



# **LANDSCAPE-LEVEL INVESTMENT PACKAGES (LLIP)**

**Background paper for the Bonn Challenge 2.0**

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## 1 Introduction

The “**Bonn Challenge**”, first organized in 2011 by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) in collaboration with IUCN and the Global Partnership for Forest landscape restoration (GPFLR), is a high-level political effort by committed and leading countries to substantiate and implement different land use sector objectives of different international policy processes. Its agreed objective is to contribute, through concrete actions, pledges and private sector contributions to the synergetic implementation of CBD Aichi target 15<sup>1</sup> and REDD+: restoring 150 million ha of degraded forest landscapes by 2020, and at the New York Climate summit in September 2014 the governments of Norway, the United Kingdom and Germany further increased the objective to a total of 350 million ha by 2030 (UNFCCC 2014). The development and implementation of landscape approaches is a significant contribution to the named political processes but also for the post 2015 development agenda and the sustainable development goals (SDGs) which emphasize integrated ecosystem and natural resources management as a core element of sustainable development. It requires strategic interventions well beyond the project level, which also take into account the inextricable linkages between different land uses within large **multifunctional production landscapes** – where land has either already been subject to degradation or conversion in the past, or is under real and immediate threats.

The agreed international policy objectives for the land use sector are very ambitious and emphasize the urgent need for concerted and immediate action. At the same time the lack of funding needed for their implementation is palpable. A study estimating the costs of complying with Aichi target 15 has analyzed the costs for restoration measures which average between US\$ 500 to 1,500 per ha. This would imply a financing need of US\$ 75 billion by 2020 (Talberth & Grey 2012); another study estimate predicts a need of US\$ 47.6 billion by 2020 (CBD 2012). These amounts exceed the global funding currently available for conservation by far. For comparison: the total amount of non-market funding for biodiversity conservation in developing countries is estimated to range between US\$ 13 and 16 billion per year (Hein et al. 2013). As a consequence the debates on targets under the CBD, the UNFCCC and other processes are always and intricately linked with those on mobilization of sources.

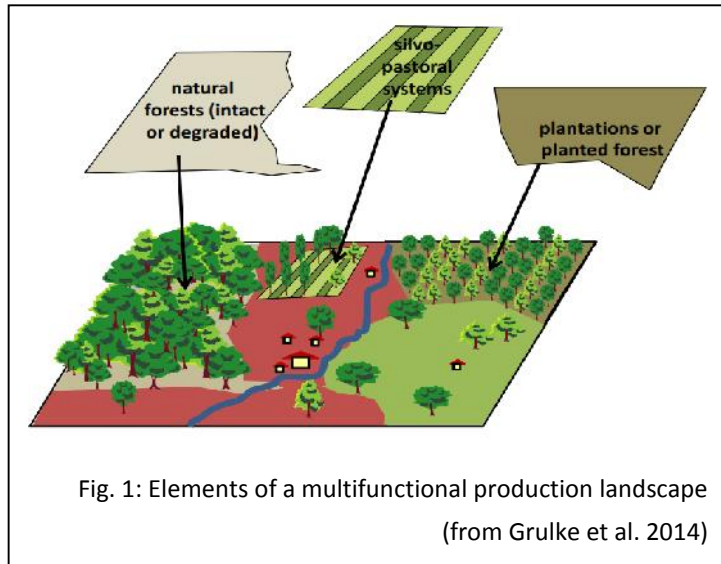
Although public funding for the land use sector has notably increased, it is widely acknowledged that traditional sources will not suffice and that the private sector has to significantly contribute for the successful implementation of the objectives. The question of how to integrate the private sector in landscape-level interventions remains a key challenge and will require innovative approaches and new forms of private-public partnerships. This background paper to the Bonn Challenge 2.0 aims at providing general information about the opportunities to include the private sector in rehabilitation and restoration activities at a landscape level.

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<sup>1</sup> Aichi target 15: “by 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15% of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.”

