Dryland restoration and dry forest management
Sharing knowledge to meet local needs and national commitments
Addis Ababa, Ethiopia, 8-10 April 2021

Coordination: challenges and new approaches for effective collaboration

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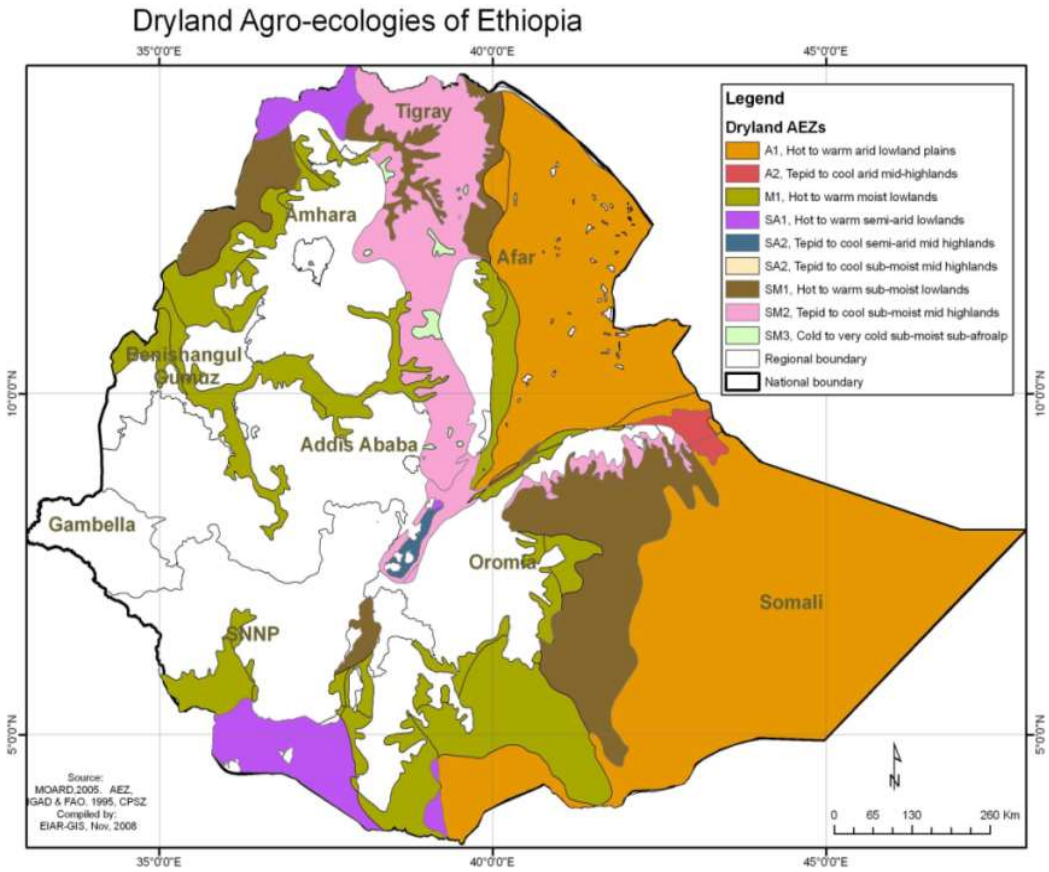
1. Introduction

- In Ethiopia about **75 % or (3/4) of the land mass** is categorized as dryland.
- home to about **1/3** of the country's population, as well as to a comparable proportion of livestock.

- The most widespread livelihood in the drylands is pastoralism, which relies on a diversity of grass and shrubs as key productive inputs.
- encompass diverse natural resources that have enormous socio-economic and ecological significances



2. Ethiopian Dryland resources

major dryland resources/potential include:

- Forests resources (woodland, shrub land, agroforests, wild foods..)
- Water resources (both underground and surface water),
- Pastoralism (Unique livestock potentials)
- Variety of crop species and varieties
- National parks, reserves and great biodiversity and endemism
- Mineral and Energy resources
- etc.





2. Ethiopian Dryland resources cont.

there are large-scale development programs and development corridors in the drylands:

- Several hydroelectric dams,
- Large and small scale commercial agricultural investments,

which will enable the country to make use of the abundant resources in the drylands.

