



## **Integrating Land Governance into the Post-2015 Agenda Harnessing Synergies for Implementation and Monitoring Impact**

Annual World Bank Conference on Land and Poverty Washington DC, March 24–27, 2014

### **GLOBAL GOVERNANCE FOR SUSTAINABLE LAND USE – STATUS AND OPPORTUNITIES**



**UWE FRITSCHÉ<sup>a)</sup>, ULRIKE EPPLER<sup>a)</sup>, LEIRE IRIARTE<sup>a)</sup>, STEPHANIE WUNDER<sup>b)</sup>,  
TIMO KAPHENGST<sup>b)</sup>, FRANZISKA WOLFF<sup>c)</sup>, DIRK HEYEN<sup>c)</sup>, ALEXA  
LUTZENBERGER<sup>d)</sup>, ALMUT JERING<sup>e)</sup>**

- a) International Institute for Sustainability Analysis and Strategy (IINAS), Germany;
- b) Ecologic Institute, Germany; c) Oeko-Institut, Germany; d) Leuphana University, Germany; e) Federal Environment Agency, Germany

presenting author: [uf@iinas.org](mailto:uf@iinas.org)

**Paper prepared for presentation at the  
“2014 WORLD BANK CONFERENCE ON LAND AND POVERTY”  
The World Bank - Washington DC, March 24-27, 2014**

*Copyright 2014 by author(s). All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.*

## **Abstract**

The GLOBALANDS (Global Land Use and Sustainability) project was initiated by the German Federal Environmental Agency and is funded by the Federal Ministry for Environment. It identifies “best practices” in terms of national and international-level policies and practices of global sustainable land use.

Key research results concern:

- A *comprehensive screening* was carried out of national and international-level policies with relevant (side-) effects on sustainable land use, and the identification of *windows of opportunity* to strengthen sustainable land use.
- A new concept for socially inclusive and regionally differentiated *systemic* indicators for sustainable land use in key areas was developed. There is a specific gap of adequate indicators applicable for small-scale land users that creates a hurdle for inclusive policies and which may restrict political agreements on sustainable land use goals. The systemic approach integrates environmental and social aspects through formulating sustainable land use *practices* for different actors and regions, taking into account traditional knowledge, and respective evidence.
- As a way ahead, activities are required to strengthen sustainable land use aspects in *existing* global governance systems such as UN conventions and other international policies, as well as a better *safeguarding* of sustainable land use for project-level financing through bi- and multilateral development agencies. The latter should be socially inclusive processes and take into account actor-oriented indicators.

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

## 1. INTRODUCTION

In large parts of the world, land is under continuous threats of degradation (CCD, 2014) which causes and increases poverty (Barbier, 2012; ELD, 2013; IFPRI, 2011). To overcome or at least alleviate the various pressures on natural resources and livelihoods (Fritsche & Eppler, 2013), innovative and effective governance is needed to strengthen responsible and sustainable land use *practices*. International policy-making can make an important contribution to this.

Currently some promising international policy initiatives are emerging that aim to address this need from different angles. These include a possible integration of land use into the future *Sustainable Development Goals* (SDG); the implementation of the *Voluntary Guidelines on the Responsible Governance of Tenure* (VGGT; see CFS, 2012) and various activities to strengthen the *UN Convention to Combat Desertification* (CCD; see CCD, 2012).

However, many questions still need to be clarified with regard to strengthening the international governance of sustainable land use: for instance, how could synergies between existing instruments and UN conventions such as the *Convention on Biological Diversity* (CBD), the CCD and the *Framework Convention on Climate Change* (FCCC) be strengthened in favor of sustainable land use? What added value new instruments imply and which policy mix serves best for enhancing sustainable use of land, including social aspects and poverty in general. Furthermore, questions of adequate indicators and their implementation need to be addressed (UN-SDSN, 2014).

