

KB 11 Policy Brief

Value chains and agro-food systems from a landscape perspective

The year 2013 was used to explore the large variety of landscape approaches and their respective suitability to approach agro-food systems from a spatial perspective. Not coincidentally also the year, where the concept of “landscapes” have gained in popularity not only within environmental organisations, but more and more attention is being given to this approach by agricultural organisations. The year was closed by the very first Global Landscapes Forum at the COP19 in Warsaw-Poland organised by a diverse group of international organisations such as CIFOR, World Bank and FAO.

These developments have encouraged CDI-WUR even more to further look into the value chains and agro-food systems from a landscape perspective. In order to do this, we have organised a series of seven landscape lunch meetings all with a different entry point of looking at landscapes. These have helped CDI in formulating an CDI’s approach regarding this topic. Experts from various disciplines were invited to share their interpretation of landscape approaches, and their views on developing value chains from a spatial perspective. Several experts from CGIAR, WRI, ITC, Both Ends and other organisations have been found interested to share their view, and join a collective search for a “spatialisation” of value chains. After providing an overview of the seven guest speakers and their views, we will conclude with how these presentations have contributed to a CDI approach on landscape approaches and how this can be put into practice in the years to follow.

Overview of the “Landscape Lunches”

The following seven guest speakers have contributed to the landscape lunch meetings in 2013:

Guest speaker	Date	Topic
1. Lini Wollenberg - CGIAR Team leader of the Pro-Poor Mitigation Theme in the CGIAR's Climate Change, Agriculture and Food Security Research Programme	20-02-2013	In search of market governance: Sustainable commodities and landscape-based climate change mitigation.
2. Iris van Duren - ITC- Twente University Assistant Professor at the Department of Natural Resources	14-04-2013	Commodity agriculture and landscape change
3. André Brassier - Beagle Sustainable Solutions Founder of Beagle Sustainable Solutions where they focus on practical solutions to sustainability issues.	28-05-2013	Why companies would adopt a landscape approach
4. Kadi Warner - World Resources Institute Natural resource management and adaptation specialist currently contracted by DGIS/DME stationed in Uganda.	31-05-2013	From community forestry to ecosystems and landscapes
5. Willem Ferwerda - Ecosystem Return Foundation Managing Director and Founder of the Ecosystem Return Foundation	01-10-2013	Landscapes and business: Building a business model for ecosystem restoration
6. Koen Kusters - Wereld in Woorden Writer and researcher specialised in environmental conservation and international cooperation.	12-11-2013	Sustainable investments in forests and forest products: sharing or sparing?
7. Maaike Hendriks - Both ends Project officer sustainable land use	12-11-2012	Rich forests Initiative: Matchmaking for green ventures

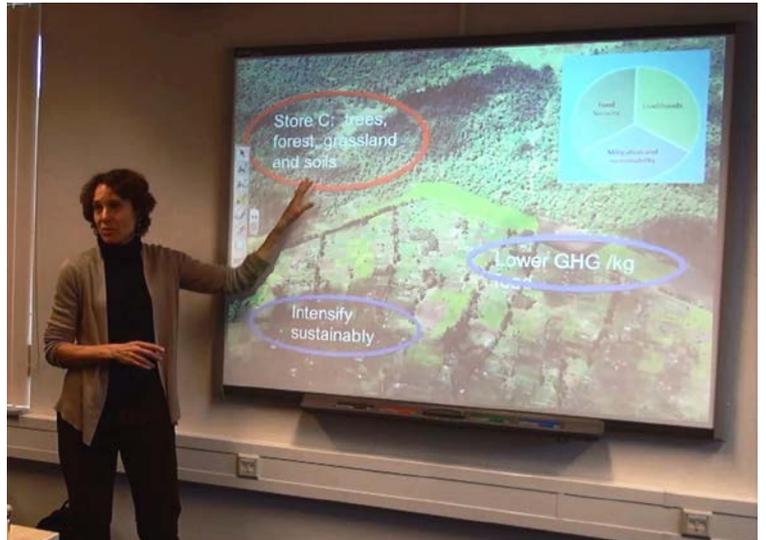
Almost all of these presentations have been recorded on video and will be published together with the PowerPoint presentation on the website of the Global Partnership on Forest and Landscape Restoration (GPFLR: www.forestlandscaperestoration.org/) as short lectures which can be viewed by our large online network of over 400 professionals.

1. Lini Wollenberg - CGIAR

In search of market governance: Sustainable commodities and landscape-based climate change mitigation.

