

CONCEPTUAL FRAMEWORK FOR THE DEVELOPMENT OF GLOBAL LAND INDICATORS

SECURING LAND AND PROPERTY RIGHTS FOR ALL











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ABBREVIATIONS

AU African Union

CEDAW Convention on the Elimination of All forms of Discrimination Against Women

CF Conceptual Framework

CFS United Nations Committee on World Food Security

CSO Civil society organization

EGM Expert Group Meeting

FAO Food and Agriculture Organization of the United Nations

GLII Global Land Indicators Initiative

GLTN Global Land Tool Network

IFAD International Fund for Agricultural Development

ILC International Land Coalition

ILO International Labour Organization

LGAF Land Governance Assessment Framework (World Bank)

LPI Land Policy Initiative (African Union, African Development Bank and UNECA)

MDGs Millennium Development Goals

NGO Non-governmental organization

NRI Natural Resources Institute (University of Greenwich)

OHCHR Office of the High Commissioner for Human Rights

SDGs Sustainable Development Goals

SDSN United Nations Sustainable Development Solutions Network

REDD/REDD+ Reduced Emissions from Deforestation and Forest Degradation

ToC Theory of Change

UN-Habitat United Nations Organization for Human Settlements

UNCCD United Nations Convention to Combat Desertification

UNDRIP United Nations Declaration on the Rights of Indigenous Peoples

VGGT Voluntary Guidelines on the Governance of Tenure of Land, Fisheries and Forests

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FOREWORD

This document presents the Conceptual Framework for the Development of Global Land Indicators. It was compiled for GLII as part of the technical assistance that the Natural Resources Institute at the University of Greenwich provided to GLTN / UN-Habitat in managing the GLII process from January to May 2015. The document was compiled by Julian Quan of NRI, building on GLII Working Group discussions in The Hague in October 2014, presentations made to the Expert Group Meeting (EGM) in Addis Ababa in November 2014, and the conclusions of a subsequent EGM held in Washington D.C. in March 2015.

A "long list" of fifteen proposed GLII indicators, formulated to incorporate the perspectives and conclusions of the March 2015 EGM is included in GLII Working Paper No. 3 Proposed Global Land Indicators: Status Report, and in GLII Working Paper No. 4; A Sourcebook for operationalisation of Global Indicators. The conceptual framework and these two following papers sought to builds on an earlier feasibility and options study undertaken for GLTN and World Bank (now published as GLII Working Paper No. 1). The Sourcebook, GLII Working Paper No. 3 was developed in consultation with a GLII Data and Statistics Reference Group, and also includes detailed considerations on measurement, data sources and next steps required for further refinement and operationalisation. Working Papers No. 3 and No. 4 provide the most recent formulations of the land indicators proposed by the GLII platform. Some of the indicators still require more precise formulation according to the precise features that stakeholders seek to measure and the nature of the specific data available to support the indicators

in different countries. This applies to some of the indicators intended to monitor performance in land administration and the frequency and resolution of land conflicts and disputes.

Since the conceptual framework and associated list of indicators was formulated, continuing discussions during 2015 and 2016 focussed on incorporation of headline indicators proposed to measure land tenure security into the framework of indicators for the Sustainable Development Goals (SDGs) which resulted in acceptance of GLII's proposed indicators of tenure security at Indicator 1.4.2 in the SDG framework under Goal 1, Ending Poverty.

Further development of the GLII indicators and of a collaborative framework and set of methodologies for broader land monitoring continues in many ways to be intertwined with ongoing efforts to implement the land indicators in the SDG framework, which also include indicators on Women's ownership and control of agricultural land under Goal 5, Women's Empowerment, Human Settlement Indicators under Goal 11, and on Sustainable Land Use under Goal 15, Ending Land Degradation. Success will also depend on the data sources and methodologies and the institutional arrangements adopted by land agencies, statistical authorities and other stakeholders for data analysis and reporting at global, regional and country levels. In this context, various elements of this conceptual framework that are pertinent to GLII's mission and mandate of making global land monitoring a reality will necessarily be subject to further development by GLII participating experts and organisations.



INTRODUCTION

This document presents a draft conceptual framework for the Global Land Indicators Initiative (GLII). It is intended to inform the development and selection of global land indicators and GLII's further development as a broad grouping of experts concerned with progress and learning towards improved land governance and tenure security for all.

The framework was developed to provide a basis for the formulation, validation and implementation of a set of global land indicators, alongside the proposed indicators themselves. It is the result of a series of meetings and workshops of land experts and representatives of concerned organizations during the period 2013-15. Its purpose is to assist agreement on a set of commonly agreed global land indicators intended to monitor key aspects of land governance and land tenure security, so that all concerned stakeholders can contribute to a common monitoring effort at global, country, project and local levels. The proposed set of common global land indicators as presently formulated is presented in Annex A of this document.

The conceptual framework sets out the key elements of agreement amongst GLII expert participants (members of the GLII Working Group, EGM and institutional partners) on the most important considerations for setting appropriate land indicators, reflecting the significant degree of consensus achieved by the international community on the importance of secure land rights and land governance more broadly for development. Background information on the origins of GLII and its evolution is given in Section 1 and, as outlined in Section 2, the development of the conceptual framework has been supported by five key elements of work, reflected in this document:

 Clarification of the meanings and scope of the relevant land tenure and land governance related concepts and terminology, to facilitate common understanding and agreement on exactly what is to be monitored and thus more precise definition of the indicators. Definitions are offered of land, land governance and land tenure security. The full set of terms and concepts involved in the indicators are defined in a glossary, presented in a separate document.

- ii) An explanation of how improvements in land governance and tenure security can contribute to wider development goals, including economic and social inclusion, women's empowerment, food security, eradicating poverty, and sustainability in natural resource use and urban growth and consumption patterns, together with the key changes required to achieve the necessary land outcomes.
- iii) A discussion of the purposes and objectives of land monitoring, the principal aspects of land governance proposed for monitoring, principles and criteria involved in selecting and formulating land indicators.
- iv) Analysis of the feasibility requirements for proposed land indicators and the potentially available data sources, methods for data collection analysis and the process of reporting.
- v) A Theory of Change, which sets out the expected broad causal linkages amongst factors and processes anticipated to lead to achievement of shared objectives, including the planning and delivery of land-related interventions themselves.

The overall requirements and content of the conceptual framework are a balance between the purposes and objectives of land monitoring and feasible data sources and data collection strategies in relation to the land governance outcomes and higher level development objectives that GLII participants and partners intend to pursue. These objectives are reflected in the Voluntary Guidelines of the Governance of Tenure (FAO, 2012), the

post-2015 Sustainable Development Goals (SDGs) and other global and regional land policy instruments, such as the Framework and Guidelines for Land Policy in Africa (LPI, 2010). The purpose and functions of the conceptual framework are explained in detail in Section 2.

The rationale for shared global efforts in monitoring changes in land tenure and land governance is given in Section 3, and is based on the principle global agreements that relate to land rights and land tenure. This includes the Voluntary Guidelines (FAO, 2012) and a series of international policy declarations and conventions related to urban settlements, the elimination of discrimination against women, indigenous rights and human rights. All of these are reflected in discussions on the importance of secure land rights and effective land governance in relation to several of the proposed post-2015 SDGs. Land is a source of food and shelter, a basis for social and cultural identity, religious and spiritual practices and is a central factor in economic growth. Nevertheless, land tenure systems, whether based on written policies and laws or unwritten customs and practice, are under stress as a result of demographic and commercial pressures on land, environmental degradation and climate change. Weak governance of land undermines food security, sustainability and social stability and can lead to violent conflict. The growing global consensus on the importance of land and the key dimensions for monitoring result from progress in academic and policy research on land and from development agencies' accumulated practical engagement with land. Secure rights to land and property are fundamental to unlocking both largescale and small-scale investments in farm production and land resources, and more equitable distribution of land assets is associated with higher levels of economic growth (Lawry et al., 2014; Deininger, 2003). Because land is held under different tenure systems, including customary and group-based arrangements, individual land titling as conventionally practiced in developed countries does not offer a universal solution to tenure security and may risk concentrating land in the hands of local elites and undermining women's land rights. A variety of alternative, low-cost approaches are available, including the formal recognition of functional customary tenure systems (Toulmin and Quan 2000; Deininger, 2003). Development agencies have also made progress in recent years in sharing understanding of the key features of effective institutions for land administration that are necessary to support good land governance, including its accuracy, efficiency, accessibility and the need to curb corruption in the land sector. Public confidence in land administration institutions and in land policies' ability to deliver security of tenure under a variety of tenure systems is fundamental to good governance generally, and to the contract and trust between citizens and government.

In view of the concerns and objectives of GLII participants, Section 3 of the document also identifies the key dimensions of land governance that need to be monitored as: land tenure security for women and men, including the documentation and perception of secure land rights and formal recognition by states of the variety of forms of tenure; the effectiveness of land conflict and dispute resolution; the quality and effectiveness of land administration systems; levels of sustainable land use; and the equity dimensions of all of these aspects.

The key principles adopted for selection and formulation of land indicators include disaggregation by gender, by urban and rural areas and major administrative regions, socio-economic groups or wellbeing categories in income groups, in addition to the consideration of all tenure types. Selection criteria for indicators should be grounded in a rigorous analysis of land tenure and governance issues and how these can be measured. The criteria include global comparability; feasibility of measurement and reporting; meaningfulness to multiple stakeholders; overall coherence of the set of

indicators; applicability to global, national and local levels, with scope for subsidiarity in monitoring efforts by different actors at different levels. Other criteria are the ability to address causal processes linking land governance outcomes with development outcomes for people and the interplay of different factors affecting land and land governance at multiple scales, from global to local and vice versa.

Feasibility considerations in selecting indicators are discussed in detail in Section 4; they include practical and technical feasibility, and political acceptability and stakeholder ownership. Practical feasibility includes the technical feasibility and the costs of collecting, analysing and reporting on monitoring data from existing and potential new potential data sources. Political acceptability of the indicators must be considered from the point of view of national governments, global development actors and civil society organizations operating locally.

The data requirements and potential data sources for land indicators are discussed, bearing in mind the need for comparable global reporting and comparison for purposes of both inclusion in the monitoring framework for the SDGs, and development of a broader framework of GLII indicators to deepen knowledge and understanding of progress towards land governance. The principle available data sources identified and discussed by an earlier feasibility study (UN-Habitat / GLTN, 2014), include:

- Administrative data, in particular that derived from national land information systems, although in many countries these data sets are incomplete and not up to date, or gender-disaggregated, and therefore requiring supplementation from other data sources;
- National censuses and household surveys, for which there is considerable scope for expansion by introducing specific land-related modules into existing national surveys, designed and adapted so as to elicit consistent data across different countries;

- Purpose designed global polls, comprehensive sample surveys managed on a global basis to supplement data available nationally on questions not easily integrated into demographic and household surveys; for example, perceptions of tenure security for which a "perception module" is being developed by the World Bank; and
- Expert assessment panels and expert surveys, which
 provide important ways of assessing the quality of
 legal frameworks, qualitative improvements and
 changes, and of making sense of institutional
 processes and complex and incomplete data sets
 from different sources.

Section 5 of the document outlines a Theory of Change, to make explicit the logic and assumptions about how different causal factors interact to produce change that underlie the planning and design of interventions intended to realise or contribute to a set of specific desirable outcomes. This is presented as a tool for visualization and discussion of the anticipated global adoption of a common set of land indicators as part of broader process of strengthening land governance in achieving positive outcomes for people and progressing towards shared development goals. The main assumptions are that reasonable levels of funding will be available for programmes to enable countries to improve land governance over the next 15 to 20 years, and that the development and roll-out of monitoring systems will be part of global and national frameworks and programmes of action by GLII participant and partner organizations. From these basic starting points, the theory of change traces the expected causal linkages and assumptions involved in translating action at the level of planning, funding and monitoring of landrelated policy, programme and project interventions to the strengthening of land governance and tenure systems themselves, and in turn to progress towards development goals, which also depend on other factors and processes.

Alongside routine monitoring and reporting to track progress in land and related outcomes at different levels, there is need to create conditions for stakeholders to review, assess and learn about what does and does not work in practice in bringing about effective change. Stakeholder involvement in reviewing progress at each stage and at each level, assisted by improved data and information on outcomes, and increased analytical work to evaluate project impacts feeding into existing land data and knowledge, can make important contributions to these learning processes. Project level evaluations, impact assessments and systematic reviews of research findings can all make important contributions to learning, knowledge and evidence about the linkages between land tenure and governance improvements and broader development outcomes. The adoption of robust indicators by public institutions, which GLII promotes, should thus create space for complementary engagement in monitoring by citizens and civil society organizations. This includes the use of participatory methodologies, community-based monitoring systems and stakeholder learning platforms. These are important to deepen understanding and advance debate about how land governance processes and outcomes can be improved in practice and the role they play in achieving wider development objectives in different contexts. A learning agenda on the different aspects of land governance prioritized by GLII and the linkages with development objectives will involve processes of debate and investigation across different countries and engage multiple stakeholders, including those in the global "land community", which cannot be comprehensive in coverage but which could be gradually broadened in scope over time.

