Scientific and Technical Advisory Panel

Report to the 46th Meeting of the GEF Council

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Chair, GEF-STAP

Scientific and Technical Advisory Panel
of the Global Environment Facility

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Who is STAP?

Anand Patwardhan,
Adaptation

Sandra Diaz,
Biodiversity

Ralph Sims,
CC Mitigation

Jakob Granit,
International Waters

Rosina Bierbaum,
Chair

Annette Cowie,
Land Degradation

Henk Bouman,
Chemicals & Waste

Ricardo Barra,

Michael Stocking,
Special Adviser

Tom Lovejoy,
Special Adviser

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Outline of the Report

- STAP Work Programme activities and products
- OPS-5 STAP Evaluation and self-reflection
- STAP's role in the GEF-6

STAP Work Programme

Activities and Products

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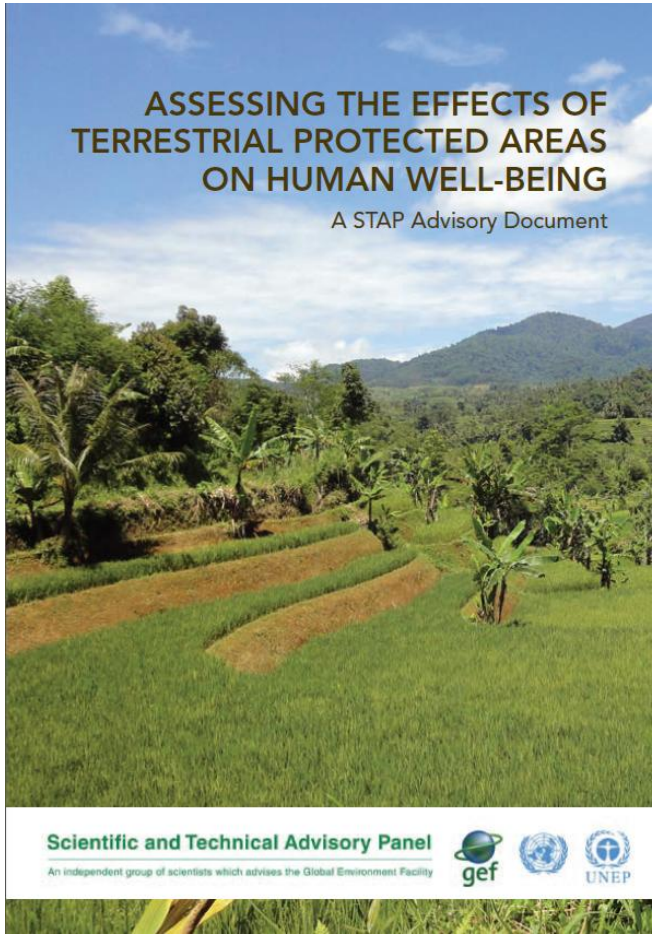
Assessing the Effects of Terrestrial Protected Areas on Human Well-Being



- PAs can have positive, neutral, or even negative social effects

BUT…

- The evidence base is insufficient to directly inform policy
- GEF projects can fill this gap . . .

