#### Oromia Regional National State Bureau of Agriculture and Natural resources

#### Effort of Integrated Watershed Management Towards Reversing Land Degradation

Feb. 2017 Mekele

## **Presentation outline**

- 1. Introduction
- 2. Achievements
- 3. Challenges
- 4. Opportunities
- 5. Lessons Learned
- 6. Way Foreword

## I. Introduction

- **Oromia** is the largest Regional State in the country with total population 31.1 million and land area of 366,908 km<sup>2</sup>.
- Geographically, it is located between 3<sup>0</sup>
  18' 43" and 10<sup>0</sup> 09' 24" N latitude and 34<sup>0</sup> 18'03" and 43<sup>0</sup> 04' 33"E longitude.
- The region has physical contact with almost all of the regional state except Tigray regional state.
- About 87% of the population live in the rural area and engaged in agriculture .
- The region consists of Agrarian and mixed farming and pastoral area.



The region is characterized by diversified:

✓Agro-climatic zones,

 $\checkmark$ Agricultural potential and

✓ Natural resources



#### Rain fall



The overall land mass of the Region is hydro logically divided into 8 Basins. Six are River Basins ,one Lake Basin and one dry basin. Two of the River Basins, Abbay and Baro Akobo, are part of Nile River .



## Introduction

- Like the other part of the country the pressure on land is increasing at an alarming rate coupled with the ever increasing need of human and livestock population.
- ✤ As result extensive area of land has been brought to agriculture
  - without considering proper land management practices;
  - Cultivation of steep slopes; for expanding crop lands,
  - $\clubsuit$  Deforestation for fuel, construction and timber.
  - ✤ overgrazing
  - uncontrolled land degradation/environmental degradation;
  - Consequential declining production and productivity
- And land degradation become serious issue .

## Introduction

Past natural resources conservation and rehabilitation approaches have not shown tangible changes on natural resources management.

**\*** Due to

Top -down approach in planning and implementation

Only technical aspects of arresting soil erosion has got focus

<sup>(a)</sup>While the underlying causes like socio-economic actors and policy issues were not fully considered

## Introduction

- To alleviate this situations, Community-Based Participatory Watershed Development was launched in 2011 the country and also in the region.
- The Regional government has take the initiative and decided to tackle the existing worst scenario with attentive attention and full force in severely degraded areas.
- And common understanding were created at all level on the problems of natural resources degradation and the importance of averting the problem

#### **Implementation Approach**

- Before the launching of integrated watershed management in 2010/11 in the region,
  - The problem of land degradation was not equally acknowledged at all levels in the region
  - Because they think that oromia is in a better position in natural resources and watershed management is not type of activity to be undertaken through large community mobilization which requires large financial inputs.
  - To solve this problem, at the beginning of the first year, the Regional Government organized series of meetings and debate forums at all level
  - And in doing so, a common understanding were created.

#### **Implementation Approach**

- And now, on average 6.8 million people were mobilized yearly for 30 days free labor on the watershed management activities.
- Which is estimated to be **4.28 billion** Ethiopian Birr
- And the reflections on the programme imply that success is possible as the community is encouraged to rehabilitate the <u>environmental</u>

#### **Community mobilization**

- Target group training and orientation
  - practical supported training were organized yearly before the start of dry season work
- Planning
  - ✓ Participator approach
    ✓ Marticipator approach
  - ✓ Multi-disciplinary,
  - ✓ Multi-component
- Input identification and supply
  ✓ Identification of input types, amounts and their sources
- Experience sharing



#### **Community mobilization**

The starting date will be scheduled in consultations with communities and it begin with <u>sermon</u> depending on their interest.







## Community work



#### First Aid, Handcrafts, refreshments and transportation









#### **Physical and Biological soil conservation**

- 2,531,934 km different bunds have been constructed,
- 5,685,979 m<sup>3</sup> check dam constructed
- **10,065,374** of water harvesting structures for plantation have been implemented.
- 1,174,010 ha <u>area closure</u>

#### Achievements









## Achievements



#### Achievements





Degraded area become rehabilitated and changed to productive area





After

## Impact

#### Gullies are Rehabilitated





## Impact

Area closure be come sources of income for community







#### Productivity of land increased







Impact



#### **Traditional landscape rehabilitation**



#### some examples of Water management





#### community water management



#### Road water harvesting

 Most of the water from road culvert increase erosion and causes big gully formation on farm land. Ex Dodota gulley in Arsi





## **RWM solutions- Dodota**



## Dodota - RWM











## Dodota

- Roadside Tree plantation
- Area closure



#### RWH Midhaga Tola :-





## borrow pit in Bora



## **Challenges :**

- Free grazing
- Implementation of biological measures at different levels was affected by shortage of rainfall and suitable seedlings for the arid areas,
- Low survival rate of seedling
- Poor data management
- Climate change



## **Opportunity**

- Conducive police environment
- Committed community
- Availability of Best experiences

#### **Lessons Learned**

- The importance of practice-oriented training and experience sharing visits to best performing areas within and outside the region.
- The importance of assisting the communities in their effort to develop their byelaws,
- Closure areas are good means to attract wildlife and raise/regenerate indigenous tree species,
- The need for integrating other activities with the natural resource management mobilization program for maximum impact,

#### Way forward

- Watershed development approach is a powerful technique to tackle
  environmental degradation and climate change related problems
- Clearly define accountability and responsibility of all stock holder
- Establish harmonized and integrated working environment among all stakeholders;

## Horaa Bulaa

# Thank you