The effectiveness of the monitoring framework, including the indicators selected, their meaningfulness for policy makers, relevance to stakeholders and to internationally agreed principles and benchmarks, the adequacy of the reporting and the partnership

arrangements that underpin all of these elements, and the utility of the theory of change will also need to be reviewed. The learning processes around land indicators incorporated into the SDG framework, and those for the GLII indicators as a whole, are likely to be distinct, although inter-related, and may involve different sets of stakeholders. For land indicators linked directly to the SDG indicators, GLII would need to participate in broader reviews focusing on coverage, global comparability and ease of reporting, in which national and regional statistical organizations would be key players. More broadly, for the full set of proposed GLII indicators (see Annex A), statistical agencies should also be key players, but broader partnerships will be needed with additional guidelines on how common indicators can be tested, taken up and implemented by different actors who can provide relevant data.

In conclusion, the combination of the existing global consensus on key principles for land governance, the links between land and higher-level development outcomes and goals, the main dimensions of land governance identified for monitoring, principles of necessary disaggregation by gender and for urban and rural areas, and practical and political feasibility as set out in this conceptual framework document, should now enable the definition of shared land indicators. A good basis for data collection to address land governance issues exists, and further progress in the assessment of feasible data sources and methodologies to support each indicator should enable confirmation of the indicators as presently formulated. GLII participants and partners will need to take stock of the status of land in relation to the Sustainable Development Goals, as the SDG monitoring framework is finalized. But they should also undertake further work to develop an operational framework, factoring the key elements discussed here into the action plan for development of appropriate methodologies and collaborative and reporting arrangements based around the commonly agreed set of global land indicators.

BACKGROUND ON THE GLII

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Over the past decade, development agencies, governmental and civil society organizations, expert practitioners and researchers concerned with land and property rights globally (the "global land community"), have seen shifts in knowledge and understanding, and a growth in consensus that land tenure security for all and equitable land governance are foundations for sustainable economic development and the elimination of poverty (UN-Habitat / GLTN, 2014). This consensus is reflected 2012) and other related regional and global instruments, such as the Framework and Guidelines on land policy in Africa (LPI 2011) and the Principles for Responsible Investment in Agriculture and Food Systems (CFS, 2014). The international donor community has also paid renewed attention to land governance by responding to the new wave of private land acquisition and land-based investment in the global South, seeking to improve the potential to drive agricultural growth and economic development.

Effective monitoring is central to ensuring that changes in land governance result in improved conditions and sustainable development opportunities for all, especially for vulnerable groups and those living in poverty. In 2013, the G8 committed to support greater transparency in land transactions, including the responsible governance of tenure of land, increased capacity in developing countries, and the release of data for improved land governance. The United Nations High-Level Panel of Eminent Persons on the Post-2015 Development Agenda report has proposed a target of "secure rights to land, property, and other assets" as a building block for people to lift themselves out of poverty. Discussions on the integration of land into the framework for measuring progress towards a set of post-2015 Sustainable Development Goals (SDGs) are now actively underway. Better knowledge and understanding of a) the extent to which people benefit from secure land and property rights; and b) the effectiveness of land-related policies and land administration systems in helping to deliver tenure security for all and achieve sustainable use of land resources are now needed.

These developments have created the need for a core set of land indicators that have national application and are globally relevant and comparable. To date however, development agencies and programmes undertaking land-related interventions have established their own systems for monitoring the outcomes of land-related development interventions reflecting specific agency and project goals; there is no overall comparability of progress in different countries or of the effectiveness of different approaches. Monitoring has tended to focus on land policy and legislative processes and on the performance of individual projects rather than on people's perceptions of tenure security and the development outcomes of land governance systems as a whole. In addition, there are large gaps in available data, including baseline conditions, and coverage of national land information systems is extremely limited and confined to relatively segments of the population. These issues led to collaboration between UN-Habitat, the Millennium Challenge Corporation and the World Bank in 2012, facilitated by the Global Land Tool Network (GLTN) (initiated and hosted by UN-Habitat), to establish a Global Land Indicators Initiative (GLII). This is a platform for knowledge generation, sharing and dissemination on land indicators, which aims to develop a set of core land indicators to measure tenure security globally and at country level (UN-Habitat/GLTN 2014).

GLII has since grown to include over 30 organizations in a multi-stakeholder platform of institutional partners (including NGOs, multilateral agencies, academia and research institutions, training institutes) and individuals, actively learning and sharing knowledge to define appropriate and feasible land indicators and explore innovative means of collecting data that will

be affordable, easy and manageable by United Nations member states. Between 2013 and 2015, a series of GLII Working Groups and Expert Group Meetings (EGMs) of land and development experts, including representatives of a wide range of organizations, worked to develop a coherent set of land indicators and a common framework for monitoring and measurement of progress towards improved land governance and greater tenure security at country level. The aim was to establish an agreed list of indicators, feasible methodologies and a collaborative framework within which the indicators can be tested and applied incrementally by the global land community and local stakeholders over the medium and longer term. GLII promotes the incorporation of a shortlist of indicators within the broader set of indicators and targets that form part of the framework for the post-2015 Sustainable Development Goals (SDGs), therefore the framework must allow for measurement at the country level, consistent country reporting and global comparative analysis.

In 2014, a GLTN study undertaken in collaboration with the World Bank to assess the feasibility of robust measurement and global reporting of a draft set of land indicators proposed to cover a set of priority dimensions of land governance and formulated through GLII discussions in 2013 (GLTN 2014). This study reviewed existing data sources and data collection methods and assessed the scope to meet data needs using administrative data and the incorporation of additional modules in national censuses, household surveys, opinion polls and expert surveys. The study concluded that global - and country-level monitoring is feasible and achievable.

INTRODUCING THE CONCEPTUAL FRAMEWORK AND ITS PURPOSE

The conceptual framework (CF) sets out the key elements of agreement amongst GLII expert participants (members of the GLII Working Group, EGM and institutional partners) on the most important considerations for setting appropriate land indicators. It reflects the significant degree of consensus achieved by the international community on the importance of secure land rights and land governance more broadly for development. These include the outcomes in terms of tenure security and systemic aspects of land governance to be tracked and measured and are linked to broader development outcomes, including the equity dimensions and the processes by which this should be done. The framework builds on the progress made so far by GLII in formulating indicators and seeks to establish a clear framework in which they can be refined and developed. It makes explicit the assumptions and logic behind the formulation of the indicators so that they can be used as both a management tool to achieve specific changes and improvements and as a means of tracking progress. Five key elements of work have supported development of the conceptual framework and are reflected in this document:

i) Clarification of the meanings and scope of the relevant land tenure and land governance-related concepts and terminology, to facilitate common understanding and agreement on exactly what is to be monitored and thus a more precise definition of the indicators. These concepts include the idea of land governance and the components of effective land governance systems, including land policy, land tenure, land access and distribution, land administration and the overall processes and goals of land management.

Land has been defined by UNECE as "the ultimate resource, for without it life on earth cannot be sustained. Land is both a physical commodity and an abstract concept in that the rights to own or use it are as much a part of the land as the objects

rooted in its soil. Good stewardship of the land is essential for present and future generations." (UNECE, 1996.) With this definition, land can be characterized by physical and environmental criteria, including as pointed out by FAO (1995), as a delineable area of the earth's surface, incorporating the natural resources and structures on and near its surface. It includes the results of past and present human activities on its surface, its uses, the tenure status of its holders or occupants, whether customary or statutory, and the rights this gives access to. These characteristics reflect different perspectives on the use and the social and economic function of land.¹

Land governance can be defined as: "the rules, processes and structures through which decisions are made regarding access to and the use (and transfer) of land, the manner in which those decisions are implemented and the way that conflicting interests in land are managed" (UN-Habitat, 2011). This definition highlights three important dimensions: (1) institutions, (2) quality of decision-making and the translation into action; and (3) managing conflicting interests, entailing consideration of the of the equity dimensions of land policies, land interventions, and the institutional arrangements for land governance.

Land tenure can be defined as the relationship, whether legally or customarily defined, among people as individuals or groups, with respect to land and associated natural resources, such as soils, forests, wild resources and products, soil resources and water sources. Land tenure designates the

It is worth noting that Polanyi (1944) stressed that land should not be considered as a commodity like any other. "The economic function is but one of many vital functions of land. It invests man's life with stability; it is the site of his habitation; it is a condition of his physical safety; it is the landscape and the seasons.... and yet to separate land from man and organize society in such a way as to satisfy the requirements of a real-estate market was a vital part of the utopian concept of a market economy."

rights that individuals and communities have with regard to land, namely the right to occupy, to use, to develop, to inherit and to transfer land. Land tenure should thus primarily be viewed as a social relation involving a complex set of rules that governs land use and land ownership. While some users may have access to the entire "bundle of rights" with full use and transfer rights, other users may be limited in their use of land resources. The exact nature and content of these rights, the extent to which people have confidence that they will be honoured, and the various degrees of recognition by public authorities and the concerned communities, have a direct impact on how land is used. (FAO, 2003; Fourie, 1999; Payne and Durand-Lasserve, 2013; UN-Habitat, 2011).

To supplement the GLII conceptual framework, a full glossary of land-related concepts and terms related to GLII's proposed indicators has been developed. It is based on internationally accepted definitions and is made available as a separate document intended to promote common understandings amongst GLII participants and other interested parties in land collaborative monitoring efforts.

- i) A narrative that explains how improvements in land governance and tenure security can contribute to wider development goals, including economic and social inclusion, women's empowerment, food security, eradicating poverty, and sustainability in natural resource use and urban growth and consumption patterns, together with the key changes required to achieve the necessary land outcomes. This is summarized in Section 3.1 below, with reference to the relevant global agreements and conventions, policy documents and supporting research findings.
- iii) A brief discussion of the purposes and objectives of land monitoring, the principal aspects of land

governance proposed for monitoring, principles and criteria involved in selecting and formulating land indicators, and the practical requirements for an effective and feasible set of indicators. This is in Section 3.2 below; general considerations related to the nature, role and definition of different types of indicators are summarized in Annex B.

- iv) Analysis of the feasibility requirements for proposed land indicators and the potentially available data sources, methods for data collection analysis and the process of reporting, discussed in Section 4.0.
- v) A Theory of Change, which sets out the expected broad causal linkages amongst factors and processes anticipated to lead to achievement of shared objectives, including the planning and delivery of land-related interventions themselves. This raises questions of key process elements which GLII partners will need to promote and monitor in the longer term, including the means of implementation for country level monitoring; required from the international support community in strengthening land governance; and the links between land outcomes and higher level development goals. The main elements of a preliminary theory of change are summarized diagrammatically in Section 5.0 as a basis for analysing and discussing these aspects.

The overall requirements and content of the Conceptual Framework is represented in the following diagram.

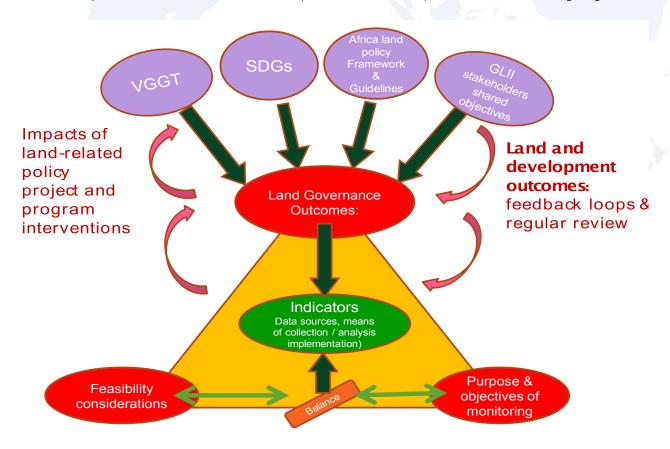


Figure.1: Visual representation of the GLII Conceptual Framework devised by GLII platform member Marc Wegerif and Julian Quan (NRI, University of Greenwich); original graphic courtesy of Marc Wegerif.

In this diagram, the aspects of land governance outcomes for monitoring are set by higher level, global development goals, including those encapsulated in the Sustainable Development Goals, and the ways in which improved outcomes are intended to support them, which is reflected in the shared objectives of GLII participants and internationally agreed instruments, notably the VGGT. The indicators themselves, and the necessary data sources and means of implementation, are set so as to track these land outcomes, bearing in mind the need for a balance between the purpose and objectives of monitoring (including the levels of

ambition amongst participants about what is desirable to monitor and to achieve) and the practical feasibility.