Mainstreaming Biodiversity in Practice

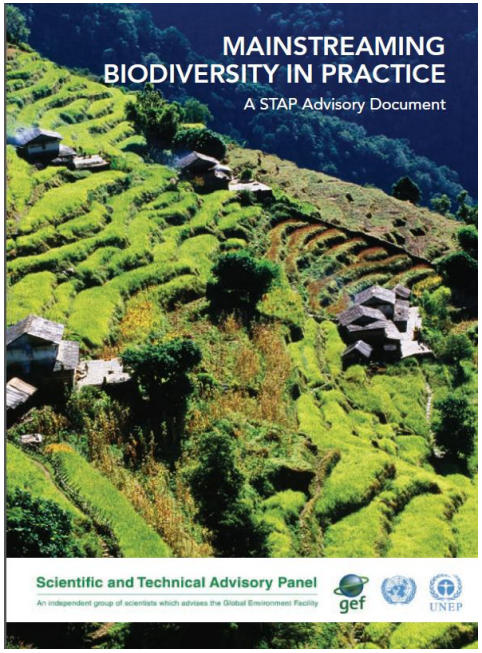
Field experience

Expert workshop

Recommendations for future mainstreaming

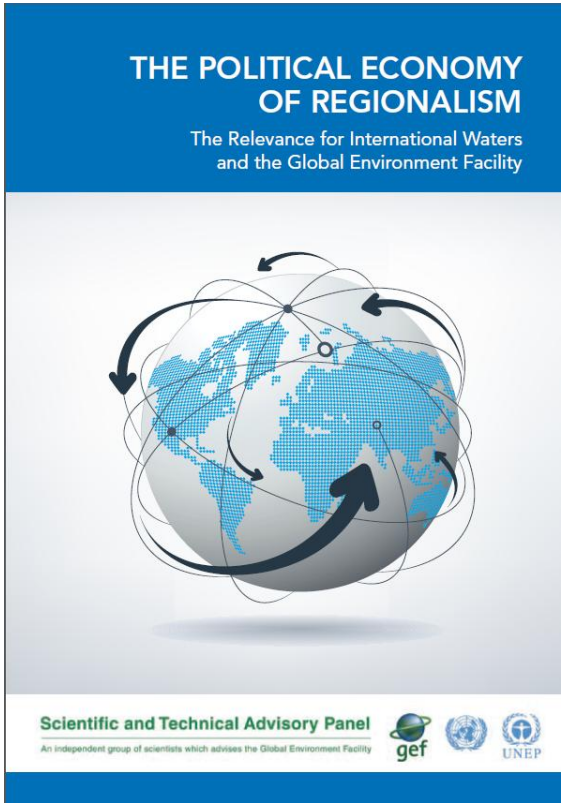
Science

Literature review



The Political Economy of Regionalism

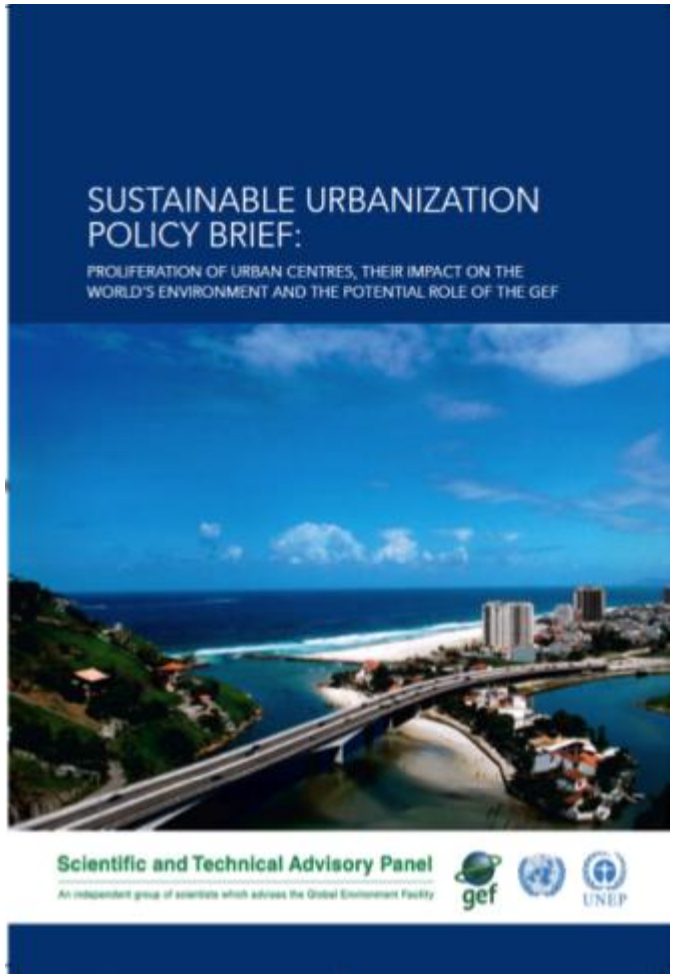
- When addressing transboundary water management systems, it is important to…
  - Synchronize national and regional incentives
  - Assess existing regional institutions and frameworks
  - Consider social and economic contexts



Preliminary thinking on Sustainable Urbanization Opportunities

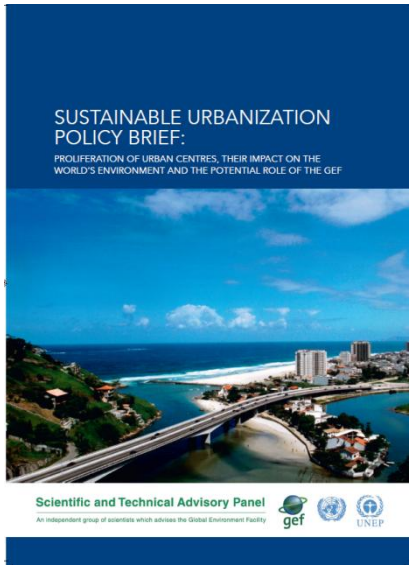
Provides preliminary thought to improve the implementation of the IAP:

- Refining its objectives and outcomes
- Applying SLM in an urban context
- Seeking opportunities within the City Life Cycle



+ Other Activities

- Roundtable discussion on mainstreaming adaptation
- GEF CEO Innovation Forum on Information Communication Technology (ICT)
- Marine Spatial Planning in Practice
- Improving understanding of mercury in the environment
- STAP retreat to develop Assembly Report



Upcoming/Ongoing

- Black carbon
- Biofuels for climate change mitigation
- More on Sustainable urbanization
- The scientific basis for measuring, monitoring, and evaluating adaptation
- Agroecosystem resilience

OPS-5 STAP Evaluation and self-reflection

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Key Findings of OPS-5's Evaluation of STAP

1. There are opportunities to improve the flow of knowledge to and from the STAP
2. How can science be enhanced in the GEF?
3. As demands increase, we need to prioritize

gef IEO Independent Evaluation Office GLOBAL ENVIRONMENT FACILITY

STAP's current role

- **Assist in the development of GEF strategies**
  - Panel members played an active role in the TAG's
- **Advise on cross-cutting thematic areas**
  - Products such as the STAP report to the GEF Assembly
- **Scope emerging global environmental issues**
  - Reports on topics such as marine debris
- **Strengthen scientific & technical basis of GEF programming**
  - Screening of PIF's, and on-going engagement through participation on the focal area task forces

STAP's reflections on its role in the GEF

- For GEF-4 and GEF-5 the majority of STAP's programmatic activities addressed specific focal area requests
- STAP only occasionally tackled higher-level strategic issues facing the GEF partnership.
- Screening projects took the lion's share of STAP resources (both Secretariat and Panel members).

Examples of focal area specific work

Examples of higher-level strategic work

STAP's Role in GEF-6

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Strengthening the efficiency and effectiveness of STAP's review in GEF-6

Currently: All full sized projects are reviewed by STAP.

However: Not all projects benefit equally from a STAP review.

Therefore: We are thinking about the possibility of a **selective review process.**

We would need to have selection criteria – some possibilities for consideration….

- Novel intervention approaches/technologies
- New thematic area, strategic objective
- Integrated Approaches
- Complex, innovative & integrated projects – multiple focal area, multi-trust, or programmatic approaches

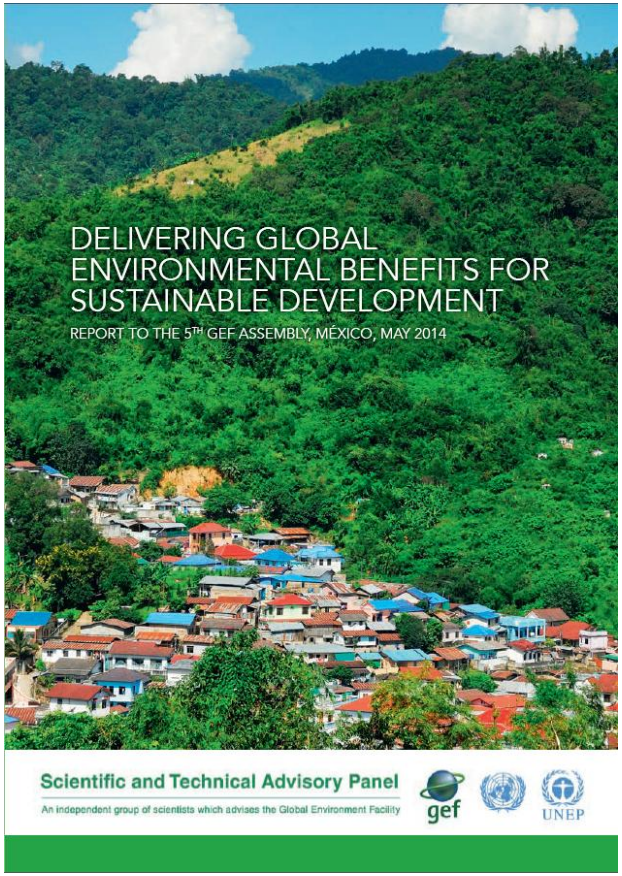
We would absolutely want the partners engaged in the selection process

