

Global Governance for Sustainable Land Use

Systemic Indicators: Concept, Examples and Implementation Options

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Introduction



- GLOBALANDS: **transdisciplinary** research project carried out by IINAS in cooperation with Ecologic Institute, Oeko-Institut and Leuphana University
- Funding: German Ministry for Environment (BMUB) through Federal Environment Agency (UBA), runs from Fall 2011 until April 2015
- Approach for **systemic indicators** is presented
- Working papers available at www.globalands.org



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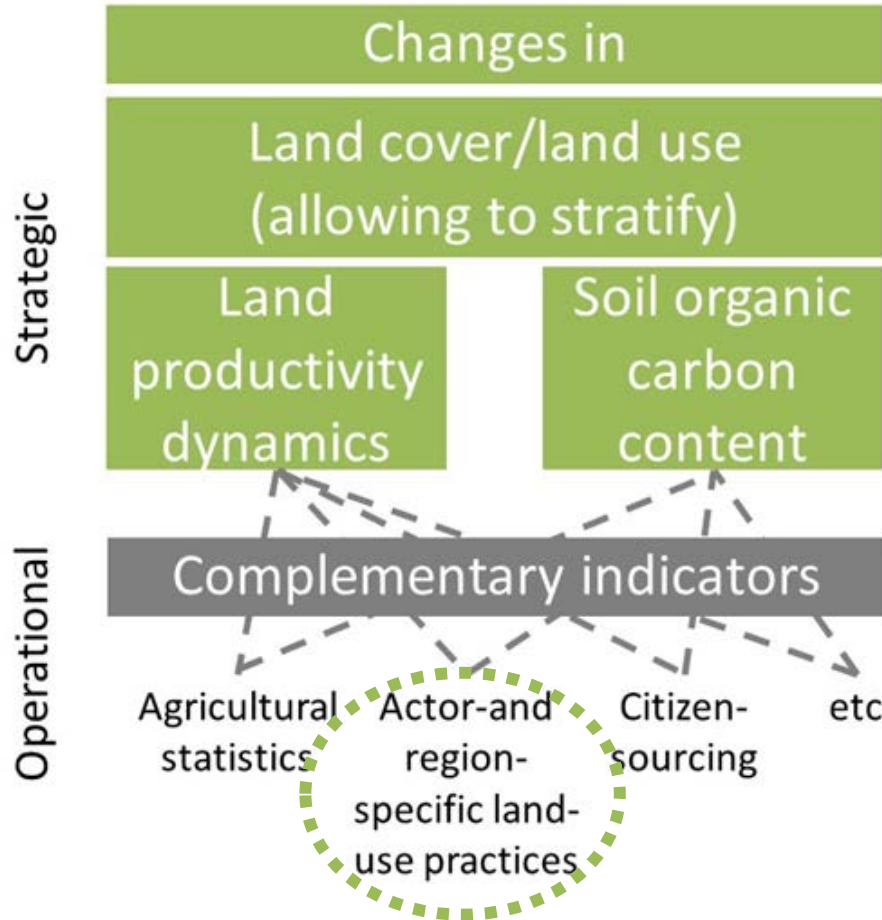
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Land Indicators in the SDGs

