



Enhancing Integrated Water and Land Resources Management for sustainable Food and Nutrition security and ecosystem services in the Genale Dawa River Basin.

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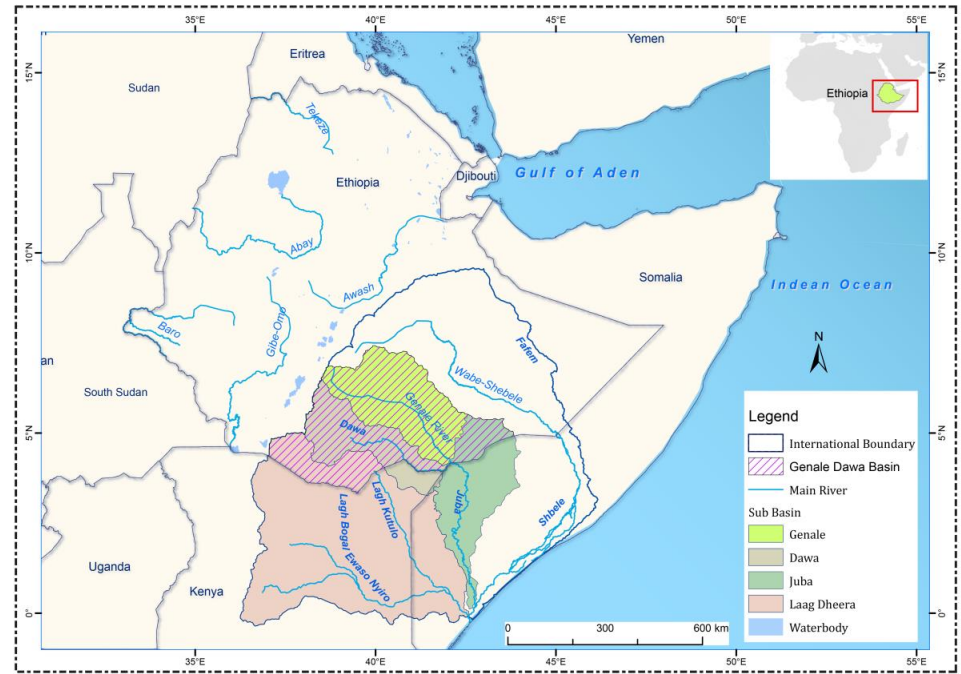
ILRI Campus, Addis Ababa, Ethiopia

Outline

- Introduction
- Project Rationale
- Goal and objectives
- Work Packages and Activities
- Plan of Action
- Logframe (Draft)