As indicated by the curly arrows on the left of the diagram, land-related interventions have impacts on land governance outcomes, and in turn on the related higher-level development outcomes. The interventions include policies projects, associated development programmes and private and public investments of different types, whether they originate in the land sector itself or in others, such as agriculture, natural resources management or urban development. As part of a GLII operational framework, the knowledge of

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the linkages between land governance outcomes and the wider development outcomes, as pursued by the SDGs and promoted by the VGGTs, the LPI Framework and Guidelines and by GLII participants and partners themselves, should be subject to regular review, as shown by the curly arrows on the right of the diagram. The outcomes and the objectives pursued have an important bearing on the choice, formulation and prioritization of the indicators. The indicators should therefore be reviewed according to the monitoring results obtained and the outcomes achieved, and in the light of impact evaluation studies, noting that the selection of indicators may influence the interventions designed to influence land and related development outcomes. The indicators can also be adapted by national level stakeholders to meet national requirements and their own specific monitoring needs related to land.

Some of these aspects discussed further in relation to the Theory of Change in Section 5.0. LAND INDICATORS
AND DEVELOPMENT
OUTCOMES: THE NEED
FOR MONITORING

3.1 THE ROLE OF LAND AND LAND GOVERNANCE IN SUSTAINABLE AND INCLUSIVE DEVELOPMENT

In developing a monitoring framework to support the Sustainable Development Goals (SDGs), coordinating bodies, notably the United Nations Sustainable Development Solutions Network (UNSDSN) and United Nations Statistical Commission (UNSC), together with a wide variety of stakeholders, have recognized the significance of secure land tenure for poverty reduction and sustainable development. Secure rights of access, use, ownership and control of land and other productive assets for women and men, Indigenous Peoples and local communities in both urban and rural areas are important for providing them with livelihoods, shelter and economic development opportunities. Land tenure security tenure thus deserves serious attention in development policy and practice given the extent of reliance on land resources for incomes, subsistence and social reproduction, and the growing pressures on them that result from population pressures, largescale land acquisitions for food and biofuel production, agribusiness, mining and other extractive industries. As a result, land tenure security has been recognized as highly relevant to the achievement of proposed new sustainable development goals for ending poverty, ending hunger, achieving food security, gender equality, sustainable cities and human settlements, and for the protection and sustainable use of terrestrial ecosystems (SDSN, 2015).

As recognized by recent international instruments and agreements, notably the Voluntary Guidelines on the Responsible Governance of Tenure (VGGT) to which 193 United Nations member states have subscribed, the eradication of hunger and poverty and the sustainable use of the environment depend in large measure on how people and communities gain access to land and other natural resources (FAO, 2012). Land is a source of food and shelter, is a basis for social and cultural

identity, religious and spiritual practices, and is a central factor in economic growth. Nevertheless, land tenure systems, whether based on written policies and laws, or unwritten customs and practice, are under stress as a result of demographic and commercial pressures on land, environmental degradation and climate change. Weak governance of land undermines food security, sustainability and social stability and can lead to violent conflict. Secure land rights for ordinary land users and private investors alike are essential to agricultural development and economic growth. Nations need to urgently develop adequate capacities for land administration and resolution of land conflicts, including stronger arrangements for recognition and management of customary land rights, as recognized by the Framework and Guidelines for Land Policy in Africa, which was formally adopted by the African Union and its members states (AU et al., 2010).

The VGGT seek to contribute to improved tenure governance by providing guidance and information on internationally accepted practices and systems to address the rights to use management and control of land, fisheries and forests; to the development of better policy, legal and organizational frameworks, enhanced transparency of tenure systems and strengthened capacity of implementing organisations at all levels (FAO, 2012). International civil society organizations and a number of multilateral agencies argue for incorporation of these principles within the post-2015 global development agenda (Action Aid et al., 2015).

Global agreement on the importance of tenure security for the urban poor and of land governance for the sustainable urban development growth is also well established. It is reflected in successive declarations of the Vancouver Declaration on Human Settlements (1976), the Habitat II Conference, Istanbul Declaration on Human Settlements (1996), and subsequently in the inclusion of Target 11 (to improve the lives of at least 100 million slum dwellers by the year 2020 in

the Millennium Development Goals (MDGs, 2000), a measure which galvanized international action to strengthen security of tenure vulnerable urban groups.

The importance of women's rights to land in ending poverty, achieving dignity for all and reducing gender based discrimination and violence is reflected in the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW). The principles of universal access to basic rights of shelter, access to productive resources required for subsistence and livelihoods and Indigenous Peoples' land-related cultural and territorial rights are also incorporated into a wide range of earlier international declarations and covenants. These include the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP); International Labour Organization Convention Number 169 concerning indigenous and tribal peoples in independent countries; the establishment of Agenda 21 (1992) and the Office of the United Nations High Commissioner for Human Rights (OHCHR) (1993); the International Covenant on Economic, Social and Cultural Rights (adopted in 1966, in force since 1976); the African Charter on Human and People's Rights (1987); the American Convention on Human Rights; and the European Convention for the protection of Human Rights. The rights to housing and to ownership of property were also enshrined in the 1948 Universal Declaration of Human Rights. The 1992 Convention on Biological Diversity recognizes the rights of Indigenous Peoples and local communities to access, use and benefit from land-based biological resources.

The growing global consensus on the importance of land results from progress in academic and policy research on land and from development agencies' accumulated practical engagement with land. Secure rights to land and property are fundamental in unlocking both large-scale and small-scale investment in farm production and land resources (Lawry et al., 2014; Deininger, 2003), improved security of tenure

is associated with increased agricultural productivity (Place and Otsuka, 2002; Banerjee et al., 2002), and more equitable distribution of land assets is associated with higher levels of economic growth (Deininger and Squire 1997; Ravallion and Datt, 2002). In South Asia, land reforms to improve tenure security and land access have been associated with poverty reduction (Besley and Burgess, 2000), and "land to the tiller" agrarian reforms in East Asian countries in the 1940s and 1950s increased rural prosperity and proved important in promoting urban and industrial development (Deininger, 2003). As a result of entrenched historical patterns of land distribution which persist in some countries, in addition to growing economic inequalities and rising land values that prevent poorer groups and younger generations from acquiring land rights through the market, redistributive land reforms are relevant today in various countries. This is especially so where unequal land distribution concentrates economic power in the hands of small elites and privileged groups, where land acquisition serves speculative purposes, and where land holdings fail to fulfil their productive, "social function" (a principle recognized explicitly in the Brazilian Constitution). In practice, insecure land tenure and unequal land distribution is widely associated with exploitative practices, unfree labour and political domination of the poor by the rich.

Because land is held under different tenure systems, including customary and group based arrangements, individual land titling as conventionally practised in developed countries does not offer a universal solution to tenure security and may risk concentrating land in the hands of local elites and undermining women's land rights (Toulmin and Quan, 2000; Deininger, 2003). A range of alternative, low-cost approaches is available, including the formal recognition of functional customary tenure systems (Lawry et al., 2014; Deininger, 2003; Toulmin and Quan, 2000), support for the improvement of spontaneous urban settlements (UN-Habitat, 2008; Payne and Durand-

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Lasserve, 2013) and mechanisms to secure community land rights offer an important and cost-effective means of delivering tenure security in both rural and urban contexts in many countries (Deininger et al., 2010). While recognition of indigenous communities' land and territorial rights is central to both their cultural identify and for their livelihoods, other community groups also assert the need to secure and manage land resources on a group basis. This is particularly so for resources held in common, such as grazing land and community forests, but also includes agricultural lands in many cases, to which household and individual use rights can be allocated according to customary principles.

The recent wave of large-scale land acquisitions by outside commercial interests is one factor that has led to renewed global interest in questions of land governance and the need for improved monitoring. In Africa, Schoneveld (2014) estimates that 22.7 million hectares of arable land have been acquired by corporate entities, equivalent to between 15 and 35 per cent of all remaining potentially available crop land, excluding forests (Chamberlin et al., 2014). Many of these acquisitions have taken place over a relatively short period and are concentrated in more productive, high-population regions and development corridors where large numbers of smaller deals also take place (Cotula et al., 2014; Jayne et al., 2014), thus having considerable localized impacts on small-scale farmers. Across much of Central America, there has been largescale land allocation to corporate interests in recent decades, reducing the space for small-scale farming, undermining food security and increasing dependence on imported foodstuffs (Baumeister, 2013). Other land governance problems include: erosion and non-recognition of customary and indigenous land management and tenure systems throughout the world; increasing fragmentation of farm plots; landlessness; reduced access to land due to combined demographic and market pressures (Jayne et al., 2014), the need

to increase capacity and curb corruption in land administration, the need to strengthen coordination amongst multiple government agencies and to strengthen stakeholder participation in decision making and planning related to land (ILC, 2015, forthcoming).

In addition, current debates feature a number of issues about the broader relevance of land governance:

- The role of land governance in relation to the maintenance of peace and stability, and in relation to social, political, civil, religious, ethnic and military conflicts and conflict risks within and between nations and peoples (see for example Huggins and Clover, 2005);
- The importance of clarifying land rights and governance arrangements in relation to disaster risk reduction and in management of and adaptation to climate change (see for example Pantuliano 2009);²
- In the context of climate change and global financing for climate change mitigation and reducing carbon emissions from deforestation and forest degradation (REDD+), the need for effective land and territorial governance in order to achieve sustainable landscapes that integrate the maintenance of essential local, regional and planetary scale environmental services and biodiversity with human land and natural resource use (Sayer et al., 2013).³

It is not within the scope of this document to set out a detailed, normative vision of what land governance should be like. Rather, the priorities for improving land governance systems and arrangements that support broader development goals are context-dependent and should emerge from joint stakeholder engagement in monitoring and learning efforts. Nevertheless, based on agreed global principles as enshrined in the VGGT (FAO 2012), the principle characteristics of effective

² See also: http://usaidlandtenure.net/events/disasters-webinar

³ See also http://www.landscapes.org/

and equitable land governance can be summarized as a set of policies and institutions that together enable:

- The establishment of tenure security for all, through the legal recognition and support for development of multiple forms of tenure, including both formal and customary systems.
- Increased provision of secure land rights for women, held in their own right or through joint spousal tenure, according to demand and including rights to inherit and bequeath resources, and the progressive evolution of customary systems so that they become less discriminatory.
- Secure indigenous land and territorial rights, and opportunities for community groups to secure areas of land and natural resources held in common in both rural and urban areas.
- Opportunities to access land for purposes of housing, agricultural and other economic activities accessible to all social groups, including younger generations and groups reliant on extensive use of natural resource for their livelihoods.
- Respect for and mechanisms to enforce land and property rights that are socially legitimate.
- Efficient, accessible and appropriate mechanisms for the resolution of land disputes and conflicts of all kinds, through the formal judicial system and alternative mechanisms, including those based on customary practice.
- Opportunities and programmes for land redistribution and restitution to redress historically entrenched inequities, unjust expropriations and solve problems of landlessness and increasing fragmentation of small-scale plots used by vulnerable and low-income groups.
- Successful functioning of land rental and purchase markets, with safeguards to protect the rights of all parties.

- Simple and inexpensive procedures to secure land rights and conduct land transactions in a timely and efficient manner, accessible to all social groups.
- Appropriate decentralization and subsidiarity of land management and administration by regional and local government, and community and customary or indigenous groups.
- Accessible and affordable land administration services in all geographical regions and for all social groups.
- Effective arrangements for land-use planning for the development of rural and urban infrastructure and land development projects that enable the participation of all affected and interested parties.
- Mechanisms whereby investors large and small can obtain access to land for development projects that serve public interests in a timely and efficient way.
- Guarantees mechanisms for the free prior and informed consent of affected communities to commercial land investments, and for due legal process and adequate compensation for individuals and communities for the loss of rights to land compulsorily acquired by the state.
- The raising of public tax revenues from commercial land users according to values of land holdings to assist in recouping the cost of land administration and support public investment generally.
- Identification and prevention of the corrupt use of public lands and land management institutions to serve private gain and political objectives.

In addition, a number of important features of the functioning and operations of land administration necessary to support good land governance need to be considered.

