallholders who make up the majority of the population in Ethiopia.

#### 4.3 *Insights on the current national policy framework*

Ethiopia has moved very fast to incorporate climate change adaptation into government policy, and the policy documents and programmes are considered well-reasoned and well-designed by most interviewees.

*We move fast in terms of policy. (Gebru Jember, Climate Change Forum – Ethiopia)*

Some possible reasons for the surprisingly rapid pace and thoroughness of uptake of climate change in the policy framework could be the following:

1. High vulnerability of population and economy to climate change impacts, and first impacts of climate change already being reported (interviewees mentioned changes to rain seasons and increased frequency of droughts).

*The policy that is now in place in Ethiopia is extremely good, because of the direct relationship between livelihoods and climate. The government is taking the issue very seriously. (Kassu Kebede, World Food Programme)*

2. Strong alignment of climate change adaptation with existing policy priorities (particularly with development), as well as the perception of climate change as being a threat to development objectives.

*We have really recognized that one of the biggest challenges to setback our development trend will be climate change. (Wondwossen Sintayehu, Ethiopian Environmental Protection Agency)*

3. Expectations of accessing funding for adaptation (and mitigation), which would include benefits for the country's development agenda. Expectations were particularly strong during the process that ended in the UNFCCC Copenhagen conference in 2009 (COP-15).

However, the speed of uptake was related by some interviewees to the policy development process in the country, which is not considered participatory and is even seen by some as autocratic. The uptake of participatory processes in policy design and development was considered important for policy improvement, as was the use of indicators of social acceptance. Independent of the final quality of policy itself, a questionable process was considered intrinsically faulty and having the potential to lead to conflict. Taking up these recommendations for the country's policy development would probably increase policy development time and costs.

There was a broad consensus among interviewees that the existing policy framework addressing climate change adaptation is good or very good, and several interviewees considered it better than that of most developed countries.<sup>28</sup>

#### *4.4 Insights on a future policy framework*

As discussed above, Ethiopian interviewees evaluated the policy framework in favourable terms, and most could not identify any policy gaps that need to be addressed or that would be addressed, in the future. Thus no real insights were made regarding the direction of broad future policy developments.

Due to the fast policy reaction of the Ethiopian government to the threat of climate change over the last 5 years approx., the relevant policy in the country is very new, and so has yet to acquire a performance record. In this way, many interviewees agreed that, in time, issues with current policies are bound to appear, but they were unable to identify any issues. Accordingly, in terms of the revision processes of the current policy framework that are to come in the future, interviewees could offer no insights as to main directions or elements of these processes.

*In general the framework, the climate change-related policy: it is a new one. Before it should be amended it should be tested first. (Gebru Jember, Climate Change Forum – Ethiopia)*

However, one significant future policy development is related to the current climate mainstreaming process. Climate issues have been incorporated into the growth policies

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<sup>28</sup> This good policy would increase the population's human security, mostly by improving food security; most interviewees made no link with conflict potential.





and the agricultural sector policies, and the plan is that they be progressively mainstreamed into other sectoral policies.<sup>29</sup>

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<sup>29</sup> E.g. Ato Beyele Sebeku, personal communication.

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