1. Introduction

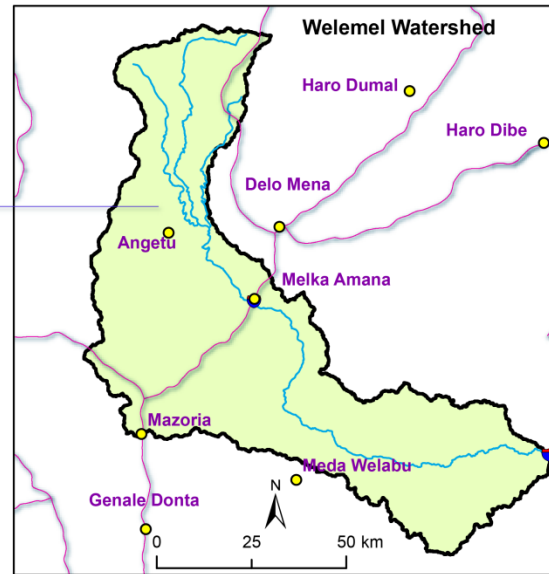
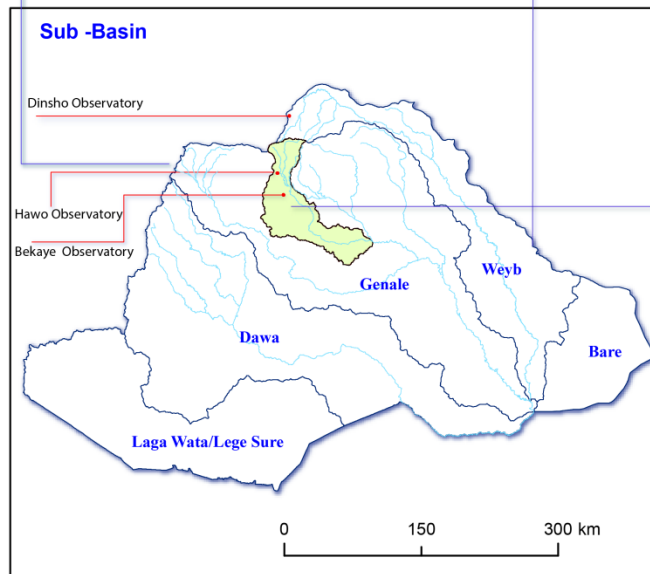
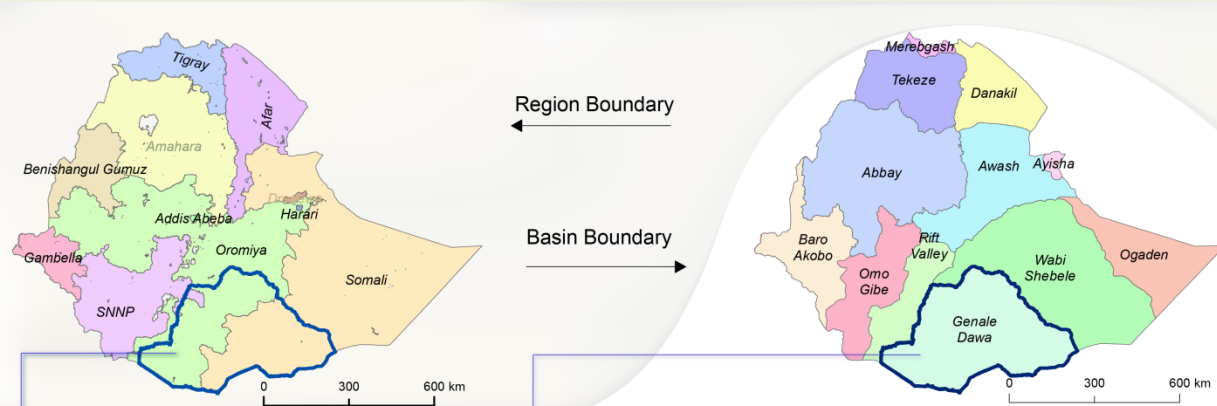
- The Genale Dawa (Juba) River Basin is shared by Ethiopia, Kenya and Somalia.
- It is the third largest river basin after (WS and Abay)
- Major sub-basins are - Genale, Dawa and Weyb
- The Bale Mountains are the water towers of the basin.
- The river systems drain the driest and thirstiest part of the regions.
- It is inhabited by communities eking livelihood
 - ✓ mixed farming system in the highlands;
 - ✓ mixed farming in mid altitudes;
 - ✓ pastoral communities.



The Basin's climate is changing increased drought frequency, as well as unpredictable rains that fall in shorter but more intense episodes.

The magnitude and rate of current climate change, combined with additional environmental, social and political issues, are making many traditional coping strategies ineffective and/or unsustainable, amplifying environmental degradation and food insecurity, and forcing communities to rapidly find new livelihood strategies.

Administrative boundary and sub-basins



The major sub-basins include:

Dawa – irrigation development by IGAD to benefit the three countries is proposed

Genale – is where GD3 is now under construction.

Weyb – is shared between Somalia and Ethiopia.

The spatial, temporal and inter-annual variability is very high.

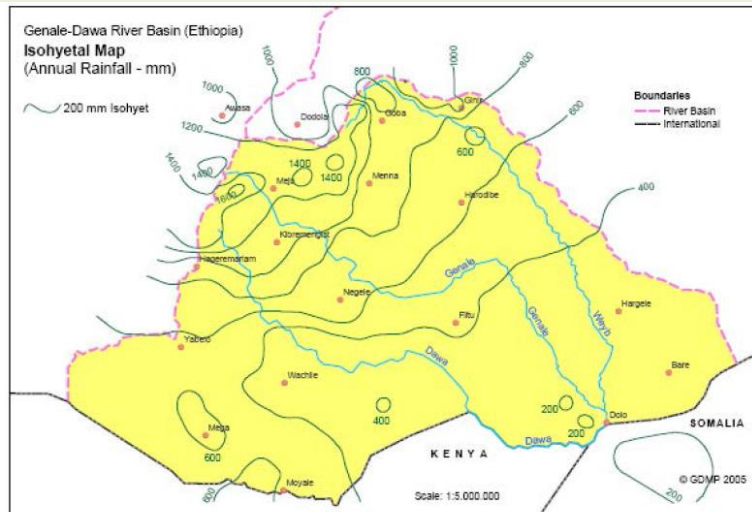


Figure 8. Mean annual rainfall in the Genale-Dawa river basin. Source: MoWR (2007)