Given the challenges of poverty alleviation and food security on the one hand and the challenges of future land use policies to sustain natural resources on the other, the research project *GLOBALANDS* (Global Land Use and Sustainability) initiated by the German Federal Environmental Agency and funded by the German Federal Ministry for Environment aims at identifying relevant international policies with a potentially high impact on sustainable land use. It also strives to identify possibilities and *windows of opportunity* to improve international policies with regard to socially, environmentally and economically sustainable land use in an inclusive way.

GLOBALANDS is a collaborative research project carried out by IINAS (International Institute for Sustainability Analysis and Strategy) in collaboration with Ecologic Institute, Oeko-Institut and Leuphana University Lueneburg. The project started in 2011 and runs through 2014.

The project has benefitted from various inputs during several international expert workshops, including at the Global Soil Week 2012 and 2013. Key results of the project's transdisciplinary research are presented in the following sections.

## 2. SCREENING OF EXISTING INTERNATIONAL POLICIES ON SUSTAINABLE LAND USE

When looking at opportunities to improve global governance for sustainable land use, an analysis of the status quo is essential. Within the GLOBALANDS project, a comprehensive screening of international policies with land use relevance was undertaken (and complemented by a screening of national land use arrangements in selected countries). The screening identified and analyzed international policies for their impact on sustainable land use. The screening was not limited to the main land use sectors such as agriculture and forestry, but included other policies that affect large areas of land, even if these effects are not intended by the policy such as trade and investment policies, development or energy policies (Wunder et. al., 2013). Overall, the analysis covered more than 120 international policies that have been considered relevant for sustainable land use. The selection of policies was conducted along 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. In addition, there are many more policies that have a potentially significant and at least indirect impact on land use but that could not be analyzed in the report, such as policies on human rights, education, defense or research.

In the following, overarching findings from the screening and the analysis are presented as well as some observations on the policies identified in the screening and potential current windows of opportunities to strengthen sustainable land use within existing policies.

The first key observation is that there is *no overarching* sustainable “land (use) policy” at international level, even though three UN conventions (CBD, CCD and FCCC) deal with land-related issues and other various international processes put more and more emphasis on land as a need for policy action (e.g. the VGGT). And those “land-related” policies that explicitly address land use typically do so only in their specific contexts, such as agricultural, forest and biodiversity, climate, resource or development policies. Other policies such as on trade and investment do not have land use as their objective but do have substantial (often negative) side effects on the sustainability of land use.

To elaborate on this: 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 developed countries to virtually or (when coupled with investment in land) actually occupy foreign land for their own consumption. Unilateral environmentally-motivated exceptions to the principle of non-discrimination are possible but not to primarily address environmental goods in foreign territory.

Similar to trade policy, the current international policy framework on investment can indirectly impact on land-related environmental regulation and on land use. The tremendous growth of foreign direct investment (FDI) in OECD countries and increasingly in developing countries in the last decades (Kaphengst & Bahn, 2012) is a result of the removal of regulatory investment barriers. 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.

The analysis within the GLOBALANDS project furthermore shows that no international policy approach so far addresses competing land uses and demands for land. Instead, sector- specific policies still predominate. For example, EU biofuel policies do not consider the interaction with the food and feed sector, EU and other international agricultural policies hardly consider interactions with biodiversity etc.

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 (Western) diets, increasing consumption with respective growth of material inputs, population growth and poverty (see Fritsche & Eppler, 2013).

Nevertheless, the governance screening in GLOBALANDS also identifies a range of international policies that aim to promote sustainable land use, such as the CBD, CCD, to some extent the FCCC, the *Non-Legally Binding Instrument on All Types of Forests* (NLBI) and other initiatives. To a certain degree, these tend to be weak: they often lack political support and appropriate financial resources, suffer from a low level of implementation or their scope of application is restricted to certain regions. However, a number of policy developments suggest that the governance of sustainable land use at international level might gain momentum and that some windows of opportunity emerge within current policy making processes:

