The landscape approach: Ten principles to apply at the nexus of agriculture, conservation and other competing land-uses

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ATBC Symposium
S26–Forest People and Market Integration
June 26th 2013
San Jose, Costa Rica
Why ‘landscapes’?

- Forests support ca. 65% of worlds terrestrial taxa
- Estimated 1.6 billion people “depend” on forested landscapes in some way for their livelihoods
- 40% of world’s food originates in multi-functional landscapes
- Forests and trees sustain agriculture through ES provision
- “Landscape approaches” have moved to forefront of research and development agenda
What do we mean by landscapes?

• Landscapes are fuzzy concepts – they are not planning units
• “A geographical construct that includes not only the biophysical components of an area but also the social, political, institutional and cultural components of that system”
Shooting in the dark..?

- Large body of literature on “landscape approaches” and “ecosystem approaches” but little consensus on applicability
- General principles and guidelines have been largely missing
- However, need to avoid “one size fits all” approach
- Complex landscapes; complex challenges
Core challenge: different sites, different issues
Whose landscapes?
Multi-functionality

• Combination of separate land units with different functions (spatial segregation)

• Different functions on the same unit of land but separated in time (temporal segregation)

• Different functions on the same unit of land at the same time (functional integration or “real multi-functionality”)
But in reality, segregation is the norm
Land sparing/sharing within landscapes

(a) land sharing

(b) land sparing within each farm

(c) land sparing across multiple farms
Landscape assessment for development

- Collecting economic data at various levels, engaging most stakeholders
- Spatial data: administrative boundaries, land cover change and current land uses
- “Governance landscape” including local (traditional) institutions
- Focus on ecosystem services and agricultural productivity and away from protected areas alone
Preliminary observations from LM sites

- Governance and land use planning remain weak especially without project/NGO-led interventions
- Still few compensations/incentives for conservation, but interest in certification, PES and REDD+
- Past trends in terms of forest/tree cover: eradication of forest patches, monocultures preferred to agroforests…
- How to achieve sustainability when donor driven??
Perceived importance of forest goods and services in five landscape mosaics
New (landscape) approaches

- Since 2008, CIFOR and multiple partners working on defining and refining broad “landscape approaches” building on previous initiatives
- How? Review of published literature, multiple workshops for consensus building, conferences/side events, e.g. Diversitas, IUFRO, CBD Bonn, Nagoya
- Validated by extensive survey of field practitioners
- Based on this on-going work, SBSTTA commissioned CIFOR to draft report “sustainable use of biodiversity at the landscape scale” (see http://www.cbd.int/doc/meetings/sbstta/sbstta-15/official/sbstta-15-13-en.pdf)
So, what is new?

- The landscape approach has been re-defined to include societal concerns related to conservation and development trade-offs and negotiate for them
- Increased integration of poverty alleviation goals
- Increased integration of agricultural production and food security
- Emphasis is on adaptive management, stakeholder involvement and multiple objectives
The “Ten Commandments”...?
Ten principles for a landscape approach

1. Continual learning and adaptive management
2. Common concern entry point
3. Multiple scales
4. Multi-functionality
5. Multi-stakeholder
6. Negotiated and transparent change
7. Clarification of rights and principles
8. Participatory and user-friendly monitoring
9. Resilience
10. Strengthened stakeholder capacity
What impact?

- Recommendation XV/6 "sustainable use" from SBSTTA XV (includes work on bushmeat)
- Tabled for adoption at COP 11 in Hyderabad: “taken note” of by parties
- Desire (and funding) to follow up with future CGIAR and CBD policy processes
- Contribution to System Level Outcomes of CGIAR
Ten principles for a landscape approach to reconciling agriculture, conservation, and other competing land uses

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Edited by Kenneth G. Cassman, University of Nebraska, Lincoln, NE, and accepted by the Editorial Board December 21, 2012 (received for review June 21, 2012)

“Landscape approaches” seek to provide tools and concepts for allocating and managing land to achieve social, economic, and environmental objectives in areas where agriculture, mining, and other productive land uses compete with environmental and biodiversity goals. Here we synthesize the current consensus on landscape approaches. This is based on published literature and a consensus-building process to define good practice and is validated by a survey of practitioners. We find the landscape approach has been refined in response to increasing societal concerns about environment and development tradeoffs. Notably, there has been a shift from conservation-orientated perspectives toward increasing integration of poverty alleviation goals. We provide 10 summary principles to support implementation of a landscape approach as it is currently interpreted. These principles emphasize adaptive management, stakeholder involvement, and multiple objectives. Various constraints are recognized, with institutional and governance concerns identified as the most severe obstacles to implementation. We discuss how these principles differ from more traditional sectoral and project-based approaches. Although no panacea, we see few alternatives that are likely to address landscape challenges more effectively than an approach circumscribed by the principles outlined here.
Challenges of the landscape approach

- Understanding complex systems is not straightforward
- Understanding and influencing underlying trajectories
- Functionality of landscape mosaics
- The landscape approach is different to spatial planning. Landscapes are dynamic and subjective. Different people see them in different ways.
- Trade-offs are the norm and have to be negotiated
- There is no “end point” or best solution for a landscape – one can simply intervene to avoid bad outcomes and favour better ones
Some tricky questions

- What are we trying to achieve?
- Who decides?
- How to reconcile and negotiate trade-offs?
- How to predict outcomes and understand “landscape dynamics”?
- How to measure progress and/or success?
- Impact?
The Center for International Forestry Research (CIFOR) is one of the 15 centres supported by the Consultative Group on International Agricultural Research (CGIAR)

Thank you!

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