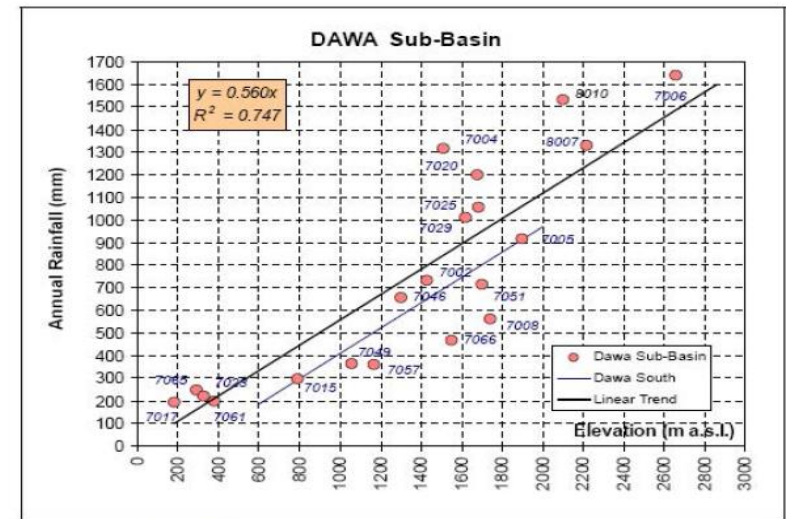
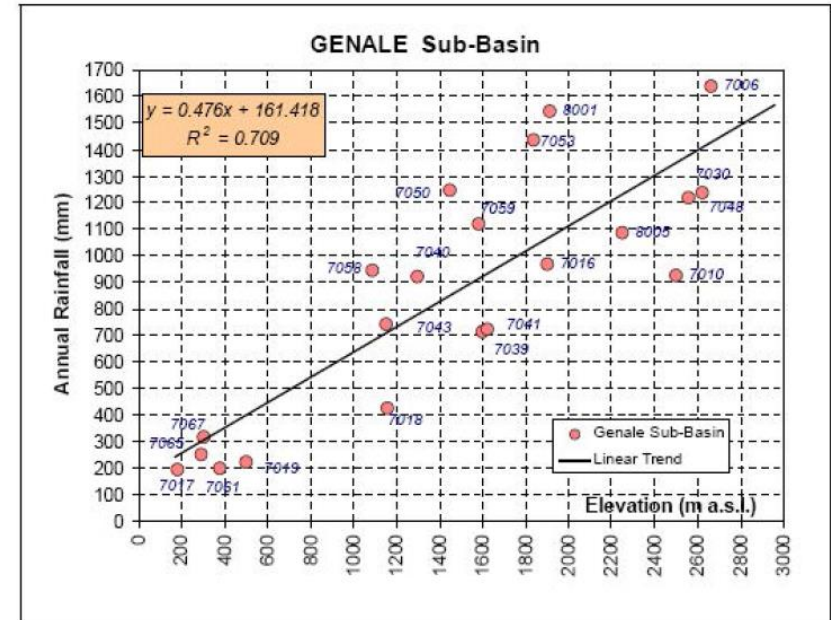