First, in response to the widely recognized need to address the negative impacts of large scale land investments (often discussed under the term “land grabbing”) mainly in developing countries the *Committee on World Food Security* (CFS) has adopted the VGGT in May 2012 (CFS, 2012). 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 practices which can serve as an internationally agreed benchmark for future legally binding measures on land tenure at national and international level. Of course, the VGGT still need to prove their impact on the ground. Moreover, the adoption of the VGGT and the role of the (reformed) CFS in this process also brought a new spirit to the international negotiations: participation of non-state actors in the negotiations was broadened and non-scientific knowledge inputs (such as traditional knowledge) were accepted. Both aspects might provide a reference for future land use governance initiatives. For example the CFS’s *High-level panel of Experts on Food Security and*

*Nutrition* (HLPE) was at this time the only UN science-policy interface which recognized that there are different bodies of knowledge, including science and more traditional forms of knowledge. This model pushed the boundaries of what and whose knowledge is recognized as legitimate to be included in policy processes such as, e.g., the CBD (CBD, 2013).

A second important international process that has the potential to ultimately benefit global sustainable land use is the development of the SDGs. The purpose of SDGs is to address the broad challenges of poverty eradication, environmental protection and sustainable consumption and production. They shall thus set at right the shortcomings and challenges of the UN's *Millennium Development Goals* (MDGs) which expire by the end of 2015. The agreed language in the Rio+20 outcome document “*The future we want*” can be an indicator that land will be of importance in the definition of the SDGs: in paragraph 206, the heads of states and governments “*recognize the need for urgent action to reverse land degradation. In view of this we will strive to achieve a land degradation neutral world in the context of sustainable development*” (UN, 2012). A beneficial outcome of this process could be a set of concrete goals, targets, and indicators as well as best practice examples of how to implement the SDGs on national and other levels. It remains to be seen whether and how the discussion about a land specific goal on “zero net land degradation” will pan out. Currently (as of February 2014), a dynamic discussion takes place on national and international levels among policy makers, NGOs, academia and other stakeholders on how to integrate into the SDGs the issue of land – either as a stand-alone goal or within other contexts such as food security or within the water, energy and land nexus.

Moreover, each of the UN “Rio Conventions” provides opportunities to strengthen sustainable land use:

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 leverages. The recently launched *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.

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 the carbon stored in forests and to manage forests sustainably. Ideally, this can be aligned with protecting biodiversity and with the generation of livelihood “co-benefits”. The effectiveness of REDD+ will depend, among others, on the degree to which national drivers of deforestation and forest degradation are taken into account when implementing funding schemes. Moreover, closing land use related gaps in

climate policies such as the inclusion of emissions related to the agricultural sector and peatlands can have significant impacts on sustainable land use as well.

Eventually, current processes under the CCD can be seen as a window of opportunity: it is the first and only internationally legally binding framework set up to address the problem of desertification and land degradation. However, the CCD covers only arid, semi-arid and dry sub-humid areas, thereby targeting approximately 41% of the global land surface and living space for 35% of the world population (MEA, 2005). In addition to the limited scope, progress in the implementation of the CCD has been slow (CCD, 2007a) and the CCD exhibits a lack of impact: “*desertification trends show no signs of abatement and (...) there is a lack of strong achievements on the ground*” (CCD, 2007b).

However, in the last two years, there has been some political momentum: In 2012 the CCD Secretariat started an initiative on introducing a potential goal on *zero net land degradation* (CCD, 2012). The above quoted passage in the Rio+20 outcome document on the aim “*to achieve a land degradation neutral world in the context of sustainable development*” (UN, 2012) is a direct result of the CCD initiative. Also, discussions on the further development of the CCD started there, including the potential introduction of a new legal instrument such as a protocol on Zero Net Land Degradation (CCD, 2012; Weigelt et al., 2012). A midterm evaluation of the CCD “The 10-year strategic plan and framework” (often referred to as “The Strategy”) was presented. The overall finding was relatively positive, and stated that there has been “*some progress towards achieving the objectives contained in The Strategy, but less than what was hoped*” (IWG, 2013). The establishment of an Inter-governmental Working Group (IWG) that (among others) should “*i) identify a science-based definition of land degradation neutrality in arid, semi-arid and dry sub-humid areas, ii) develop options relating to arid, semi-arid and dry sub-humid areas, that Parties might consider should they strive to achieve land degradation neutrality (...) and take note of (...) the importance of identifying synergies to avoid duplication among the Rio Conventions, other international bodies, and agencies addressing environment and development issues*” (Decision 8/COP 11 CCD). COP 11 delegates also endorsed the Scientific Knowledge Brokering Portal (SKBP) to enhance knowledge management, including on traditional knowledge, best practices and success stories and established an ad hoc working group, one on the iterative participatory process on impact-indicator refinement and monitoring.

