



Supporting watershed restoration through institutionalization of communities in Ethiopia

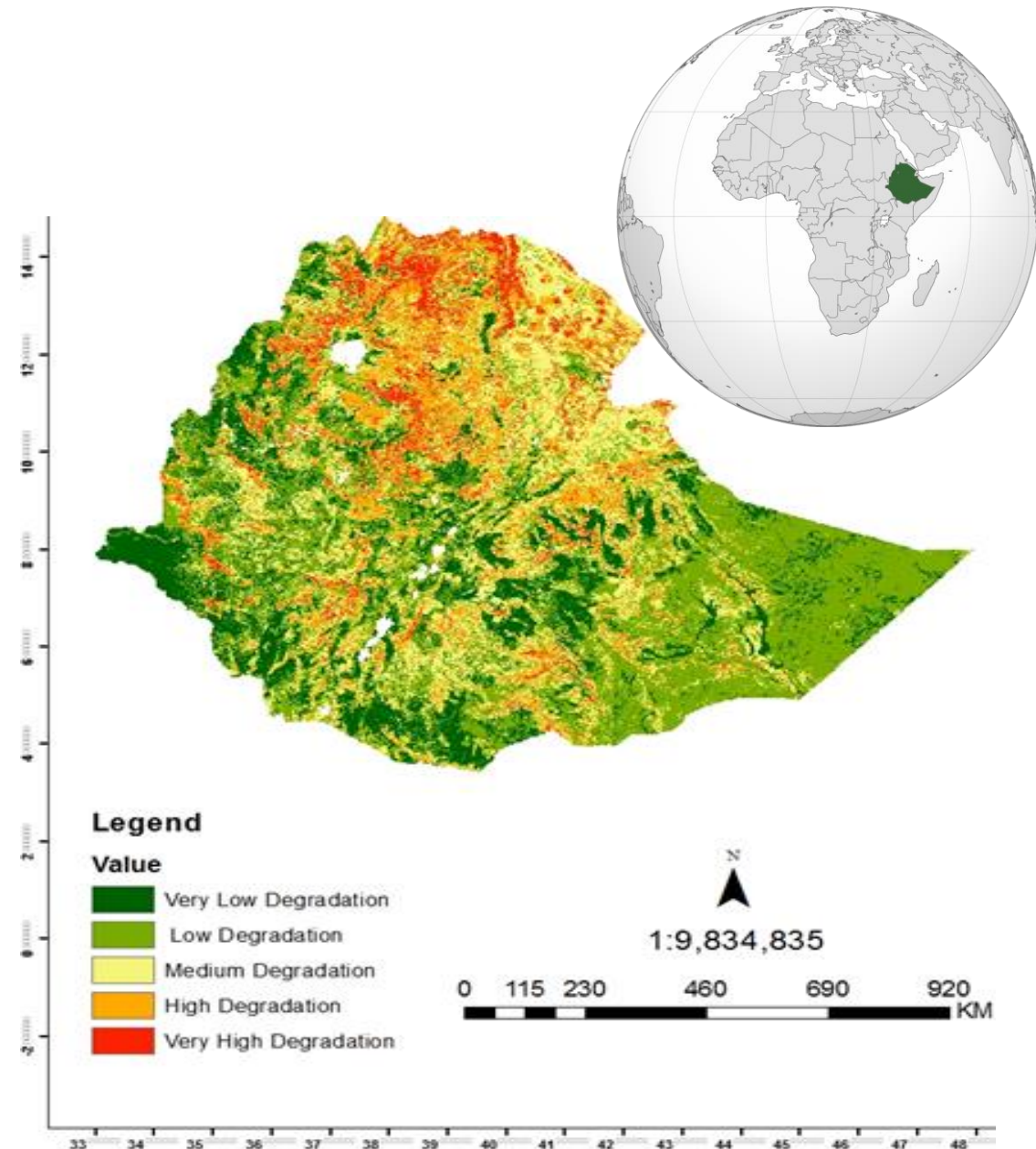


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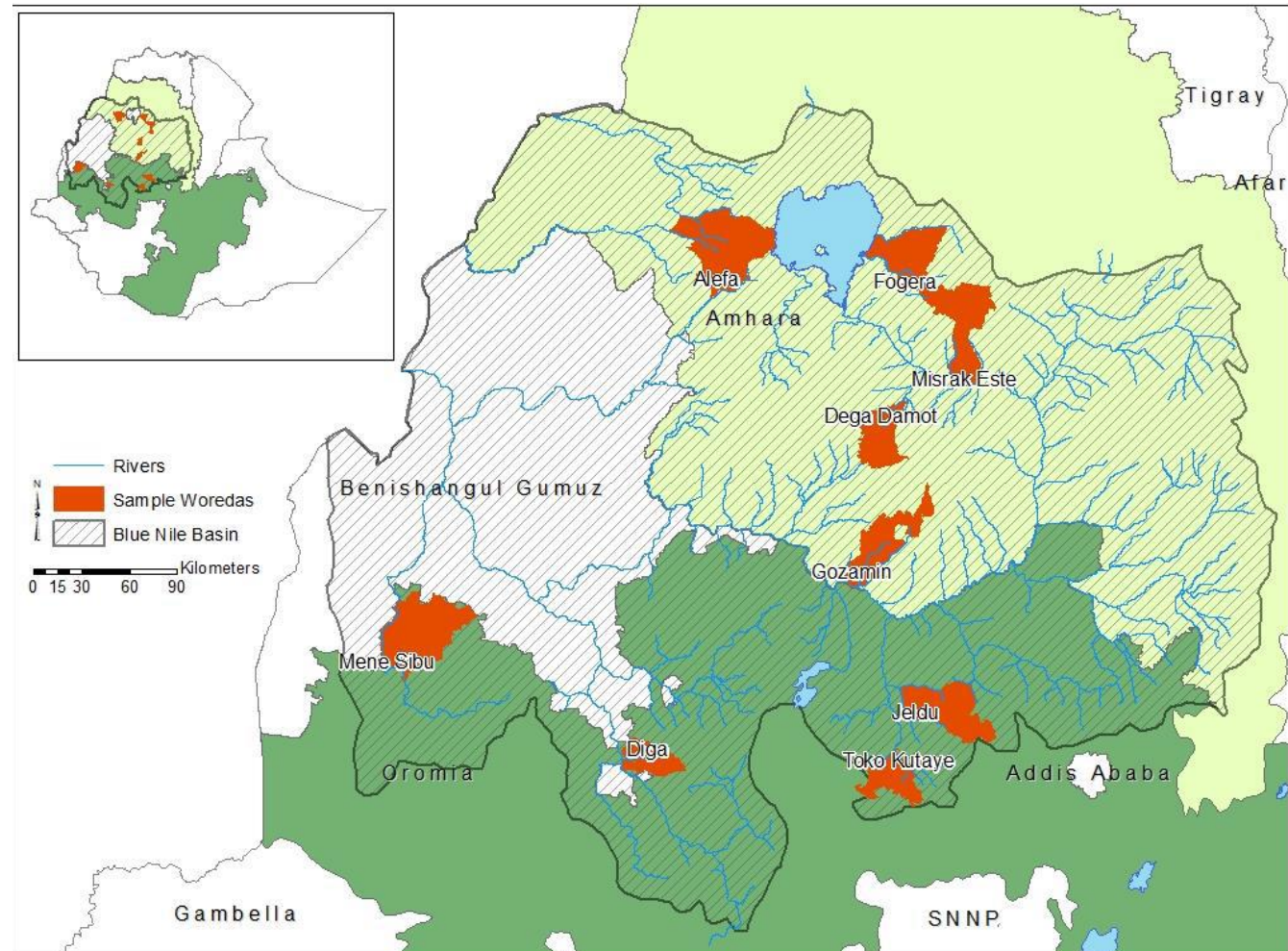
Background

- Ethiopia, found in the North East highlands of Africa
- Has a unique geography with altitudinal variation from 110 mbsl to 4620masl
- ~80% of ~100million population, lives in rural areas with agriculture and pastoral livelihood
- Suffers from environmental degradation associated with
 - high population pressure,
 - deforestation,
 - overgrazing and
 - unsustainable utilization of natural resources
- The government and its development partners committed 100s of millions every year to restore degraded landscapes and livelihoods



