

State of ustainability nitiatives

The Landscape Approach Moving towards sustainable land use patterns Commentary Report March 2016

Moving Towards a Landscape Approach

Most societies are now experiencing the pressure of balancing environmental conservation with satisfying the needs of growing human populations. With over 7 billion people living on the planet, demands for food, fuel and fibre continue to grow. The United Nations expects that food production will have to increase by 60 per cent to meet the needs of 9.3 billion people by the middle of the century. Meanwhile, the unsustainable land practices of past and present generations mean that there is, simultaneously, significant restorative and conservation work to be prioritized. Indeed, agriculture, conservation, development and other land uses all compete for space and for resources.

Management approaches that consider agriculture, f orestry, biodiversity and poverty alleviation as separate issues or in "silos" do not suffice. The scale of the global challenges we face is too great; there is a need for genuinely integrated approaches.

In this context, landscape approaches provide "a framework to integrate policy and practice for multiple land uses, within a given area, to ensure equitable and sustainable use of land while strengthening measures to mitigate and adapt to climate change." 1

With respect to forest management, landscape

approaches attempt to overcome traditional landmanagement boundaries and consider land-use decisions and interventions in a more holistic way. Forests are understood to be a part of landscapes with diverse, and sometimes conflicting, purposes. A landscape approach challenges forest managers to consider a broad range of sectors and stakeholders in decision-making processes.

According to experts at the Centre for International Forestry Research (CIFOR), there have been a plethora of definitions of "landscape approaches" over the years, which has led to some confusion and subsequently delayed uptake by policy-makers and those implementing on the ground.² However, Terry Sunderland, Principal Scientist with CIFOR's Forests and Livelihoods Programme, argues that the fact that the approach defies an easy definition is actually a good thing. He explains: "The landscape approach is anything but orderly. It is more a case of muddling through and being flexible enough to adapt to change, and integrating multiple objectives for the best possible benefits."³ The nature of the landscape approach, and one of the benefits it seems, is that it avoids an oversimplified definition.

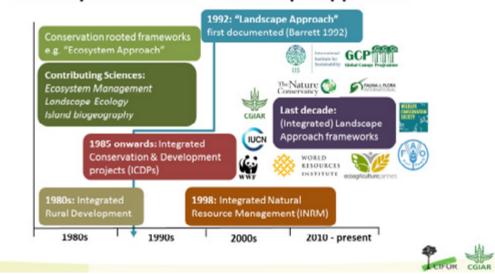
In terms of guiding principles, however, there is some clarity and consensus. A 2012 intergovernmental and inter-institutional process led to the development of the following 10 principles that characterize the landscape approach.

¹ Reed, J., Deakin, L, & Sunderland, T. (2015). What are 'Integrated Landscape Approaches' and how effectively have they been implemented in the tropics: A systematic map protocol. Environmental Evidence, 4, 2, p. 1. Retrieved from https://environmentalevidencejournal.biomedcentral.com/ articles/10.1186/2047-2382-4-2

² Ibid.

³ Sunderland, T. (2014). 'Landscape approach' defies simple definition — and that's good. Retrieved from http://blog.cifor.org/23834/landscape-approachdefies-simple-definition-and-thats-good?fnl=en





Development of the "Landscape Approach"

Source: Centre for International Forestry Research

Complementing the Ecosystem Services

Approach

The landscape approach is a natural ally of ecosystem services logic, which emphasizes that the natural systems upon which humans depend (e.g., pollination, filtration, photosynthesis) require the proper functioning of the overall ecosystems of which these services are a part. Both approaches promote "systems-level" thinking, away from the narrow, sector-specific approaches that have, in many ways, contributed to present-day conundrums.

Forests are known to provide an array of ecosystem services, such as retaining and filtering fresh water, preserving biodiversity, generating habitats for many species and mitigating climate change by sequestering carbon from the atmosphere, among others. The hope is that these multifunctional purposes are better captured in a landscape or ecosystems services approach—one that expands our understanding of the diverse values derived from natural systems—than, for example, under typical forest management plans that simply recognize the value of timber and wood products.