Beyond the three UN Conventions, various (EU) resource policies and bioenergy 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) includes the milestone that by 2020, EU policies are on track with an aim to achieve *no net land take* by 2050. Moreover, the EU Commission is planning to develop a *land communication* in 2014.

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), as these have a potential for being aligned with a broader approach to sustainable land use.

Further *windows of opportunity* are related to trade and investment policy. While a reform of the WTO regime remains stuck in the Doha Round, 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. With regard to investment, various processes are ongoing that should be used to safeguard the impacts of investments on land use, such as the review and update of the *World Bank social and environmental Safeguards* and the current work on the *Principles for Responsible Agricultural Investment that Respects Rights, Livelihoods and Resources* (PRAI) by the World Bank, the *International Fund for Agricultural Development* (IFAD), the *United Nations Conference on Trade and Development* (UNCTAD) and the *Food and Agriculture Organization of the United Nations* (FAO).

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.

These conditions influence which effects can be expected from a (national or international) policy on sustainable land use. Moreover, there is not yet a common understanding in the international policy debate of what “sustainable land use” means – for some, it is primarily about fighting environmental and soil degradation, others see it as a means to achieve food security or environmental security more widely. Still others link sustainable land use to questions of rights and equity. Potentially, sustainable land use can be about all of these aspects but there are also potential tradeoffs between different of the above mentioned aspects (e.g. in terms of land use intensification or extensive use of land). However, before international policies can be developed, a discourse is necessary to clarify respective perspectives and reach joint understanding.

In this context, GLOBALANDS aims to develop a new approach with regard to sustainable land use policies and indicators that is described in the following chapter.

### 3. A NEW APPROACH: SYSTEMIC INDICATORS FOR SUSTAINABLE LAND USE

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* recently 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 which may well hamper political agreements on sustainable land use goals: policy-makers may be concerned 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; UNECE, 2013; UNEP, 2013).

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, the working hypothesis of GLOBALANDS is that the VGGT *could* serve as a framework once implementation in countries, regions or by economic actors took place.

The GLOBALANDS project currently explores 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. Both aspects have played an increasing role in current international policy processes, such as the development of the VGGT that – as described above - have been developed with a broad alliance of actors and put an increasing focus on the inclusion of traditional knowledge. Another recent example is the *Intergovernmental Platform on Biodiversity and Ecosystem Services* (IPBES) that aims to mainstream issues of biodiversity and ecosystem services into important sectoral policies such as agriculture, forestry, fisheries, and energy and that will be 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).

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 testing and refinement before it is applicable for this endeavor, and ongoing work within GLOBALANDS will concentrate on delivering examples for defining systemic indicators, and will also consider limitations of the concept for real-world application and implementation (IINAS, 2014).

#### **4. WAYS AHEAD TO FOSTER SUSTAINABLE LAND USE IN THE INTERNATIONAL GOVERNANCE SYSTEM**

The current research and discussions in GLOBALANDS on options to improve governance of global sustainable land use led to three key approaches:

- 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.

As the GLOBALANDS project applies 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.

The presentation and discussions during the 2014 Land and Poverty Conference are a key element in this, and will be followed-up by further discussions in international expert workshops (for details, see [www.globalands.org](http://www.globalands.org)).