Potential Vegetation types of Ethiopia

1. Desert and semi desert scrubland
2. *Acacia–Commiphora woodland and bushland*
3. Wooded grassland of the western Gambella region
4. *Combretum–Terminalia woodland,*
5. Dry evergreen Afromontane Forest
6. Moist Evergreen Afro Montane Forest
7. Transitional Rain Forest
8. Ericaseaus Belt
9. Afroaline Belt

(Fris et al., 2011)

Bamboo tickets

- Highland
- lowland bamboo

Dryforest and forest products (timber and NTFPs) provide enormous socio-economic and ecological contributions

MAJOR CHALLENGES

- Deforestation and forest degradation
- Lack of land use planning
- Population pressure & the increasing need for agricultural land
- Over grazing (Free grazing).
- Improper resource utilization
- Forest fire and bush encroachment and invasion of alien species

Soil erosion, reduce agricultural productivity & siltation

- Ethiopia holds one of the highest erosion rate in the world (2 billion metric tons of soil per year).
- This soil degradation reduces between 2–3 % of the annual agricultural gross income (Yesuf et al., 2005).

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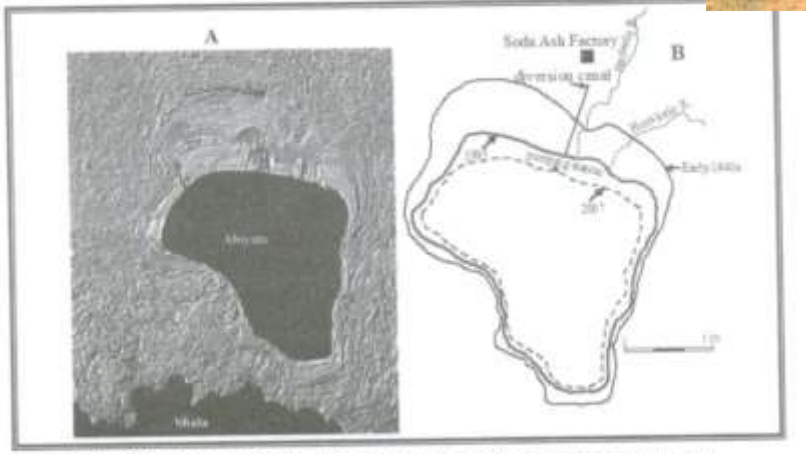


Figure 2. Recession of Lake Abiyata: A) enhanced satellite image showing different strandlines representing shorelines at different times; B) reconstructed shoreline positions at different years.

Deforestation in the Rift Valley

This forest is found in Australia. But, it remembers me the forest (woodland) from Modjo to Hawassa about 50 years ago. (Mebrate M)

Around Ziway, by 2015

Deforestation & Environmental pollution in the Rift Valley

Ziway Lake 1984

Ziway Lake 2015

Siltation, water hyacinth, water pumping for irrigation,…

mean **depth reduced from 16 to 2.5 meters** and is polluted

Lake Abyata 1984

Lake Abyata 2015

Climate change & Desertification

- Dryland ecosystems are rampantly expanding in Ethiopia.
- Most of these drylands including those in Borana, Somali, Afar and South Omo are under sever vulnerability to desertification.
- Drought and its consequent critical shortage of moisture and fodder disrupted the productivity of livestock sector which is the mainstay of the pastoral and ago-pastoral communities, leading to a chronic hunger.

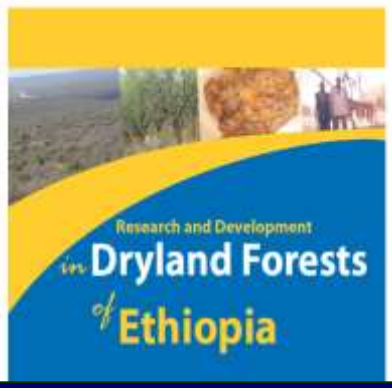
Coordination: challenges and new approaches for effective collaboration

