
**Assessments of Ecosystem Services
in Ethiopia
Challenges and Opportunities**

Bedilu Amare Reta

*Environmental Specialist and Compliance
Adviser*

beamreta@gmail.com

Existing policies Vs Ecosystem Services (ES)

Ecosystem Services (ES) are fundamental to human life.

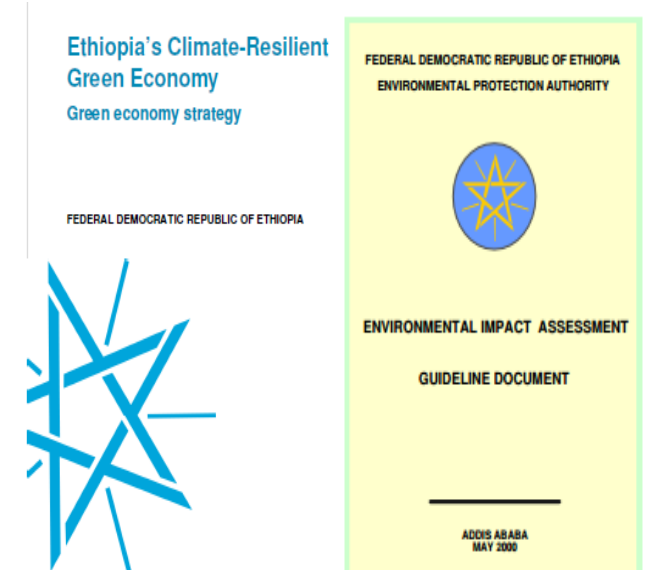
In Ethiopia, **ES** are essential for the provision of **livelihoods, social, economic and environmental needs.**

Over the **last two decades**, the Ethiopian government has put in place **a number of policies, strategies and laws that are designed to support sustainable development.**

- ▶ Ecosystem services is not adequately taken in to account !!!
- ▶ Required support and efforts to consider **ES** in the existing and upcoming development planning and decision making process....

▶ **How, where and when ????????**

- ENVIRONMENTAL POLICY OF ETHIOPIA
- I. THE RESOURCE BASE AND THE NEED FOR A POLICY
 - 1.1 The Natural Resource Base and the Rural Environment



Challenges - Assessments of ESS

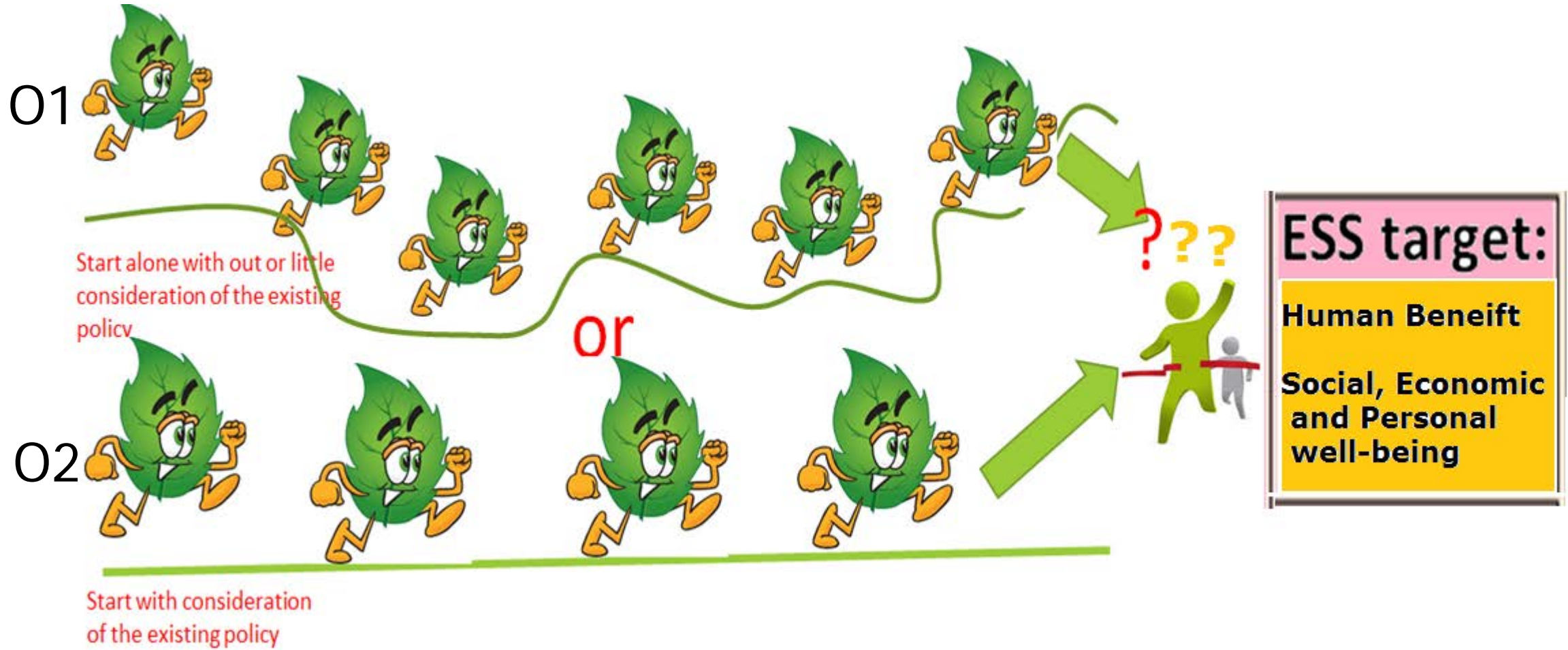
- Lack of **awareness** and **Knowledge** on **ESS** approach
- Limited **knowledge** on the implementation of **ESS**
- Lack of **relevant** data
- Lack of **capacity**
- Lack of adequate **research**
- Lack of **coordination**
- No clear **understanding on similarity and differences** with the existing Environmental assessment practices, Like **EIA**
- Need to define a clear **steps** and key **actors**
- No clear **procedural guideline** to implement, including **consultation** with **SHs**



