Linking Land Tenure and Use for Shared Prosperity
Annual World Bank Conference on Land and Poverty
Washington DC, March 23-27, 2015

GLOBAL GOVERNANCE FOR SUSTAINABLE LAND USE – RESULTS OF THE GLOBALANDS PROJECT

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Paper prepared for presentation at the
"2015 WORLD BANK CONFERENCE ON LAND AND POVERTY"
The World Bank - Washington DC, March 23-27, 2015

Abstract

The world is under threat from degradation of land, natural resources, and livelihoods so that innovative and effective governance structures are needed to strengthen sustainable land use practices. Currently there are promising international policy initiatives that aim to address this need. Potential synergies between existing global conventions (CBD, CCD and FCCC) and possible new instruments to enhance sustainable use of land and secure land tenure require adequate and practical indicators.

Given these challenges, the GLOBALANDS (Global Land Use and Sustainability) project was initiated by the German Federal Environmental Agency and funded by the Federal Ministry for Environment, Nature Protection, Building and Nuclear Safety. It aims at identifying best practices in terms of international policy options, their synergies and possible implementation to forward global sustainable land use in an inclusive way. GLOBALANDS started in 2011 and runs until April 2015. The paper presents relevant findings.

Key processes to strengthen global governance towards sustainable land use are:

- The proposed UN "Sustainable Development Goals" (SDG) in which land is covered partially.
- Extending the UN Convention to Combating Desertification (CCD) to a global scope, and developing a legal instrument to address land-degradation neutrality in all countries.
- Considering a "Land Protocol" under the UN Convention on Biological Diversity (CBD), making use of the Ecosystem Approach and taking into account traditional knowledge, and social requirements such as land tenure, and livelihoods.
- Coherent treatment of sustainable land use the UN Framework Convention on Climate Change (FCCC) and its instruments, especially reporting requirements and REDD+.
- Better **safeguarding** of sustainable land use for **project-level financing** of bi- and multilateral development agencies and bodies, taking into account socially inclusive processes, especially the Voluntary Guidelines on the on the Responsible Governance Tenure of Land (VGGT).
- The **private sector** can play an increasing role in the governance of sustainable land use. There are several approaches and initiatives (e.g. the UN Compact, voluntary agreements between businesses along value chains), and businesses can implement the VGGT on their own.

GLOBALANDS developed the concept of "systemic indicators" for sustainable land use in key areas (especially agriculture, forestry) as an opportunity for socially inclusive and regionally differentiated implementation:

- With the ongoing processes to establish goals and targets at least for **some** aspects of sustainable land use (e.g. SDG, CBD, CCD), the questions of how to adequately express sustainable land use in terms of practical measurements becomes relevant. Often, respective indicators concern economic and biophysical properties of land, but lack reflection on bother implementability, and social contexts with regard to real livelihoods of people, and actors such as farmers, foresters, herders etc. Furthermore, there is a specific gap of adequate indicators applicable for small-scale and poverty prone land users which creates a hurdle for inclusive policies.
- Systemic indicators are a new (complementary) approach to integrate environmental and social aspects through formulating sustainable land use practices for different actors, and regions. The implementation of such indicators could be possible within the process of regionally or nationally transforming SDGs into policy-making. For this, systemic indicators should become an option in the SDG Indicator Framework currently under development.

A final outcome of the GLOBALANDS project is the discussion of possible “ways ahead” to foster sustainable land use in the international governance system, with a focus on respective national policy recommendations for Germany.

Key Words: indicators, land use policies, land governance, sustainable land use

1. KEY RESEARCH QUESTIONS AND APPROACH

The main research questions of the GLOBALANDS project were the following:

- How can an **international governance** be designed and effectively contribute to a more sustainable land use at **global** level? Which role can **standards** play in that context?
- Which current and upcoming **political processes** are most promising and can be used for strengthening sustainable land use?
- Which role can the German government play in such processes, and what are key **recommendations** for national policies in that regard?

As the GLOBALANDS project applied a *transdisciplinary* approach, its research includes interaction and discussion not only with the academia but also with key stakeholders especially from governments and civil society. For this, several international and national workshops and consultations took place (for details, see www.globalands.org).

