Using the findings of the Land Degradation and Restoration Assessment

Trondheim Biodiversity Conference

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UN environment

United Nations Educational, Scientific and Cultural Organization

Food and Agriculture Organization of the United Nations

UNDP
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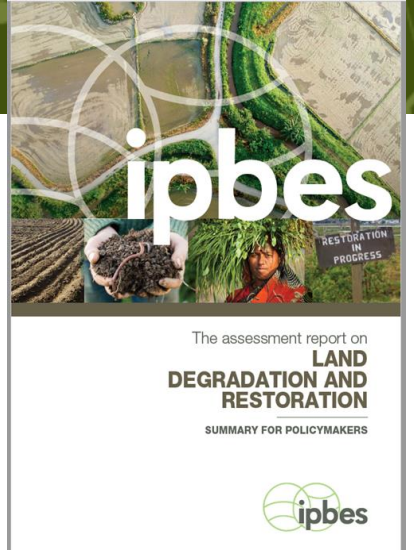
A quick reminder…

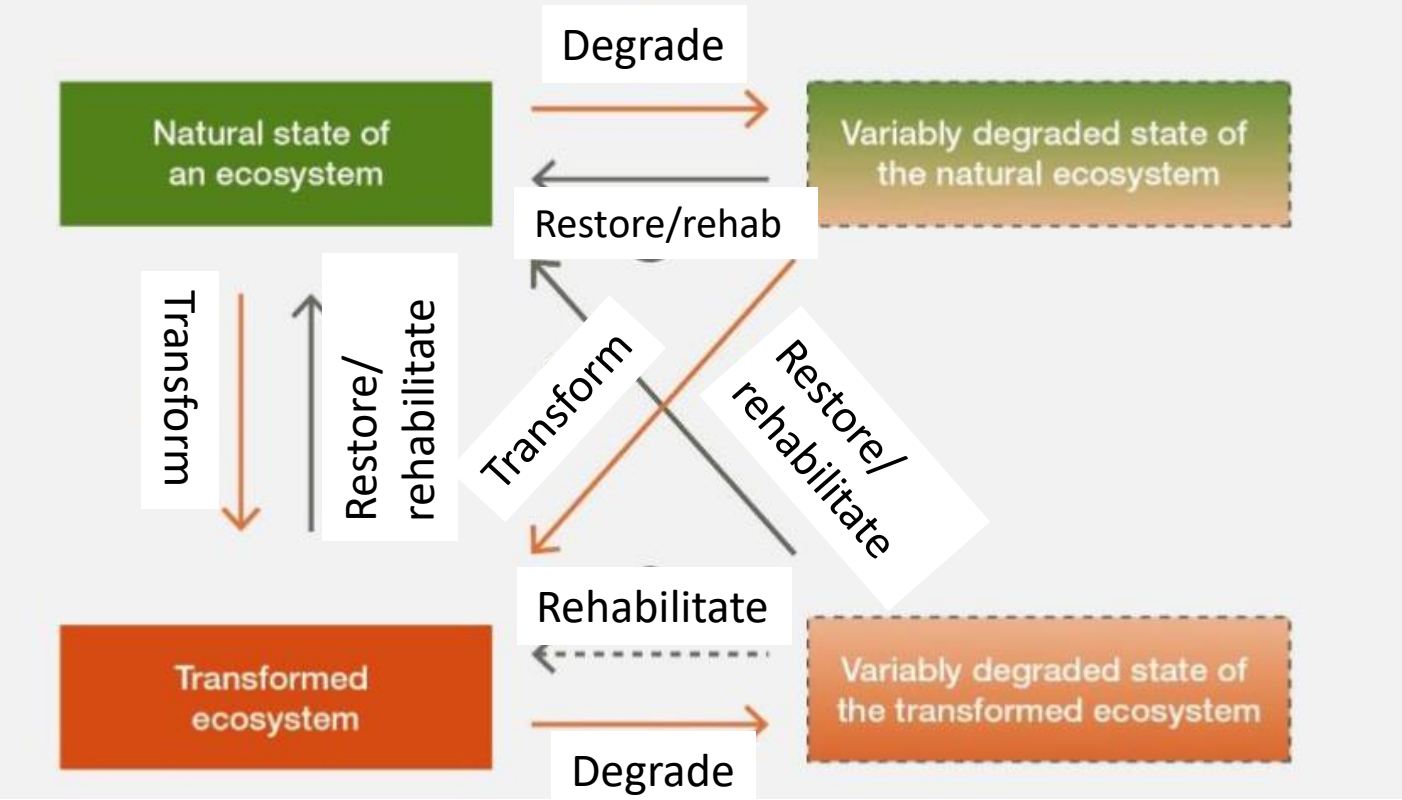


The IPBES Land Degradation and Restoration Assessment, completed in March 2018, was the first of its kind

- covering all terrestrial and inland ecosystems, worldwide
- By 150 leading international experts from 55 countries
- Assessed > 4,000 sources (Scientific, Government & Indigenous and Local Knowledge)
- 7,300 comments taken into consideration

We are making progress on the definitional hurdle

Degradation, meaning a decadal, persistent loss of ecological function and thus capacity to deliver benefits to people, and often accompanied by a loss of biodiversity, takes many forms, and can be found in all ecosystems.



Land Degradation is pervasive, extensive and probably the biggest single contemporary environmental issue

Only one quarter of the global land surface is relatively unaffected by human activities

One quarter is transformed from its original ecosystem function to a human-substituted one

- croplands, settlements, mines, plantations, infrastructure

One half is substantially altered by human use, degraded to varying degrees:

- domesticated rangelands and exploited and managed forests

The fraction of unaltered land **will decline to a tenth by century-end**, unless we slow the rate of transformation

Degradation materially reduces the wellbeing of 3.2 billion people worldwide

The hidden **costs** of land degradation amount to about **10% of annual global gross pr**oduct
The root **causes** of land degradation are **both global and local**

Halting land degradation and restoring degraded land is a solution common to many contemporary issues

Climate change

~ 10% of global forcing
Cost-effective mitigation

Top driver of abundance decline

Biodiversity loss

Driver of degradation
Opportunity for adaptation

Land and Freshwater Ecosystem Degradation

Major source of weakening Function and services

Migration and Conflict