CGIAR's landscape approach contains a focus on agriculture and forest trade-offs across landscapes. In order to conduct action research on these landscapes, Lini together with CGIAR colleagues have developed the following research focus:

1. Mainstreaming mitigation into agricultural development: low emissions development
2. Innovative mechanisms: understanding the institutional arrangements and incentives for achieving step 1.
3. Data and methods for smallholder systems e.g. feasibility studies.



Their solution to facilitate agriculture-environmental convergence is to store carbon in forested areas and to intensify agriculture sustainably. This way you can create a balance between food security, livelihoods and biodiversity. However, to achieve this we have to look at the institutional arrangements on global, national and also landscape level. Their main questions is therefore as follows:

“How do institutional arrangements affect environmental, economic and social outcomes in tropical forest landscapes where commodity agriculture is a key driver for forest loss?”

Their question implies that there is currently a knowledge gap regarding institutional arrangements in tropical eco-agricultural landscapes. CGIAR therefore stressed the need for the documentation of innovations, the role of market governance, its outcomes, followed by lessons learned which potentially could stimulate new innovations in other landscapes. The implementation of such an action research programme contains three steps:

1. Characterize institutional arrangements of (successful) innovations
2. Analyse impacts of institutional arrangements on deforestation, GHG emissions and livelihoods.
3. Facilitate collaborative learning to improve outcomes

2. Iris van Duren – ITC, University of Twente

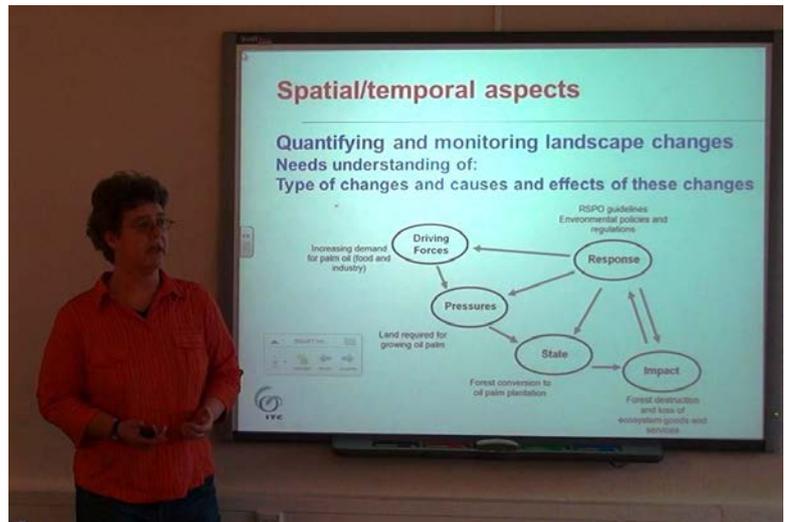
Commodity agriculture and landscape change

Working at the Faculty of Geo-Information Science and Earth observation (ITC), her focus on is on quantifying and monitoring of landscape changes. By taking examples from palm oil production in Kalimantan, Indonesia, Iris, showed how satellite imagery helps to analyse commodity agriculture as a key driver of landscape change.

Landscape is a difficult concept to define, especially if you have to quantify it. However, according to Iris landscape contains three elements:

- terrain
- land cover
- people

These can be translated into variables which can be measured and mapped. This would then provide us with a better understanding of the causes and effects of landscape change, which are needed to improve spatial planning for optimizing economic benefits while reducing negative impacts on livelihoods and food security at landscape level.



3. André Brassier – Beagle Sustainable Solutions

Why companies would adopt a landscape approach



Beagles Sustainable Solutions offers practical solutions to sustainability issues and they have recently conducted research on why companies should engage in a landscape approach.

André argues that from a NGO background a landscape approach is a natural context you work from, however from a business perspective it is not. For businesses

is about sourcing areas, so this needs to be kept in mind when engaging businesses in a multi-stakeholder approach. Talking the same language is probably one of the most difficult issues.

Defining a landscape approach is difficult as it is many things, everyone has their own approach, but all have five elements in common:

1. **To achieve multiple objectives:** including human well-being, food and fiber production, climate change mitigation, and conservation of biodiversity and ecosystem services. It is a move from sectorial approaches to integrated approaches where the focus is on the interconnectedness of more than just one sector.
2. **Ecological, social and economic interactions** among different parts of the landscape are managed to seek positive synergies among interests and actors or reduce negative trade-offs.
3. **The key role of local communities** and households as both producers and land stewards is acknowledged. It involves a bottom up process where there should be room for a dynamic, flexible and adaptive process.
4. **A long-term perspective** is taken for sustainable development, adapting strategies as need to address dynamic social and economic changes. It takes time to develop a sustainable landscape approach, but the advantage is that it becomes rooted in place and supported by implementers.
5. **Participatory processes of social learning and multi-stakeholder negotiation are institutionalized**, including efforts to involve all parts of the community and ensure that the livelihoods of the most vulnerable people and groups are protected or enhanced.