2. EXISTING INTERNATIONAL POLICIES ON SUSTAINABLE LAND USE

As a base to identifying opportunities for improving global governance for sustainable land use, GLOBALANDS carried out a comprehensive analysis of international policies with land use relevance, complemented by a screening of national land use instruments in selected countries, including other policies affecting large areas of land, e.g. trade and investment, development, or energy policies (Wunder et. al., 2013). Overall, the analysis covered more than 120 international policies which were selected through two major criteria: the estimated *quantitative land use relevance* at global scale and a *high degree of qualitative impact* (negative or positive) a policy might have on soil and land use[1].
In the following, overarching findings from the screening and the analysis are presented.

2.1 Land Use on the International Level

The first key observation is that there is *no overarching* sustainable "land (use) policy" at international level. The most land-relevant UN conventions (CBD, CCD and FCCC) so far deal with land-related issues incoherently, and other international processes e.g. on food security more and more consider "land" as an issue for policy action (e.g. the VGGT). Furthermore, those land-related policies that explicitly

[1] There are many more policies with a potentially significant and at least indirect impact on land use, such as policies on human rights, education, defense or research, but could not be analyzed in the report.

address land use typically do so *only in their specific contexts*, such as agriculture, forest and biodiversity, climate, resource or development policies, failing to adequately address the *nexus character*[2] of sustainable land use (ECN, 2014; FAO, 2014; DIE, 2013; Prinz, Kok, 2012). The GLOBALANDS analysis furthermore shows that no international policy approach so far addresses competing land uses and the overall demand level for land. Nevertheless, the GLOBALANDS governance screening identifies a range of international policies that aim to promote sustainable land use (see Section 3).

2.2 Trade Policies and Land Use

Other international policies such as on trade and investment do not have land use as their objective, but substantially influence - often negatively- the sustainability of land use. Current trade policies – which mostly focus on the liberalization of markets and better market access – set economic incentives and pressures for additional land conversion. Moreover, they enable countries to virtually or (when coupled with investment) actually occupy foreign land for their own consumption. Similar to trade policy, the current international policy framework on investment has indirect impacts on land-related environmental regulation, and on land use. Higher flows of investment are likely to exacerbate the extraction of weakly regulated resources and increase the exploitation of land with regard to agricultural and timber production or mining activities which are of major concern with regard to sustainable land use. In addition, the *Convention on International Centre for Settlement of Investment Disputes* (ICSID) gives companies the right to sue countries in terms of their investment policies and hence to challenge domestic environmental/ sustainability regulations. So-called *Investor-State Dispute Settlements* (ISDS) have rapidly increased in the last two decades[3].

2.3 Land, Cities and Food

Also, it has to be noted that current international policies do not or not effectively address the most significant drivers of unsustainable land use, such as food, population growth and poverty (see Fritsche & Eppler, 2013). The linkages between urbanization, food and rural development have significant impact on current and future land use, and a respective GLOBALANDS issue paper with a more detailed discussion of these linkages and a brief urban-rural governance screening is under preparation.

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[2] For a broader discussion of and resources on this nexus, see http://www.water-energy-food.org/ and http://www.nexus-assessment.info/

[3] GLOBALANDS currently prepares a brief analysis of the ongoing Transatlantic Trade and Investment Partnership (TTIP) negotiations between the EU and the US with regard to possible land impacts.

3. WINDOWS OF OPPORTUNITY

From the analysis of existing policies and processes, GLOBALANDS identified some *windows of opportunity* were sustainable land use could be improved within current policy-making processes.

3.1 Land in the SDGs

The broadest international process that has the potential to benefit global sustainable land use is the development of the UN Sustainable Development Goals (SDG). The purpose of SDGs is to address the broad challenges of poverty eradication, environmental protection and sustainable consumption and production, and to overcome shortcomings and challenges of the UN's *Millennium Development Goals* (MDGs) which expire by the end of 2015 (UN, 2012).