The Voluntary Guidelines (FAO, 2012) ask that states make land registration or rights recording systems available to all citizens and most countries do have systems to document land and property rights. In many cases, the geographical coverage and inclusion of different forms of tenure, including customary tenure rights in these systems, need to be increased and improved. However, not all land registries function in the same way and not all are capable of providing accurate information and efficient access, avoiding corruption and securing registered property rights. In this context, a number of aspects can be highlighted:

- Accuracy of land administration: land title registries tend to be more accurate than deed registries because the degree of control that the registrar has on registration applications is greater. The strength of procedures used to review land registration, title or transfer applications, including checks on the identity of applicants to avoid fraud, is one important aspect. The organization of a plot-based cadastral or land information (LIS) system (as opposed to a system organized by personal folios), in which key data on rights holders and other aspects are linked to unique land parcel numbers, represented on a map) equips the registry to function more accurately. This also is applies to the degree of coordination between the land registry and other agencies, the inclusion of relevant data in the LIS, and whether or not the courts consider the land registry's records to be accurate. The existence of compensation mechanisms, and whether or not compensation actually occurs in the event of mistakes, indicate whether the land registry is able to provide accurate information and if it is working effectively.
- Land administration efficiency: the organization of the land registry's books and data as discussed above plays a big role, as does its human and technical resources capacity and the fee incentives that the registry has, for example a sliding scale of user registration / transaction fees, which reduces the longer these operations take, will encourage efficiency. While computerization and digitization

- of data can be expected to help improve efficiency, this is only the case if the managers and operators of the system can perform effectively using a paper-based system, otherwise inefficiency may just become more costly.
- Corruption in land administration: corruption, in the form of rent-seeking by land officials, can vastly increase the speed of land transactions and the cost for those willing and able to pay. It also creates the risk that fraudulent or inaccurate, overlapping land allocations and transfers will be registered. Where the users are not willing and able to pay, rent-seeking can extend the time taken to process claims and applications inordinately, or even prevent legitimate ones from ever being formally registered because the attention of officials, and opportunities to secure land rights or to access new land, are concentrated on those with greater means, power and influence. The degree of independence that the land registry has vis-à-vis politicians, other government officials and centres of power, the ways in which a land registrar is selected, the legitimate incentives available to staff (such as salary levels and performance incentives), and the ways in which staff are supervised and managed, all have important bearings on levels of corruption in land administration. Users' practical experiences of the operation of the system can provide good indications of the level of corruption problems.
- Accessibility of land administration: Important elements of an accessible system are the relevance of the services offered by the land administration system and the extent to which it addresses the needs for tenure security, land access, land registration or transfer, and documentation services for land users holding land under different forms of tenure, including customary rights. In addition, it must be physically accessible, creating a need for geographically dispersed access points

and functional linkages, for example between a central registry and a municipal registry, or district land board administering squatter upgrading, or rural registration programmes, or a communitybased organization, customary authority or villagebased committee managing the allocation of land rights and changing land uses within a community land area. Other aspects of accessibility include: the level of fees and costs for different services, including the disclosure of information, relative to their affordability; whether or not land services are directly accessible to users or are only accessible via notaries, lawyers or other professional intermediaries; the travel costs involved in accessing services; and whether or not there are specific obstacles to access by women or certain groups, such as literacy, cultural discrimination, income levels and tenure status.

GLII experts have agreed that land governance is fundamental to good governance generally and to the contract and trust between citizens and governments. Citizens need to feel trust or confidence in the responsible public organizations and designated authorities responsible that they will govern land resources in a fair and respectful manner. Public confidence in land governance and the operation of land administration services can help to build confidence in government more broadly, whereas failures in land governance severely undermine the social contract between state and citizens. Land governance outcomes have consequences for development and for public governance that stretch far beyond land itself, and encompass economic growth, poverty, inequality, food security sustainability and the integrity and legitimacy of government.

3.2 KEY DIMENSIONS OF LAND GOVERNANCE FOR MONITORING

The principle objective of establishing land indicators is to enable monitoring to support the improvement of land tenure security and of land governance as a whole,

in all countries and at a global level. Land governance includes land policies, legal frameworks and effective institutional arrangements for land administration and for decision making concerning land allocation, land use, access and distribution (Deininger et al., 2010), and concerns the processes by which decisions are taken and the ways in which onflicting interests in land are managed (UN-Habitat, 2011).

Land governance, land tenure, land access, land administration and their equity dimensions

In line with the global policy consensus and the findings of empirical research in relation to land, as summarized in the previous section, land governance must respond to the needs of all social groups in the achievement of higher level development goals. These needs include those of both women and men, in both urban and rural areas, private business, other economic actors and publically managed efforts for economic development, all of which are enabled and assisted by ensuring adequate security of tenure and access to land related services. Land administration systems and mechanisms for land conflict and dispute resolution need to be relevant to the full range of potential users. They need to perform efficiently and effectively to provide land users with certainty as to their rights in a timely way, and enable then to make productive investments in land resources, while also promoting sustainable land and natural resource use (Deininger et al., 2010). In addition, mechanisms should be available to enable land access by those who need it for purposes of shelter, livelihoods and income generation, which may involve the introduction of specific programmes or regulatory mechanisms. These include land taxes, zoning and planning restrictions designed to ensure that land is not excessively concentrated or left idle for speculative purposes, the correction of historical inequities in land access and distribution to avoid associated social conflicts, to enable broad-based economic growth, and to provide new economic opportunities for those living in poverty.

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Based on these principles, GLII experts have identified a series of key topics which the monitoring of progress in land governance should address, and for which specific indicators have are proposed (see Annex A):

- Tenure security, including both documentation of legally recognized land rights and perceptions of secure protection from dispossession and eviction; documentation and legal recognition alone do not necessarily lead to real security in practice.
- Legal frameworks to ensure women's tenure security specifically, and gender equality in terms of access to land, and rights to hold, inherit and bequeath land and property.
- Formal recognition of the plurality of tenure systems, with provision for clear definition and security of rights, covering statutory and customary, individual and collective tenure regimes, temporary and permanent forms of tenure based on ownership, state land concessions or licences, rental and leasing arrangements, etc.
- Quality and effectiveness of land administration systems, including their accuracy, geographical coverage, efficiency, relevance and accessibility to all social groups irrespective of forms of tenure, and their degree of freedom from corruption, as discussed in the previous section.
- Levels of conflict related to land, and efficiency and effectiveness of systems for land dispute and conflict resolution.
- Sustainability in land use as a critical means of maintaining ecological systems, environmental services and biodiversity, and enabling adaptation to climate change.

In addition, GLII participants emphasized the need for monitoring to address equity aspects:

Cases and frequency of dispossession and loss of land rights by vulnerable groups, and measures to discourage or prevent the displacement of people or of socially established land uses, by land allocations for large scale investments, mining concessions, and commercial and infrastructure development projects, except where this takes place according to the principles of *Free, Prior and Informed Consultation* (FPIC), and with adequate compensation.

Political and administrative will and capacity to ensure that land fulfils its "social function". This is a concept which features, for example in the Brazilian Constitution, according to which both private and public land holdings land should be used productively or for other recognized social and economic and environmental purposes, not left idle or acquired for purely speculative purposes, and not excessively concentrated in relation to broader social need. A particular concern is whether governments have any programmes of affirmative action to mitigate gross historical inequities in land distribution and to ensure that vulnerable people in need of land, including women, landless or land-scarce farmers, displaced people and others without secure shelter and livelihoods, can gain secure access to land.

Sustainable land use

Land governance must also take account of the sustainability of land and land-based natural resource use, and therefore the formulation of indicators that can provide measures of changes in sustainability of land use is also relevant, alongside indicators of tenure security and incidence of land conflicts and the institutional, policy and legal dimensions. The Open Working Group on the sustainable development goals has highlighted the need to protect land and soil resources which underpin key services for sustainable development, including food production, carbon and nitrogen cycling, biodiversity protection and regulation of water resources. Effective mechanisms for sustainable land-use planning which also responds to social and economic needs is therefore required at a variety of scales, and in both rural and urban areas. This is critical in the context of climate change and other pressures on land resources. As a result, sustainable land use and the good management of soil resources therefore underpin several of the SDGs. Given the difficulties of defining "sustainable land management", which is highly context dependent, indicators have been proposed to measure changes in land cover, land productivity, and soil carbon. These will be based, as far as possible, on remote sensing and earth observation data, to alleviate a potentially complex data collection and reporting burden on individual countries.4 Attention should also be given to the management and institutional processes whereby countries can strengthen sustainable land management as part of overall land governance arrangements. This is important for enabling the effective implementation of global climate finance to improve sustainable land use, reduced carbon emissions and increased carbon accumulation at a landscape scale.

In a rural context, sustainable land use can be interpreted as a condition of "zero aggregate land degradation" (UNCCD, 2013). Good management of factors such as land cover, soil resources, carbon stocks and natural ecosystems, including natural resource management and benefit-sharing arrangements at local level, are all relevant and have a bearing on opportunities for farmers and others to adopt sustainable land-use practices. In an urban context, however, sustainability and, accordingly, the objectives of land-use planning are significantly different; they are more concerned with the avoidance of environmental, health and security hazards and natural disaster risk, the allocation of land for different purposes including industrial, commercial and residential use, the provision of public services and public goods and amenities (including clean air open space, and social facilities),

and thus with the functional sustainability of human settlements. Urbanization necessarily involves major changes in land use, land and the physical remodeling and socio-economic reallocation of land resources, but the challenge is to ensure that these changes are balanced and sustainable, engaging the people and stakeholders who are affected. Accordingly, sustainable urban planning must have regard for these elements, and planning policy must consider the levels of land pressure exerted by urban migration, urban commercial development and transformation of peri-urban land resources.

Thus, monitoring needs to address not only land quality, but also the capacity and ability of countries to plan sustainably in both urban and rural contexts. At the macro-level, planning should focus on maintaining aggregate levels of land quality and environmental services across the national territory, in relation to demographic changes and social and economic demand, which may have repercussions for some established land uses and land users, and for adjustments to business-as-usual patterns of urban growth that are generally focused on capital or major cities and involve increasing rural-urban migration. This requires some integration or bridging of land-use and economic planning processes and mechanisms for stakeholder consultation and engagement.

Socio-economic and bio-physical monitoring efforts that will be undertaken and managed by different stakeholders ultimately need to be brought together within a consistent overall framework, with opportunities for constructive "conversations" between the different data sets, global epistemic communities, and country-level actors.

The place of land governance and land-related interventions in responding to pressures on land resources and their combined socio-economic and biophysical impacts is summarized in Figure 2 below.

⁴ Stakeholder Workshop on Sustainable Land Use Indicators, hosted by European Environment Agency (EEA) and the Institute for Advanced Sustainability Studies (IASS), Copenhagen 5-6 February 2015.

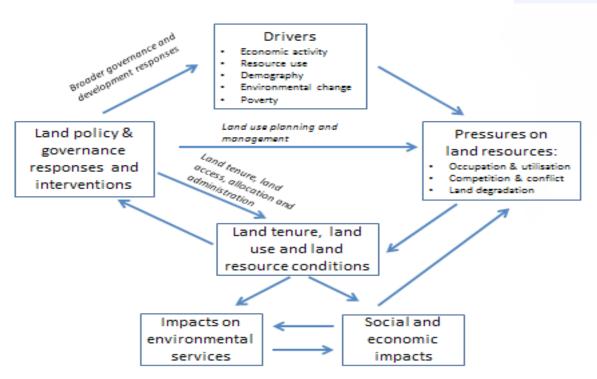


Figure.2: Pressures on land resources, drivers, impacts and responses (Source: author's adaptation from Indicators in the UNCCD context: Presentation by Victor Castillo, UNCCD Secretariat at the GLOBALANDS Project, 4th International Expert Workshop, Paris 6-7 October, 2014).

This diagram illustrates how a common set of overall economic, demographic and environmental drivers leads to pressures on land resources in terms of occupation, use, competition, conflict and land degradation, and thus to changing tenure, land use and natural resource conditions, which together have social, economic and environmental impacts. These changing land conditions are the domains within which different land policy and governance measures intervene, by strengthening land tenure, access, allocation arrangements, by improving land-use planning and land management arrangements. Potentially these measures are part of broader governance responses and changes in development pathways, which can influence the drivers of land occupation, land use, land development and land conflict. The purpose of land monitoring is then to track both socio-economic and biophysical land outcomes, and the quality and effectiveness of the full range of policy and governance interventions in an integrated way.

3.3 SPECIFIC OBJECTIVES OF LAND MONITORING

GLII has identified ten specific, inter-related objectives of effective monitoring systems in helping to deliver tenure security for all and strengthen land governance global, regional, national or sub-national levels:

- To track real world land outcomes for people that result from ongoing and combined local to global drivers, trends and policy and programme interventions and the significance of these outcomes at national scales.
- ii. To build common understanding and stakeholder learning about what current policies and programmes are achieving, what they are not, the importance of different aspects of land governance, and which approaches work in different development contexts. This will help to build consensus in problem diagnosis and to set

- the basis for well-informed debate and decision making about land.
- iii. To inform formulation of land policy, design of programmes, budgeting and allocation of funds to enable them to contribute progressively to the practical adoption and implementation of the principles, practices and approaches recommended by the VGGT (FAO, 2012), the Framework and Guidelines on Land Policy in Africa (LPI, 2010), the Principles on Responsible Agricultural Investment (CFS, 2014), and other relevant instruments.
- iv. To contribute to responsive delivery of land programmes and projects, by providing "real time" feedback that identifies areas for improvement (at national, global, local or project levels).
- v. To promote a "race to the top" by the different United Nations member states by identifying and recognizing effective policies and related good practice that are helping to achieving positive outcomes, by adoption of the principles and practices enshrined in The Voluntary Guidelines on the Responsible Governance of Tenure (CFS and FAO 2012).
- vi. To promote better understanding of gender and social (in)equalities in land rights and the effects of land governance practices and arrangements on different social groups, through a disaggregated monitoring approach.
- vii. To encourage and agree on common and harmonized standards for assessment of progress and performance in land governance and in extending and improving tenure security.
- viii. To identify specific responsibilities in relation to land governance of different branches of government, civil society, academia, and private business, and to contribute to better integration across government and amongst stakeholders in dealing with land and land rights.