To conclude, according to André a landscape approach is about “supporting food production, ecosystem conservation, and rural livelihoods across entire landscapes.”

When addressing this approach from a business perspective: it is not about a value chain, but about the sourcing area. Having interest in the long term help of that area to secure the area quality and sustainability. This is new for businesses. So adopting a landscape approach for businesses means:

1. Multi-stakeholder approach
2. Addressing a shared risk: *share the risks and cut the costs*
3. In a key sourcing area
4. Requiring beyond farm or plant interventions

4. Kadi Warner – World Resources Institute

From community forestry to ecosystems and landscapes.

Kadi Warner is a senior advisor on community-based management, sustainable livelihoods programming, market development, payments for environmental services, and climate change. In her presentation she describes the paradigm shift in forest management from the ‘tree’ focus in the early community forestry initiative was overtaken in some regions to include a forest ecosystem approach that includes wildlife and broader ecosystems services such as watersheds and soils. It is due to global commitment to poverty reduction that pushed forest management into having to meet multiple complex objectives, as well as focusing more attention on the dependency on forest resources of the poor – the “little people.”

Kadi concludes her presentation with a definition from World Bank and argues that besides the ecosystem approach, the landscape approach is getting more popular: Landscape approaches - Agriculture, water, forests, and food security are all connected. As the challenges these sectors face are linked, it becomes clear that we need to work across sectors to find integrated solutions at the scale of entire landscapes (World Bank).

5. Willem Ferwerda – Ecosystem Return Foundation

Landscapes and business: Building a business model for ecosystem restoration

Willem Ferwerda has been the director of IUCN the Netherlands for 12 years and last January he set up his own foundation: The Ecosystem Return Foundation.

His quest is to find ways to mainstream businesses into landscape restoration and processes and he argues that these are needed to upscale restoration activities globally. In order to achieve this, we have to develop business cases to convince those investors for the need of their engagements in restoration. For us, universities, environmental organisations, NGOs, the most important step is to address the obstacles for business, listed below:



1. Give insight in ecosystems & Triple P: Rethinking of Triple P at ecosystem level as resilience is based on sustaining ecosystem functions.
2. Communicate without jargon: explain to businesses how they can contribute
3. Exit silos by creating 'Out of Box' groups:
4. Develop ecosystem knowledge
5. The need for a common language
6. Create new business propositions: develop business cases
7. Understand that stakeholder management is the Key Success Factor, this also means a long term process.

According to Willem, a business case for private companies to become engaged in ecosystem restoration can deliver four returns:

- **Natural Capital:** fertile soils, carbon storage, water
- **Social Capital:** jobs, income, cohesion and engagement
- **Return on Investment:** financial performance
- **Inspirational Capital:** beauty, innovation, meaning

6. Koen Kusters – Wereld in Woorden

Sustainable investments in forests and forest products: sharing or sparing?

Koen Kusters has contributed to a research on different modes of rural development that are possible in forest tropics. The overarching dual challenge is about the agricultural production to feed future generations while conserving the natural resource base. According to the landscape approach, the only way to move forward is to acknowledge this duality and to promote an integrated approach where agricultural and conservation objectives are met. But how to do this? The sharing versus sparing debate focusses on this implementation.

Sparing: if you want ensure global food security and conserve biodiversity, you would best focus on investments on industrial and intensified agriculture, because land is then used most efficiently and then you can spare land for nature conservation.

Sharing: you need to invest in environmental friendly types of agricultural that will allow for agricultural production to be integrated with biodiversity conservation in the landscape. So nature and agriculture share the same space



One of the main arguments for “sparing” is that there is no better way to feed the world than to intensify agriculture due to growing world population and urbanization (Louise Fresco). One of the main counterarguments recognizes the contribution of conservation efforts to supporting agricultural production such as clean water, pollination and pest control services.

7. Maaike Hendriks – Both Ends

Rich forests Initiative: Matchmaking for green ventures



Rich Forests is a partnership established in 2013 between the NGO Both ENDS, a former staff member of Cordaid and two international NGO networks: the Non Timber Forests Products Exchange Program (NTFP-EP) and the International Analog Forestry Network (IAFN).