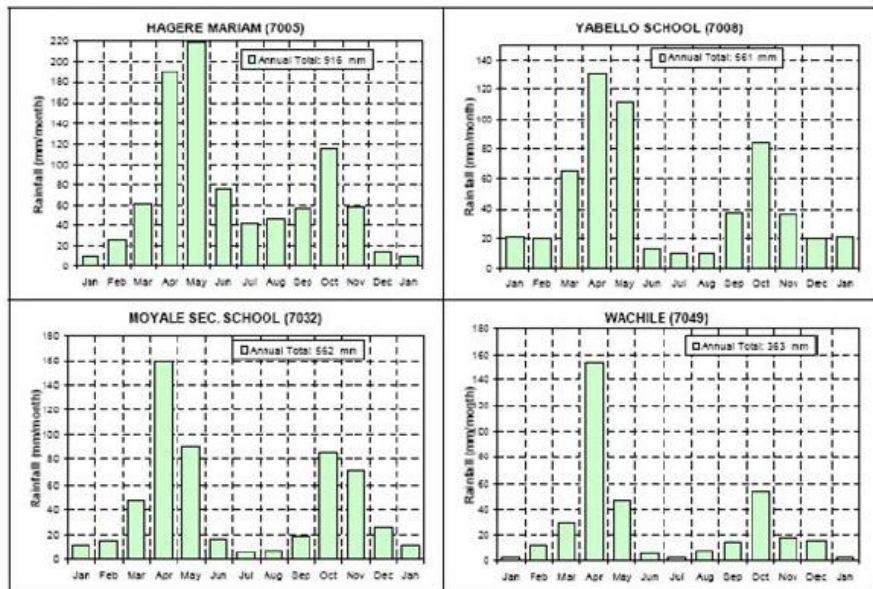
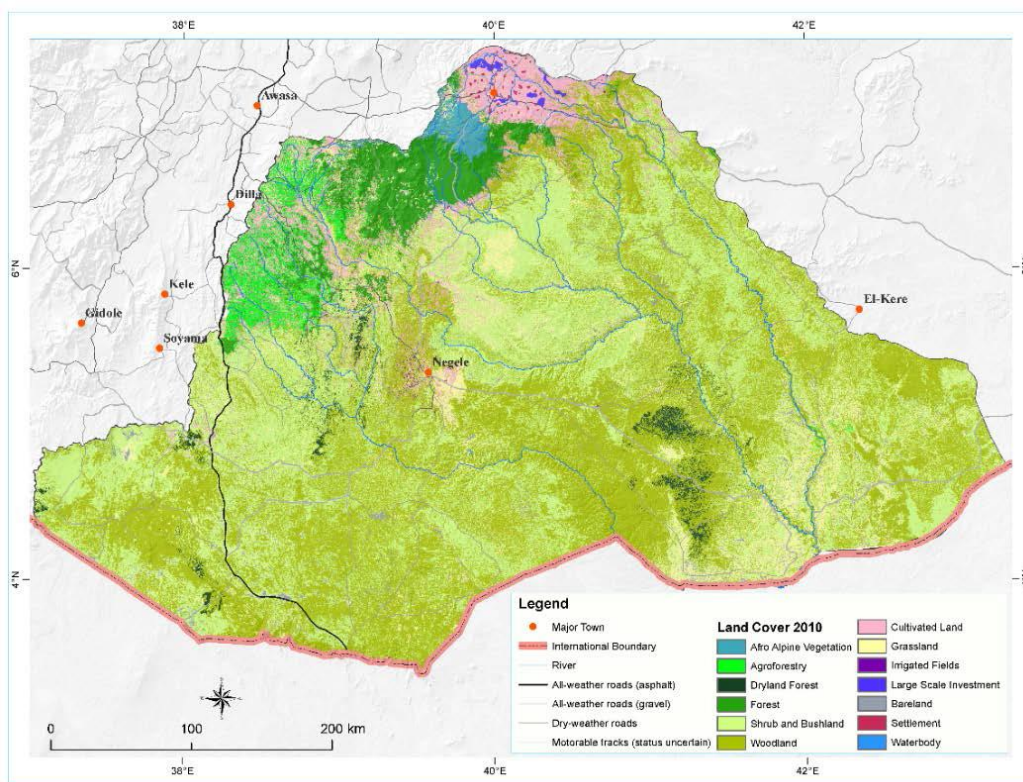