## 2 The landscape approach and LLIPs

The term “landscape” is defined by the European Landscape Convention as “a socio-ecological system with defined boundaries and marked by characteristics that are the result of the action and interaction of bio-physical and socio-economic factors”. In this sense, landscapes are a conglomeration of landscape elements (figure 1), stakeholders and stakes, and institutions, all of which determine its boundary. Landscapes are heterogeneous in size and character, and the options for capturing value from the different ecosystem services they provide the solutions for landscape approaches differ considerably – there is no one-size-fits-all solution. However, “what exactly is a landscape is a matter of perspective. [...] Often, landscapes are formulated around a specific problem – land degradation, poverty, illegal logging or opportunity (REDD+)” (Chavez-Tafur & Zagt 2014).



Ultimately, the “landscape approaches” seek to reconcile economic, ecologic and social interests in order to maximize synergies between these dimensions of sustainability and to reduce negative trade-offs. The means to achieve this objective are to promote and support the establishing patterns of different **sustainable land uses**. Ideally they are immediately self-sustaining through the marketing of the ecosystem goods and services it provides or can provide. The generated income should be sufficient to secure the livelihoods of its inhabitants and also enable further development and investments. However, reality proves to be more difficult and there are a number of challenges that need to be addressed.

In the past, unsustainable land use practices and land use change have often been enabled due to a lack of functional tenure and legal bases, either tolerated and or even actively promoted through policies, subsidies or other economic incentives. In order to facilitate a transition towards the above-described ideal, an important prerequisite for change is the creation of and **investments in a suitable enabling environment**. The global discourse on REDD+ and the expectations this mechanism has raised have sped up such reform processes. As a consequence, many countries currently seek to improve their land tenure systems and environmental governance, e.g. as part of their readiness efforts during REDD+ phase I and phase II<sup>2</sup>. Such developments, however, will not suffice to change commodity demand-driven land conversion. During the last three decades industrial agriculture was by far the largest single cause of deforestation, driven by private sector entities on all scales along the respective value-chains: espe-

<sup>2</sup> Countries describe their planned measures and activities in their national strategies and action plans. For many REDD+ countries these can be retrieved at <https://forestcarbonpartnership.org/redd-countries-1> and [http://www.un-redd.org/Partner\\_Countries/tabid/102663/Default.aspx](http://www.un-redd.org/Partner_Countries/tabid/102663/Default.aspx).

cially soy and cattle ranching in Latin America, palm oil in Southeast Asia and cocoa in West Africa. The demand for these and other commodities is expected to further increase, due to global markets, population growth and increasing wealth.

In the last decade many stakeholders believed that the ecosystem service of mitigating CO<sub>2</sub> would generate sufficient funding through voluntary and compliance markets for carbon to fund the provision of other ecosystem services (“piggy-backing carbon”). During the last five years, however, this hope was diluted as compliance markets, relying on politically created demand, for various reasons did not succeed. Securing stable and predictable income is vital to convince actors to change their land use practices. More tangible is to focus on sustainably produced marketable ecosystem goods and services – as prominently promoted for example through the TEEB studies (Ring et al. 2010, TEEB 2010) – and **financially self-sustaining landscape approaches need sustainable and profitable business models** for sustainable produced agricultural products and **marketable ecosystem goods and services**.

Not only driven by increasing consumer awareness about the social and environmental externalities the demand for such commodities is notably growing. In contrast to the dominant unsustainable production practices, sustainably produced commodities are still “niche markets” where it is difficult to achieve premium prices, policies and consumer trends support this movement. The evolving deforestation free sourcing initiatives enforced by voluntary commitments from the large consumer companies, such as Unilever and Mars, have raised the demand for sustainable production. However, it remains unclear if this will result in a price premium to the producer or additional costs only. Lessons learned from FSC certified timber indicate that in general no premium prices are achieved and production costs for certified products are higher but market access is improved. However if critical demand thresholds for legally sourced commodities and timber will be established and enforced this may change. The EU-TR, FLEGT and the US American Lacey Act, for example, significantly raise the demand for legally produced certified timber. The same holds true for other commodities such as certified palm oil, coffee, cacao, meat and dairy products.

