



United Nations
Economic Commission for Africa

Nature based solutions for water resources infrastructure and community resilience in Ethiopia

Joint Initiative of UNECA and WoWIE of Ethiopia

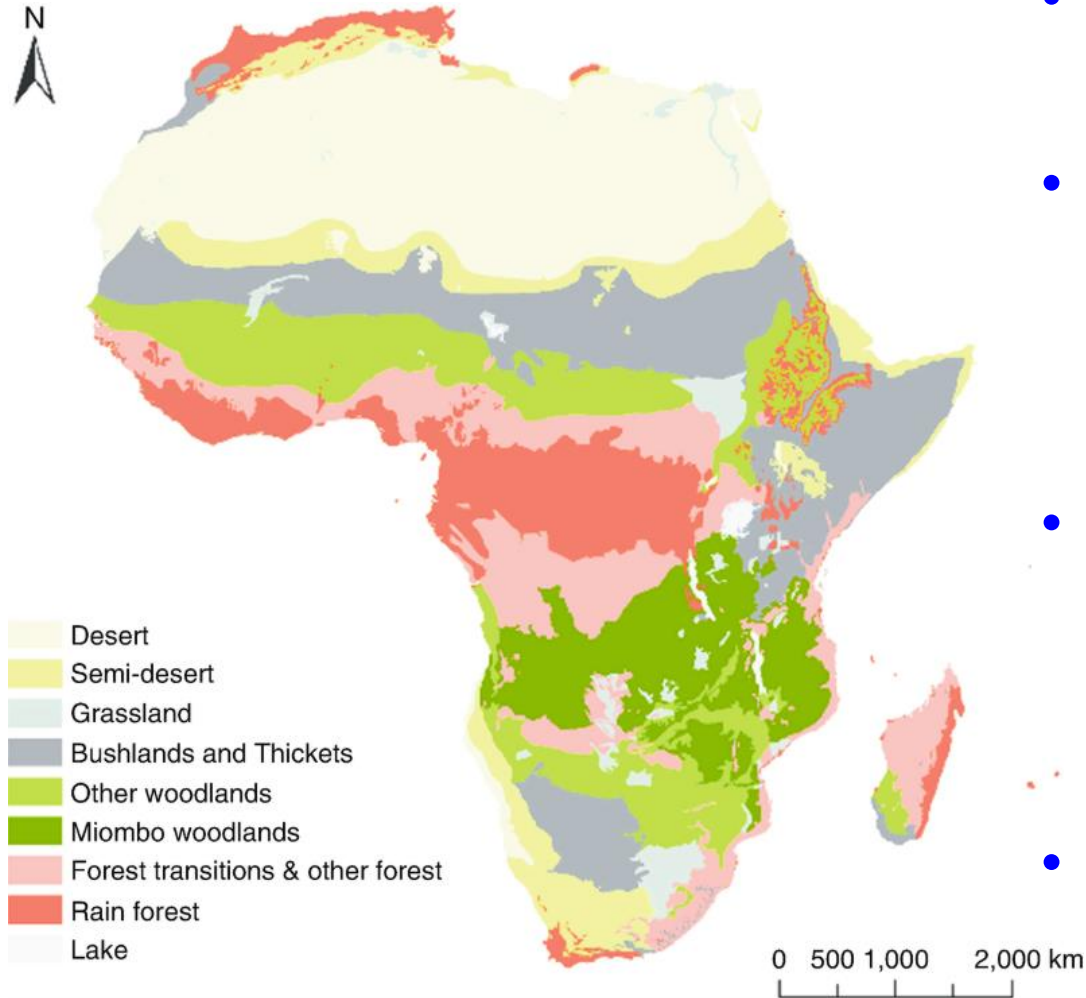
*Vera Songwe (Dr.)
Executive Secretary, UNECA*