SO ...what will be the possible way to find the solution???

Two Options/ways to start implementation of ES and to achieve the target

Assumption !!! Route for the implementation of ESS approach in the development planning



Possible Solutions and Opportunities:

- ESS is a key for ensuring the benefits of the community !!!...Agreed
- ESS is an advantage from Ethiopia perspective!!!!....agreed



This....

- Required to Plan ES accordingly to fit in to the current policies and practices

Opportunities of existing practice
....To Start ESS :-

- Use **simple methods, i.e., easily manageable, understandable, required limited resources, Etc. e.g. expert valuation matrix.**

Expert valuation Matrix

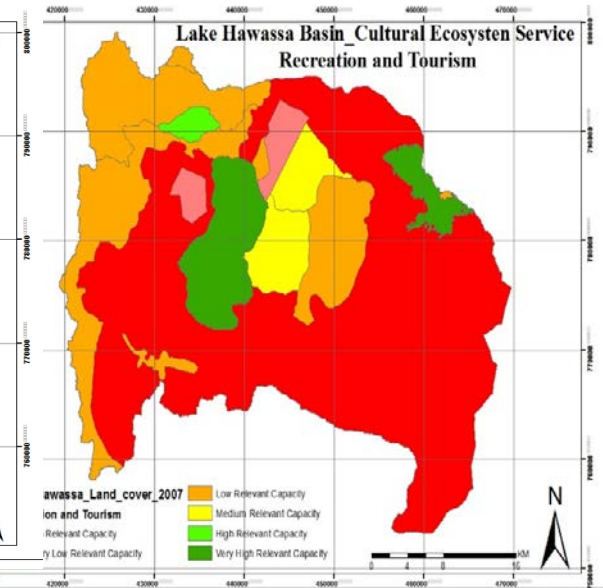
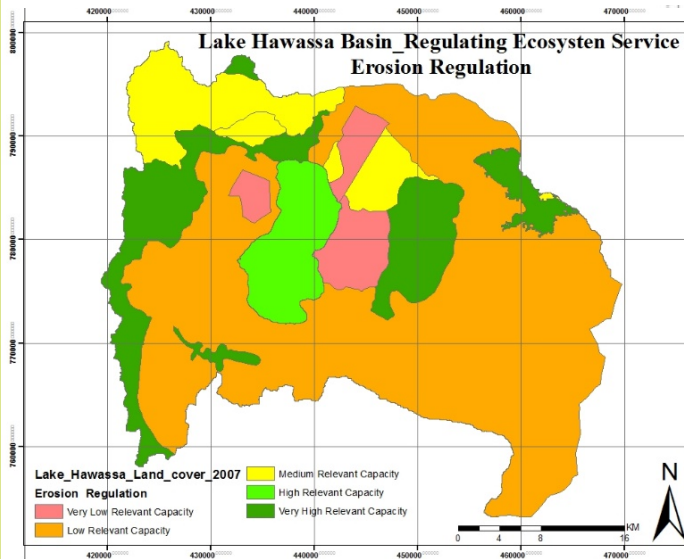
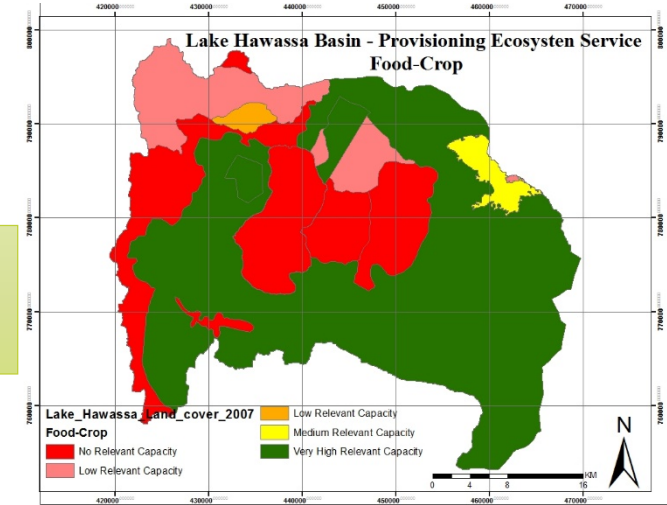
| No. | LULC | sum | Provisioning Services | Food-Crop | Food-Fish | Food-Livestock | Fresh water | Fuel wood | Fodder, Grazing for livestock | sum | Regulating Services | Global Climate Regulation | Water Purification | Flood Regulation | Erosion Regulation | Waste Regulation | sum | Cultural Recreation and Tourism | Cultural Heritage and |