#### **ACKNOWLEDGEMENT**

This paper benefited from discussions in the GLOBALANDS Project Working Group meetings, and from the Project Advisory Board.

We are also indebted to Alexander Müller (IASS) and Maryam Rahmanian (Centre for Sustainable Development and Environment, Iran) for informal comments and discussions.

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 (BMUB) under R&D contract 371193101.

## REFERENCES

- Anseuw W et al. 2013: Creating a public tool to assess and promote transparency in global land deals: the experience of the Land Matrix; in: The Journal of Peasant Studies vol. 40 no. 3, pp. 521-530
- Barbier E 2012: Natural Capital, Ecological Scarcity and Rural Poverty; World Bank Policy Research Working Paper 6232; Washington DC  
<https://openknowledge.worldbank.org/bitstream/handle/10986/12083/wps6232.pdf?sequence=1>
- CBD (United Nations Convention on Biological Diversity) 2013: Biodiversity meeting affirms key role of traditional knowledge in implementing UN biodiversity convention; Press Release Oct. 12, 2013; Montreal <http://www.cbd.int/doc/press/2013/pr-2013-10-12-8j-en.pdf>
- CCD (United Nations Convention to Combat Desertification) 2014: Desertification - The Invisible Frontline; Bonn  
[http://www.unccd.int/Lists/SiteDocumentLibrary/Publications/Desertification\\_The%20invisible\\_frontline.pdf](http://www.unccd.int/Lists/SiteDocumentLibrary/Publications/Desertification_The%20invisible_frontline.pdf)
- CCD (UN Convention to Combat Desertification - Secretariat) 2012: Zero Net Land Degradation. A Sustainable Development Goal for Rio+20; Policy Brief; Bonn  
[http://www.unccd.int/Lists/SiteDocumentLibrary/Rio+20/UNCCD\\_PolicyBrief\\_ZeroNetLandDegradation.pdf](http://www.unccd.int/Lists/SiteDocumentLibrary/Rio+20/UNCCD_PolicyBrief_ZeroNetLandDegradation.pdf)
- CCD (UN Convention to Combat Desertification) 2007a: Report of the Conference of the Parties on its eighth session, held in Madrid from 3 to 14 September 2007. Addendum Part two: Action taken by the Conference of the Parties at its eight session; ICCD/COP(8)/16/Add.I
- CCD (UN Convention to Combat Desertification) 2007b: Report of the Conference of the Parties on its eighth session, held in Madrid from 3 to 14 September 2007, Annex IV; ICCD/COP(8)/16
- CFS (UN Committee on World Food Security) 2012: Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security; Rome [http://www.fao.org/fileadmin/user\\_upload/nr/land\\_tenure/pdf/VG\\_Final\\_May\\_2012.pdf](http://www.fao.org/fileadmin/user_upload/nr/land_tenure/pdf/VG_Final_May_2012.pdf)
- EC (European Commission) 2011: Roadmap to a Resource Efficient Europe; Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions; COM(2011) 571 final; Brussels  
[http://ec.europa.eu/environment/resource\\_efficiency/pdf/com2011\\_571.pdf](http://ec.europa.eu/environment/resource_efficiency/pdf/com2011_571.pdf)
- Ehlers K et al. 2013: Soils and Land in the SDGs and the Post-2015 Development Agenda; UBA, IASS, EC-JRC <http://globalsoilweek.org/wp-content/uploads/2013/10/Soils-and-Land-in-the-SDGs-and->

[the-Post-2015-Development-Agenda-A-proposal-for-a-Land-Degradation-Neutral-World-goal-and-targets.pdf](#)