Integrated Drylands Management in Ethiopia

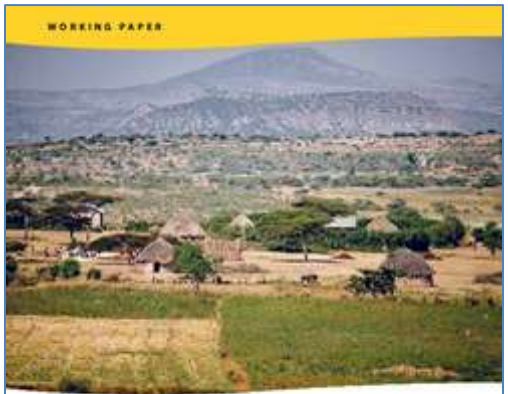
ARTICLES

nature sustainability

Frankincense in peril



Research and Development in Dryland Forests of Ethiopia



WORKING PAPER

Strengthening the resiliency of dryland forest-based livelihoods in Ethiopia and South Sudan

A review of literature on the interaction between dryland forests, livelihoods and forest governance

UN-REDD PROGRAMME

Guidelines on sustainable forest management in drylands of Ethiopia

Dealing with Comp

in Dryland Management in

An Integrated Approach

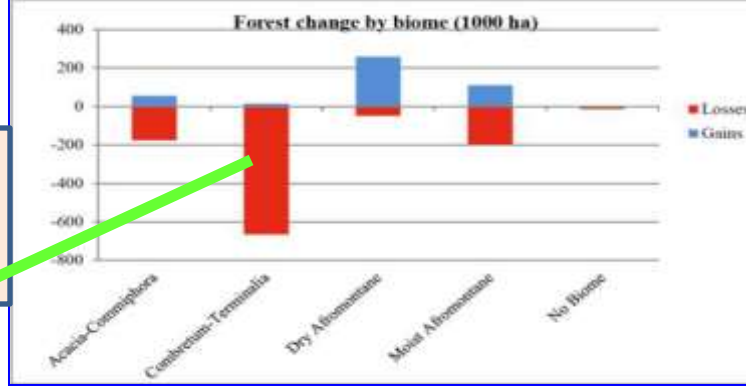
December, 2014

Countless efforts have been made to disseminate information/technology/best practices of dryforest management: Challenges and possible intervention measures are suggested

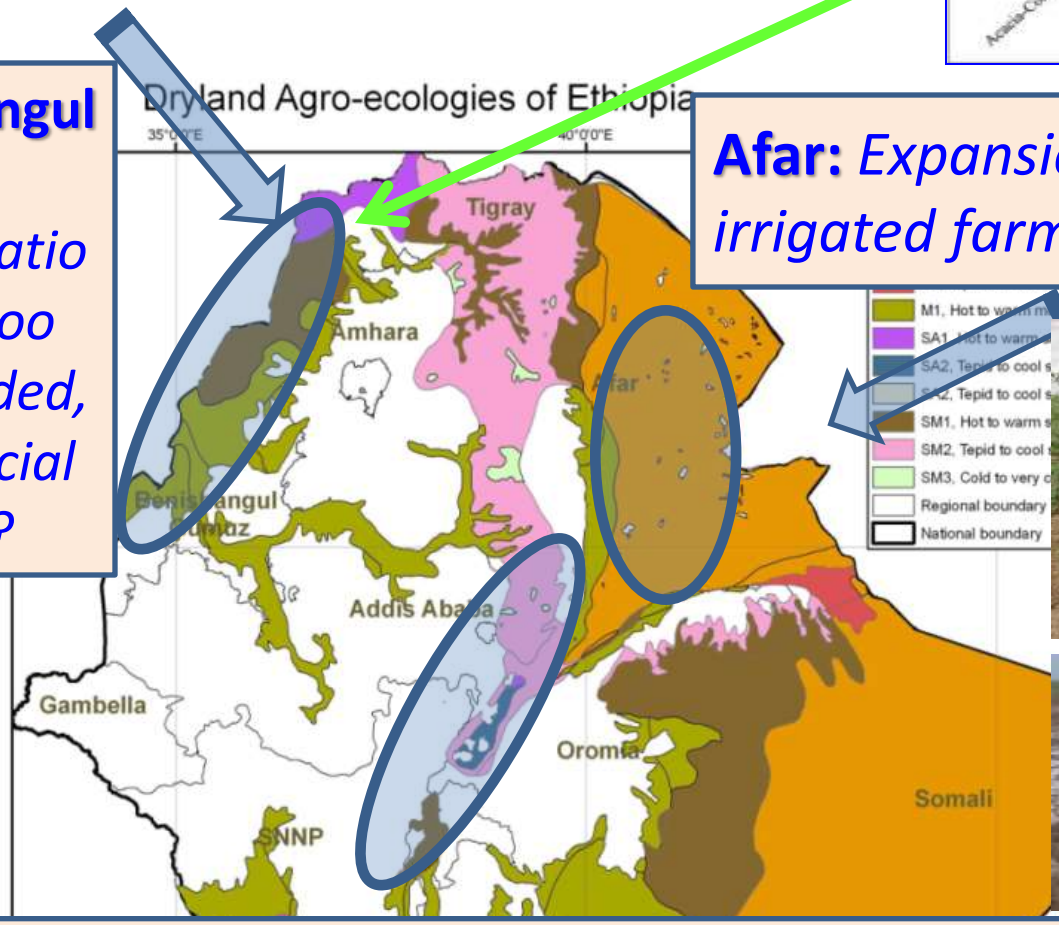
Dissemination Workshop on Research Findings on Dry forests of Ethiopia