- x. To provide information to assist in planning for national and local government, multilateral and bilateral development agencies and CSOs concerned with land, and private business (ranging from large-scale corporations, medium-scale enterprises and small-scale business people, traders and farm producers) so as to be better able to meet their own objectives and fulfil their social responsibilities in relation to land rights and sustainable resource use.
- x. To promote greater transparency and access to information about land ownership, land use and planning of land developments, and greater public accountability of governments, private investors and of large-scale and institutional landowners in decision making over land.

3.4 PRINCIPLES FOR SELECTION AND FORMULATION OF LAND INDICATORS

Disaggregation

For indicators to be genuinely meaningful for policy and practical action, it is necessary to have more precise information so that it is possible to tell which groups in the population and which parts of a country are benefiting and which are not; in other words, the indicators require disaggregation in order to assess specific outcomes and practical priorities for further improvements.

Accordingly, two central principles adopted by GLII are:

Gender disaggregation for all land indicators, in order to know whether women are benefiting as much as men, given the importance of land for women's livelihoods and the importance of women's security of tenure for social reproduction and overcoming poverty.

Disaggregation by urban and rural areas for all land indicators, given the importance of tenure security and land governance n both rural and urban contexts. Disaggregation by tenure type (or rather, collection of data according to tenure type) should enable an assessment of the levels of security tenure that are available and the relevance of existing governance mechanisms and services to those holding land in different ways, including statutory and customary, leasehold and rental arrangements and through individual, spousal / household, or community / group-based land registration or titling. If data is collected in this way, it would also permit identification of the percentage of men and women whose tenure security derives from legal recognition and documentation of household, community or indigenous rights.

GLII also highlights the importance of:

Disaggregation by income group or socio-economic wellbeing (e.g. as computed by the Human Development Index) would enable information about land governance outcomes and processes to be correlated with wealth and poverty status, providing insight into the social equity dimensions, including the incidence of land problems and distribution of benefits amongst different social groups.

Disaggregation by geographical or major administrative region can capture inequalities amongst regions and variations in governance practice. For practical reasons however, geographical disaggregation is likely to be confined to large countries and those with federal or highly decentralized structures, and decisions on this should be left to the country level according to the national systems for data collection.

An additional aspect of consideration is:

Disaggregation by ethnic group might similarly provide information about the incidence of discrimination in land governance and the extent to which different groups experience land governance problems and capture the benefits of policy and programme interventions. Understandably, however, there are questions about the

desirability of collecting and disseminating land-related data according to ethnic categories, which could be used against certain groups or individuals, and of the willingness of governments to collect and divulge data that is disaggregated in this way.

Consideration of the full range of tenure categories

When monitoring land governance, in addition to quantitative changes in the numbers and proportions of men and women who benefit from secure land rights, it is necessary to know to what extent countries' legal and institutional frameworks recognize and support different land tenure categories. This is in order to identify the scope to extend tenure security to all, including tenure forms for land resources held in common, and to provide for equity between men and women in rights to hold, inherit and bequeath land. The availability of appropriate land administration services, the effectiveness of land dispute resolution mechanisms and land-use planning, as well as the levels of gender equality between people with different forms of tenure, including those in the customary sector, also need to be assessed. This is essential in order to assess whether land governance institutions and interventions are able to address the needs of all social groups, or if particular groups and forms of tenure are excluded from legal recognition. This may be as a result of political action or institutional failures, which can lead to bias towards better-off or politically favoured groups and regions, or towards men rather than women, or individuals and households rather than groups that hold and use land as collectives and through customary arrangements.

Selection criteria for the indicators

In its technical guide for the development and reporting on Global Land Indicators, the GLTN (2014) proposed a set of criteria to be used to select and screen the proposed indicators.

BOX 1. GLTN/GLII PROPOSED CRITERIA FOR SELECTION OF LAND INDICATORS

- Valid and meaningful an indicator is valid and meaningful if it adequately reflects the phenomenon it is intended to measure and is appropriate to the needs of the user.
- Sensitive and specific to the underlying phenomenon sensitivity relates to how significantly an
 indicator varies according to changes in the phenomenon. An indicator should ideally respond
 relatively quickly and noticeably to changes, but not show false movements. The indicator should
 also be specific, aligning with the phenomenon of interest and no other, non-related phenomenon.
- Grounded in research awareness of key influences and factors affecting outcomes needs to be built up.
- Statistically sound indicator measurement needs to be methodologically sound and fit for the purpose to which it is being applied.
- Intelligible and easily interpreted indicators should be sufficiently simple to be interpreted in practice and be intuitive in the sense that it is obvious what the indicator is measuring.
- Relate where appropriate to other indicators a single indicator tends to show part of a
 phenomenon. Simple single indicators, such as life expectancy or employment rates, are useful
 as 'background' measures, but each by itself has serious limitations and disadvantages as an
 indicator of the quality of life, or as a measure of development. They are best interpreted alongside
 other similar indicators.
- Allow international comparison indicators need to reflect specific global goals and be consistent
 with those used in international indicator programmes, especially with the United Nations
 Statistical division so that comparisons can be made.
- Ability to be disaggregated indicators need to be able to be broken down into population subgroups or areas of particular interest, such as sex or ethnic groupings or regional areas.
- Consistency over time the usefulness of indicators is directly related to the ability to track trends over time, so as far as possible indicators should be consistent.
- Timeliness data needs to be collected and reported regularly and frequently relative to the
 phenomena being monitored. There should also be minimal time lag between the collection and
 reporting of data, to ensure that indicators are reporting current rather than historical information.
- Linked to policy or emerging issues indicators should be selected to reflect the important issues as closely as possible. Where there is an important emerging issue, indicators should be developed to monitor that issue.
- Compel, interest and excite does the indicator resonate with the intended audience?

(Source: Adopted from Advisory Committee on Official Statistics. (2009). Good practice guidelines for the development and reporting of indicators. Wellington: Statistics New Zealand).

General considerations on the nature and purpose of different types of indicators are summarized in Annex B. In addition to the various points of principle regarding indicators and the importance of different aspects of land governance discussed above, GLII working group discussions have identified a series of central practical considerations in the choice and selection of indicators for the GLII monitoring framework, these partially overlap with these criteria:

- Overall coherence of a set of indicators, in being internally consistent, covering the range of priority questions and meeting shared objectives.
- Global comparability of indicators: the indicators must be defined and interpreted in such a way that they can be used to measure essentially the same things in different countries and contexts, and reflect the priority issues agreed amongst the stakeholders.
- Measurement and reporting should also be feasible on a global basis, i.e. not so expensive that the costs are prohibitive.
- The indicators must be meaningful and useful to different stakeholders and, in this sense, owned by them, so that they reflect shared understandings of priorities and serve common objectives. Ideally, they should also be useful to address the priorities of specific interest groups, agencies or governments but at the same time not be skewed by particular approaches they adopt that are not shared by others. Ownership and utility of indicators will be reflected in their precise definitions for which it is necessary to consider exactly what each indicator will be measuring and for what (whose) purpose. Different stakeholders (e.g. a national land administration service, a land rights NGO, or a major international donor investing in land) will have their own specific objectives and mechanisms for data collection and monitoring that aim to serve these objectives. However, there needs to be common understanding of how these different actors and monitoring systems can contribute to common national and global level monitoring efforts, and what data and information they should be providing.
- Therefore, the overall framework for indicators and monitoring should include scope for functional "subsidiarity". In other words, the headline indicators for global monitoring must be relatively few in number, clearly agreed, and cannot be expected to include everything that every concerned organization may wish to monitor. They must be meaningful at country level and for the different stakeholders, but in different countries and contexts it will be appropriate to collect and analyse data on a wide range of specific aspects, which may not be directly relevant or comparable globally. There must be scope for different monitoring efforts to meet different needs. Clear agreement on this will, in turn, assist in defining and distributing responsibilities and resources for global land monitoring efforts, and the funding requirements.
- The overall approach to monitoring needs to address the causal nexus of changes that occur at global, national, project and regional / local levels. In other words, outcomes need to be tracked that result from ongoing processes and trends, from action by the international community, national governments, and by specific interventions and actors locally and regionally at different scales. Processes that are being tracked, such as establishment and application of global instruments (such as the VGGT) or national policies and legislation, can be assessed from the points of view of their outcomes and impacts across national territories, at local level and for specific groups.
- The framework should therefore provide for indicator tracking at different levels – global, regional, national and sub-national. This is so that appropriate levels of aggregation and disaggregation can be achieved, and suitable mechanisms for data collection and analysis can be put in place at the different levels. In that way,

different stakeholders, including international organizations, relevant branches of national and sub-national governments, civil society organizations and specific development projects operating in the land sector, can contribute to monitoring efforts.

The practical questions for indicator selection and formulation, the feasibility of data collection, analysis and reporting, and meaningfulness for key stakeholders are discussed in Section 4, below. The indicators as currently proposed and formulated are listed in Annex A.

The detailed rationale for the indicators as formulated, proposed disaggregation, potential data sources and available methods for assessment and data collection are presented in a separate document on the GLII operational framework. It should be noted that precise formulations are dependent on agreed definitions of the concepts and terms to be used; for this purpose, a glossary of relevant concepts and terms has also been developed.

FEASIBILITY CONSIDERATIONS

The indicators selected, and as specifically defined and refined by the GLII process, must be feasible to use. This is a necessary guiding principle of which there are two key dimensions:

i) Technical and practical feasibility of the methods proposed for data collection and analysis to enable the indicators to work in practice and to deliver the necessary combinations of quantitative and qualitative information, understanding and degrees of disaggregation required (methodological feasibility). Costs and current and future funding availability are also key factors, now and in future.

ii) Political acceptability for different nations and interest groups, and recognized shared utility and ownership by different stakeholders in their practical efforts to improve tenure security and land governance. Land indicators and their utility in achieving improved outcomes must be seen as legitimate by the users.

4.1 TECHNICAL AND PRACTICAL FEASIBILITY

For land indicators to be feasible, there must be appropriate sources of data available, and sound and rigorous methodologies for data collection and analysis are essential. This applies to both quantitative and qualitative data. For quantitative data, this means that survey methodologies and procedures for gathering samples or comprehensive data are sufficiently rigorous and detailed, and that statistical methods for data analysis and computation of indicator values over time must be sound, consistent and reliable so as to produce significant results. The monitoring of process indicators, to measure the extent of stakeholder and public participation in and acceptance of land governance changes and developments, and qualitative data collection and analysis in general, must also follow consistent and robust methodologies. Both quantitative and qualitative data sets used for monitoring must be internally consistent at the national level and be comparable across countries.

If adequate data sources and feasible methods for data collection are not yet available, or cannot be guaranteed in future, responses and alternatives must be considered from the beginning. Nevertheless, practical experience to date, the feasibility study undertaken (UN-Habitat/ GLTN, 2015), the interests of statistical agencies, and developments in new technology all suggest that increasingly sophisticated land monitoring is feasible, and thus a degree of ambition is appropriate. This, however, this is likely to require additional technical capacity at both national and global levels, especially for more comprehensive and more regular and globally comparable household surveys and polls that capture detailed land information and land user perspectives. The coverage and accuracy of administrative data maintained by national governments also needs to improve considerably in many cases, and indeed this is part of the business of strengthening land governance.

In the short term, where new instruments and procedures for data collection and analysis are to be introduced, these must also be feasible to implement. This is likely to require using and supplementing existing capacity and available data sets with modest affordable innovations, achievable within nationally available budgets and resources, or with additional support delivered through international and regional programmes to assist land monitoring. Where the data sets necessary for monitoring changes in important indicators prioritized by GLII participants are missing and incomplete, it will be necessary to pilot test new approaches to establish their feasibility and affordability. In order to do this, the necessary technical capability, financial resources and institutional responsibilities must be in place. This will require time and investment and may mean that important data sets for systematic monitoring at the national level, or to enable comprehensive global comparisons, can only be built up gradually. Incremental processes and the scope for increased research efforts need to be considered,

through which regional and country coverage can be extended over time within a consistent overall framework.

For certain purposes, in particular, for example, regular global reporting within the framework of the SDGs, certain more feasible indicators that are amenable to measurement using existing data sources with modest, affordable and easily implemented practical improvements will have to be prioritized. Indicators that rely, for instance, on global polls with substantial sample sizes, completion and regular updating of national administrative data sets, or on sophisticated processes of expert assessment and triangulation across multiple data sets, are likely to prove more complex and costly in implementation. It would be difficult to apply methods such as these comprehensively, and would require piloting, broader experimentation and sustained research investment. Thus, they are less likely to be feasible and would be a lower priority in relation to the SDG indicator framework, but where such indicators were agreed to be necessary, they could be included in development of the GLII monitoring framework in the medium-to-longer term.