The preliminary outcome of this process is the **SDG proposal** of the UN Open Working Group (UN-OWG, 2014), and the synthesis report of the UN Secretary-General (UN-SG, 2014). Land is covered directly in Goal 1 (End poverty in all its forms everywhere), Goal 2 (End hunger, achieve food security and improved nutrition, and promote sustainable agriculture), and Goal 15 (Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss). Furthermore, the SDG cover land indirectly in Goals 6 (water), 8 (resource efficiency), 11 (sustainable cities) and 13 (climate change) through linkages to food, materials consumption, urbanization, etc.

It will be important in the ongoing negotiations that this broad coverage of land will be maintained in the final decision on the SDGs in September 2015 by the UN General Assembly, especially with regard to the target of a “land-degradation neutral” world in Goal 15. In parallel to the negotiations, a framework on monitoring is being developed which includes relevant indicators to ultimately “measure” the SDG implementation success (see Section 4).

Besides the SDGs, the UN “Rio Conventions” provides opportunities to strengthen sustainable land use.

3.2 Land and Biodiversity: The CBD Option

The CBD with its internationally binding Aichi biodiversity targets and its Programmes of Work on forests, agriculture, drylands, protected areas etc. is among the most relevant international conventions with regard to sustainable land use and provides different potential leverage.

Given that the CBD follows the integrative Ecosystem Approach and explicitly considers traditional knowledge and human livelihoods, it is worth exploring to what extend a “Land Protocol” might be feasible under the CBD to establish standards for sustainable land use similar to the VGGT for land tenure (see Section 3.5).

3.3 Land Degradation and the CCD: A Way forward?

In parallel to a potential "Land Protocol" under the CBD, current processes under the CCD eventually offer a window of opportunity as well: it is the first and only internationally legally binding framework set up to address the problem of desertification and land degradation which are of global nature (CCD, 2014). Yet, the CCD covers only arid, semi-arid and dry sub-humid areas, thereby only targeting approximately 41% of the global land surface and living space for 35% of the world population (MEA, 2005). In 2012, the CCD Secretariat started an initiative on introducing a potential goal on *zero net land degradation* (CCD, 2012). The Rio+20 outcome document wording "*to achieve a land degradation neutral world in the context of sustainable development*" (UN, 2012) is a direct result of this CCD initiative, and was taken up in the SGD target in Goal 15 (see Section 3.1). At Rio+20, discussions started also on the further development of the CCD, especially a potential new legal instrument such as a *global* protocol on Zero Net Land Degradation (CCD, 2012; Weigelt et al., 2012). The establishment of an Intergovernmental Working Group (IWG) by COP 11 may open-up a (longer-term) political process to extend the CCD to a truly global scope, but progress seems quite slow.

3.4 Policies and Instruments under the FCCC

Climate policies can provide synergies to improve the sustainable use of land. The *Reduced Emissions from Deforestation and Forest Degradation* Program (REDD+) offers financial incentives to maintain forests carbon stocks and to manage forests sustainably. Ideally, this can be consistent with protecting biodiversity and livelihoods, but requires safeguards for social aspects of land, especially land tenure (CIFOR, 2014a+b). The current negotiations in preparing for the 2015 Paris COP is an opportunity to consider *legally binding* REDD+ sustainability safeguards, especially for land-related issues such as biodiversity, and tenure.

Moreover, the FCCC national reporting requirements on land use and land use changes should be extended beyond GHG emissions to address also effects on biodiversity, and land tenure which would significantly improve data for land transparency instruments such as the LAND MATRIX (www.landmatrix.org) and the consistency between the UN conventions.

3.5 Implementing the VGGT and the RAI Principles

In May 2012, the *UN Committee on World Food Security* (CFS) adopted the VGGT (CFS, 2012) – this was the result of a multi-year and multi-stakeholder negotiation process carried out in response to negative impacts of large-scale land investments mainly in developing countries ("land grabbing"). The remarkable issue about the VGGT is that they were agreed among a broad global partnership of

international, regional and national organizations of different types. Although voluntary, they entail clear provisions on responsible land tenure, providing an internationally agreed benchmark for future legally binding measures on land tenure at national and international level. Still, the VGGT need to demonstrate their impact on the ground. The VGGT also broadened participation of non-state actors in the negotiations and accepted non-scientific knowledge inputs (such as traditional knowledge).The CFS's *High-level panel of Experts on Food Security and Nutrition* (HLPE) was the first UN science-policy interface recognizing different bodies of knowledge, including science and more traditional forms of knowledge. This model pushed the boundaries of what and whose knowledge is legitimate to be included in policy processes such as, e.g., the CBD (CBD, 2013). This achievement is key for any future global land-related governance scheme.

