COSTS AND BENEFITS OF SUSTAINABLE LAND MANAGEMENT PRACTICES IN WESTERN, KENYA

Regreening Africa

THE ECONOMICS OF LAND DEGRADATION

ELD INITIATIVE

- **Global initiative** established in 2011 by the German Federal Ministry for Economic Cooperation and Development, UNCCD and European Commission.
- Aims at transforming global understanding of the **economic value of productive land** to improve sustainable land management.
- Is supported by the ELD-secretariat hosted by the Sector Project BoDeN (at GIZ in Bonn, Germany).
- Offers a website and diverse publications **www.eld-initiative.org**

PROJECT ACTIVITIES

- Assessment of total economic **cost** of strategically selected ongoing **land degradation** phenomena.
- Assessment of the economic **cost and benefits of investment in sustainable land management**.
- **Capacity Building** on the valuation of ecosystem services.

Key Results

Physical terraces and agroforestry, have a longer payback period but **yields benefits over a longer time frame**. These benefits (e.g., improved soil and water retention) are not restricted to the farm scale but **extend to wider society**.

Agro-forestry has higher economic than financial value. It provides **important benefits to wider societ**y but often farmers have to cover the costs.

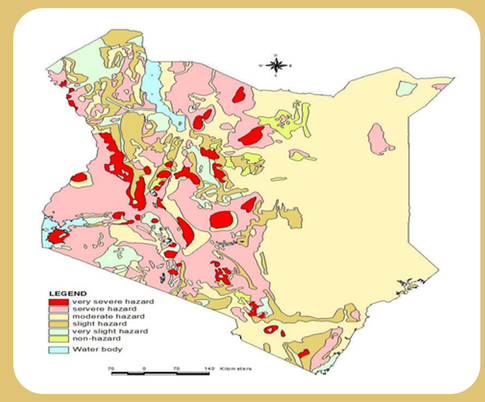
Manuring and intercropping have a **positive net present value and shorter payback period**, hence takes shorter time to recover initial outlay costs through improved yields (Highly adopted practices).

22-30% of land in Kenya is considered severely degraded & 64% moderately degraded (ELD, 2015)

Estimates of the cost of Land degradation in Kenya range from USD 0.39 billion to 1.3 billion per year

Determinants of SLM uptake

- **Farm characteristics:** An SLM practice is more likely to be used where more of the farm is **owned** and more of the labor used on the farm is from **family members**.
- **Access to assets & advice:** Key variables include membership of **agricultural groups** or projects, recent contact with **advisers** and access to **machinery** or farm buildings.



Methodology

- 320 HH surveyed from Bungoma, Siaya, Kakamega.
- Evaluated using regression and CBA techniques.

Goal

- Identify the rationale for implementing SLM practices.
- Determine how long it takes for total benefits to outweigh total costs.

Conclusion

- Policy should support practices that deliver high returns at low cost and improve soil and increase yields at a wider scale through a combination of **institutional** and **capacity building actions**.
- If the twin goals of reducing land degradation and improving food security are to be addressed, it will be vital for smallholder farmers to be adequately and appropriately **compensated** and **supported** for undertaking environmentally sustainable practices.

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