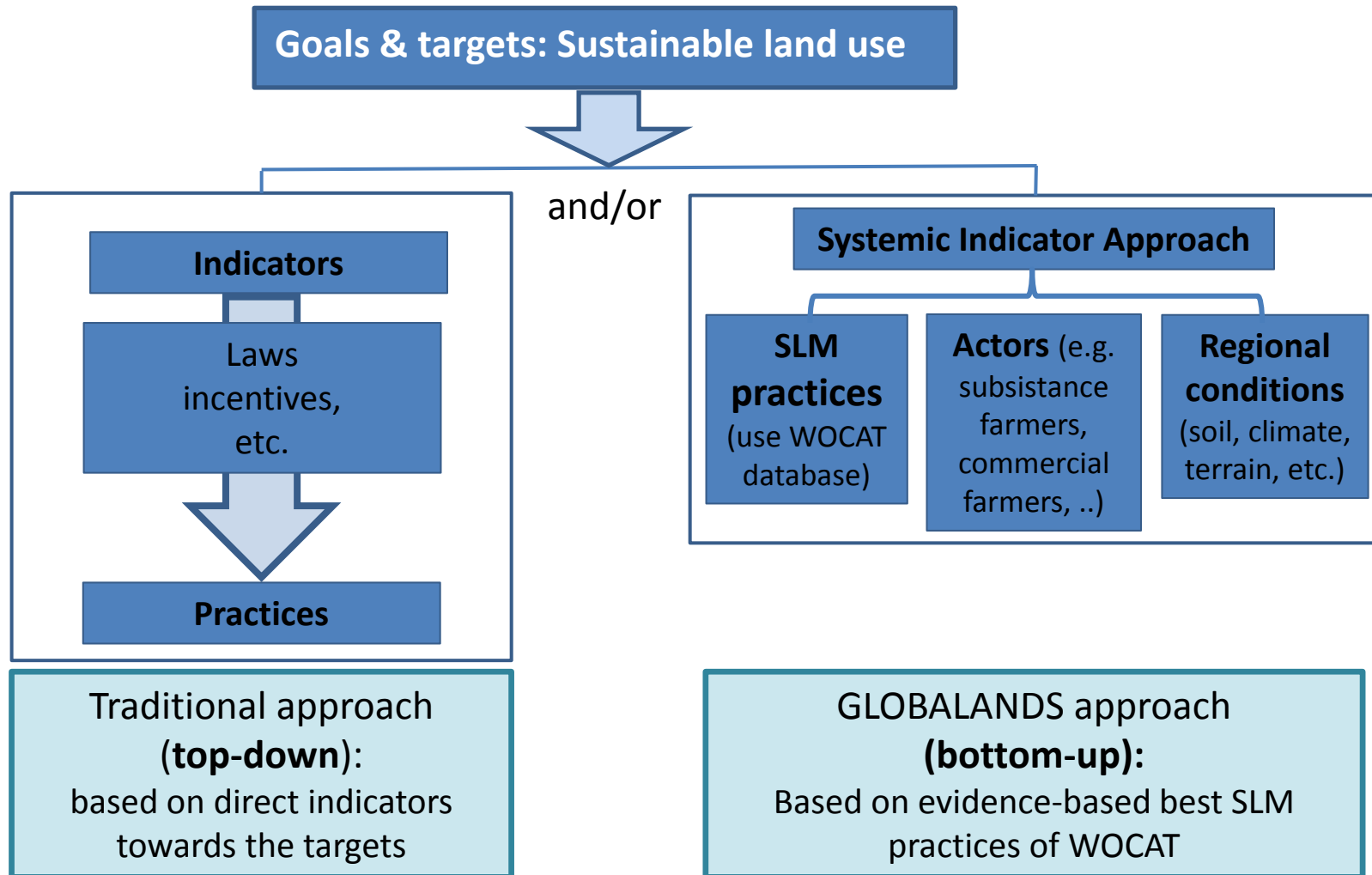


Source: EEA/GLII/IASS workshop “Possibilities for indicators on sustainable land management for the Global Land Indicators Initiative” Feb 5-6, 2015; Copenhagen

Systemic Indicator Approach

- Basics: focus on land **use** and **positive** signals
- Approach aims to **integrate** environmental and social aspects, including traditional knowledge
- Social **actor group** differentiation and focus: e.g. large corporate vs. small-scale farming
- Metrics: **combination** of sustainable LU **practices** and actor groups in specific regions
- ☞ Meant to **complement** policy development and monitoring