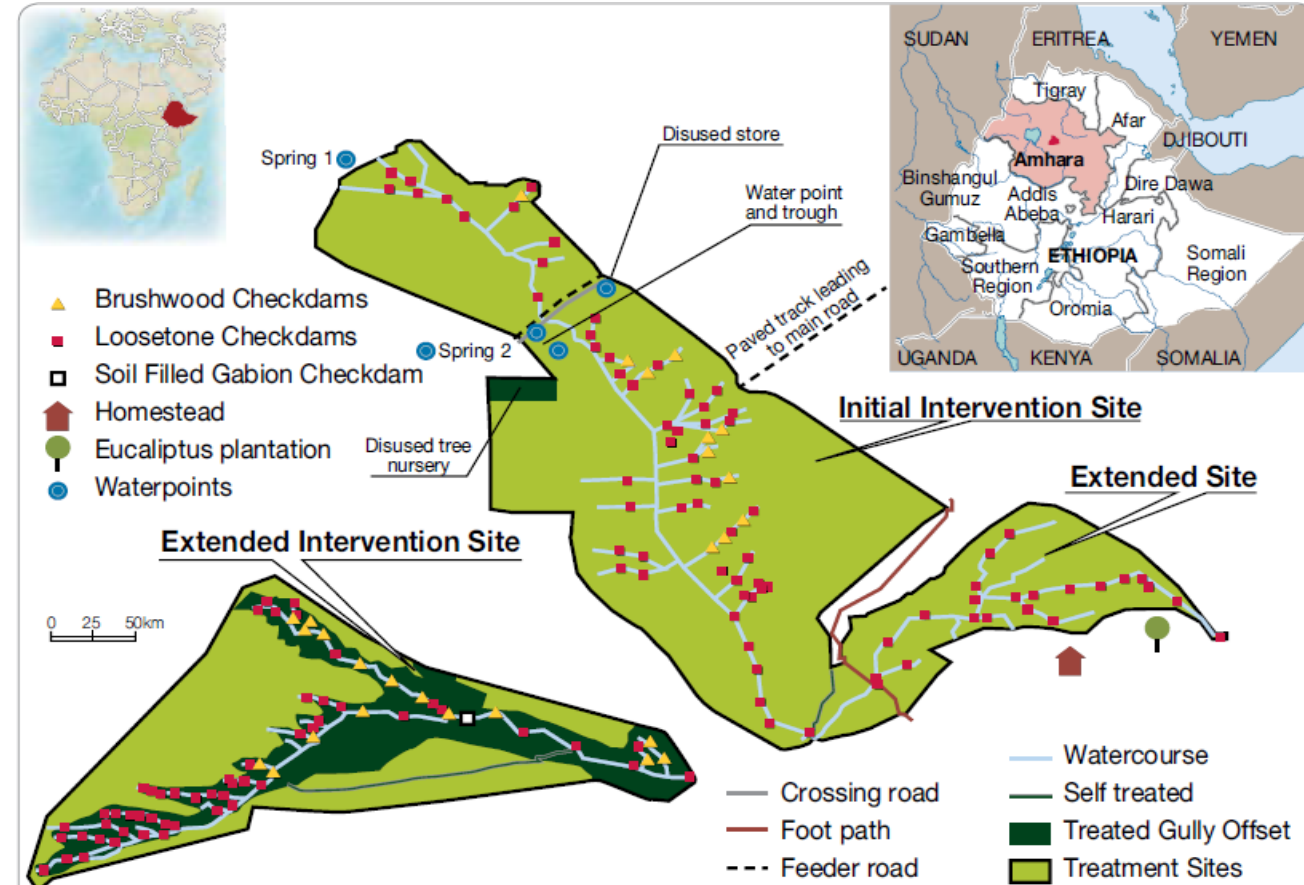
Project site, structure and support

- The case study project is one of these responses implemented from 1996-2008
- The project had 25 restored micro-watersheds with a history of severely degraded beyond productivity
- The project sites are found, where
 - population growth rate is 2.9%, with
 - an average family size of 5 and
 - land holding of 1.4 hectares



...project site, structure and support

- In 5 Of the 25, pilot sites beneficiaries were formally institutionalized with bylaws and institutional certificates to
 - initiate the restoration activities and
 - maintain sustainable management and utilization of the restoration outputs
- The community institutions had interest groups (LIG) with livelihood projects
- These LIGs received capacity building and financial loans from the project through their institution
- Kanat restoration site is one of these, with
 - 13.26 ha restored area
 - 230 beneficiaries