Landscape Approach Examples

Trees are grown and cultivated far beyond forest boundaries, and, as such, trees form an important component of many rural and urban landscapes. For instance, trees may be planted as hedgerows throughout agricultural fields, or to create shade in public parks or home gardens, or as plantations for productive purposes.

Agroforestry is a good example of the use of "trees outside of forests." It is a land-use system that integrates trees into farmlands and rural landscapes to enhance productivity, profitability, diversity and ecosystem sustainability. Trees are managed together with crops and/or animal production systems to increase social, economic and environmental benefits for land users at all scales.⁴

In Thailand, paper companies are working closely with farmers to facilitate growing trees around land under rice cultivation. In a pilot project, the Programme for the Endorsement of Forest Certification (PEFC) has been supporting local stakeholders to articulate the specific requirements for sustainable management of agroforestry resources.

Did you know?

India is the only country to have adopted a National Agroforestry policy (as of 2015) and is the world leader in agroforestry innovation.¹ In addition, Sachin Raj, from India's Network for Certification and Conservation of Forests, informs us that 80 per cent of industrial wood in India comes from trees outside of forests.²

 $^2\,$ Raj spoke at PEFC's 2015 Forest Certification Week in Montreux, Switzerland.

The American Forest Foundation (AFF) is working with American landowners in Florida to develop landscape management plans. Given the vast scale and the mosaic of landowners and priorities, this has proven to be a

¹ Kapsoot, D. (2014). Agroforestry in India: New national policy sets the bar high. Retrieved from http://www.the-guardian.com/globaldevelopment-professionals-network/2014/feb/17/india-nationalpolicy-agroforestry-tree-coverage

⁴ Food and Agriculture Organization. (2015). Agroforestry. Retrieved from http://www.fao.org/forestry/agroforestry/en/

Ten Principles of the Landscape Approach

1. Continual learning and adaptive management

 To account for the dynamic and uncertain nature of landscape processes, management must be adaptive.

2. Common concern entry point

 Bring stakeholders together by identifying short to immediate term objectives.

3. Multiple Scales

 Create awareness about high and low-level processes that affect local interventions.

4. Multi-functionality

 Landscapes and their components have multiple purposes; tradeoffs must reconcile multiple needs, preferences and aspirations.

5. Multiple Stakeholders

 Failure to include all stakeholders in an equitable manner in decision making processes will lead to sub-optimal outcomes.

Source: Adapted from Sawyer et al. 2012

challenging task. Once a final master plan is accepted, individual landowners will be required to make formal commitments to implement and manage the master plan.⁵

The Landscape Approach and the Global

Development Agenda

The third annual Global Landscapes Forum (GLF) took place in Paris, France, alongside the United Nations Framework Convention on Climate Change's 21st Conference of the Parties (COP 21) in December 2015. Bringing together more than 3,200 stakeholders and 148 organizations from forestry, agriculture, water, energy, law and finance, the GLF positioned the landscape approach as the "framework for balancing the global, top-down political agenda for climate change and development with a more bottom-up approach to land use planning."⁶ The GLF did not shy away from the issue of poverty either: "In the same landscapes where we are trying to adapt to or mitigate climate change, we are also trying to alleviate poverty. It requires us to confront the problems of power inequalities, recognizing that while some people will benefit, others will inevitably lose out."7

$^5\,$ T. Martin (2015), speaking on behalf of AFF at PEFC's 2015 Forest Certification Week in Montreux, Switzerland.

⁷ Ibid.

6. Negotiated and transparent change logic

- All stakeholders need to understand and accept the general logic, legitimacy and justification for a course of action.
- 7. Clarification of rights and responsibilities

As a basis for good management.

8. Participatory and user friendly monitoring

 Information, often many different kinds, needs to be widely accessible. Gathering and interpreting information is a vital part of developing and updating "theories of change" upon which the landscape approach is based.

9. Resilience

 Actions that address threats and allow for recovery after perturbation need to be promoted through capacity building.