27 July 2020
Addis Ababa, Ethiopia

Background

Africa

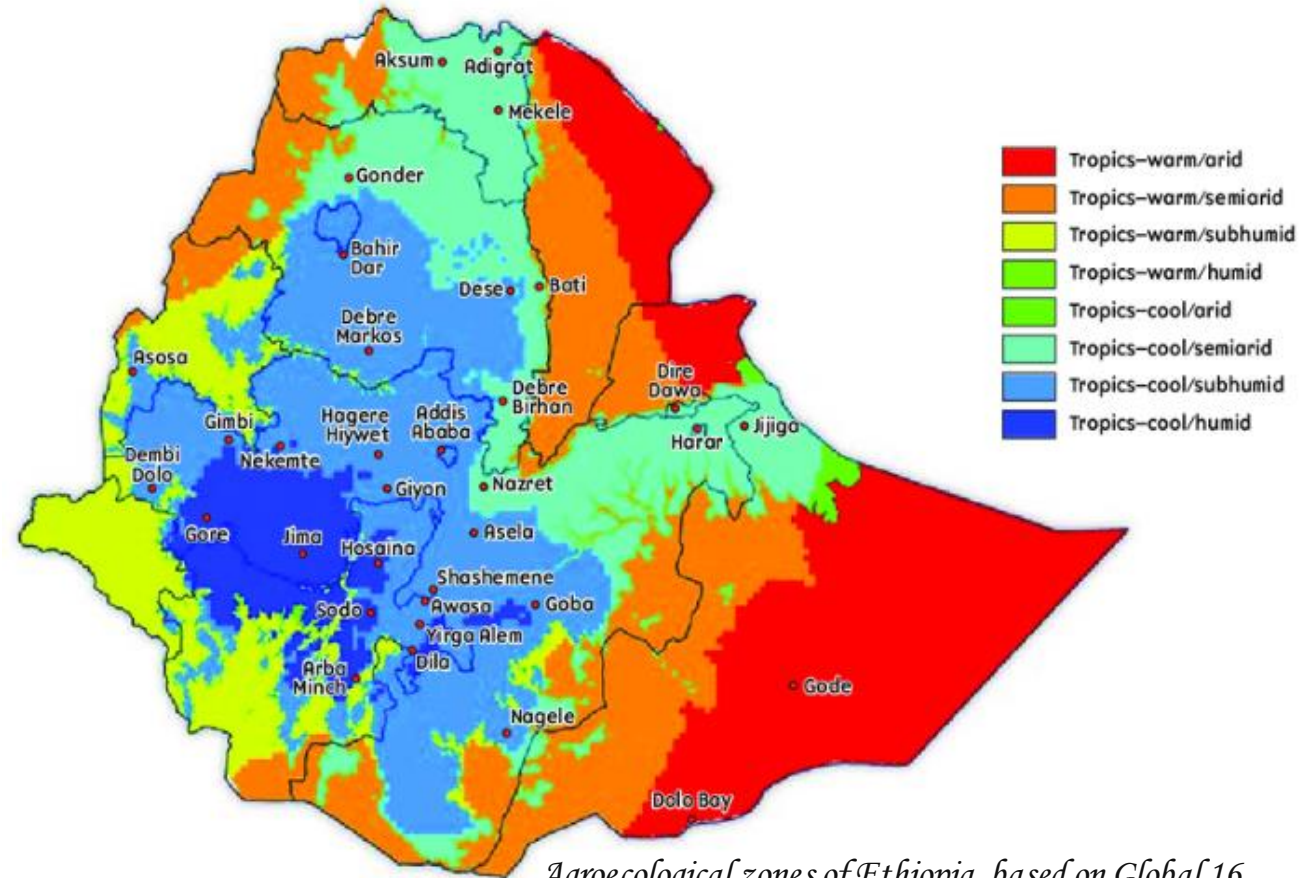


Map of Africa vegetation (Ribeiro et al. [2015](#))