- GEF (Agencies and Secretariat) identify projects as the work program is assembled
- STAP identifies projects that are scientific/technically challenging and not identified by the GEF
- Council exercises its prerogative to identify projects

Next step:

Establish a working group to think about selection criteria and process for presentation at the next Council Meeting in November

The STAP Report to the GEF Assembly



- Environmental degradation must be tackled in a more integrated and holistic way
- Sustainable development should be at the core of GEF interventions
- The GEF should continue to be **catalytic and innovative** while seeking to effect **permanent and transformational** change

Manage information and knowledge

- Experimental design
- Targeted research
- Systematic scientific reviews
- Efficiency of resource use

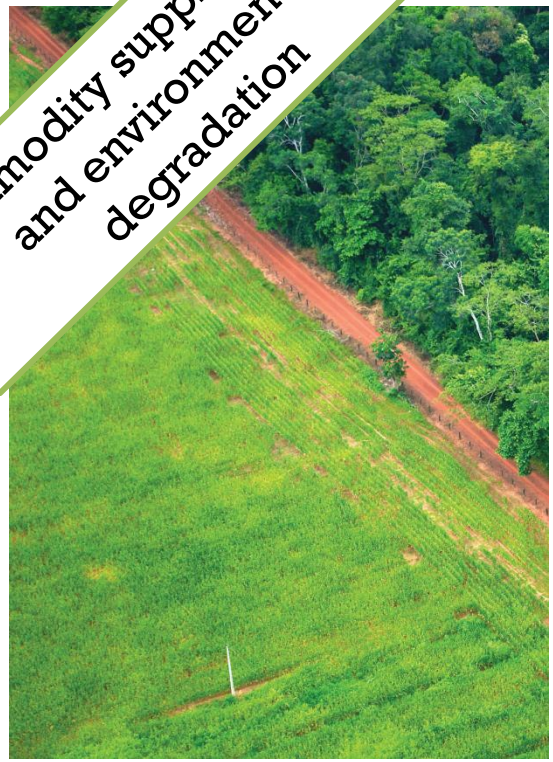
FOR EXAMPLE:
We don't know if Protected Areas enhance livelihoods

Integrated approaches

Sustainable cities

Food security in Sub-Saharan Africa

Commodity supply chains and environmental degradation



Perhaps some future IAPs? Climate resilience

- As risk management
- As a co-benefit
- Integrated into a Multiple Benefits framework

STAP can help: Sustainable cities

STAP panel members have strong science networks.

STAP could:

- review work undertaken to date (APEC low-carbon model towns; ICLEI; Covenant of Mayors; C 40; etc);
- provide case studies of current sustainable city activities to illustrate what might be feasible;
- provide key indicators that will enable a city to monitor a more sustainable growth pathway
- with regard to water supply and consumption, waste treatment, air quality, sustainable energy systems, urban design, freight and passenger transport options, land management, chemical use, biodiversity, etc.
- An excellent model for a case study could be the Development Index System produced by Yujiapu Financial District.

Possible indicators for assessing Sustainable Cities…..

- Carbon emissions/person in buildings
- Low-carbon transport share of total journeys
- Renewable energy shares of heat and power supply
- Ratio of accredited "green buildings"
- Green technology procurement by public utilities
- Outdoor air quality (PM 2.5, SO_2, NO_x levels)
- Carbon emission intensity / GDP
- Green space out of total land area
- Daily water consumption/person
- Waste treatment system efficiency
- Underground space utilisation