An outcome of another investor-related process with land relevance is the now completed agreement on "*Principles for Responsible Investment in Agriculture and Food Systems* (RAI) which were adopted in October 2014 (CFS, 2014). They are meant to complement the VGGT and provide non-binding voluntary but internationally consensual definitions of responsible agricultural investments. Their key objective is to avoid "land grabbing" and foster sustainable investments not only by large-scale enterprises but also smallholders, and to help formulating respective policies.

The implementation of both the VGGT and the RAI Principles require evidence-based monitoring, and may well *allow to enlarge the scope* to address more coherently not only the social aspects of land but also key environmental safeguards, especially carbon and biodiversity, but also more general ecosystem services which are fundamental to sustainable land use.

3.6 Investment Policies and Land: The Private Sector Role

Further *windows of opportunity* are related to trade and investment policy. While a reform of the WTO regime remains questionable, trade and investment agreements are also negotiated bilaterally and between regions. Any scope in such agreements for more environmentally protective clauses, including for sustainable land use, should be made full use of the VGGT and RAI principles mentioned before as safeguards.

Furthermore, the CBD's *Green Development Initiative* (GDI) establishes a scheme for biodiversity-positive area management through registering and/or certifying biodiverse sites against the GDI standard. This initiative aims at attracting financial support from private investors for restoring ecosystems or their sustainable management. With regard to the FCCC's *Green Climate Fund* (http://gcfund.org), safeguarding policies similar to the REDD+ scheme are required.

3.7 European Policies on Land

Beyond the UN conventions and international policies with a global scope, various (EU) resource policies might provide windows of opportunity. Especially within resource efficiency policies at EU level the land topic is of growing importance. The *Roadmap to a Resource Efficient Europe* (EC, 2011) included the milestone that by 2020, EU policies are on track with an aim to achieve *no net land take* by 2050. It needs to be seen how the new European Commission (EC) and Parliament will deal with that. The development of a *land communication* to be released by the EC in 2015 (Desalle, 2014) will be a benchmark for that.

3.8 Biofuels, Bioenergy, Bioeconomy: A new Umbrella?

In addition, bioenergy policies provide an entry point: in parallel to globally increasing biofuel production, their sustainability (particularly with regard to impacts on the environment and food security) is discussed controversially (e.g.; FAO, 2013; HLPE, 2013a). In response to reiterated concerns, various governmental and private standards for the sustainable use of biofuels were developed (van Dam, 2010; WWF, 2013). However, subsequent studies and analyses made clear that standards and certification schemes focusing solely on biofuels inevitably lead to inconsistencies and leakage effects (e.g. indirect land use change). More recent approaches, therefore, seek to extend biofuels standards to biomass in general (Fritsche, 2012; Fritsche, Iriarte 2014), as these have a potential for being aligned with a broader approach to sustainable land use. With regard to bioenergy, the Global Bio-Energy Partnership (GBEP) is actively implementing the sustainability bioenergy indicators developed for the national level (GBEP, 2011). The EU will continue to consider such approaches in the post-2020 energy and climate policy, but refrains from developing binding sustainability schemes beyond biofuels (EC, 2014). Germany sponsors a project to discuss the inclusion of biomass into the SDGs through an international platform, and many countries as well as the OECD explore the sustainability of a “bioeconomy”.
Due to the intrinsic linkage of biomass to land use, these processes may foster sustainable land use as well.

3.9 Implementation Issues of Sustainable Land Policies

Notwithstanding the findings of GLOBALANDS for the international level, the analysis also showed that implementing global policy frameworks strongly depends on national or even regional conditions (e.g., which actors are involved, local governance, level of corruption, etc.). This will be true also for the implementation of the SDGs once they are agreed. However, implementation will also require agreed indicators. In this context, GLOBALANDS developed a new approach with regard to sustainable land use indicators that is described in the following chapter.

