

2018 WORLD WATER WEEK

Conserving the Lake
Tana Ecosystem and
Biodiversity for
Sustainable Livelihoods
and Enduring Peace

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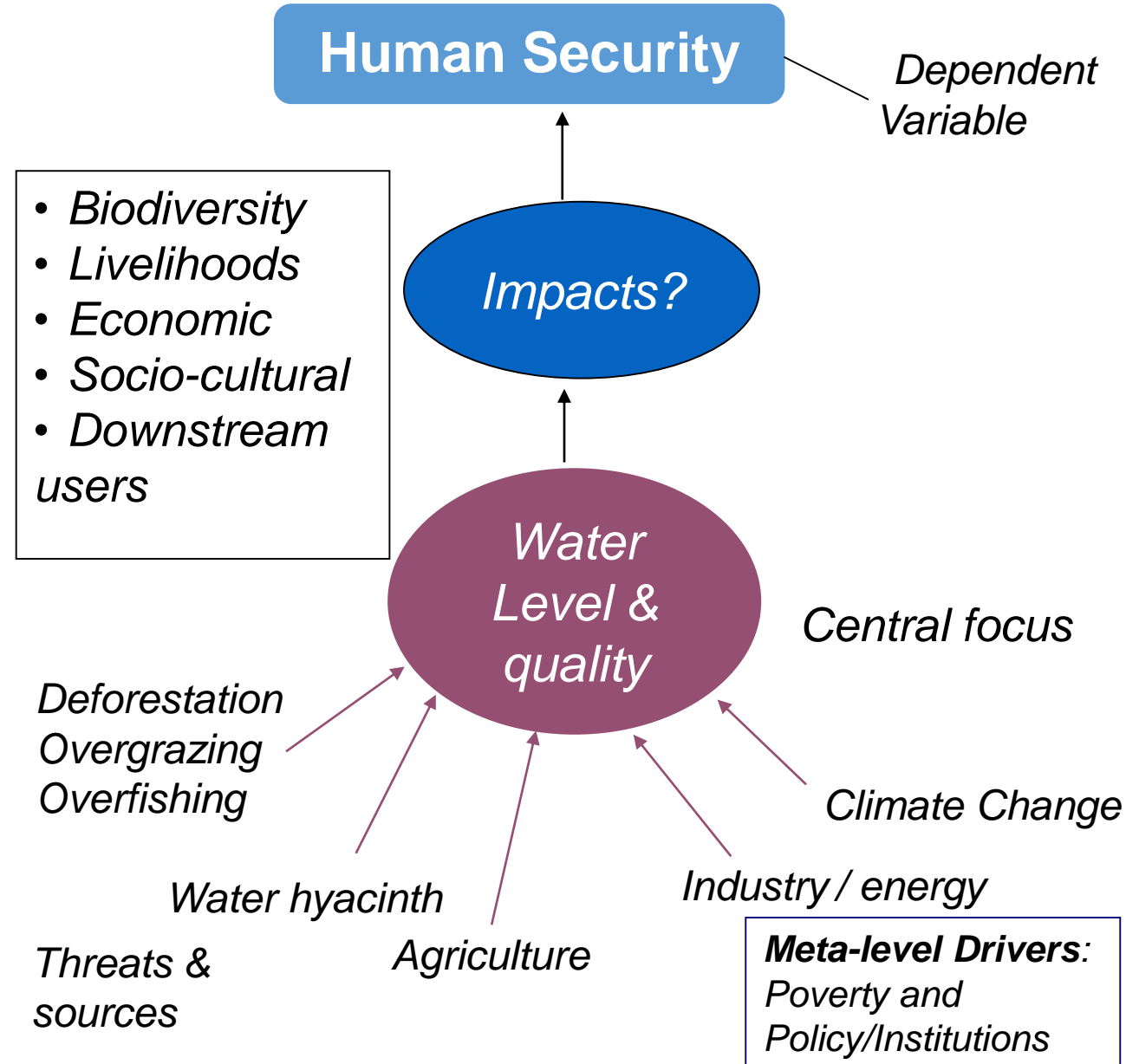
Study Rationale and Objectives

- ❖ Most African armed conflicts are related to environmental scarcity/insecurity (land and water) not yet captured in the development policy and planning process
- ❖ Study objectives:
 - ❖ Assess the security implications of the deterioration in the quantity and quality of Lake Tana waters
 - ❖ Determine the drivers, processes and impacts
 - ❖ Help governments to proactively respond to these impacts to ensure sustained peace and political stability

Study Methodology

- ESAF (the environmental security assessment framework) developed by FESS
- Multiphase analytical tool for assessing environmental security
- Combines secondary and primary data gathering