Data sources

The feasibility study undertaken by GLTN with the World Bank (UN-Habitat, 2014) assessed the range of potential data sources and their suitability to generate globally comparable data as required for the SDG framework, and to support the broader set of indicators identified by GLII. The principal data sources include:

 Administrative data – in particular that derived from national land information systems – although in many countries these data sets are incomplete and not up to date, or gender-disaggregated, therefore requiring supplementation from other data sources, according to the quality and coverage of administrative data available in different countries.

- National censuses and household demographic and health surveys: there is considerable scope to expand these by introducing specific land-related modules into existing national surveys, designed and adapted so as to elicit consistent data across different countries.
- Purpose designed global polls comprehensive sample surveys managed on a global basis to supplement data available nationally on questions not easily integrated into demographic and household surveys; for example, perceptions of tenure security for which "perception modules" are under development by the World Bank.
- Expert assessment panels and expert surveys: these provide important ways of assessing the quality of legal frameworks, qualitative improvements and changes, and of making sense of institutional processes and complex and incomplete data sets from different sources. Expert opinion polls are a relatively easy and cost-effective method, but may need to be supplemented by use of multi-stakeholder platforms using internationally consistent methodologies which are more complex and costly. Efforts are also needed to recruit appropriate panel members and to ensure that internationally consistent methodologies are applied. The IFAD rural land index and World Bank LGAF provide models that can potentially be adapted.

The feasibility study concluded that data collection of globally comparable data to meet the requirements of GLII's identified land indicators is feasible, although some investment in additional data sets and capacity will be needed. United Nations Secretary General, Ban Kimoon, has proposed that the framework for monitoring progress towards the SDGs should take full advantage of the data revolution offered by new information and communication technologies. He also proposed that

necessary innovations should be embedded within national data collection and statistical systems, thereby stimulating innovation in data collection, analysis and communication, resulting in gradual and sustainable improvements in monitoring capacity. Increasingly wide and comprehensive sets of data are becoming available globally because of information technology and internet connectivity, including growing capacity in developing countries and the expansion of crowd sourcing for global data.

As time goes on, capability will increase further. "Big data" must be accompanied by "big analysis", however, and the full potential of the data revolution will only be realized if the detailed, lengthy work in data analysis can be undertaken. Nevertheless, specific opportunities are likely to emerge, for instance, for increased coverage and rapidity in analysis and reporting of household survey data, meta-analysis of multiple data sets and crowd-sourcing of data. Topics covered could be indigenous and community land claims and land disputes, the interoperability of global data bases and platforms, and integration of spatial and socio-economic data sets for both national and global level analysis, reporting and communication of findings. With the right combinations of skills and expertise, and strong institutional and stakeholder partnerships, significant levels of aspiration and ambition are appropriate, alongside a necessary focus on a set of feasible, meaningful and relatively simple land indicators.

4.2 POLITICAL ACCEPTABILITY AND OWNERSHIP

As mentioned in the introduction, global land indicators must cater for a diversity of situations and meet different expectations, and it must be recognized that multiple agencies with different interests and approaches are involved. For political reasons, some countries may resist proposals to monitor levels of public disclosure

and accountability of political decisions made about land, although in other respects they might be open to making practical improvements in land governance in response to social demands and economic needs. Civil and military conflicts or periods of heightened political tension can be expected to disrupt both the institutional arrangements for land governance and for data collection and monitoring to track its outcomes, quality and performance.

In addition to the acceptability of the chosen indicators by states and international agencies, another important dimension of political acceptability and ownerships, which could be described as bottom-up acceptability, is the need for acceptance and ownership of indicators as being significant and meaningful for civil society and community-based organizations at a local level. This is generally needed to link targets and monitoring efforts to practical programmes of action and to ensure broader accountability of actions by governments. This principle is linked to the incorporation of participatory, community-based monitoring processes that many civil society organizations have already developed and are using into the broader GLII framework. These approaches, although difficult to apply comprehensively and consistently, can help where there are major data gaps, and are relevant to the broader GLII methodology in the longer term. Appropriate subsidiarity can be encouraged, whereby countries, administrative regions, land-related development projects and local organizations conduct broader or more specific monitoring exercises to meet their own needs, but within a consistent framework, enabling them to report data necessary for globally comparable monitoring to higher levels.

It should be recognized that political acceptability, ownership and methodological feasibility are connected. Technical feasibility, convincing logic and workable institutional arrangements are all important in securing the high-level political acceptance and

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ownership required for land monitoring at the national and global levels. The processing and absorption capacity of decision makers and political systems is likely to be limited. This creates a risk of information overload and leads to the requirements for relatively clear and simple systems for information management focused on a small number of meaningful indicators at the political level. On the other hand, many countries still have limited capacities for management, data collection and monitoring, and continue to grapple with inadequate existing land information systems, poorly kept land registries, and limited data on large or densely populated geographical areas. This has negative impacts on specific social groups and forms of tenure, for instance where land and natural resource management is based on customary practices and principles, and for informal settlements where rights of occupation are regarded as legitimate by low-income urban communities.

These circumstances create challenges: available capacity must be focused on gathering and analysing information needed to understand gaps and priorities on the key areas of land governance where improvement is necessary, and on mobilizing resources both to meet these gaps and priority needs and to improve capacity for monitoring and ongoing management of programmes that can deliver tenure security and land governance improvements. For any monitoring process to be feasible, the institutional capacity and arrangements for collaboration amongst different actors need to be addressed, and specific responsibilities at the different levels defined.

THEORY OF CHANGE

A theory of change (ToC) makes explicit the logic and assumptions about how different causal factors interact to produce change that underlies the planning and design of interventions intended to realise or contribute to a set of specific desirable outcomes. Theories of change and intervention designs should be based on accumulated knowledge and evidence, but they can also be useful as tools for visualising anticipated processes of change and in building stakeholder understanding, and consensus in devising new and innovative approaches. As such, they can be tested against the results of experience and modified so as to inform revised approaches and policy, programme or project designs.

When applied to interventions that involve the establishment of systems for monitoring and impact assessment, a ToC can show how a monitoring or impact tracking system can help to achieve the desired results and how it needs to be linked to other practical programmes of action in order to do so. Evaluation of the results and impacts of interventions can test the validity of the assumptions made and demonstrate how a monitoring system can be improved so as to provide more useful information to measure changes in outcomes, and to track factors which have an important influence and how decision makers and other actors can make better use of monitoring data. This may involve monitoring new things and the adjustment or modification of indicators, data sources and means of analysis.

The ToC proposed here is intended as a tool for visualization and discussion, and is therefore subject to further iterations and revisions. The key intervention is the establishment of global- and national-level monitoring systems based on the adoption of a common set of agreed land indicators by member states and other stakeholders. The main assumptions are that sufficient funding will be available for programmes to enable countries to improve land governance over the next 15 to 20 years, and that the development and roll-out of monitoring systems will be part of global and

national frameworks and programmes of action by GLII participant and partner organizations (linked to the SDGs, to GLII as a partnership promoting global land monitoring, and / or to specific projects and support programmes). This requires policy commitments and investments to strengthen land governance, directed towards bringing about changes in institutional performance and concomitant changes in the attitudes and behaviour of key players.

The ToC illustrated in Figure 3 describes the anticipated expected causal linkages between the actions and outcomes that take place. It also illustrates the assumptions made about the nature and context of efforts to strengthen monitoring and other factors that may need to be addressed, at each of three different levels; i) that of the monitoring system itself; ii) within the land governance and land tenure systems; and iii) in making progress towards higher-level development goals and strengthening broader governance of national and global development. Actions at each of these levels are within the scope of land sector projects, programmes and policy interventions, undertaken by governments and supported by international donors, development agencies and partners, although of course the outcomes are influenced by other factors.

Reading from right to left, the diagram visualizes the changes that may result from a starting point that involves: i) the adoption of a set of land indicators at global levels, linked to ii) the principal assumptions of adequate funding and investment to support improved land governance and increased tenure security, including support for the necessary monitoring capacity. These principal interventions could be expected to lead, under certain conditions, to a series of specific and systemic changes (indicated by the thick red arrows). These include: a) improved monitoring capacity together with increased stakeholder engagement and understanding at the country level; b) a set of improved land governance processes and outcomes; which result in c) improved land outcomes for people, on the right

hand side of the diagram; in turn leading to d) better development outcomes and the realization of higher level development goals, represented by the yellow circles on the far right.

Clearly, improved land monitoring alone cannot be expected to lead to these results, even when combined with increased investment in programmes to strengthen the different aspects of land governance interventions. The theory of change generates a subsequent chain of downstream assumptions (represented by the grey circles at the bottom of Figure 3). These concern the links between adoption of indicators, improved data availability, incentives to improve performance, increased investment in land governance and the ability to make effective use of it, leading to improved land outcomes, broader development interventions and the attainment to development goals at the country level. These assumptions represent necessary conditions for the anticipated progressive changes to occur in practice at sufficient scales, indicated by the blue arrows linking the assumptions at the bottom to improved land governance processes, and land governance to improved development outcomes and broader goals:

As noted above, a principal assumption is that adoption of the land indicators at global and country levels will be linked to international funding and practical mechanisms to strengthen land governance and tenure security for all types of land users. This would need to include financial and technical assistance to strengthen capacity at national levels, together with assistance to enable collection, analysis and reporting of land monitoring data, at national, regional and global levels. A clear place for land within the SDG framework of development goals, targets and indicators can be expected to stimulate expansion of these types of investments. GLII could also promote partnership arrangements to assist in generating the necessary data and to strengthen analytical capacity at the country level.

- A second, related assumption is that investments in improved data collection and monitoring at country level will produce incentives for governments to improve land governance performance and also a greater readiness to engage with multiple stakeholders in data collection, analysis and in achieving better understanding of the strengths and weaknesses of existing land governance practices. This may involve questions of political will dependent on the political and economic conditions bearing on the land sector institutions, and the prioritization and linkage of improvements in land governance by states vis-a-vis other objectives. Subsequent assumptions are:
- That improved analysis and understanding results in increased efforts to strengthen tenure security for specific groups and priority regions or other specific aspects of land governance where performance is weak, and that these investments result in concrete improvements. This may be influenced by the design of interventions and their ability to strengthen the use of improved data and knowledge in policy prioritization and programming.
 - The management and monitoring arrangements for land sector interventions, assistance programmes, practical innovations and policy and institutional reforms then need to be designed and delivered in such a way as to continuously track and raise their effectiveness in actually delivering land-specific outcomes, such as increased tenure security, equal rights for women, fewer land conflicts and effective resolution of disputes, and more sustainable land use. For this purpose, in addition to the tracking and reporting of progress by governments, projectand programme-level monitoring and evaluation, and broader impact studies that address the wider conditions that affect development of the land sector and determine practical outcomes for land users and rights holders, can play important roles in assessing progress and outcomes and understanding the associated processes of change.

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- Land governance and tenure security interventions are linked to other sector interventions, and other development programmes recognize and address land-related objectives in ways that ensure they all push together to deliver real, improved development outcomes for the intended beneficiaries, including the large mass of small-scale producers and urban dwellers. Although it may not be possible to attribute such outcomes directly to land governance improvements, the analysis of outcomes and broader impact evaluation needs to be done. This is in order to track the linkages between improvements in land governance and tenure security and broader development outcomes in the longer run for specific populations, groups,
- countries and sub-national regions, and to assess the changes experienced not only by project beneficiaries but by control groups drawn from the population as a whole.
- Finally, economic development, development assistance programmes, and the necessary improvements in land governance need to take place at adequately large geographic scales and be sufficiently inclusive so as to contribute to the achievement of higher level development goals at national and global levels. Monitoring should thus focus on the bigger picture of the effectiveness of land policy and governance improvements and the coverage and impact of interventions in relation to national territories and populations as a whole.

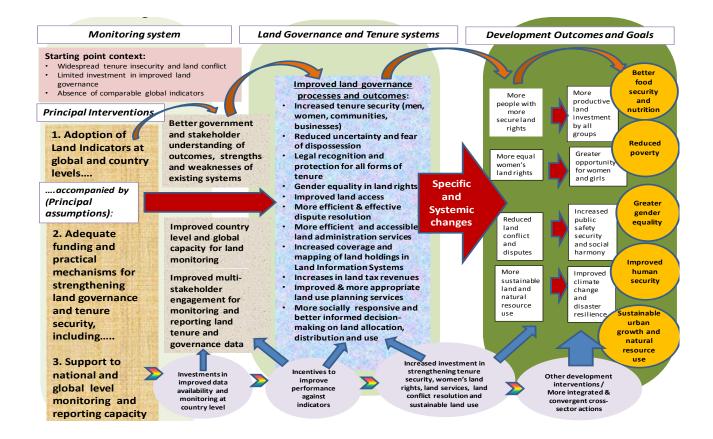


Figure.3: Proposed Theory of Change for Global Land Indicators.

