

# Experiences of the MERET Project of the **Ministry of Agriculture** in Integrated Watershed Management in Ethiopia

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RESEARCH  
PROGRAM ON  
Water, Land and  
Ecosystems

Led  
by:



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# Overall Context

**Land degradation is the major cause of low productivity, food insecurity & Poverty**

- Deterioration of soil
- Degradation of water resources
- Loss of vegetation cover & biodiversity
- 2 to 3% of AGDP loss per yr
- ~US\$ 1.0 billion/year



## Recognizing Negative impacts of LD,

- GoE with support of dev't partners launched large scale LR program in **1980s**.
- The **1<sup>st</sup> FFW** supported SWC started in **1971 in Tigray in 1972 in Wollo** with the U.S. food aid under the PL 480 project
- This was replaced by **WFP** funded projects in **1974**
- **1974-1980** small & fragmented SWC projects

# The Beginning of MERET Project

- The WFP supported MERET (ETH-2488/FFW) project started in 1980s
- This marked the beginning of large scale LR & SWC in Ethiopia

- **Before this project;**

- ☞ Little was known about **IWSM, WH, SWC**

So, **MERET** is- a **pioneer project** ⇒ marked the beginning of **Large scale LR & NR mag't (WH & SWC)**

## Main objectives

➤ To increase the ability of food insecure HHs to meet necessary food needs and improve livelihoods;

through

➤ Land rehabilitation, proper natural resources management, productivity enhancement, asset creation & diversification of livelihoods

# Scope of the Project

☞ MERET Operates in 5 Regions & One administrative council, in 72 woredas:

➤ Tigray (17)

➤ Amhara (23)

➤ Oromia (16)

➤ SNNP (12)

➤ Somali (3)

➤ Diredewa (1)

✓ In **500-600 sites (sub-watersheds)**

✓ No of annual beneficiaries is about **1.5 million (40% are women)**

# Relevance & Applicability of MERET

## Experiences to Nile River basin

- Some woredas are Located in Nile basin

e.g. 11 Woredas in Amhara & 2 Woredas in Oromya

- Most of the project operation areas have been confined to the highlands
- With similar bio-physical & socio-economic settings of the upper Nile River basin
- Thus, the experiences & best practices of MERET are very relevant and applicable





# MERET - LOCAL LEVEL PARTICIPATORY PLANNING



MINISTRY OF AGRICULTURE

WORLD FOOD PROGRAMME



- MERET adopted CBPWSM
- Gender sensitive & women are empowered

# Major activity Components

- ✓ Water Harvesting & SWC
- ✓ Reforestation
- ✓ Seedling production
- ✓ Multiplication of improved (MP) planting materials
- ✓ Community level access road development



# Major Activity Components

- ✓ Enhancing productivity & Biomass Intensification (AF, Forage, MP spp,
- ✓ To meet fuel wood, timber & Livestock feed & SOMM
- ✓ Provide adequate ground cover
- ✓ Low cost SFM (SOMM) (e.g. Compost)



# Major Activity Components

## ➤ IGAs-HSD (Packages):-

- ✓ Horticulture,
- ✓ Beekeeping, poultry
- ✓ Fattening, dairy, fish culture

## ➤ Small Scale Water Dev't

## ➤ Capacity development & technical back ups



# Achievements & Impacts of MERET

Many degraded lands, which were barren, devoid of any vegetation, rocky & gullied lands were converted into productive lands & Green Environment



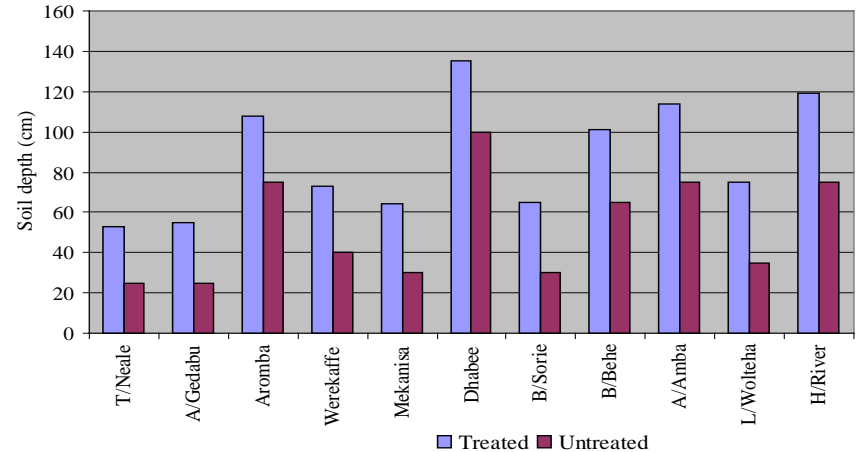
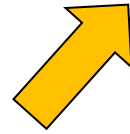
Rehabilitated  
Degraded lands