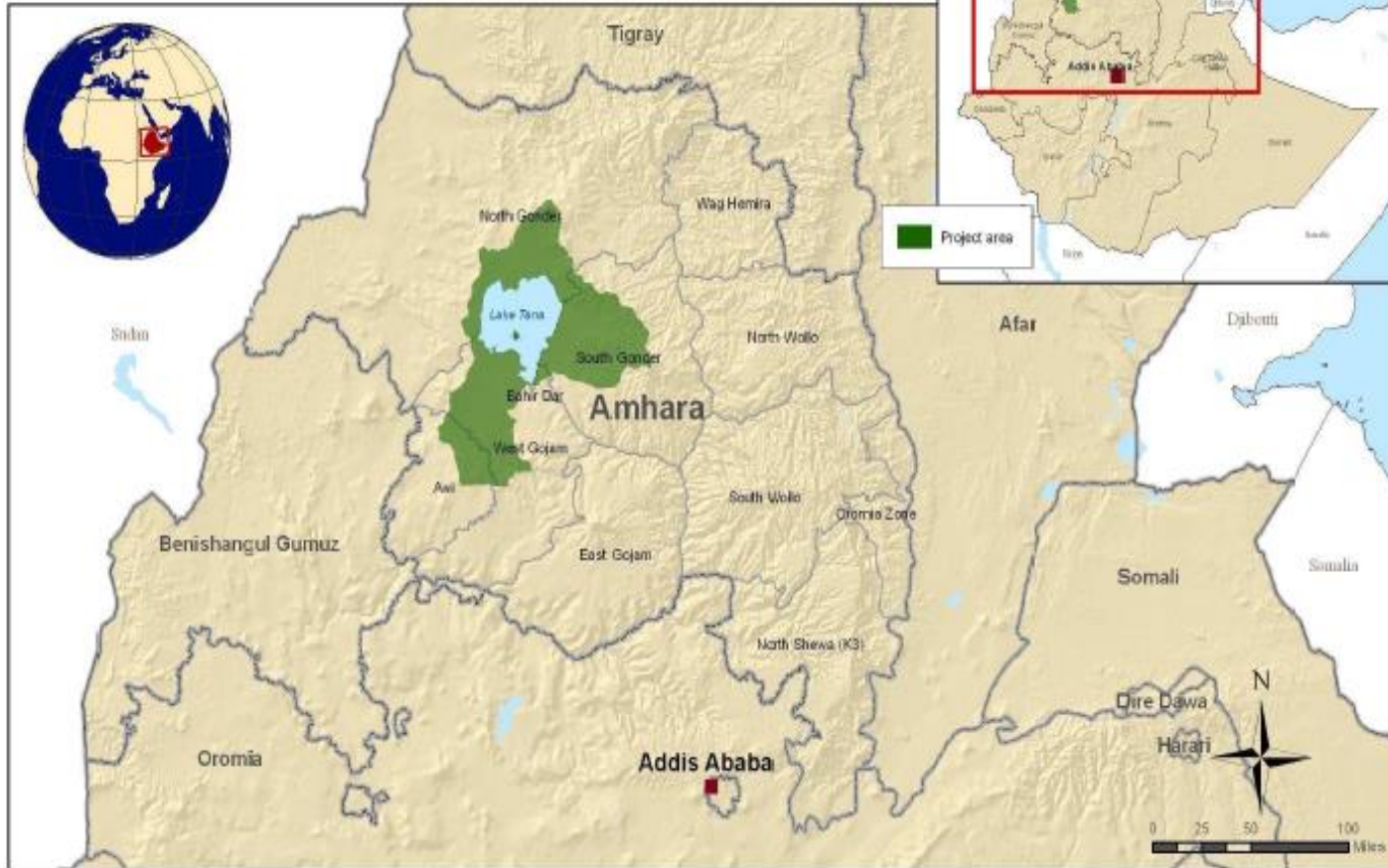
Community focused group discussion: Woreta, Gondar



Setting: Lake Tana

Federal Democratic Republic of Ethiopia

Community-Based Integrated Natural Resources Management Project



- Largest lake in Ethiopia
- Headwaters of the Blue Nile
- Elevation: 1780 mas, Africa's highest lake
- **Average depth: 9 m**
Deepest: 14 m
- Fed by more than 60 rivers and streams
- Designated Biosphere Reserve, 19th June 2015



The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

Map compiled by IFAD

Lake Tana and its Watershed: Significance

Biodiversity:

- endemic fish species, home to the only remaining flock of labeobarbus fish in the world.
- Hippopotamuses, the Nile crocodile and Nile Monitor
- endemic and migratory bird species,
- endemic plant species and cattle breeds
- vast wetlands, marshes and floodplains



Socio-cultural:

- ❖ Lake has 37 islands of which 20 have Ethiopian Orthodox churches and monasteries
- ❖ Tana Qirqos, one of the Church monasteries, is believed to have hosted the lost Ark of the Covenant 4BC – 4AD
- ❖ The Lake and its environs are globally acclaimed tourist attractions



Lake Tana and its Watershed: Significance (cont.)