As the demand for these commodities will continue to increase globally, it is consensus that **deforestation-free supply chains** need to be developed and promoted. This marks a key entry point for integrating the private sector and landscape-level interventions which will then be specified by the specific features of a landscape, the theoretical options, the enabling environment and the stakeholder preferences have an influence on the strategy and the focus. Options for interventions include

- the introduction of new commodities and – in the context of ecosystem restoration – marketable high value native timber species that can be sustainably produced, or products where the source of origin can be traced and a certified premium production landscape adds value to the product,
- implementing innovative and sustainable land use practices, in particular increasing the efficiency of production, to reduce the pressure on forests while ensuring livelihoods,
- exploring and developing new markets and marketing strategies for sustainably produced ecosystem goods and services, including appropriate labelling and certification, and

- tapping revenues for non-provisioning services such as ecotourism or carbon payments.

The main and immediate challenge lies in overcoming the transition period which often requires considerable investments while the revenues occur at a much later point of time – a **liquidity gap** which prevents that the transition can take place, despite the availability of economically sound land use alternatives: local land and right holders rarely have access to affordable loans and the available public funding is seldom sufficient to close these liquidity gaps. These gaps require innovative approaches and **viable business models**<sup>3</sup> which are a crucial element for the development of **landscape-level investment packages (LLIPs)**, as subsequently conceptualized in six consecutive steps (figure 2).

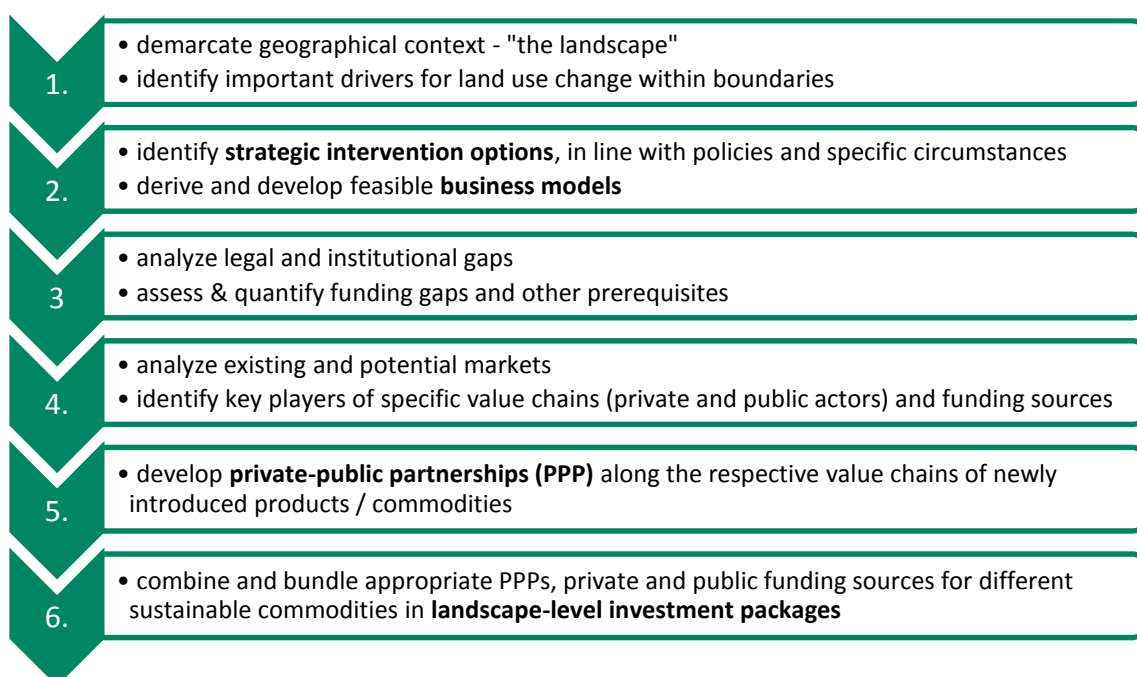


Figure 2: Steps toward the development of landscape-level investment packages.