Challenges per regions

North -Western Ethiopia: *Severe deforestation, B. papyrifera is endangered*



Benishangul *Severe deforestation, Bamboo is degraded, commercial farming?*



Afar: *Expansion of Prosopis juliflora, irrigated farming and salinity.*

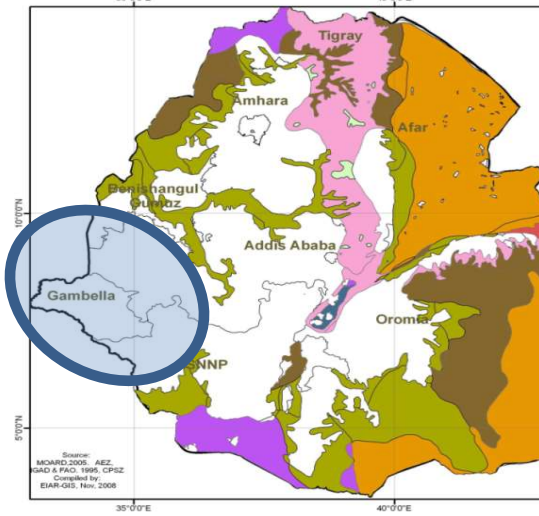
Central Rift valley: *Acacia woodland has gone, lakes are endangered, biodiversity is endangered*

Main challenges per dryland regions

Gambella

Huge NR potential.

Severe deforestation, large scale failed investments, refugees and its pressure on NR, etc.