ELD (Economics of Land Degradation) 2013: The rewards of investing in sustainable land management; Interim Report for the Economics of Land Degradation Initiative: A global strategy for sustainable land management; Bonn [http://www.eld-initiative.org/index.php?eID=tx\\_nawsecuredl&u=0&file=fileadmin/pdf/ELD-Interim\\_Report\\_web.pdf&t=1382472648&hash=e46737e4d7decc3ee0cb53b7dd5df75b0b2fa705](http://www.eld-initiative.org/index.php?eID=tx_nawsecuredl&u=0&file=fileadmin/pdf/ELD-Interim_Report_web.pdf&t=1382472648&hash=e46737e4d7decc3ee0cb53b7dd5df75b0b2fa705)

Eppler U, Iriarte L 2013: Sustainable Land Use Indicators - A Compilation for WP3; GLOBALANDS Working Paper AP 3.2 prepared by IINAS; Berlin, Madrid

FAO (Food and Agriculture Organization of the United Nations) 2013: Biofuels and the Sustainability Challenge; Rome <http://www.fao.org/docrep/017/i3126e/i3126e.pdf>

Fritsche U 2012: Sustainable Bioenergy: Key Criteria and Indicators; D 4.1 Delivery of the Biomass Futures project funded by IEE; Darmstadt  
[http://www.biomassfutures.eu/public\\_docs/final\\_deliverables/WP4/D4.1%20Sustainable%20Bioenergy%20-%20criteria%20and%20indicators.pdf](http://www.biomassfutures.eu/public_docs/final_deliverables/WP4/D4.1%20Sustainable%20Bioenergy%20-%20criteria%20and%20indicators.pdf)

Fritsche U, Eppler U 2013: Global Land Use Scenarios: Key findings from a review of international level studies and models; GLOBALANDS Working Paper AP 1.3; Darmstadt  
[http://www.iinas.org/tl\\_files/iinas/downloads/IINAS\\_2013\\_GLOBALANDS\\_AP-1\\_3.pdf](http://www.iinas.org/tl_files/iinas/downloads/IINAS_2013_GLOBALANDS_AP-1_3.pdf)

G8 (Group of Eight) 2013: 2013 Lough Erne G8 Leaders' Communiqué; London  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/207771/Lough\\_Erne\\_2013\\_G8\\_Leaders\\_Communique.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/207771/Lough_Erne_2013_G8_Leaders_Communique.pdf)

GDP (Global Donor Platform for Rural Development) 2013a: Land in a post-2015 framework; Platform Policy Brief no. 9; Bonn  
[http://www.scribd.com/document\\_downloads/197654261?extension=pdf&from=embed&source=embed](http://www.scribd.com/document_downloads/197654261?extension=pdf&from=embed&source=embed)

GDP (Global Donor Platform for Rural Development) 2013b: On Common Ground - Donor perspectives on agriculture & rural development and food security & nutrition; Revised version following member consultation in 2012-2013; Bonn  
[http://www.scribd.com/document\\_downloads/141131838?extension=pdf&from=embed&source=embed](http://www.scribd.com/document_downloads/141131838?extension=pdf&from=embed&source=embed)

GLTN (Global Land Tool Network) 2013: Communique Expert Group Meeting of the Global Land Indicators Initiative; The Hague

<http://www.gltm.net/index.php/resources/publications/publications-list/finish/3-gltm-documents/132-expert-group-meeting-of-the-global-land-indicators-initiative-eng-2013>

HLPE (High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security) 2013a: Biofuels and food security; HLPE report 5; Rome

[http://www.fao.org/fileadmin/user\\_upload/hlpe/hlpe\\_documents/HLPE\\_Reports/HLPE-Report-5\\_Biofuels\\_and\\_food\\_security.pdf](http://www.fao.org/fileadmin/user_upload/hlpe/hlpe_documents/HLPE_Reports/HLPE-Report-5_Biofuels_and_food_security.pdf)

HLPE (High Level Panel of Experts on Food Security and Nutrition of the UN Committee on World Food Security) 2013b: Investing in smallholder agriculture for food security; Rome