### 3 Needs and challenges for LLIPs – understanding investors

The steps along the above-conceptualized process require different forms of resources and support. In the end a key challenge remains the mobilization of significant finance for different investments. Since the aim is to attract private sources for these investments in the following we briefly summarize the rationales of different types of investors and purposes of investment types. This constitutes a first step for matching them with the needs and challenges associated with developing LLIPs in the context of REDD+ and the Bonn Challenge. LLIPs should identify

<sup>3</sup> A business model describes the rationale of how an organization creates, delivers, and captures value, in economic, social, cultural or other contexts. It is the plan implemented by a company to generate revenue and make a profit from operations. The model includes the components and functions of the business, as well as the revenues it generates and the expenses it incurs.

and develop, or improve, profitable business models and implementation measures (step 2) which in particular:

- increase the efficiency of production of a specific commodity without providing incentives to increase the production area and related pressure on remaining forests (e.g. improving dairy & beef cattle feed and feeding practices in silvo-pastoral production system),
- introduce climate-smart agriculture practices (e.g., shift from sun grown plantation coffee to shade grown garden coffee),
- and / or promote investments in climate-friendly food production value chains to make them more competitive compared to high-carbon impact production and explore markets for climate-friendly goods and services (e.g. restoration with native tree species, non-timber forest products).

In most cases such activities are associated with consumer education and considerable investment needs and related investments risks related to new and innovative production systems. A key challenge is also to support relevant research and an enabling investment climate to attract targeted investor types for transformational changes of our current rather inefficient food, feed and fiber production systems where 20 to 30% is waste.

### 3.1 Different investor types

Limited investor confidence in the business case and skilled work force, lacking regulatory requirements for sustainable land use practices and law enforcement, and poor governance in general make it challenging to convince private investors to become engaged in such activities. In this section we briefly categorize different investor types and outline their rationales for investment in order to identify strategies to advance from purely publically funded investments in the enabling environment, to enabling investments and co-financed partnerships between public and private sector actors, to independent, sustainable and profitable private sector business models. Generally, investors can be distinguished into three categories based on their motivations and the expectations associated with their engagement (table 1).

#### Non-profit investors

Their rational for investments is a notable positive environmental and social impact. Accordingly they do not expect financial returns but rather invest in activities that promote environmentally sound practices and sustainable development. This group consists of donor countries and national governments, NGOs, foundations and other philanthropy institutions.

#### Profit-oriented investors

In contrast to the first category, profit-oriented investors seek risk adjusted financial returns on their investments (ROI). This group includes local private companies or people, as well as institutional investors (e.g., banks, pension funds) who seek to generate profits for their clients. For them the accumulated risks associated to the investment are the main determining factor for their return expectations: the higher the risks, the higher the expected return. Despite notable developments (public awareness, respective demand for products with reduced

environmental and social footprints, low interest phase), asset investors seldom consider social or environmental aspects in their decision-making other than investment risks.

### Impact investors

Impact investments are guided by philanthropic motivations. Their rationale for their investments is also to generate returns but profit maximization is not their main objective. The main investment purpose is to generate positive and measurable social and environmental impacts, while returns even below average market interest rates are often accepted. Vehicles for their investment are impact investment funds or direct investments in meaningful projects such as sustainable land use management with strong social and biodiversity benefits. This group includes foundations and family offices or private sector entities which get engaged in such investments often as part of their corporate social responsibility.