Thus, in addition to monitoring actual changes in land governance processes and outcomes, there is a need to create conditions for stakeholders to review, assess and learn about what does and does not work in practice in bringing about effective change. That is, whether the adoption of land indicators does, in fact, lead to improved understanding, engagement and monitoring capacity; if such behavioural and institutional changes do lead to improved land governance processes; to what extent these produce improved outcomes for people in terms of tenure security, reduced land conflict, greater equity in land rights and land holdings, and more sustainable land use; and finally, whether and how such improvements contribute to better development outcomes.

The requirements for these sorts of learning processes is indicated by the curved orange feedback loops linking the main types of anticipated systemic change near the top of the diagram. Reading from left to right, these concern: how effectively support to the land sector and to associated monitoring efforts are designed and linked, in terms of the objectives and the indicators used; how far these changes actually strengthen planning and action (likely to depend on effective stakeholder engagement, uptake and use of knowledge, and thus on human and management capacity and perhaps on political will); how improved policy and programming leads to improved land tenure and governance outcomes (dependent on design of interventions, coverage, efficiency and effectiveness of specific methods used, and the degree to which they are able to control intervening factors; and, finally, how these outcomes, along-side other factors, can lead to specific short- and longer-term development outcomes.

Stakeholder involvement in reviewing progress at each stage and at each level, assisted by improved data and information on outcomes and increased analytical work to evaluate project impacts feeding into existing land data and knowledge, can make important contributions

to these learning processes. The links between land and development outcomes that appear at the right of the diagram are based on existing knowledge and evidence about how successful land interventions can work. They incorporate assumptions about how increased coverage, improved targeting and management of these alongside other complementary development support can produce broader social and economic benefits at scale, which is a key topic for learning that a GLII partnership-based monitoring framework can address.

For instance, it is now well established that interventions to improve tenure security at the plot or household level do lead to increased investments in land. However, existing data suggests that these improvements are relatively long term and do not, for instance, include automatic increases in availability of credit to smallholders, processes in which other factors are important, as shown by a recent systematic review of impact and analytical studies (Lawry et al., 2014). This same review also shows that less is known about the impacts of policies and programmes to secure customary rights, for instance by providing community land titles on small-scale farmers ability to invest in the land, and the most effective mechanisms to help smallscale farmers obtain broader benefits and improve local economic development and food security. Projectlevel evaluations have also shown that strengthening land legislation to improve gender equality can lead to improved outcomes in terms of perceived tenure security by women. This, in turn, leads to greater control over land assets in practice and to new income generating opportunities, additional small-scale investments and improved access to markets. Nonetheless, more can be learned about the conditions under which this takes place and the mechanisms involved; for instance, the ways in which the interventions are delivered and the nature of methodologies used to strengthen women's voices and autonomy or to overcome entrenched gender discrimination in practice. These factors are all relevant to delivering benefits of tenure security to women at scale and to the design of appropriate measures involving different actors.

In these ways, the Theory of Change set out here identifies the key process dimensions which GLII partners will need to promote and monitor in the longer term, including the means of implementation for country level monitoring, the support required from the international community in strengthening land governance, and the links between land outcomes and higher-level development goals. The adoption of robust indicators by public institutions, which GLII promotes, should thus create space for complementary engagement in monitoring by citizens and civil society organisations. This would include the use of participatory methodologies, community-based monitoring systems and stakeholder learning platforms, which are important to deepen understanding and advance debate about how land governance processes and outcomes can be improved in practice, and the role that these play in achieving wider development objectives in different contexts.

Thus, although the focus of advocacy for land in the context of the SDGs is the adoption of common headline indicators by public institutions, which focus on measuring key land governance outcomes primarily in terms of effective tenure security for all, the GLII indicator framework needs to embrace a broader range of contextual processes, which need to be addressed in order to produce these results. These are reflected in the multiple dimensions identified for monitoring incorporated in the proposed GLII land indicators (detailed in Annex A), which are already the concern of agencies making major investments in the land sector the subject of efforts to improved data collection and impact assessment. These go beyond those aspects focusing on tenure security that have been prioritized for incorporation into the SDG framework, providing a menu of topics, including the relevance and quality of land administration systems; the effectiveness of conflict and dispute-resolution mechanisms; the equity dimensions, bearing in mind the needs of women, vulnerable groups and the rights of Indigenous Peoples; the sustainability of land use and the effectiveness of land use and broader planning in engaging stakeholders; and addressing the land governance dimensions of other development interventions and public and private investments. These factors can all be taken up and addressed at national and project levels as complementary, context-specific indicators, something which the SDG framework envisages as necessary to support reporting on a smaller set of directly comparable global indicators, and to make these meaningful for country level actors (SDSN, 2015).

This underlines the importance of identifying and agreeing common sets of indicators and common methodologies so that they can be used in a globally comparative manner, and data collected through different tools and instruments and analyses conducted by different agencies and stakeholders can be genuinely complementary and useful in a global context. The different elements of land governance monitored, as well as the linkages between land interventions, monitoring efforts, capacity and behavioural and performance changes, land-specific outcomes and shorter and longer term development outcomes are topics that also provide an agenda for learning and understanding of good practice at national and global levels. This will involve processes of debate and investigation across different countries and engaging multiple stakeholders, including those in the global "land community" which cannot be comprehensive in coverage, but which could be gradually broadened in scope over time. The key issues of common concern for in-depth comparative research and stakeholder debate, which should also form part of the GLII framework, are how to achieve improvements in land governance that,

in turn, contribute in practice to better development outcomes, and how appropriate policy changes, investment programmes and interventions by different actors can be combine to achieve meaningful results in different national contexts.

5.1 STAKEHOLDER LEARNING AND REVIEW

For land monitoring to play its part in improving land governance and tenure security and to contribute to broader level development outcomes, it must be associated with processes of stakeholder learning at different levels, so as to inform a definition of priorities for improvement, policy reform and design of suitable funding programmes. The indicators selected and the validity of the Theory of Change itself will also need to be reviewed periodically.

It is expected that the GLII conceptual framework as a whole should be gradually adapted over time in response to the initial contexts and practical arrangements for monitoring, and the diversity of local and national level conditions encountered. It has been suggested that a formal review of the framework and of the precise formulations of indicators be done every five years, but overall consistency of the indicators and the methodological framework over a longer time period is essential, especially in monitoring progress towards the SDGs and the associated targets.

Questions that need to be asked about the indicators include:

Are the indicators chosen, as formulated, adequate to address GLII questions and concerns about equity, multiple tenure systems, gender equality, indigenous rights and the inclusiveness of land administration and dispute resolution systems; for instance, do they capture gender equality in relation to land and the outcomes for people holding land within the diversity of tenure systems?

Do the indicators help policy makers to measure progress on wider development outcomes?

Are the indicators useful for measuring progress on the implementation of internationally agreed benchmarks and principles, such as those reflected in the VGGT (FAO, 2013) and the Framework and Guidelines on Land policy for Africa (LPI 2010)? Are they useful for establishing correlations with other SDG indicators (i.e. those selected for food security, health, education, productivity, etc.)?

Are the indicators selected useful to the variety of stakeholders involved in land governance or are there areas of the debate that the indicators selected are not able to support?

Ideally, resources should be devoted to piloting and testing the indicators from an early stage, and arrangements made to solicit evidence and feedback on these questions from a variety of sources, including both governments and civil society in the countries where the indicators are being applied.

In relation to the Theory of Change, we will need to ask:

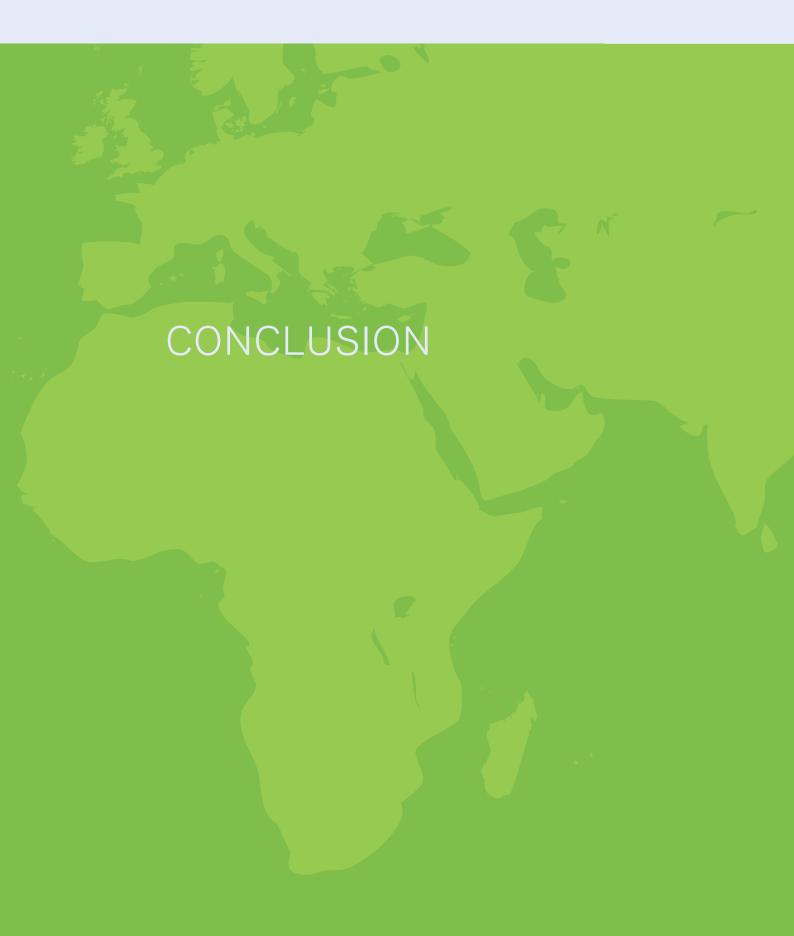
Are the assumptions that are made correct about the linkage of the adoption of the common indicators and targets to improved investments in land governance, increased resources for monitoring, and delivery of improved land outcomes?

How best can we track the association between these improvements and better development outcomes for different socio-economic groups, and are land governance improvements contributing to broader development goals in practice?

The learning processes around land indicators incorporated into the SDG framework and those for the GLII indicators as a whole are likely to be distinct, although inter-related, and may involve different sets

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of stakeholders. For land indicators linked directly to the SDG indicators, GLII would need to participate in broader reviews focusing on coverage, global comparability and ease of reporting, in which national and regional statistical organizations would be key players. More broadly, for the full set of proposed GLII indicators, statistical agencies should also be key players, but broader partnerships will be needed with additional guidelines on how common indicators can be tested, taken up and implemented by different actors who can provide relevant data, including national and local governments, global development partners, civil society and the private sector.



The combination of the existing global consensus on key principles for land governance, the links between land and higher-level development outcomes and goals, the main dimensions of land governance identified for monitoring, the principles of necessary disaggregation by gender and for urban and rural areas, and the practical and political feasibility as set out in this conceptual framework document, should all now enable the definition of shared land indicators.

As discussed earlier and shown in Figure 1, the definition of land indicators involves questions of balance between the purpose of the specific indicators proposed in relation to shared land governance objective, and development outcomes on the one hand, and considerations of practical and methodological feasibility and political acceptability and ownership on the other hand. For the incorporation of land indicators within the framework of the SDGs, this balance between requisite practical feasibility of measurement and the necessary ownership by global stakeholders and United Nations member states is now pressing. Nevertheless, a good basis for data collection to address land governance issues exists, and further progress in the assessment of feasible data sources and methodologies to support each indicator should enable confirmation of the indicators as presently formulated.

A key practical aim is that processes of monitoring agreed sets of indicators, both within the SDG framework and a broader medium-longer term GLII framework, will enhance stakeholder debate, understanding and consensus on the normative principles for land management, administration and overall governance in different contexts, based on steadily increasing evidence of the outcomes at both global and policy levels.

Achieving stakeholder consensus and a fully harmonized approach is as much about the quality and efficacy of the GLII stakeholder participatory process as it is about the content, credibility and consistency of the indicators and the methodologies to be used.

As noted at the outset, the further development of these indicators, and of a collaborative framework and set of methodologies for broader land monitoring by GLII, is inter-related with the extent and the way in which the GLII priority indicators are incorporated into the SDG framework, the data sources and methodologies adopted, and the institutional arrangements proposed for data analysis and reporting at both global and country levels. As a result, elements of the conceptual framework that are pertinent to GLII objectives beyond the incorporation of key indicators into the SDG framework will necessarily be subject to further development. GLII participants and partners will need to take stock of the status of land in relation to the SDGs. They also need to undertake further work to develop an operational framework, factoring key elements into the action plan for development of appropriate methodologies and collaborative and reporting arrangements based around the commonly agreed set of global land indicators, and into any necessary future iterations of this conceptual framework and its theory of change.