Agro-ecosystem resilience

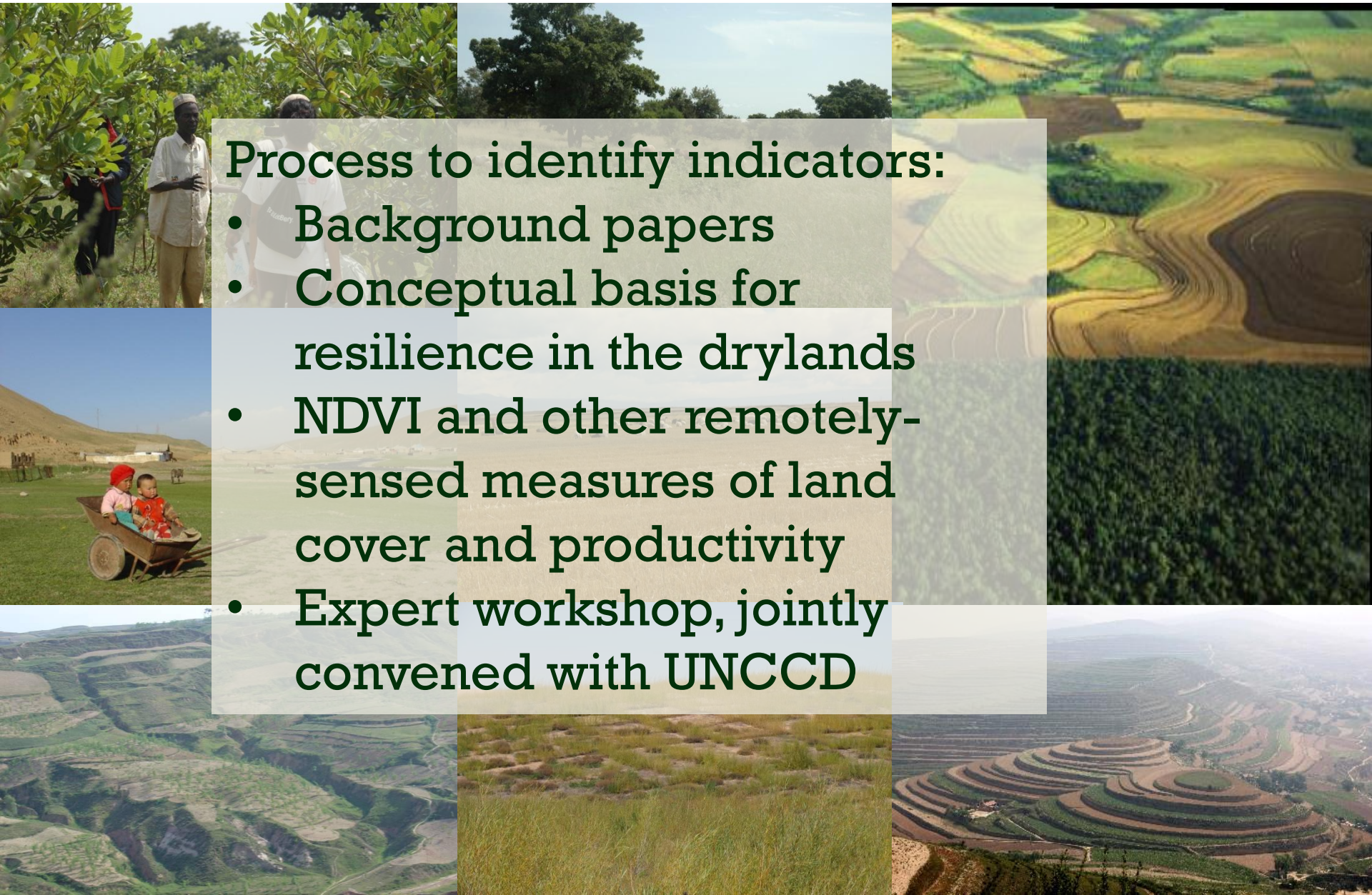
Relevant to:

- Climate change adaptation
- Biodiversity conservation
- Managing land degradation
- Food security
- Sustaining livelihoods of the rural poor

Relevant at many scales:

- GEF project
- GEF program (LD RBM, Food Security IAP)
- National (Conventions, SDGs)