Poverty and Ill-health
Food and water security
Ocean and land quality
Climate change
Sustainable consumption

Avoiding and slowing degradation is possible in all systems

Rehabilitating ecosystem function *is* cost-effective
Full restoration (ie of composition) is much slower and harder

The cost-to-benefit ratio of **avoiding degradation** in the first place is **highest**.

Rehabilitation is also cost-effective, if the benefits of the action are **fully accounted** for.

- Benefits of restoration exceed the costs by an average ratio of **10:1**
- **multiple benefits** : include increased employment, increased business and household spending, improved gender equity, and increased local investment in education among others
- investing in restoring degraded land can contribute to a decrease in violent conflict

Policy and civil society efforts have demonstrated that it is **possible to make a difference**, but the **current level of effort is far too low** to turn the situation around.

Proven actions to avoid, slow and reverse degradation

1. Improve detection, monitoring and verification systems
2. Coordinate policy between different agencies - integrate the agricultural, forestry, energy, water, infrastructure and service agendas at landscape scale
3. Eliminate ‘perverse incentives’ and promote positive incentives
4. Provide consumers the information the need to make informed choices



Conclusions

- **Perceptions and concepts play a key role** in what different actors consider to be degradation, as opposed to an intended and desirable altered state of the environment
- **Distinguish between**
  - transformation: necessary, regulated and intentional alteration of one ecosystem to another, for purposes of deriving some benefit
  - degradation: loss of capacity to supply benefit, in either transformed or natural ecosystems
- **Focus on the future desired target ecosystem state** rather than a historical baseline
  - productive and actionable, rather than retrospective, nostalgic and blame-based
- **Be aware of, and counter, the fragmentation of action across many policy sectors** – agriculture, forestry, environment, water, health, infrastructure and development.

We know how to fix this!
Many things depend on us doing so

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