[http://www.fao.org/fileadmin/user\\_upload/hlpe/hlpe\\_documents/HLPE\\_Reports/HLPE-Report-6\\_Investing\\_in\\_smallholder\\_agriculture.pdf](http://www.fao.org/fileadmin/user_upload/hlpe/hlpe_documents/HLPE_Reports/HLPE-Report-6_Investing_in_smallholder_agriculture.pdf)

IAASTD (International Assessment of Agricultural Knowledge, Science and Technology for Development) 2009: Agriculture at a Crossroads - Global Report; Washington DC

[http://www.agassessment.org/reports/IAASTD/EN/Agriculture%20at%20a%20Crossroads\\_Global%20Report%20\(English\).pdf](http://www.agassessment.org/reports/IAASTD/EN/Agriculture%20at%20a%20Crossroads_Global%20Report%20(English).pdf)

IFPRI (International Food Policy Research Institute) 2011: Economics of Land Degradation - The Costs of Action versus Inaction; Nkonya E et al.; IPRI Issue Brief 68; Washington DC

[www.ifpri.org/sites/default/files/publications/ib68.pdf](http://www.ifpri.org/sites/default/files/publications/ib68.pdf)

IINAS (International Institute for Sustainability Analysis and Strategy) 2014: Global Sustainable Land Use: Concept and Examples for Systemic Indicators; Fritsche U, Eppler U, Iriarte L; GLOBALANDS Working Paper 3.3; Darmstadt, Berlin, Madrid (forthcoming)

IWG (Intersessional Working Group) 2013: "Mid-term evaluation of the 10-year strategic plan and framework to enhance the implementation of the Convention (2008–2018)", Report by the IWG during COP11 of the UNCCD, document ICCD/COP(11)/21; Bonn

<http://www.unccd.int/Lists/OfficialDocuments/cop11/21eng.pdf>

Kaphengst T, Bahn E 2012: Land Grabbing: Der globale Wettlauf um Agrarland; Hamburg

<http://www.vsa-verlag.de/uploads/media/www.vsa-verlag.de-AttacBasisText40-LandGrabbing.pdf>

LPFN (Landscapes for People, Food and Nature Initiative) 2013: Reducing Risk: Landscape Approaches to Sustainable Sourcing; Kissinger G, Brassler A, Gross L; Washington DC

[http://landscapes.ecoagriculture.org/documents/files/reducing\\_risk\\_landscape\\_approaches\\_to\\_sustainable\\_sourcing.pdf](http://landscapes.ecoagriculture.org/documents/files/reducing_risk_landscape_approaches_to_sustainable_sourcing.pdf)

MEA (Millennium Ecosystem Assessment) 2005: Ecosystems and Human Well-being: Synthesis; Washington DC <http://www.maweb.org/documents/document.356.aspx.pdf>

ODI (Overseas Development Institute) 2013: The Possible Shape of a Land Transparency Initiative; Locke A, Henley G; London <http://www.odi.org.uk/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8599.pdf>

UN (United Nations) 2012: Report of the United Nations Conference on Sustainable Development; A/CONF.216/16; New York  
<http://www.uncsd2012.org/content/documents/814UNCSD%20REPORT%20final%20revs.pdf>

UNCTAD (United Nations Conference on Trade And Development) 2013: Trade and Environment Review 2013: Wake up before it is too late - Make agriculture truly sustainable now for food security in a changing climate; Geneva  
[http://unctad.org/en/PublicationsLibrary/ditcted2012d3\\_en.pdf](http://unctad.org/en/PublicationsLibrary/ditcted2012d3_en.pdf)

UNECE (United Nations Economic Commission for Europe) 2013: Framework and suggested indicators to measure sustainable development; prepared by the Joint UNECE/Eurostat/OECD Task Force on Measuring Sustainable Development, 27 May 2013  
[http://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/2013/SD\\_framework\\_and\\_indicators\\_final.pdf](http://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/2013/SD_framework_and_indicators_final.pdf)