Their mission is to invest in the conservation and restoration of forests and in the creation of sustainable livelihoods for forest-dependent communities. It contributes to rural

development and economic security while restoring degraded forest.

Rich forests is thus an example of “sharing” rather than “sparing” as they promote practices such as: analog forestry and agroforestry for NTFPs. They support local initiatives on agricultural production, harvesting, marketing, ecosystem management in the tropics and Agro-industrial companies: restoration of degraded lands and forests, with benefits for local communities. In doing this, their ambition is to become a match-maker between NGOs, investors and companies and develop innovative business models. However, they do acknowledge some challenges when involving businesses such as the risks aversion of the private sector.

The Global Landscapes Forum - COP19- Warsaw, Poland

“Fragmentation is our enemy, therefore we have to look for convergence of forestry and agriculture”

The very first Global Landscapes Forum was a two-day event held on the sidelines of the UN climate change negotiations as part of the Conference of the Parties (COP19) in Warsaw on 16-17 November 2013. It was attended by over 1,200 experts on landscapes, agriculture and forestry.



The Forum was designed to inform the global climate and development frameworks —specifically the UN Framework Convention on Climate Change (UNFCCC) and the UN General Assembly (UNGA) — about the opportunities of a “landscape approach” to development.

The key messages and statements from this Forum are listed below:

- **The landscape approach is important for the design of the Sustainable Development Goals:** *“Landscapes approaches provide the ideal framework for the development of land-related sustainable interventions, such as balancing food security, timber supply and ecological conservation for the provision of ecosystem services.”*
- **Crucial is landscape management is a multi-stakeholder approach:** where we identify and encourage participation of (local) actors. We should therefore empower those people with less power so they can enter the dialogue which is needed to establish a common vision regarding the landscape.
- **Engaging the youth:** *“In developing sustainable solutions to tackle climate change issues, the UNFCCC must engage with and listen to the voice of youth in the landscape sector who contribute much-needed innovative ideas and energy. Capacity development of youth movements within these processes is critical for them to contribute to their future.”*
- Panelists discussed the power of public sector action to shift incentives and create the right conditions for more sustainable land-use investments, and **emerging business models** that seek to align profitability with social and environmental sustainability

However, in order to further to put the landscape approach central in the design of the post 2015 development goals. we need to upscale good examples of landscape management, but there are still major knowledge gaps that need to be addressed such as:

- How to achieve win-win-win situations
- How do ecosystems services flow through the landscape
- What policy framework is needed to mobilize finance
- How to implement a landscape approach

CDI's approach and next steps for 2014

Looking back at the year 2013, we can see that more and more players in the environmental and agricultural field are contributing to the development of a landscape approach which is exciting for us to see. Each of the presenters of the landscape lunches has touched upon some aspects of such an approach.

We started out with the causes of environmental degradation and the duality of agriculture and environmental practices. Lini Wollenberg taught us to always look for trade-offs across the landscape and stimulate new innovations. Iris van Duren provided us with tools on how to use satellite imagery for the analysis of landscape change. After you have done an analysis of the landscape dynamics, how do you intervene? André Brassier gave us an example of a more practical approach where he sees a landscape approach as a multi-stakeholder process which needs to include the private sectors as well. Willem Ferwerda was very much on the same line of thinking and presented a concrete business case for businesses to become involved in landscape processes in the form of restoring degraded land. Koen Kusters and Maaïke Hendriks concluded the landscape lunch series with addressing the sharing versus sparing debate. So once we have established to adopt an landscape approach and are looking for a convergence of agriculture and environment, how should this be done? Should we separate the land use practices in separate spatial areas or should they be the same landscape in a more mosaic landscape?

There are still many questions to be unanswered, as also became clear from the first Global Landscape Forum organized by CIFOR and partners. However, the reason we need to take up this integrated approach has become more clear: we have always been segregating functions within a landscape: forest, water, agriculture whilst they are actually inter-connected socially and biophysically. The adoption of a landscape approach thus allows you to capture the complexity of the different land uses and stakeholders.

For the year 2014, we would very much like to continue with this approach, however we want to shift our focus from their respective suitability to its applicability for the development of a sustainable business model for agro-food businesses, based on the principles of restoring damaged landscapes or 'ecosystem return'. This entails that we do not see the landscape approach as an goal in itself, but rather as a means or a perspective which can help to reach our goal of securing people's livelihood, contribute to local economy and conserving biodiversity.