Introduction

Climate change adaptation is one of the sub-themes under RiPPLE’s Growth Long-term Action Research Study (LARS). This sub-LARS will examine the role of water investments in facilitating local adaptation to the current and projected impacts of climate change on water resources.

Adapting to the potential impacts of climate change is essential for Ethiopia. Adaptation in the water sector can take the form of institutional-, policy- or market-based interventions to address both demand and supply side impacts. In Ethiopia, the National Adaptation Programme of Action (NAPA) and other government programmes like the Productive Safety Net Programme (PSNP), provide various strategies that could reduce vulnerability of local communities to climate-related hazards. Based on a review of climate change literature and adaptation policies, this study will assess the effectiveness of such interventions in facilitating adaptation.

Four specific interventions will be assessed in the Oromia region: Irrigation Schemes; Improved Rangeland Management; PSNP; and Integrated Water Resource Management/Multiple Use Systems.

Objectives

1. To identify which types of interventions/investments in the water sector enhance adaptation to the impacts of climate change.
2. To facilitate uptake of the study findings at the local, national and international level.

Research Questions

In order to identify investments, the study will include three broad research activities:

1. Impact & Adaptation Assessment by looking at what is climate change; how does it impact household assets; how do local communities cope; and what are characteristics of planned interventions?
2. Scenario Development & Analysis (Assessing the effectiveness of interventions) through considering how effective are planned interventions in facilitating adaptation; what adaptation do they facilitate; and are they economically, politically and socially sustainable?
3. Continuing the Adaptation Process through identifying a target audience and preparing a targeting strategy.

Study Methodology

The conceptual framework used for this research is the Adaptation Policy Framework (APF). The APF allows countries to evaluate existing planning processes to address CC impacts. It focuses on adaptation and takes into account the role of environmental and social stressors; socio-economic conditions; and sustainable development, when assessing climate induced impacts. It begins with current climate variability and current adaptation and provides an empirical base for future impacts, vulnerability and adaptation.

The methodological framework for the study is based on an ‘asset-based adaptation’ approach. This approach identifies the asset vulnerability of low-income individuals, households and communities to climate change in urban and rural areas and helps assess how assets can support adaptation.

Details on the methods being used under the three research activities can be found in the Climate Change Research Strategy (www.rippleethiopia.org)

Links to action

In line with the principles of action research, this study will aim at continuing the adaptation process by identifying a target audience and an uptake strategy for the local, national and international level.