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ANNEXES

ANNEX A. GLII PROPOSED LAND INDICATORS

(As formulated at 27 April 2015)

A. Land Tenure Security

- 1. Documented land rights: Percentage of women and men with legally recognized documentation or evidence of secure rights to land
- 2. Perceived tenure security: Percentage of women and men who perceive their rights to land are protected against dispossession or eviction
- 3. Tenure security under a plurality of tenure regimes: Level of legal recognition and protection of land rights and uses derived through statutory and customary forms of tenure
- 4. Equal rights of women: Level to which women and men have equal rights to land, including rights to use, control, own, inherit and transact these rights
- 5. Indigenous land rights: Proportion of indigenous and community groups with claims to land, and percentage of land areas claimed and utilized by them that have legally recognized documentation or evidence of secure rights to land

B. Land Conflicts and Disputes

- 6. Availability of dispute resolution mechanisms: Percentage of women and men, indigenous and local communities that have access to effective dispute resolution mechanisms
- 7. Frequency of land disputes and conflicts: Percentage of women and men, Indigenous People and local communities who have experienced land, housing or property disputes or conflict in the past X years
- 8. Land dispute resolution effectiveness: *Percentage* of women and men, indigenous and local communities who reported a conflict or dispute

- in the past X years that have had the conflict or dispute resolved.
- An additional indicator has been suggested: Percentage of all cases tried by national courts that concern land disputes.⁵

C. Land administration services

- 9. Land administration efficiency: Range of times and costs to conduct land transaction
- 10. Transparency of land information: Level to which land information is available for public access
- 11. Land administration availability: Level to which all users, including women and vulnerable groups, have equal access to land administration services
- 12. Mobilization of land-based taxes: Government tax derived from land-based sources as a percentage of total government revenue
- 13. Land area mapped: Proportion of national land areas with rights holders identified that is incorporated into cadastral maps / land information systems.⁶
- 14. In addition, formulation of additional specific potential indicators was suggested at the EGM,⁷ so as to address:
- Land administration capacity: e.g. average number of transactions conducted (or concluded) per week (or per month, per year) as a percentage of the total number of processes pending (for a defined set of types of transaction)
- 5 At the time of writing, there has been no opportunity to validate this suggestion in consultation with GLII participants and relevant experts.
- 6 This formulation is proposed by NRI to resolve ambiguities about what exactly an indicator of progress in national coverage of land information and cadastral systems should cover.
- 7 At the time of writing, there has been no opportunity to develop and validate formulations of these possible indicators and to consider them in relation to the other indicators dealing with land administration that have already been proposed.

- Land administration accuracy: e.g. extent to which government provides protection or reimbursement for losses incurred by the mistakes caused by official land agencies
- Affirmative action: extent of affirmative action to promote land access and tenure security of identified vulnerable groups.

D. Sustainable land use

- (14) Aggregate national changes in land use sustainability: Changes in the geographical extent of sustainable land use, measured by: i) land cover/land-use change; ii) land productivity change; and iii) soil organic carbon change.
- 15. Progress in sustainable land-use planning: Proportions of rural and urban administrative districts or units in which land-use change and land development are governed by sustainable land-use plans that take account of the rights and interests of the local land users and land owners.8

ANNEX B. NATURE, PURPOSE AND TYPES OF INDICATORS

In this annex the notion of an indicator is defined, the nature and purpose of indicators is summarized, different types of indicators that can be used for different purposes are explained, and some examples considered, as background to the propositions in the main text that sets out the GLII conceptual framework. The discussion is drawn from wider GLII documentation and discussions so of the principal land issues to be monitored during 2014 and 2015. It should be noted that the examples included do not yet incorporate the precise indicator formulations that will be needed.

An indicator is "a summary measure related to a key issue or phenomenon that can be used to show positive or negative change" (Statistics New Zealand). It is "a statistic or parameter that, tracked over time, provides information on trends in the condition of a phenomenon that has significance beyond that.....of the statistic itself" (OECD, 1994). As such, an indicator "facilitates interpretation and judgement about the condition of an element of the world or society in relation to a standard goal" (US EPA 1972), and "provides a summary of a complex picture, abstracting and presenting in a clear manner the most important features needed to support decision making" (United Nations, 2009).

As stated by GLTN in a Technical Guide for Development and Reporting on Land Indicators (GLTN 2014): "While definitions vary, there is consensus that indicators provide a summary indication of a condition or problem, and permit the observation of progress or change. The progress can be measured over time or against benchmarks, targets or visions for the future. The indicator should give a clear and unambiguous indication of change, in terms of whether the aspect of land captured by the indicator is progressing or regressing. Indicators form part of the knowledge base needed to support policy and decision-making. They help to raise awareness of an issue. They contribute to monitoring progress in achieving goals, and in policy evaluation. They enable an evidence-based comparison of trends over time, and within and between countries. They are also important for enhancing accountability."

Furthermore, effective indicators have certain key features in common:

- Relevance: they must fit the purpose, in terms of changes to be measured.
- Ease of understanding: People, including nonexperts, must know what the indicator is saying.
- Reliability: The information that the indicator is providing must be trustworthy.

⁸ This formulation is proposed by NRI to capture the key points made at the EGM on what a process indicator of national capabilities to promote sustainable land use should seek to cover.

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 Based on accessible data: The information is available or can be gathered in good time.

There are multiple factors and types of changes that can be measured depending on the purpose of monitoring; for instance in tracking the results and performance of a development project or organization. In promoting improved development at national and global levels, it is necessary to focus on a relatively small number of indicators that reflect specific processes and linkages in bringing about improved results or outcomes, and are meaningful and clearly communicable to stakeholders. These are often referred to as headline indicators.

An indicator framework can contain both outcome indicators and process indicators. The monitoring and measurement of changes in land governance outcomes; for example, increases in the numbers of people who benefit from secure tenure is of central importance. In addition to monitoring outcomes, indicators are also needed to help track progress and changes in land governance processes; for example, in land policy, legislative frameworks, the quality and effectiveness of land administration systems.

As a result, indicators can be both quantitative and qualitative, and both of these dimensions are important in monitoring change and understanding how it comes about. Assessment of numerical outcomes (for example numbers or proportions of people who feel that their land rights are secure) requires a quantitative approach; for example, to know whether or not increasing proportions of people, both women and men, are benefiting from security of tenure, requires large-scale collection of quantitative data (statistically representative sampling or comprehensive data collection) and the use of statistical analysis (e.g. significance testing). Qualitative approaches are also needed to help understand why and how certain changes occur and to enable fuller understanding of the impacts, benefits and costs for different social groups in ways that quantitative work alone cannot do.

An assessment of processes of change mainly involves a qualitative approach to determine whether or not a desirable (or undesirable) change has taken place (for instance, has a new land policy or law been put in place) or whether a law or administrative system conforms to agreed quality standards or benchmarks. For example, was there sufficient stakeholder participation in the process of agreeing a land policy? Does land legislation make proper provision for women's security of tenure as well as men's? Are land administration services available to and accessible by all different social groups in different parts of a country?

Nevertheless, both quantitative and qualitative dimensions are also relevant for the effective monitoring of both outcomes and processes of land governance. In monitoring changes in tenure security, it may be appropriate to address specific aspects or benchmarks of quality. For instance, is it possible to secure legal land rights through different forms of tenure, including customary and indigenous systems, or whether different forms of tenure provide acceptable minimum levels of security. An example of this is whether requirements for free, prior informed consent (FPIC) on the reassignment of land rights are applied to people in all tenure categories? Or do rental agreements safeguard both tenants' and landlords' rights to use land or property as they wish for reasonable lengths of time. For qualitative indicators, it is also useful to know to what extent, or on what scale, improvements in quality of land policy and governance processes are likely to lead to quantitatively improved outcomes. For example, were the full range of land users, stakeholders and geographical regions of a country involved in public debate and consultation about land law reforms? How many countries have legal and constitutional safeguards that protect women' rights? What numbers of people are at risk of losing land rights if these conditions are not met?

Indicators can also be used to measure both objective and subjective dimensions of change. For example, in monitoring tenure security, it is relevant to know both what proportion of a population hold some form of legally recognized documentation of secure land rights (an objective indicator – provided that there is a precise and commonly understood definition of what legally recognized documentation is considered to be), what proportion perceive that their land rights are secure and what proportion perceive that they are not, or fear for the loss of land rights (a subjective indicator).

In tracking improvements and changes, overall outcomes, such as the proportions of people with secure documented rights and of national area covered by land information systems (LIS) and cadastral maps, are central. However, it is important that these information and cadastral systems are developed, managed and used according to publically and internationally agreed technical and quality standards, given that such tools can be subject to manipulation for political purposes and private gain.

For general headline indicators such as these to be genuinely meaningful for policy and practical action, it is necessary to have more precise information so that it is possible to tell which groups in the population and which parts of a country are benefiting and which are not; in other words the indicators require disaggregation in order to assess specific outcomes and practical priorities for further improvements. In particular, disaggregation of all land and development indicators by gender is necessary to know whether women are benefiting as much as men. Whether there are opportunities for young people to obtain secure rights to access and use land is also relevant. We also need to know whether increases in legally documented tenure rights are applied to all tenure categories, and to all social and ethnic groups, or if particular groups and forms of tenure are excluded from legal recognition or by political actions and institutional failures, circumstances under which secure land rights registration may benefit only the better-off or more prosperous regions, and or are available to individual land claimants but not to those who hold and use land as collective groups and through customary arrangements.

ABOUT GLTN

THE GLOBAL LAND TOOL NETWORK

The main objective of the Global Land Tool Network (GLTN) is to contribute to poverty alleviation and the Millennium Development Goals through land reform, improved land management and security of tenure.

The Network has developed a global land partnership. Its members include international civil society organizations, international finance institutions, international research and training institutions, donors and professional bodies. It aims to take a more holistic approach to land issues and improve global land coordination in various ways. These include the establishment of a continuum of land rights, rather than a narrow focus on individual land titling, the improvement and development of pro-poor land management, as well as land tenure tools. The new approach also entails unblocking existing initiatives, helping strengthen existing land networks, assisting in the development of affordable gendered land tools useful to poverty stricken communities, and spreading knowledge on how to improve security of tenure.

The GLTN partners, in their quest to attain the goals of poverty alleviation, better land management and security of tenure through land reform, have identified and agreed on 18 key land tools to deal with poverty and land issues at the country level across all regions. The Network partners argue that the existing lack of these tools, as well as land governance problems, are the main cause of failed implementation at scale of land policies world wide.

The GLTN is a demand driven network where many individuals and groups have come together to address this global problem. For further information, and registration, visit the GLTN web site at www.gltn.net.





GLOBAL LAND INDICATORS INITIATIVE (GLII)

The need to step up monitoring of land governance issues led to the establishment of GLII in 2012 by Millennium Challenge Corporation, the World Bank and UN-Habitat. The platform is hosted and facilitated by Global Land Tool Network (GLTN) at UN-Habitat. GLII is as a collaborative and inclusive process for development of Global Land Indicators that aims to making global scale monitoring of land governance and progress towards secure tenure for all a reality. In addition to developing land indicators, the GLII platform provides accompanying tools and guidelines for monitoring, reporting and capacity building, and a means of coordinating and convening land and data communities. The initiative has now grown to over 50 platform members, including non-governmental organizations, multi-lateral agencies, academia, research institutions and training institutions, farmers' organizations, UN agencies working on land governance, land data and statistical agencies.

Through a series of consultations in 2012-16 amongst land professionals and development practitioners from civil society, UN and donor agencies, research institutions and independent experts, GLII has developed a set of harmonised land indicators intended to measure progress towards tenure security and better land governance at country level and globally. As a result, GLII has become established and continues to develop as a stakeholder platform for knowledge generation and learning on land monitoring.

GLII platform members alongside the Global Donor Working Group on Land (GDWGL) and other agencies contributed strongly to securing inclusion of land indicators in the framework for monitoring progress towards the Sustainable Development Goals. The GLII set of 15 nationally applicable and global comparable land indicators goes beyond the provisions for tracking the SDG land indicators to cover four key areas of land governance: land tenure security; land disputes and conflicts; land administration services; and sustainable land use management. In collaboration with platform members, GLII has developed a series of working papers on land monitoring; facilitated the development and piloting of methodology and tools for data collection on tenure security in several countries in Africa; and developed a Training Curriculum on Methodology for Data Collection and Reporting on Land Indicators fostering global learning and knowledge sharing on land monitoring. Find more information at www.gltn.net.

Members of the GLII platform continue to explore innovative means of land data collecting, monitoring and reporting, including steering land and data community consultations on harmonized indicators and methodologies for data collection, in-country monitoring and analysis and regional and global discussions. GLII now continues to work towards realising its' mission of making global scale monitoring of land governance a reality focused on common global indicators, globally comparable data sources and harmonised monitoring and reporting processes, aligned with the globally agreed Voluntary Guidelines on the Governance of Tenure and regional frameworks such as the Framework & Guidelines on Land Policy in

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