Figure 10. Rainfall-elevation relationships in the Dawa sub-basin. Source: MoWR (2007)

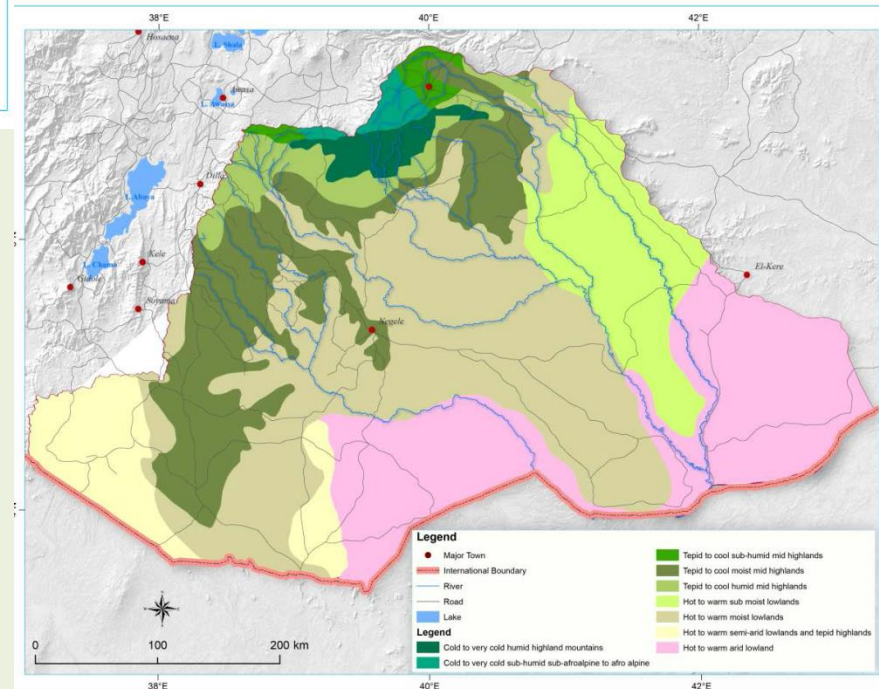
Region 1: West and Southwest



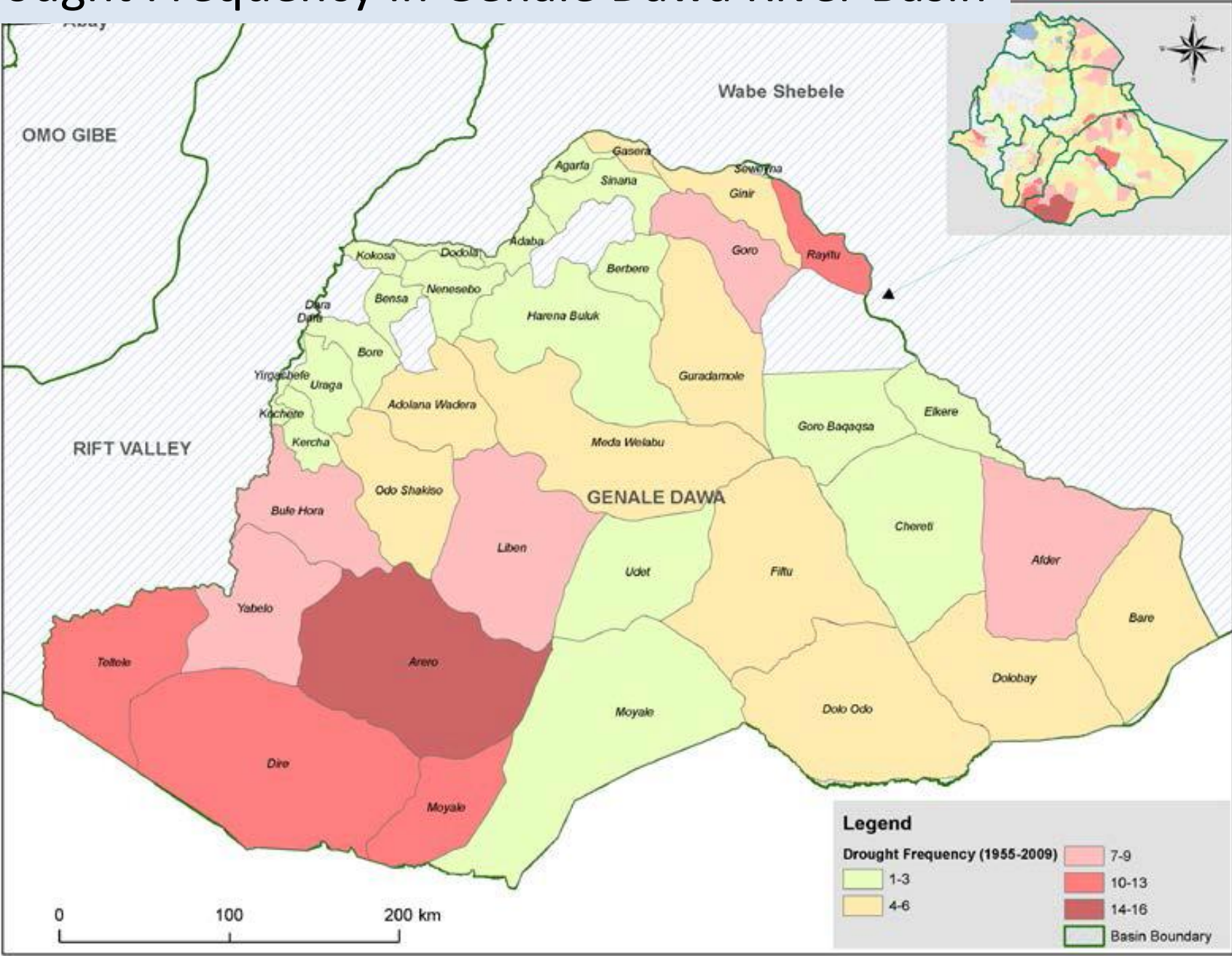


The Agro-ecology
Altitude varies from 4600 m to
about 200 mm
The rainfall varies from 1600 mm
to as low as 200 mm

The lowlands of GDRB are prone to drought.
The most recent is the 2010 drought which
affected over 10 million people in the sub-
region.



Drought Frequency in Genale Dawa River Basin



There is little evidence that the highlands experience a meaningful soil and water conservation



With appropriate soil and water conservation, steep landscapes can sustain life



Lowland landscapes, inhibited by pastoral communities, suffer from drought, rangeland degradation, encroachment due crop production, etc.

Perennial river crossing the desert in Dolo Mena



SLM Activities on Farmlands



August 5, 2014







October 2013









We changed rural
livelihoods in real terms –
we set the stage





2. Rationale for the project

The main challenges in the Basin (Ethiopia, Kenya, Somalia) include:

- securing water for all people;
- securing water for food production;
- developing other job creating activities which require water;
- not protecting vital ecosystems;
- dealing with variability of water in time and space;
- managing agricultural risks which are climatic in nature or due to land mismanagement;
- creating popular awareness and understanding in order to mobilize effective support for sustainable water management and induce the changes in behavior and action required to achieve this;
- forging the political will to act; and
- ensuring collaboration across sectors of the economy and trans-boundaries.

Integrated Water Resource Management is required to address these problems.

Goal and Objectives of the project

Promote shared vision and regional cooperation for equitable and sustainable use and management of water and land resources for agricultural activities, poverty alleviation, socio economic development, and eco-system services in the sub-region (Ethiopia, Kenya and Somalia).

Major objectives

- 1. Develop knowledge-base on water and land resources to manage risk and vulnerability to ensure sustainable development;**
- 2. Demonstrate innovative approaches on integrated water and land management for enhancing food and nutrition security through learning watersheds.**
- 3. Enhance capacity development and partnership for integrated water and land resource management**

Work Packages

WP1. Water Resource Assessment

A1.1. Spatial & temporal variability and trend analysis of rainfall.

A1.2. Evaluation of drought and flood incidences and vulnerability .

A1.3. Inventory of water resources, development efforts and opportunities.

WP2. Strengthening data generation on climate and hydro-sedimentology observatories under different agro-ecologies at a scale.

A2.1. Improve data collection instruments for accurate understanding of the hydro-logical process under different agro-ecologies.

A2.2. Establishing meso-scale cascading watersheds to investigate hydrology of the river systems at scale.