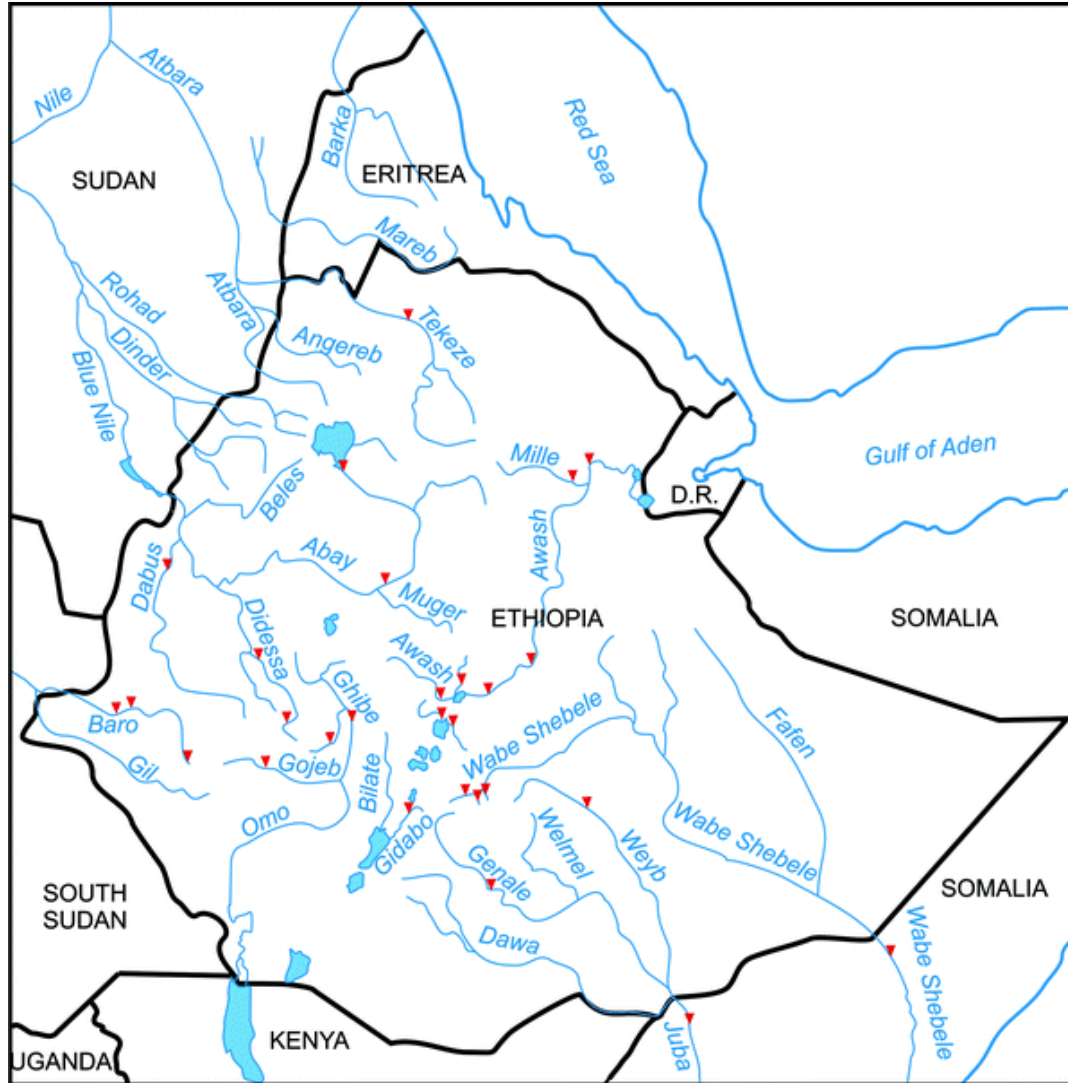
- is home to a rich and diverse animal, plant, and marine biodiversity;
- natural resources' are rapidly degraded due to high deforestation, increased human and livestock populations, poor agricultural practices, and other unsustainable land use practices;
- climate change alone could cause the loss of over half of African bird and mammal species, as well as trigger a 20%–30% decline in lake productivity, and a significant loss of plant species;
- is a leader in restoring degraded ecosystems and 27 countries have pledged to restore 100 million ha of degraded landscapes (UN, 2019).