4. A NEW APPROACH: SYSTEMIC INDICATORS FOR SUSTAINABLE LAND USE

4.1 Sustainable Land Use and the Role of Indicators

Within the ongoing processes to establish goals, targets and instruments at least for some aspects of sustainable land use (e.g. SDGs, VGGT, etc.), the question of how to *adequately express* sustainable land use in terms of *practical measurements* eligible for policy development becomes relevant.
GLOBALANDS reviewed existing sustainability indicators with regard to land use and found that indicators on biophysical and economic properties of land are most widespread. In contrast, indicators related to the livelihoods of people and their implementability for actors such as small-scale farmers, foresters, herders etc. are relatively scarce (Eppler & Iriarte, 2013), which is considered as a deficit (Ehlers et al., 2013). Similar conclusions were drawn by the *Expert Group Meeting of the Global Land Indicators Initiative* which proposed four new indicators, all related to land rights (GLTN, 2013).
The *Global Donor Platform for Rural Development* argued along the same lines: the nexus of land tenure, land rights and socially inclusive policies is key for future sustainable land use (GDP, 2013a+b).
The lack of adequate indicators applicable for small-scale and poverty prone land users creates a hurdle for inclusive land management policies and may raise concerns about potential hidden distributive effects when indicators for global goals and targets mainly address biophysical (UNEP-WCMC, 2013) and economic (ELD, 2013) aspects of land, and often neglect social and governance aspects.
Furthermore, most of current indicators concern environmental characteristics of land needed to ensure (or restore) its potential uses, including ecosystem services, and then address the impact side through defining “acceptable” levels of interference**,** or respective targets to be achieved over time. With regard to the current global discussion on SDGs this creates not only the problem of measuring e.g. soil qualities on appropriate scales (with respective cost) but also a *proliferation* of indicators which seems unsuitable for (political) agreement on the UN level.
In parallel, increasing large-scale land acquisitions and respective land uses by transnational corporations require social safeguards – at least more to *transparency* (Anseeuw et al., 2013; G8, 2013; ODI, 2013). Such land acquisitions can also impact significantly on biodiversity, soils, and water (UNEP, 2012a) so that both social aspects (including land rights) *and* biophysical and ecosystem aspects of land use need to be considered in a *metrics of sustainability land use*.
To be applicable in the context of the SDGs or other international policies, and to be negotiable in the respective policies, it seems reasonable to consider a more *compact* and *inclusive* approach to indicators for sustainable land use than the long lists that current proposals involve (e.g. UN-SDSN, 2014a-d; UNECE, 2013; UNEP, 2013; USD, 2014).

4.2 Systemic Indicators for Sustainable Land Use

Building on this, GLOBALANDS currently develops *systematic* indicators. The basic idea is to identify evidence-based land-use *practices* which are sustainable when carried out by specific *actors* (socio-economic context) in a given *region* (geographical context) as an aggregated *proxy* of sustainability indicators.

The leading thought for this is to distinguish between the one view on ***land*** use, and the other one on land ***use***, and to combine both in a sequence to derive the aggregated proxy:

- First, existing metrics and indicators on land use are used to qualify which *practices* are sustainable. For this, current knowledge and evidence on e.g. sustainable land management in agriculture (IAASTD, 2009; LPFN, 2013; UNCTAD, 2013; UN-SDSN, 2014b) is used to derive a list of *sustainable practices*.
- Next, this list is differentiated to reflect *applicability for relevant actors* (e.g. small-scale farmers, community forestry, large-scale corporate operations). The last step is to *regionally differentiate* the sustainable land use practices (e.g. Liniger et al., 2011).
- Between Step 1 and 2, iteration is needed to reflect the social contexts especially regarding land tenure, and to consider *traditional knowledge*.

To operationalize land tenure and land right aspects in indicators, GLOBALANDS assumes that the VGGT serve as a framework once implementation in countries, regions or by economic actors took place. GLOBALANDS explored how far it is possible to define such systemic indicators for key land use sectors (agriculture, forestry) which especially include *small-scale land users* and take into account traditional knowledge, and respective evidence (Fritsche, Eppler, Iriarte, 2014). Both aspects have played an increasing role in current international policy processes, such as the development of the VGGT that – as described above – were developed with a broad alliance of actors and put an increasing focus on the inclusion of traditional knowledge.