Project implementation

- The project followed more of a **rural development approach** engaged in **many sectors** with bulk of the budget for restoration efforts including
 - Soil and water conservation;
 - Reforestation;
 - Pasture/forage management;
 - Enclosure areas development and others
- Started with **participatory** and **need-oriented** approach
- Activities were planned at **micro-watershed level** (like Kanat area)
- Beneficiary **contributions** (labour and material) were agreed
- Project **financial** and **material** contributions reduced step by step

...Project Implementation

- The restoration was aimed in providing soil and water conservation, fodder, construction and fuel material, and nutrient enrichment
- Started by **selecting and planting** a variety of fast-growing indigenous and exotic **multi-purpose trees**
- Variety of **grass species** were planted **in between the trees** (mean 250 trees/ha)
- In some areas with **gullies**, the restoration involved the use of **temporary physical structures**, including loose stones, 'organic' gabion boxes, wired gabion boxes



Project outcomes and monitoring

- Natural capital
 - **quantity** and **quality** of natural assets such as **trees**, **pastures** and **soil fertility**
 - A farm and micro-watershed level Erosion and wind break
 - reduced **land use conflicts** and **downstream siltation**
 - reduced need for **external nutrient supplementation**



Description of estimates	Unit	Total yield	Value in US\$
Sequestered CO ₂ equivalents	Tonnes yr ⁻¹	1402	153,254
Fodder	Tonnes yr ⁻¹	38	20,172
Wood volume	M ³ yr ⁻¹	109	6,160,955
Crown volume	M ³ yr ⁻¹	37,068	
Total Kanat area restoration value	US\$ yr ⁻¹		6,334,381

...Project outcomes and monitoring

- Financial capital
 - From sale of tree products and NTFP
 - Increased **crop** and **livestock productivity** emanating from the restored area
 - Taking the Kanat area restoration for example
 - On the 13.26 ha the 230 households obtained **USD 160 \$/hh/yr** in just 4 years
 - The maximum income these households receive rises to **USD 1020 \$/hh/yr**
 - Had they restored their entire 180 ha would obtain **USD 7600 \$/hh/yr**

...Project outcomes and monitoring

- Food Security

- Financial resources to produce and purchase their food
- Raw materials like **fodder/forage** helped **livestock meat and dairy**
- Erosion control, water supply, nutrient availability
- Tree products used as food, for cooking and storage



...Project outcomes and monitoring

- Social Capital
 - Community institutions helped **social networks and connections**
 - Helped **further restoration effort and sustainability** of achievements
 - **Skills** gained under the project **shared** through institutions
 - In Kanat case livelihood groups were formed helping **more cohesion** between **households**



...Project outcomes and monitoring

- **Monitoring and Evaluation (M&E)**
- Somewhat **comprehensive M&E plan**, implementation started on the **2nd phase**
- “Learning loops” through the **bi-annual re-planning and M&E-meetings**
- **Recommendations of M&E** considered as strategy **for the 2nd phase**
- **Specific studies** were also financed as part of the M&E

Challenges

- **Low-quality outputs** were one bottleneck which contributed to the **rapid disintegration of the conservation measures**
- The tasks of quality control and output monitoring were particularly challenging, **leading to disagreements** and disputes **between communities, development agents and project staffs**
- The **distance between the project and the capital**, increased the workload of the project advisors and so reduced delivery
- Community institutions in other areas had to start from scratch on their own micro-watershed if not part of the pilot sites

Critical
reflections/lessons
learned/implications

In the beginning, the project **did not collect a thorough baseline** and didn't have a systematic M&E to fill the gap

The **range of activities were too wide** with a weaker focus on key activities

There was **no focus** on measures having highest effects **on food security, economic contribution or livelihood resilience**

Lacked coordination within and outside the project to efficiently ensure **adoption** or to have a **collaborative financing** scheme

The **M&E** aimed more at steering and reporting purposes which **ignored the unplanned outcomes, positive or negative**

The project **did not guide the adoption of its strategies**, by local stakeholders implying a weaker exit strategy



THANK YOU