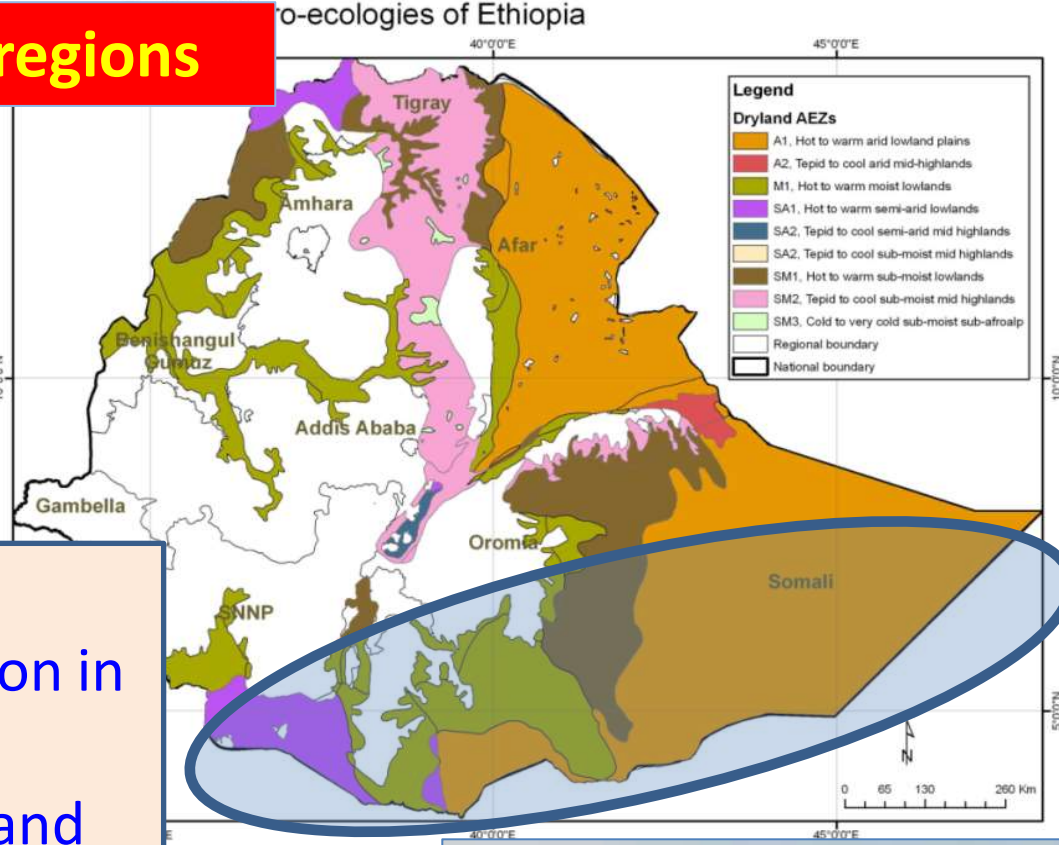
@ Reinhold

Main challenges per dryland regions

South and eastern drylands

Huge and diversified NR resources, Complex challenges and impacts

Deforestation and forest degradation, soil erosion, siltation in lakes, poor NRM and commercialization, poor rangeland and livestock mgt, bush encroachment, commercial farming,



Coordination: challenges in the drylands

Main challenges

- The governments (Federal & regional) didn't properly understood the **real potential** and extent of challenges and their terrible impacts (some are irreversible) in the drylands.
- For instance, ecosystem services of dryforests/ woodlands/ rangelands are not properly understood.
- The governments give priority to emerging situations at the expenses of unsustainable management and utilization of drylands: agricultural/floriculture investment, job creation, etc.
- The government relies on campaign based NRM development programs (plantations, SWC, Prosopis & water hyacinth eradications, etc.) rather than strategic and objective based options.
- We professionals **failed** to coordinate our efforts and properly address our findings to policy makers. Workshops/articles/policy briefs/media communications are not the only means to reach policy makers.

Coordination: challenges in the drylands

Main challenges

- Lack of coordination among partners/stackholders.
- Lack of landuse planning at national and regional level.
  - *population growth and competing land use*
  - *Local conflict over natural resources*
- Poor institutional arrangements (MoA, EFCCC, Rangeland, Rural land administration, ……)
- Problems in legal frameworks and lack of law enforcements.
- Poor natural resources development (forestry, soil conservation, water management, wildlife management, etc).
- under production of forest products and lack of marketing system for forest products, etc.
- Pollution and unregulated water use of lakes

Approaches for effective collaboration

- ✓ Prepare and Implement landuse planning (Federal and regional).
- ✓ *Establishing functional and strong institution* (Federal and regional)
  - *enacting a comprehensive regulations, directives and legal instruments for the implementation of existing laws, policies, legislations, proclamation and strategies (UND/CIFOR un published).*
- ✓ Establish/strengthen research –extension linkages at d/t levels.
- ✓ Scaling-up **best practices and technology adoption**
- ✓ Improve Capacity building and knowledge management systems.
- ✓ Strengthen information dissemination mechanisms constantly.
- ✓ Device a new mechanism to bring on board high-level policy makers (not only for opening speeches).

Coordination and partnership

Identification of relevant stakeholders at federal and regional level

- Government offices (Federal, Regional, Woreda, Kebele….)
- Non-government organizations (local and internationals)
- Research institutions (Federal, regional, international)
- Local community, associations,..
- Universities.
- Business/commercial enterprises.

Conclusion

- It is imperative to properly recognize the potentials and challenges of dryforest resources and identify and prioritize improvement measures (per region) before it is too late.
- Put in place land use policy; allocate adequate resources (human, capacity and financial) and implement workable institutional set-up is VITAL for rehabilitation, sustainable management and rational utilization of the dryland resources.
- Strong Gov. commitment (Federal and regional) not only to mainstream the approaches but to provide legal support and law enforcement,
- Strengthen **institutional and professional collaborations** and networking: policy makers, development authorities, research and educations, juridical authorities, civic societies, etc...

Let us join hands

Thank you