Economic:

- ❖ Potentials for irrigation, hydroelectric power, water supply, high value crops and livestock production
- transportation, (eco-) tourism
- ❖ Basin designated as an growth corridor for the country

Political/ security

- ❖ Livelihoods security for 5 mn people
- ❖ About 86% of the Nile waters in Egypt originate from Ethiopia
- ❖ Decline in water level triggers complaints and grievances by and tensions with riparian countries



Lake Sedimentation/ siltation



Photo: Mersie Ejigu

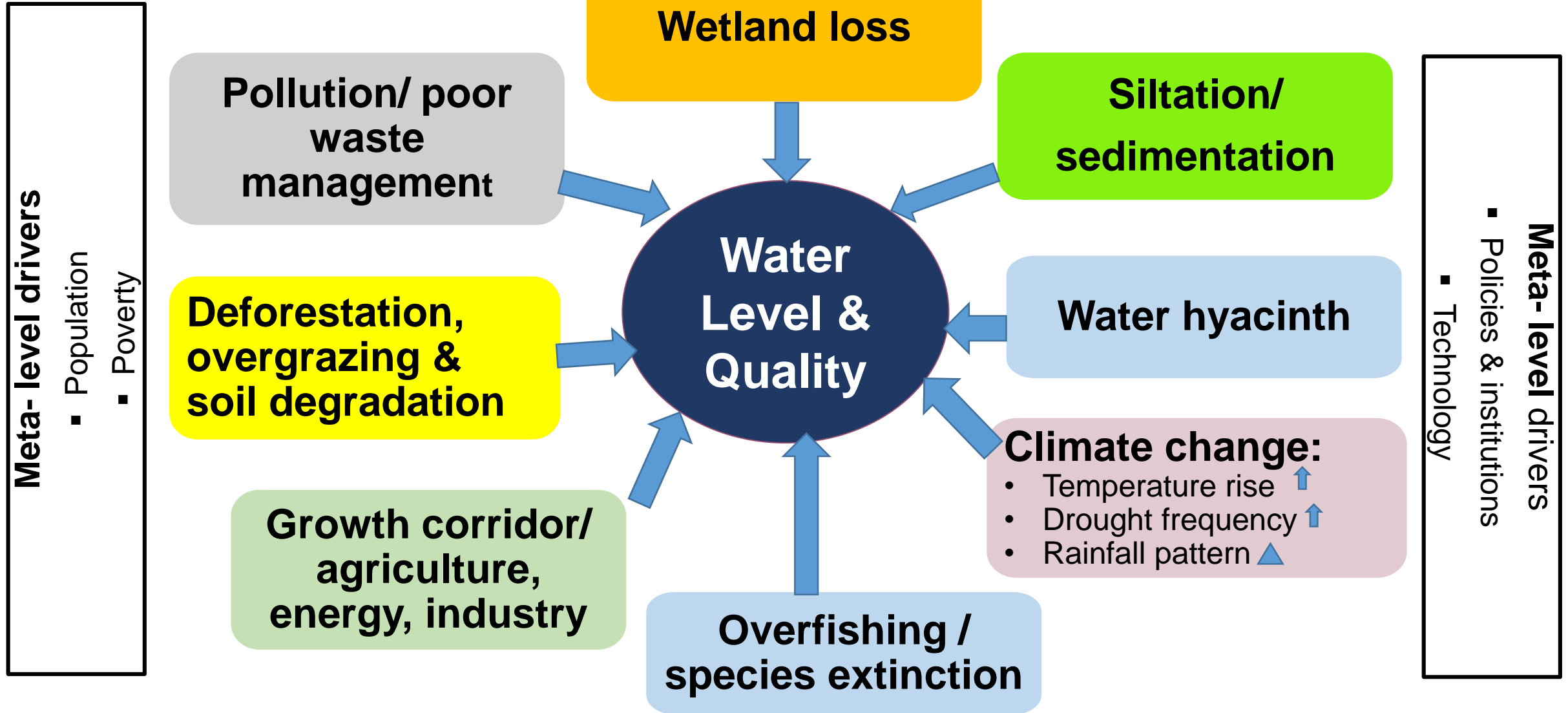
- Fogera plain: ½ km of mud & grass filled the Lake in 4 years period (2004 and 2008) at the mouth of Ribb River.

Water hyacinth



- First spotted in 2011
- Claimed over 24 k hecets of the Lake by 2016
- Current local community and Church efforts to remove the weed losing the fight

Threats – Synopsis



The Two Blue Nile Water Towers: Guna and Choke Mountains Degraded



Guna Mountains (near Kimir Dengay)/ Debre Tabor)



Choke Mountains (near Rebu Gebeya)



Conclusion & Way Forward

- ❖ Threats to the Lake: more severe, compounded and growing
 - diminishing water quantity and quality
 - heightened insecurity / grievances / instability

- ❖ Need for holistic and coordinated **local**, **national** and **global** action to conserve and sustainable use the Lake's waters:
 - Removal of water hyacinth
 - Develop the knowledge base / research, change the mind set toward conservation/
 - Build a buffer zone of vegetation cover around the Lake
 - Develop diversified and sustainable livelihood sources
 - Encourage participation of downstream countries in the rehabilitation of the watershed
 - Consider an IUCN led global coalition of international conservation, development and finance communities to save Lake Tana

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