Observatories



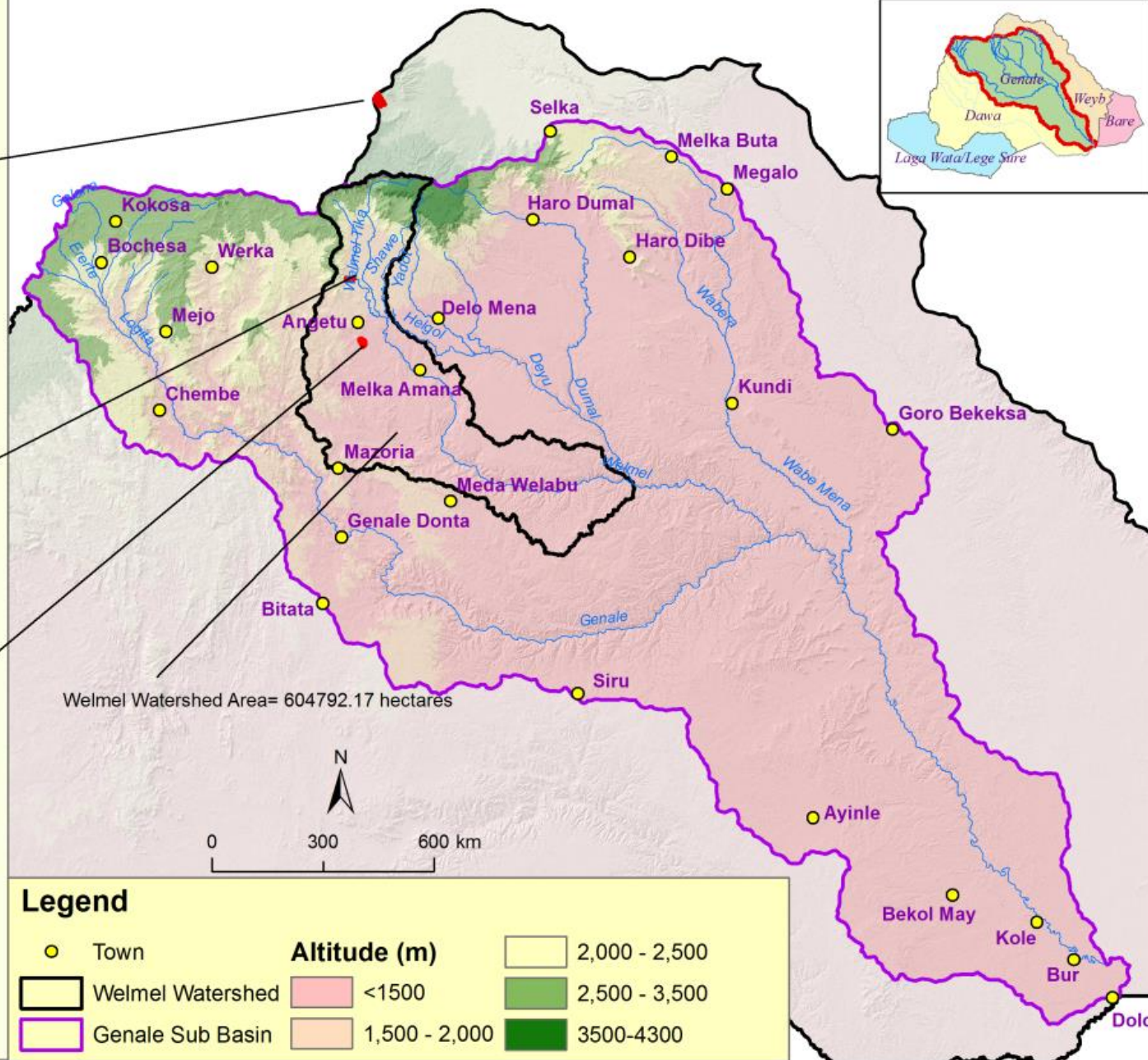
Dinsho Watershed



Hawo Watershed



Bekaye Watershed



WP4. Knowledge Generation, Management and Sharing

A4.1. Knowledge Generation and Management

A4.2. Promote facilitated Learning and experience sharing

A4.3 Empower communities and promote upstream-downstream dialogue on shared water and land resources management

A4.4. Develop scaling up strategy

WP5. Capacity development

- A5.1. Identify capacity gaps hindering water and land resource management;
- A5.2. Undertake capacity building interventions at various levels based on gaps identified.

WP3. Establishing learning watersheds to demonstrate contribution of integrated watershed management for enhancing ecosystems services under different agro ecologies.

A3.1. Undertake detailed bio-physical and socio-economic baseline survey in the watershed

A3.2. Design and implement agro-ecologically suited bio-physical and homestead development interventions

A3.3. Assess the impact of IWM intervention on the livelihoods of communities in the watersheds

Some specific features of this proposal

We shall work together with

MOWIE

MOANR

IWMI

Regional governments

Non-governmental organizations

Kenya and Somalia Water Partnership

I stop it for the moment

Thank you!