Ethiopia

- recognizing the extent of land and forest degradation and their profound negative consequences, it has made a strong voluntary commitment in the context of *'Bonn Challenge'* to implement forest landscape restoration on 15 million ha
- ambitiously planned to plant 20 billion seedlings from 2019-2024; of which 5 billion seedlings are being planted in 2020



Ethiopia (Cont'd...)



- In pursuant to restore degraded lands and address societal and environmental challenges around the water reservoir infrastructure, the UNECA in collaboration with MoWIE has developed a community-led Nature based Solution (NbS) programme.

Map of Major Ethiopian Rivers (<https://www.google.com/search?rlz=ethiopia+rivers&rlz=>)

Why Nature based Solution (NbS)?

Why NbS?

Human
Wellbeing



Because...it aims at
addressing three
interdependent
challenges

NbS...

- **tackles both climate mitigation and adaptation challenges,**
- **incorporates green and blue infrastructure in urban areas,**
- **applies ecosystem-based principles to agricultural systems.**
- **Acknowledges, just like 2030 Agenda SDGs, the interdependencies of the social, environmental and economic goals and encourages actions that promote synergies among them.**





Details on Proposed NbS Programme

The Joint Programme



Grand Ethiopian Renaissance Dam (<https://www.google.com/search?rlz>)

- **Aims to provide low-cost solutions to protect water infrastructure while delivering a wider range of ecosystem services and protecting vulnerable sectors of society**
- **Will be implemented in three hot spot areas of the Nile Sub-Basins namely Mugar, Guder and Jemma watersheds**
- **It also considers a range of activities in Afar, Somalia and Addis Ababa Administration to diversify the livelihood of the community**

The Joint Programme (Cont'd...)

- It contributes to the nation's low-emission, climate resilient infrastructure and development plans by deploying appropriate forms of green interventions, developing the skills of young people, and harnessing new technologies through knowledge exchange, capacity building and technology transfer schemes.



- It increase forest cover and carbon sequestration, minimize siltation by reducing soil erosion, and enhance livelihoods through participatory forest management activities.

The Joint Programme (Cont'd...)

Major Outputs

- 1. increase carbon sequestration by planting and managing 450 ha of indigenous and exotic tree species as part of Green Legacy Initiative campaign;**
- 2. rehabilitate 100 ha of degraded lands through the construction of various soil and water conservation structures;**
- 3. build resilience of infrastructure, ecosystems and local communities by reducing siltation and improving the livelihoods of 150,000 households through the provision of energy saving stoves and other livelihood options (e.g., fruit trees, fodder trees, beehives);**



The Joint Programme (Cont'd...)

Major Outputs

4. enhance the capacity of institutions and local communities involved in the project implementation through various interventions;
5. reduce the carbon footprint of ECA and related UN operations in Ethiopia through a carbon-offsetting scheme;
6. create employment opportunities for 1,500 youth/women in fabricating energy saving stoves.



The Joint Programme (Cont'd...)

Approach

- It will actively engage regional governments, local communities, development partners, international institutions and other stakeholders at all levels of the project implementations including in the identification and selection of tree species, seedling raising, site preparation, tree planting and post-planting management, energy saving stoves production, capacity building, and livelihood diversification schemes



The Joint Programme (Cont'd...)

Direct Beneficiaries:

- From the enhanced resilience and long-term sustainability of hydropower generation, the entire Ethiopian population will be the primary beneficiaries through the predictable and affordable access to renewable energy.
- Local communities will also be benefited directly from the various uses of trees, employment, and institutional and capacity development.
- The project interventions will be gender informed to ensure equal access to jobs and other benefits of the intervention.

Indirect Beneficiaries

- range from regional states to international communities through increased carbon sequestration, ecosystem integrity and biodiversity restoration

The Joint Programme (Cont'd...)

Contributions

- The overall estimated cost of implementing the project interventions will be 3.6 million USD over five years.
- The Green Legacy Initiative holds many important lessons for the rest of the continent. Through this collaboration with the MoWIE, ECA will package and disseminate these lessons across the continent to bolster the contributions of nature-based solutions to resilience building.



Thank You!
Merci!
Amesegeenalehu!

Ideas
to
Action