10. Strengthened stakeholder capacity

Voluntary Sustainability Standards Trending Towards a Landscape Approach

Voluntary sustainability standards (VSSs) are working towards evolving their certification schemes to allow for landscape approaches to the production of various commodities from different avenues and entry points. The Roundtable for Sustainable Biomaterials (RSB) is in the process of expanding its focus on assessing the sustainability impacts of their biomaterials certification scheme to examine indirect land-use changes. To this end, they "proposed a set of criteria attempting to define how additional biomaterial can be produced without affecting land use, effectively reducing the demand for land conversion and indirect land use change risks."⁸

The Better Cotton Initiative (BCI) is workign towards a watershed approach to cotton production with plans to team up with the Alliance for Water Stewardship, to better ascertain the resources available and required for cotton production as well as how this need fits with other competing resource uses. This will enable BCI to move from strictly focusing on producing cotton sustainably to producing cotton sustainably and holistically within a landscape mosaic supporting the livelihoods of multiple actors.

⁶ Global Landscapes Forum. (2015). Outcome Statement of the 2015 Global Landscapes Forum. Retrieved from http://www.landscapes.org/wp-content/uploads/docs/GLF-Paris-Outcomes-Statement.pdf

People engaged in landscape management issues must be competent in their responsibilities (scientific, social, cultural, financial).

⁸ Bridle, R. (2015). Roundtable for Sustainable Biomaterials Annual Meeting of the General Assembly. The Standards Reporter Report 3. Retrieved from http://www.iisd.org/ssi/wp-content/uploads/2015/06/Report-3-RSB-June-2015.pdf



PEFC and the Certification of "Trees Outside of Forests"

Aspiring towards more sustainable landscapes and urban spaces, PEFC recognizes the importance of trees outside of forests and the holistic value of the landscape approach. PEFC⁹ maintains that:

- Agroforestry contributes significantly to global supply chains and rural livelihoods alike.
- Tree farming can alleviate pressure on forests in places where natural forests are threatened.
- The non-wood forest products that the trees both inside and out of forests produce also have the potential to contribute significantly to increased food security and rural livelihoods.

With this in mind, PEFC has been looking into the role of forest certification in promoting the planting of trees outside forests and bringing recognition to the roles that trees play in sustainable landscapes.

In 2015 PEFC convened an expert group in Geneva, Switzerland, to build consensus around best practice on the certification of trees outside of forests. The work is ongoing in 2016, and clearly contributes to elaborating the "landscape approach"—seeing the need to look beyond individual stands to the larger landscapes in terms of sustainable management, planning, ecosystem services, etc.

PEFC is focusing on Sustainable Landscapes for Sustainable Livelihoods and exploring the potential for forest certification to expand its impact and scope through the landscape approach:

- 1. Into further places (i.e., outside of forests)
- 2. To further constituents/people (i.e., more smallholders operating throughout the landscape)
- 3. To further products and services (i.e., non-timber forest products, ecosystem services, etc.)

Expansion in these three dimensions is already happening, and PEFC and its stakeholders will be looking to further expand collaboration and investment to realize forest certification's full potential in promoting sustainable management (not just "timber certification"—which is a very common and persistent misunderstanding).

When considering the commodities derived from landscapes with trees, there is an area of cross-sector certification that needs exploring and attention. How can multiple certification systems work together to better align or deliver dual/multiple certifications for different crops? What is the potential for common chains of custody across different soft commodities? PEFC may be leading this discussion with global stakeholders in the coming years.

Towards Sustainable Landscape Management

As VSSs continue looking for innovative ways to progress towards sustainability on multiple fronts, the landscape approach provides a pathway forward for a more holistic approach to the production of the various commodities we have come to depend on for our well-being. PEFC has made significant efforts to allow for landscape approaches to their forest certification program by, for example, taking steps to recognize the need to certify trees outside of forests, support agroforestry and incorporate non-timber forest products. A number of other VSSs, such as RSB and BCI, are also advancing in this direction with efforts to understand indirect land-use change risks and watershed approaches to agricultural production.

⁹ PEFC (2015). Delivering impacts in the forest and beyond. Retrieved from http://www.pefc.org/resources/brochures/projects-and-development/1955-delivering-impacts-in-the-forest-and-beyond

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