|-----|---|-----|-----------------------|-----------|-----------|----------------|-------------|-----------|-------------------------------|-----|---------------------|---------------------------|--------------------|------------------|--------------------|------------------|-----|---------------------------------|-----------------------|
| 1 | Intensively Cultivated Smallholder Farm | 14 | 5 | 0 | 3 | 0 | 2 | 4 | 8 | 2 | 0 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| 2 | Intensively Cultivated Mechanized Farm | 13 | 5 | 0 | 3 | 0 | 2 | 3 | 7 | 2 | 0 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| 3 | Forest | 17 | 3 | 0 | 2 | 3 | 5 | 4 | 15 | 5 | 5 | 5 | 5 | 5 | 5 | 10 | 5 | 5 | |
| 4 | Plantation Forest | 14 | 2 | 0 | 2 | 2 | 5 | 3 | 20 | 5 | 5 | 4 | 3 | 3 | 3 | 5 | 4 | 1 | |
| 5 | Grass land | 13 | 0 | 0 | 5 | 2 | 1 | 5 | 13 | 3 | 5 | 5 | 5 | 5 | 5 | 4 | 2 | 2 | |
| 6 | Lake | 11 | 0 | 5 | 1 | 5 | 0 | 0 | 21 | 4 | 4 | 4 | 4 | 5 | 9 | 5 | 4 | | |
| 7 | Marsh land | 15 | 0 | 2 | 3 | 4 | 2 | 4 | 13 | 3 | 5 | 5 | 5 | 5 | 5 | 4 | 2 | 2 | |
| 8 | Shrub land | 11 | 1 | 0 | 2 | 2 | 3 | 3 | 16 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 2 | 2 | |
| 9 | Urban/Settlement | 7 | 0 | 0 | 2 | 3 | 1 | 1 | 4 | 1 | 1 | 1 | 1 | 0 | 5 | 3 | 2 | | |
| 10 | Wood land | 12 | 1 | 0 | 2 | 2 | 4 | 3 | 17 | 4 | 3 | 4 | 3 | 3 | 5 | 3 | 2 | | |
| | Mean Value | 13 | 2 | 1 | 3 | 2 | 3 | 3 | 16 | 3 | 3 | 4 | 3 | 3 | 3 | 5 | 3 | 2 | |

Possible Solutions and Opportunities..Contd.