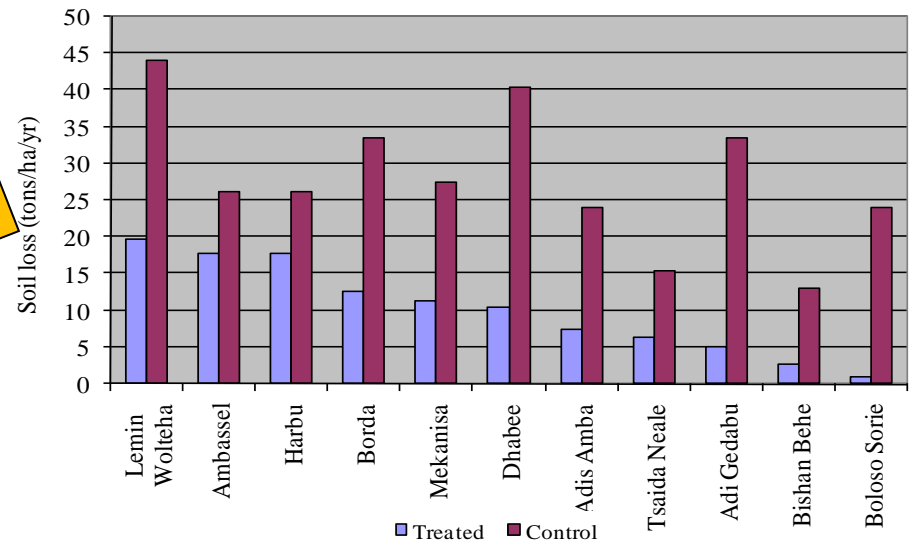
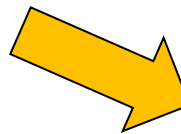
# Impacts of MERET Project

*Soil erosion control & reduction of its on-site and off-site impacts (from 11 watersheds)*

➤ **Soil Depth increased**



➤ **Soil loss reduced**



# Impacts of MERET Project

## ► Construction of Farmland Terraces:

- Increased soil depths
- Increased soil fertility
- Increased WHC
- Hence,
  - Increased Productivity &
  - Sustained Agric Production
  - Use of agric inputs became viable



# Impacts of MERET Project

Rehabilitation of degraded hillsides to productive woodlots



Ground water recharged and base flow enhanced





## Overall Impacts of MERET

- ✓ Restored the hydrological balance & availed water for SSI & domestic use
- ✓ Availed abundant **fuel wood, construction materials & livestock feed**
- ✓ Prevented flood damages to down stream farmlands, villages, properties & lives
- ✓ Prevented siltation of water bodies (dams, lakes, etc)

# Overall impacts on HH incomes & livelihoods

- ✓ Increased overall income, savings & investment
- ✓ Improved housing Quality
- ✓ Improved access to education
- ✓ Reduced Out-migration
- ✓ Enhanced knowledge on WH & SWC
- ✓ Boosted Self confidence



# Success Factors & Lessons from MERET

- Good organizational structure, staffing & strong linkages from top to the grass roots level
- Experience sharing visit system among regions, woredas and farmers
- Farmers' Filed days
- Regular joint review programs among regions & woredas (to critically review and evaluate the performance of each region **or** woreda and to learn from one another)

# Success Factors & Lessons

- Effectiveness of SWC structures (adoption of quality control system)
- Community empowerment for decision making
- Combination of right technologies (LR, & SWC should be integrated to IGAs)
- Technical capacity built at all levels
- Regular Technical back up (close supervision)
- Testing & Démonstration of the new technologies i.e. « seeing is believing »

# Major Challenges

- Social & cultural barriers (eg. Free grazing)
- Financial (resources) constraints to scale up best practices
- Inadequate impact studies & documentation of best practices, publishing and dissemination  
(e.g. Hydrology, biomass, OM accumulation, Soil moisture regime, Soil fertility/productivity, etc) vis-à-vis CC.

## Opportunities

- Availability of conducive policies, strategies for promoting SLM practices
- The **special attention given by GoE**
- Availability of success stories (**proven technologies**) on the ground (seeing is believing)
- Good **expertise and technical capacity for scaling up the same**
- Good understanding about NRM by the community esp. in areas where successful results achieved.