**Table 1: Characteristics of different investor types**

|                                                  | key investors                                                                                                                                                                               | main characteristics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>non-profit investors</b>                      | <ul style="list-style-type: none"> <li>governments</li> <li>bi- and multilateral donor organizations</li> <li>NGOs</li> </ul>                                                               | <ul style="list-style-type: none"> <li>finance and promote enabling environment and enabling investments (cf. section n 3.2)</li> <li>relatively unconditional support, strongly influenced by political trends (e.g. REDD+, green economy, restoration)</li> <li>focus on environmental and / or livelihood objectives</li> <li>official development assistance (ODA) is often seen as a disincentive for self-sustaining business models capable of attracting investments; currently changing through the paradigm shift to results-based support</li> </ul> |
| <b>profit-oriented "institutional" investors</b> | <ul style="list-style-type: none"> <li>banks, pension and other funds</li> <li>local &amp; national private investors, incl. banks</li> <li>direct investments</li> </ul>                   | <ul style="list-style-type: none"> <li>ROI and investment risks determine investments</li> <li>investment are only considered if appropriate scale can be provided (varies significantly)</li> <li>focus on established commodity markets and value chains</li> <li>environmental and social aspects are considered as reputational risks but still often play subordinate roles</li> </ul>                                                                                                                                                                     |
| <b>impact investors</b>                          | <ul style="list-style-type: none"> <li>development banks</li> <li>philanthropically foundations</li> <li>churches</li> <li>selected financial and institutional impact investors</li> </ul> | <ul style="list-style-type: none"> <li>balance between economic and other objectives, investors accept ROI below market rates</li> <li>investments must provide measurable social and environmental benefits</li> <li>transparency considered to be crucial for demonstrating social and environmental impacts → certification</li> </ul>                                                                                                                                                                                                                       |

## 3.2 Different investment needs

The investments needed in the context of LLIPs can be distinguished into various categories: investments in the enabling investment climate, prepare the ground for commercial business models, institutional investments that are based on a risk-dependent ROI and direct investments by farmer and local enterprises. They can be attributed to the described investors.

## Enabling investment climate

An enabling investment climate is achieved mainly through government policies, investments in education and research, activities reducing the administrative burden for the private sector and any other measures that improve the doing business score. Related to the land use sector the development of land use plans, forest law enforcement governance and trade to provide an enabling playing field are often crucial enabling investments.

Enabling investments are not to be confused with “investments in the enabling environment” – they are specific and focused on preparing the ground for future institutional investments, but the investors do not expect a direct financial return for the deployed capital. They are “made by governments, donors, NGOs, philanthropists, rights-holders and the private sector in order to create the conditions for productive investments in assets” (Elson 2012). In contrast to less conditional “good-will payments” and grants (where use and expected impact of the support are less clearly defined), the purpose of enabling investments is to cope with specific circumstances and deficits, and to facilitate readiness for further actions and activities. Enabling investments are usually granted for specifically defined activities and the building of institutional and entrepreneurial structures that help making desired land use practices profitable and self-sufficient – as a step towards attracting asset investments. Examples include investments for the implementation of business models, establishing farmer or producer associations and developing market access or new technologies.

## Institutional investments (and “investment barriers”)

While what is considered to be acceptable ROI varies according to the risk profile of the investor, related investments generally have to at least secure the maintenance of the invested capital. Some profit-oriented investors increasingly frame their activities as contributions to sustainable development but their main focus remains on the economic aspects, financial risks and the ROI of a particular investment opportunity. In recent years, increasing customer awareness, low interest rates and the search for secure investment opportunities have spurred an emerging and growing group of profit-oriented investors who also take into account various social, environmental and governance aspects (cf. UN Climate Summit New York – Declaration on Forests 2014). However, risk mitigation, capital maintenance and ROI remain the key decision parameter for these investments, despite the increasing interest and popularity of incorporating more balanced investment priorities. Returns can accrue in the form of raw materials for investors’ own production, as tradable goods products or monetary values (Elson 2012). Such investors are the “target group” referred to when policy makers discuss options of integrating the private sector in the financing of environmental policy objectives. In the absence of regulatory means to enforce their contribution it is crucial to understand why, where and how these investors act, and what **barriers** keep them from investing in the sustainable production of commodities (such as certified timber, coffee, or beef); examples include:

- unfavorable legal and governance situations in host countries,
- lacking proof of concept and track records of successfully implemented examples,

- high transaction costs, unfavorable risk-return profiles and incalculable financial risks: investments require long-term engagement, opportunities for “low-cost exits” are limited.
- considerable reputational risks for all investors as public sensitivity is high regarding environmental and social aspects of commodity production in tropical forests.