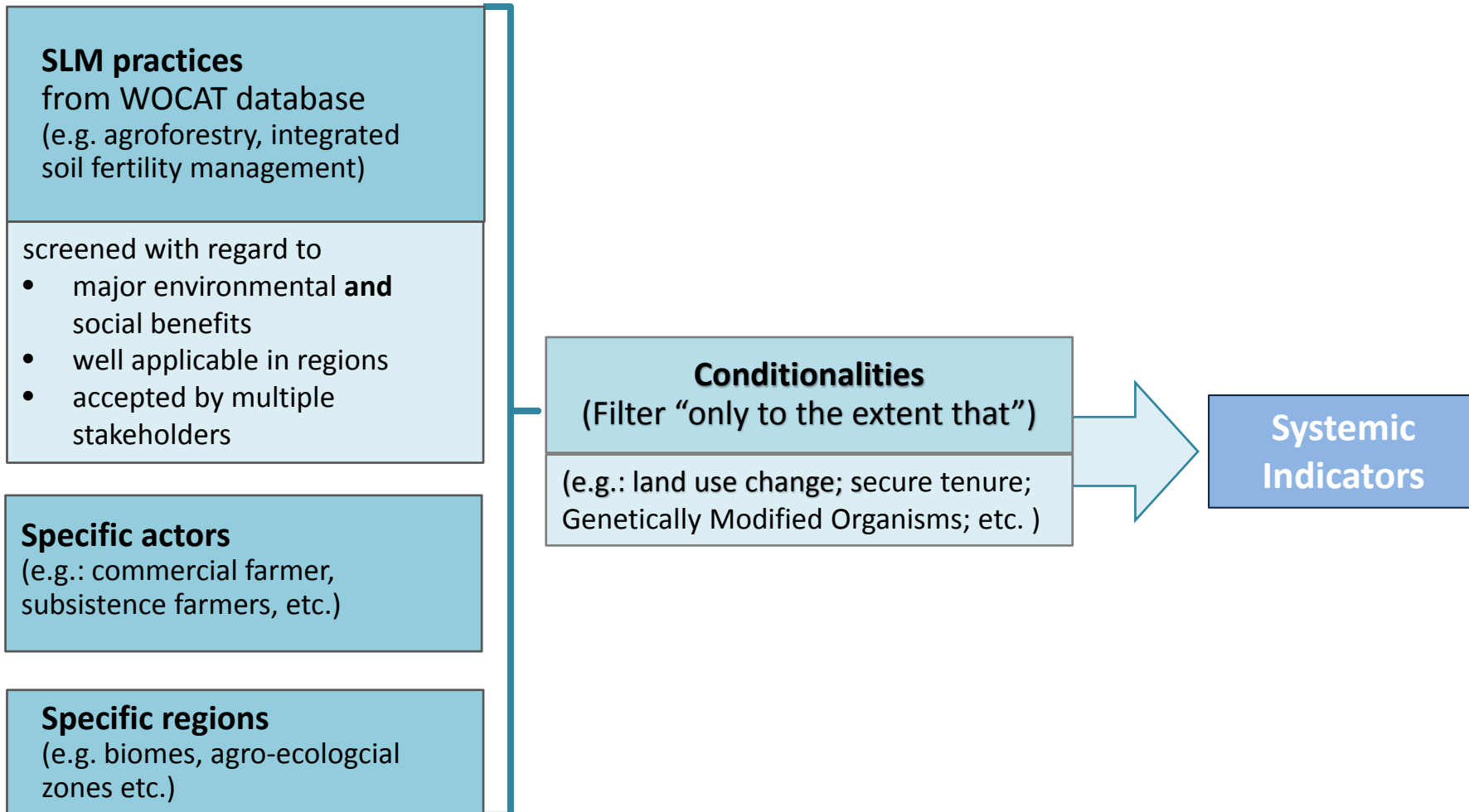
Systemic Indicator Approach



Systemic Indicators (cont.)

- Systemic indicators **could** help defining/ negotiating SDGs to include sustainable land use on indicator level
- Approach is worked out for two **examples** addressing most relevant global land uses:
 - Small vs. large-scale **farming**
 - Small/communal vs. corporate **forestry**
- Working Paper:
www.iinas.org/tl_files/iinas/downloads/land/IINAS_2014_GLOBALANDS_WP_33_Systemic-Indicators.pdf

Systemic Indicators (cont.)



Systemic Indicators (cont.)

	Screening Indicators	SLM Practices out of WOCAT data base		
		Agroforestry	Water harvesting	Cross-slope barriers
Environmental	Land degradation	+++	++	++
	Biodiversity	+++	o	+
	Soil (SOC, nutrients)	+++	o	o
	Water resources	++	+++	++
	Water productivity	+++	+++	++
	Climate change	++	o	++
Socio-Economic	Food security	+++	++	o
	Rural poverty	+++	o	o
	Rural employment	o	o	o
	Land tenure and ownership	-	-	-
	Traditional knowledge	o	o	++
	Improving crop production	++	+++	++
	Improving fodder production	++	++	++
	Supporting gender equity	++	o	o

Source: own compilation based on Liniger (2011); impact levels: + = positive; o = moderate; - = low/none

Systemic Indicators: Example

Land Use Practice	Actors	Region
Agroforestry	Small-scale land users; mixing of woody and non-woody species	dry and semi-arid regions, sub-humid mountains + temperate zones
<i>Example:</i>	<i>Poor farmer, herders, woman</i>	<i>“Re-greening” of arid regions (e.g. Sahel/Niger)</i>
Agroforestry	Large-scale land user; extensive and intensive	temperate and tropical zones
<i>Example:</i>	<i>Tea/coffee plantations</i>	<i>Latin America, Asia</i>
<i>Example</i>	<i>Montado</i>	<i>South and central Portugal</i>
Water harvesting	Poor small-scale farmers mainly < 1ha, partly 1-2 ha/2-5 ha	Arid and semi-arid zones
<i>Example:</i>	<i>Poor farmers using plant pit system/Zai</i>	<i>Burkina Faso</i>
Cross slope barriers	Small-scale , average level of wealth to poor land users	subhumid, semi-arid
<i>Example</i>	<i>Earth-banked terraces in cereal and almond cropland covered with drought resistant shrubs</i>	<i>Spain, Murcia, Region Guadalentin catchment</i>
<i>Example:</i>	<i>Small scale farmers using Fanya juu terrace</i>	<i>Eastern province Kenya</i>