Another example is the *Intergovernmental Platform on Biodiversity and Ecosystem Services* (IPBES) that aims to mainstream issues of biodiversity and ecosystem services guided by the principle to "*(…) recognize and respect the contribution of indigenous and local knowledge to the conservation and sustainable use of biodiversity and ecosystems*" (UNEP, 2012b Appendix 1, para 2d).

4.3 Implementing Systemic Indicators for Sustainable Land Use

The new approach of *systemic* indicators for sustainable land use which reflect both analytical and traditional knowledge is *complementary* to existing, detailed biophysical or socially explicit approaches, and is meant to facilitate complex negotiations - such as the SDGs - by offering suitable proxies.
The systemic indicator approach needs further development and refinement to be broadly applicable. The upcoming implementation of the SDGs as well as safeguarding of other policies provides ample opportunity to engage in that.

5. WAYS AHEAD TO FOSTER SUSTAINABLE LAND USE IN THE INTERNATIONAL GOVERNANCE SYSTEM

GLOBALANDS identified three options to improve governance of global sustainable land use:

- Activities to *strengthen* sustainable land use aspects *within existing* global governance systems such as UN conventions, and their respective protocols, and implementation programs.
- Better *safeguarding* of sustainable land use for project-level financing of bi- and multilateral development agencies and bodies, with corresponding action for private banks.
- Developing and implementing socially inclusive and actor-oriented *systemic* indicators for sustainable land use to support negotiating the SDGs, and to improve safeguarding.

The next years will be critical in making use of these opportunities, and both international bodies and national governments as well as the academia, NGOs and the private sector will have to engage in this.

With the upcoming 2016 UN HABITAT III conference (http://unhabitat.org/habitat-iii), there will also be important opportunities to consider the role of cities, the urban-rural linkages as well as e.g. urban food in the prospects of sustainable land use.

ACKNOWLEDGEMENT

This paper benefited from discussions in the GLOBALANDS Project Working Group in which representatives from German Federal Environment Agency (UBA) and the German Federal Ministry for Environment, Nature Protection, Building and Nuclear Safety (BMUB) participated, especially Almut Jering, Jan Seven, Knut Ehlers, Harald Ginzky, Frank Glante, Claudia Kabel, Matthias Koller, Gertrude Penn-Bressel, Dietrich Schulz (UBA), Rolf Bräuer, Frank Hönerbach, Reinhard Kaiser, Anne Miehe (BMUB). We also thank the Members of the Project Advisory Board for their valuably inputs and comments, especially Kathrin Ammermann (BfN), Dorothea Braun (RNE), Ulrike Doyle (SRU), Christian Graefen (GIZ), László Maráz (FUE), Swantje Nilsson (BMEL), Inge Paulini (WBGU), Maria Akhtar-Schuster (DLR), Stefan Schmitz (BMZ).
We are indebted to Alexander Müller and Jes Weigelt (IASS) and Maryam Rahmanian (Centre for Sustainable Development and Environment, Iran) for informal comments and discussions, and to the participants of the GLOBALANDS International Expert Workshops who contributed significantly with comments, feedback and valuable inputs, especially Michael Brüntrup (DIE), Victor Castillo (CCD Secretariat), Christine Chemnitz (HBS), Suani Coelho (CENBIO), Eve de la Mothe Karoubi (UN SDSN), Jacques Delsalle (EC DG ENV), Donald Gabriels (Gent University), Marcus Giger (CDE), Helmut Haberl (AAU), Luca Marmo (EC DG ENV), Richard McLellan (WWF), Luca Montanarella (EC-JRC), Gerard Ostheimer (UN SE4ALL), Martina Otto (UNEP). Martin Scheele (EC DG AGRI), Laura Silva (INRA-IFRIS), Ute Sonntag (GIZ), Michael Taylor (ILC), Sébastien Treyer (IDDRI), Sergio Zelaya (CCD Secretariat).
All errors and omissions remain the sole responsibility of the authors.

The GLOBALANDS project is funded by the German Federal Environment Agency (UBA) through the German Federal Ministry for Environment, Nature Protection, Building and Nuclear Safety (BMUB) under R&D contract 371193101.

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