### **Farm and enterprise investment**

Most of the investments in the land use sector are direct investments made by farmer and land owners themselves, and by local enterprises including cooperatives – in form of labor and farm inputs. Enterprises are either investing from their balance sheet or through credits. However, access to suitable and attractive smallholder credits for long-term land use investments is very limited and often too costly for land use investments considering the risk adjusted returns. Microfinance is often used to pre-finance harvesting costs or commodity trade but not for long-term investments e.g. in tree planting or soil inputs. Therefore, for the time being traditional ODA will remain the dominant source of finance to provide incentives for farmers and local enterprises to invest in LLIPs, but for the future these should be complemented with new and innovative financing approaches.

## **4 Conclusion and outlook**

In order to attract private sector engagement, and in particular institutional investments, the described challenges need to be overcome. The growing consumer interest and demands for socially fair and environmentally responsible produced commodities are expected to play an increasing role, with the perspective to evolve out of their role as niche markets. Triggered by such developments from the demand side, there is a notable increase of different actors from the private sector which carefully test new approaches or consider to scale up their engagement after having made positive experiences and recognizing the multiple benefits arising from it – e.g. attracting consumer that are willing to pay a social or environmental premium or for the company image in the market place and as an employer, the latter is increasingly important to attract talent and keep high performers. Nonetheless, the key challenge for attracting investors to LLIPs is to mitigate the different investment risks and uncertainties: through overcoming institutional and legal barriers, establishing tenure and well-defined use and property rights (enabling investment climate) and by developing “proofs of concept” and business models for sustainable commodity production with climate mitigation (and adaptation).

There is a role for all investor types and investments along the trajectory of change. Without a suitable enabling investment climate, private sector engagement will remain the exception. Here, countries have to define the rules and modalities for private sector engagement, and they should consider that without respective opportunities such investments will not happen. Support for investments in such enabling investment climate will have to rely on international donor support and ODA. Once a suitable investment climate has been established suitable business models have to be developed and implemented, taking into account the entire value chain and options for upscaling proofs of concept. At this stage there is a particular need for

different investors to join forces through different forms of structured investments with public investor initiating innovative catalytic land use investments and taking higher risks (waterfall structure), co-investments matching desired private sector investments, investment guarantees to reduce political or technology risks and public-private partnerships (PPPs). Taking into account the long-term prospects, in particular the time after public or philanthropic support ends (e.g. for proofs of concept and capacity building), the objective of such co-financing models should always focus on removing hurdles for market entrance, i.e. catalytic investments, while avoiding establishing *de facto* permanent subsidies or other dependence on this support. Consequently it is crucial to use windows of opportunity in encouraging philanthropy or public support for coping with management deficits, exploring market options and developing profitable and self-sustaining business cases. Furthermore, high quality investment feasibility studies and due diligence to reduce the investment at risk but may not have a catalytic impact.

PPPs play a crucial role in the efforts to effectively address these challenges (cf. figure 3, step 5). Due to their importance a separate paper has been written by the consultancy Climate Focus, titled “REDD+ Public-Private Partnership Funding Window under the International Climate Initiative” (Streck et al. 2015, unpublished). PPPs formalize the cooperation between a public institution and private enterprises or organizations (e.g. farmer associations). Depending on the investment-specific circumstances they take different shapes and forms, ranging from funds under private management (e.g. the Althelia Ecosphere Fund or the Livelihoods Fund for family farming) over contract farming with support through publicly funded extension services or consumer companies engaged in the related value chain (ibid). In the land use sector and in addressing drivers of deforestation and forest degradation in context of REDD+, a PPP should improve the institutional and regulatory investment climate for sustainable business models, while the private partners should finance pilot implementation activities and provide skills, knowledge and networks (ibid.). PPPs can also be designed and promoted with a focus on developing LLIPs and draw on the experiences of bi- and multilateral development cooperation.

Without concerted efforts, testing approaches and drawing lessons learned, there is a risk that landscape approaches remain an ideal concept, and pledges remain pledges. At the same time, the current momentum created through UN processes and the Bonn Challenge offers a chance that successful models implemented by pioneers and early movers will serve as a blueprint for other countries and jurisdictions – a main prerequisite for up-scaling, and effectively addressing the drivers of deforestation, and also for integrating the private sector through specifically tailored PPPs and LLIPs that combine private and public engagement and bundle differently motivated funding sources.



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