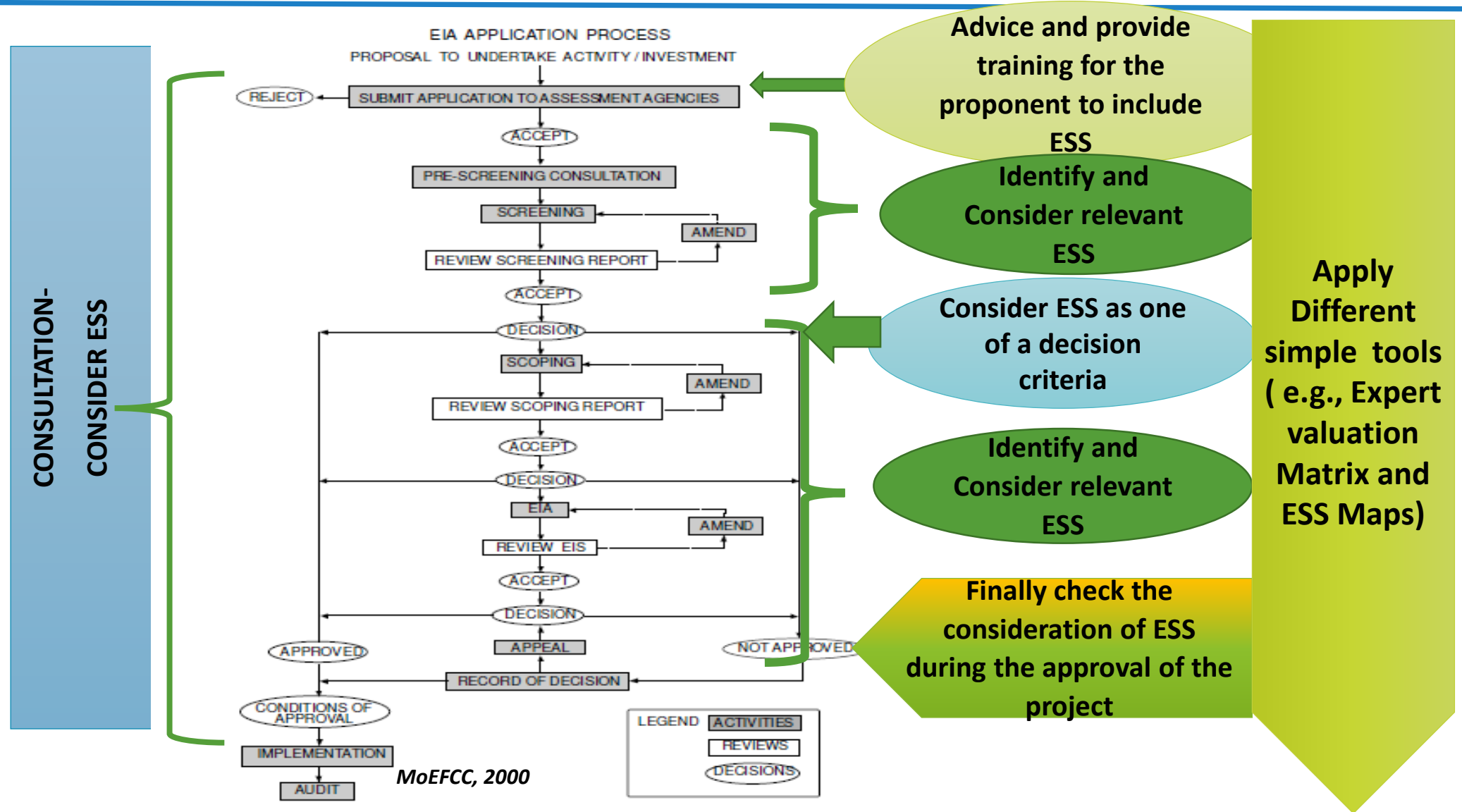
- Develop **maps** and present for **decision makers** to use it as a tool in their **planning** process

When need arise, use more **advanced methods** for **ES assessment**

- Initiate** to **integrate** this output into the upcoming and existing **development projects planning**
- Conduct additional research** to move forward.....
- Design** properly to link with the **EIA process...as a pilot study....**



SUGGESTION TO LINK ES WITHIN EIA PROCESS





THANK YOU

Bedilu Amare Reta

Environmental Specialist and Compliance adviser

Email-beamreta@gmail.com

Tel. +251924953275