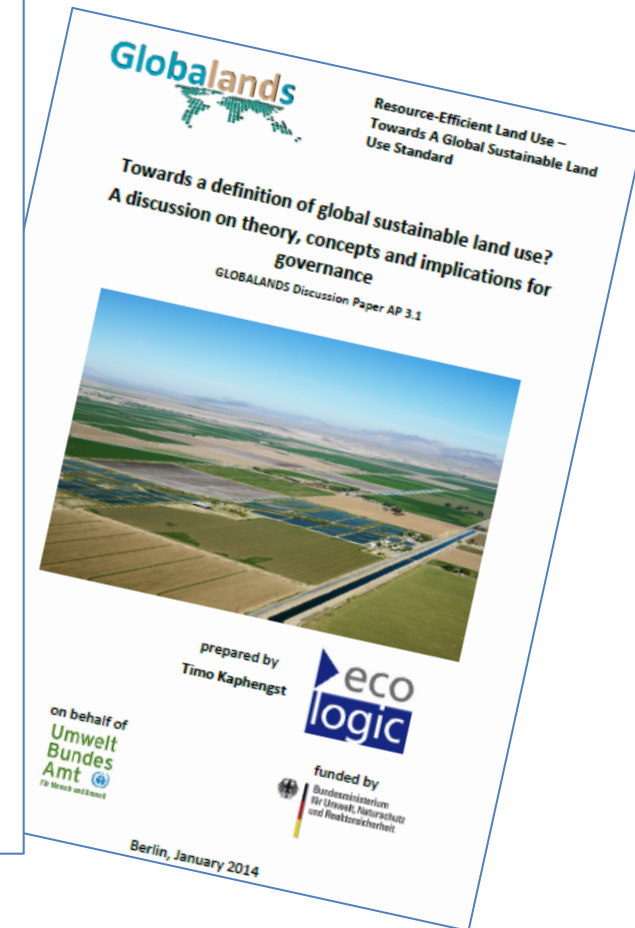
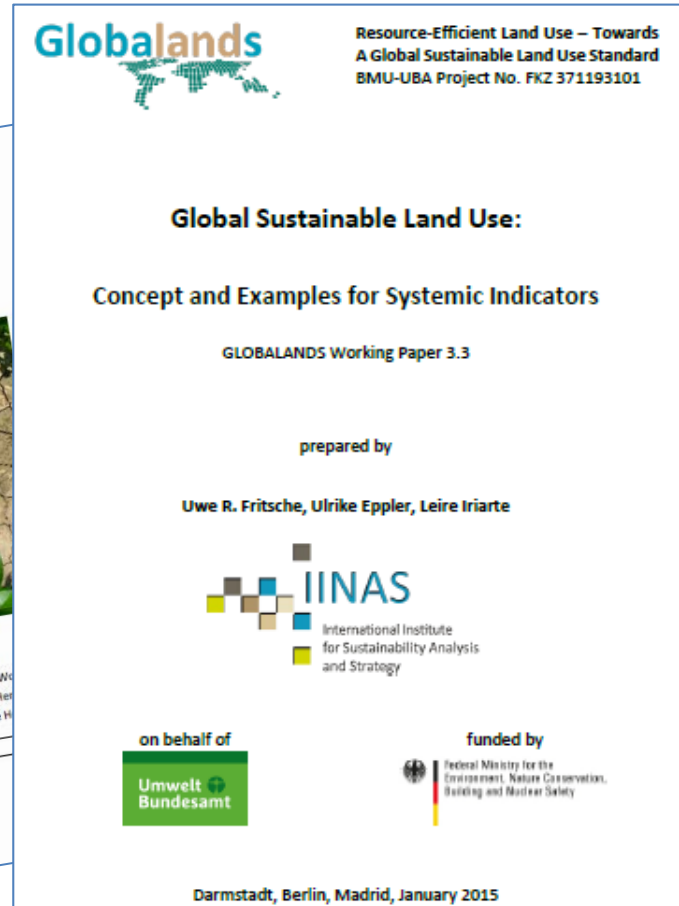
Systemic Indicators: Implementation



- Implement SI approach as part of the **indicator framework** for the SDGs on which discussions started
- Concept will be introduced to and presented at platforms (i.e. GLTN/GLII, UN-SDSN), GSW, WB 2015 Land Conference
- **“Real” application** of SI would take place when SDGs - once agreed - are **nationally implemented** in participatory processes to allow for adequate screening and agreement on safeguards – and also to “define LDN”?
- **Safeguarding** approach for sustainable land use in **existing** UN schemes could make use of SI, e.g. in regionalized REDD+ schemes, or indicators under CCD



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