ECONOMICS OF LAND DEGRADATION & SUSTAINABLE LAND MANAGEMENT



Supporting Evidence-Based Decision Making
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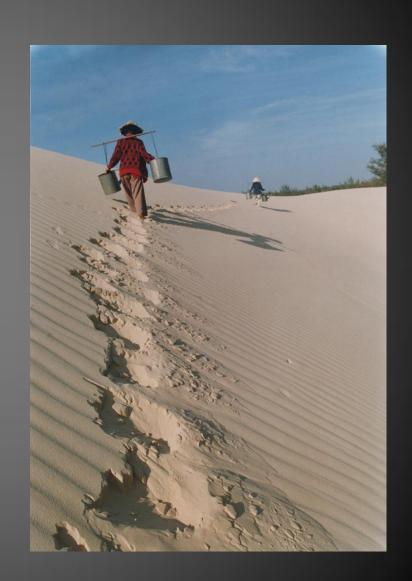
The Purpose

An initiative to develop a comprehensive methodological approach and evidence base for assessing the costs of land degradation and the economic rationale for sustainable land management

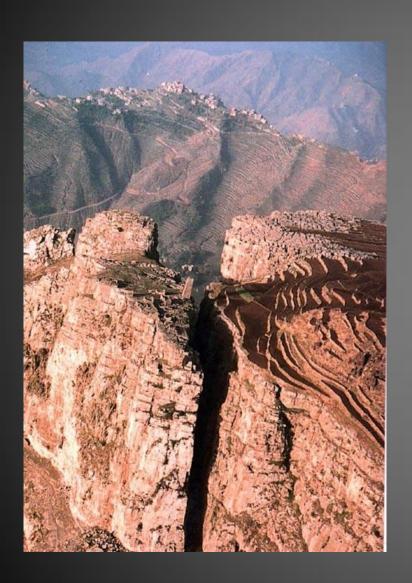


The Rationale

- Land resources underpin the economies of nations and the livelihoods of people across the developing world
- In many places these resources are being degraded by a series of pressures, and climate change will only make things worse
- The value of these resources, to national development and in poverty reduction, is often not understood properly



The Problems



- Are well understood and are why the UNCCD was created
- Variable and changing climates, poor management and overexploitation of land resources and land-use changes all jeopardise the productivity of lands and the integrity of ecosystems
- Problems often most acute where poverty and dependence on land resources are highest

The Solutions

- Are known (technically) many examples of SLM systems that reduce & reverse land degradation
- Many are built on traditional livelihoods, but add new knowledge and management practices
- SLM can have the dual benefit of reversing land degradation and improving livelihoods of the poor
- To be effective, we have to integrate the *full* value of land into decisionmaking



Some Basic Concepts

- We need to understand some concepts that are unfamiliar to many if we are to appreciate the full value of land resources
- Understanding this range of values, and the potential trade-offs between them, is the basis for rationale choices in sustainable land management



The MA Framework

ECOSYSTEM SERVICES

Provisioning

- Food
- Fresh water
- Wood and fiber
- Fuel
- ...

Supporting

- Nutrient cycling
- Soil formation
- Primary production
- . . .

Regulating

- Climate regulation
- Flood regulation
- Disease prevention
- Water purification
- ...

Cultural

- Aesthetic
- Spiritual
- Educational
- Recreational
- ...

Life on earth - biodiversity

CONSTITUENTS OF WELL-BEING

Security

- Personal safety
- Secure resource access
- Security from disasters

Basic material for good life

- Adequate livelihoods
- Sufficient nutritious food
- Shelter
- Access to goods

Health

- Strength
- Feeling well
- Access to clean air & water

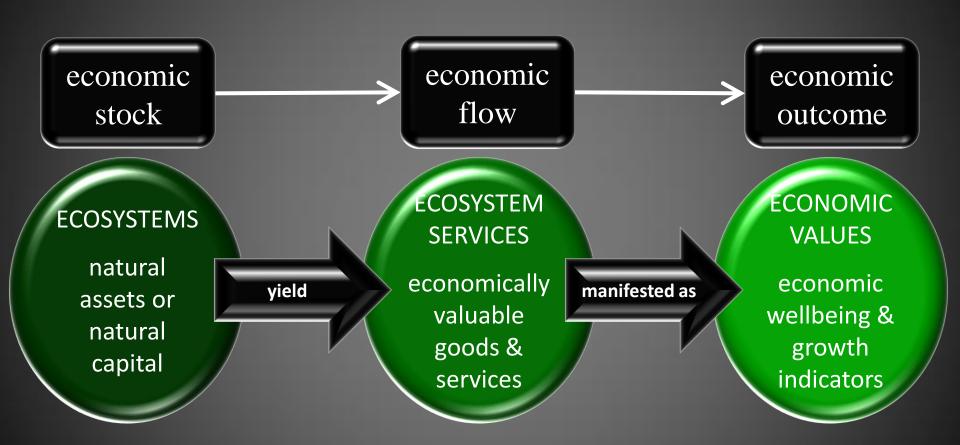
Good social relations

- Social cohesion
- Mutual respect
- Ability to help others

Freedom of choice and action

Opportunity to be able to achieve what an individual values being and doing

The Return on Ecosystems Investments



The Total Economic Value Framework

TOTAL ECONOMIC VALUE

USE VALUES NON-USE VALUES

DIRECT VALUES

production and consumption goods such as:

fish, firewood, building poles, medicines, pasture, recreation, etc.

INDIRECT VALUES

ecosystem functions and services such as:

watershed protection, nutrient cycling, flood attenuation, microclimate, etc.

OPTION VALUES

premium placed on possible future uses or applications, such

as:

industrial, leisure, pharmaceutical, etc.

EXISTENCE VALUES

intrinsic significance of resources and ecosystems in terms of:

cultural, spiritual, aesthetic, heritage, bequest, etc.

Understanding the Values of Land

- Land resources generate a wide range of ecosystems services values, many of which are not usually considered when making decisions on land management regimes:
- Provisioning services: crops, timber, livestock, fish, fuelwood, building materials etc etc
- Carbon sequestration, in plants and soils
- Biodiversity
- Water Regulation & supply
- Disaster mitigation: floods, droughts, storms
- Cultural and aesthetic values

Comparable Approaches that we can Integrate and Build On

- The Stern Report
- TEEB: the economics of ecosystems and biodiversity
- Valuation studies on individual ecosystems
- Studies of local livelihoods and the management of common property resources
- Anthropological studies
- Studies on PES, REDD, etc



Developing a Methodology: The Approach

- Assess the total values of land resources through the appraisal of the Ecosystems Services they generate
- Value the contribution of these resources to the livelihoods of communities and national economies
- Develop scenarios that:
 - Demonstrate the costs of inaction and identify the drivers of land degradation
 - Assess the costs and benefits of reducing unsustainable land management practices
 - Provide arguments for maintaining and improving existing land resource values

Six Stages in Assessment

Inception: agreeing the area, scope, policy links & partners

Assessment of land cover & ecosystem characteristics

Analysis of Ecosystems Services Flows & Values

Assessment of contribution to local livelihoods and national economic growth & development

Identification of land degradation patterns and pressures

Assessment of SLM options to reduce pressures and increase ecosystems services flows

Thanks for Listening