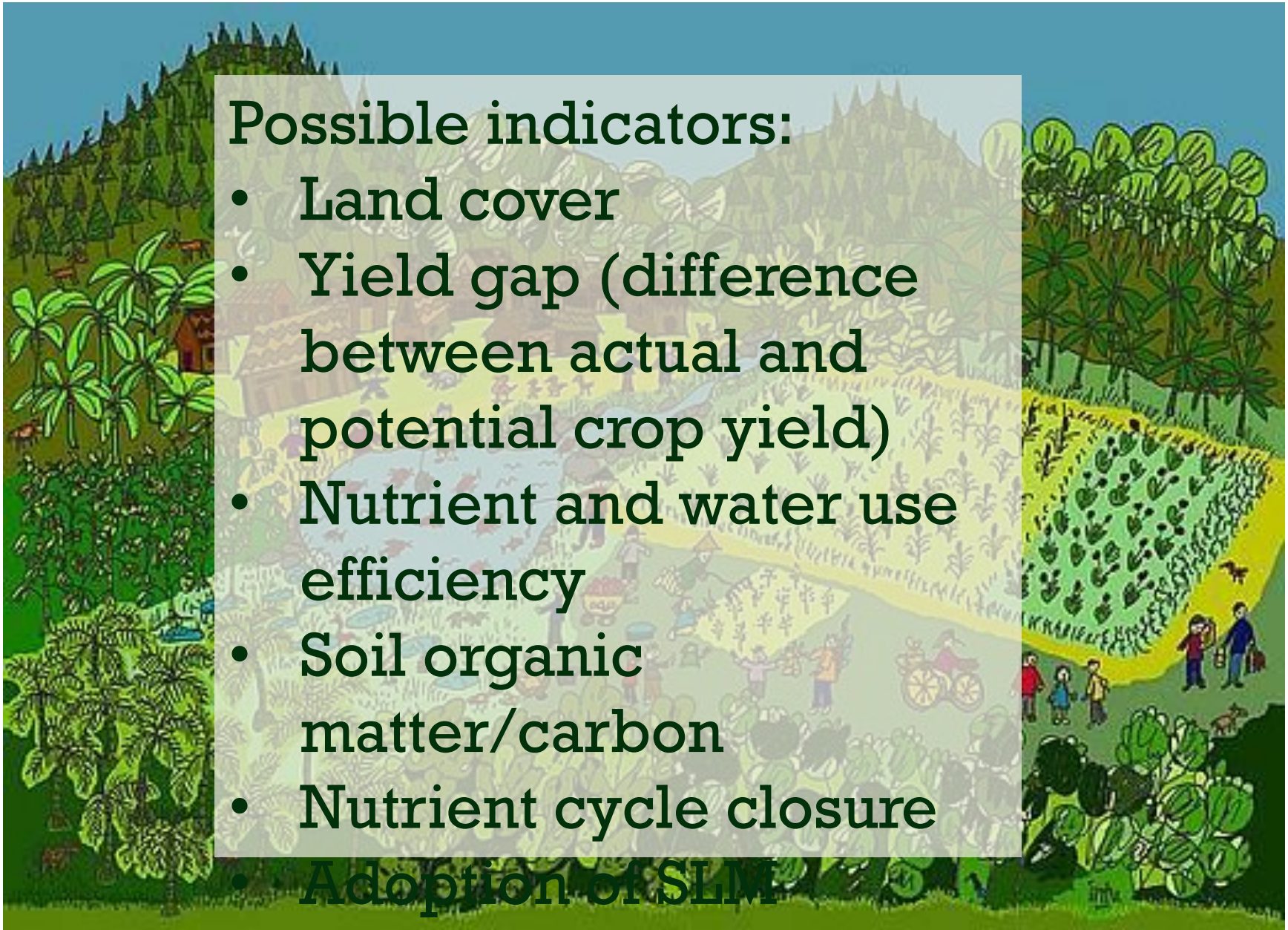
Sustainable, resilient agro-ecosystems



Process to identify indicators:

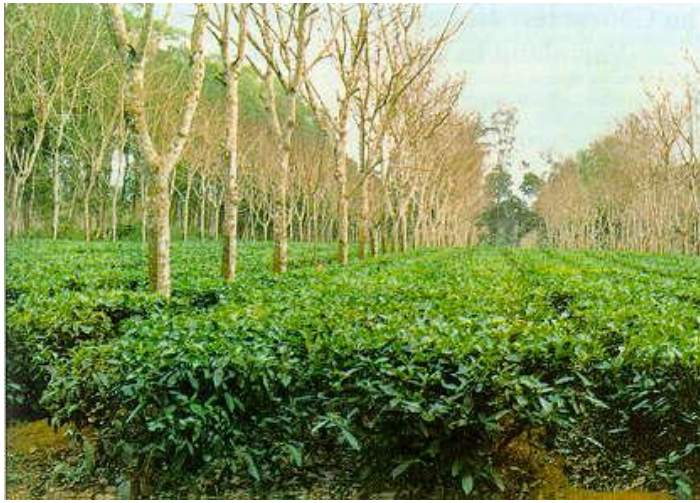
- Background papers
- Conceptual basis for resilience in the drylands
- NDVI and other remotely-sensed measures of land cover and productivity
- Expert workshop, jointly convened with UNCCD

Sustainable, resilient agro-ecosystems



Possible indicators:

- Land cover
- Yield gap (difference between actual and potential crop yield)
- Nutrient and water use efficiency
- Soil organic matter/carbon
- Nutrient cycle closure
- Adoption of SLM



Questions and comments welcomed

Rosina Bierbaum

Chair

GEF's Scientific and Technical Advisory Panel

www.stapGEF.org