UNEP (United Nations Environment Programme) 2013: Embedding the Environment in Sustainable Development Goals; UNEP Post-2015 Discussion Paper 1; Nairobi  
[http://aquadoc.typepad.com/files/unep\\_post2015\\_discussion\\_paper\\_version2.pdf](http://aquadoc.typepad.com/files/unep_post2015_discussion_paper_version2.pdf)

UNEP (United Nations Environment Programme) 2012a: The Fifth Global Environment Outlook (GEO-5); Malta [http://www.unep.org/geo/pdfs/geo5/GEO5\\_report\\_full\\_en.pdf](http://www.unep.org/geo/pdfs/geo5/GEO5_report_full_en.pdf)

UNEP (United Nations Environment Programme) 2012b: Report of the second session of the plenary meeting to determine modalities and institutional arrangements for an intergovernmental science-policy platform on biodiversity and ecosystem services; UNEP/IPBES.MI2/9; Panama City  
[http://www.ipbes.net/images/documents/Panama%20meeting%20report\\_En.pdf](http://www.ipbes.net/images/documents/Panama%20meeting%20report_En.pdf)

UNEP-WCMC (United Nations Environment Programme World Conservation Monitoring Centre) 2013: Improving measurement and reporting of progress for the United Nations Convention to Combat Desertification; UNEP-WCMC biodiversity series no. 34; Cambridge <http://www.unep->

[wcmc.org/medialibrary/2013/06/05/99d83cf3/UNEP-WCMC%20Biodiversity%20Series%20no%20%2034-Final-Web-LR.pdf](http://wcmc.org/medialibrary/2013/06/05/99d83cf3/UNEP-WCMC%20Biodiversity%20Series%20no%20%2034-Final-Web-LR.pdf)

UN-SDSN (United Nations Sustainable Development Solutions Network) 2014a: Indicators for Sustainable Development Goals; A report by the Leadership Council of the SDSN; Draft for public consultation <http://unsdsn.org/wp-content/uploads/2014/02/140214-SDSN-indicator-report-DRAFT-for-consultation.pdf>

UN-SDSN (United Nations Sustainable Development Solutions Network) 2014b: Monitoring the Performance of Agriculture and Food Systems; TG7 Issue Brief  
<http://unsdsn.org/files/2014/01/Monitoring-the-Performance-of-Agriculture-and-Food-Systems.pdf>

UN-SDSN (United Nations Sustainable Development Solutions Network) 2013: Solutions for Sustainable Agriculture and Food Systems; New York <http://unsdsn.org/wp-content/uploads/2014/02/130919-TG07-Agriculture-Report-WEB.pdf>

Weigelt J et al. 2012: Towards integrated governance of land and soil: Addressing challenges and moving ahead; Global Soil Week 2012 - Issue Paper; Potsdam, Berlin [http://globalsoilweek.org/wp-content/uploads/2013/05/GSW\\_IssuePaper\\_IASS\\_Soil\\_Land\\_Governance.pdf](http://globalsoilweek.org/wp-content/uploads/2013/05/GSW_IssuePaper_IASS_Soil_Land_Governance.pdf)

van Dam J 2010: Update: Initiatives in the field of biomass and bioenergy certification; Background document prepared for IEA Bioenergy Task 40  
<http://www.bioenergytrade.org/downloads/overviewcertificationsystemsfinalapril2010.pdf>

Wunder S et al. 2013: Governance screening of global land use; GLOBALANDS Discussion Paper; Ecologic Institute, Oeko-Institut; Berlin  
[http://www.ecologic.eu/globalands/sites/default/files/131022\\_GLOBALANDS\\_AP2\\_web.pdf](http://www.ecologic.eu/globalands/sites/default/files/131022_GLOBALANDS_AP2_web.pdf)

WWF (World Wide Fund For Nature) 2013: Searching for Sustainability – Comparative analysis of certification schemes for biomass used for the production of biofuels; Schlamann I et al.; Berlin  
[http://assets.panda.org/downloads/wwf\\_searching\\_for\\_sustainability\\_2013.pdf](http://assets.panda.org/downloads/wwf_searching_for_sustainability_2013.pdf)