SUSTAINING URBAN LAND INFORMATION:

A FRAMEWORK BASED ON EXPERIENCES IN POST-CONFLICT AND DEVELOPING COUNTRIES

SECURING LAND AND PROPERTY RIGHTS FOR ALL

UN⊕HABITAT
FOR A BETTER URBAN FUTURE

GLTN
GLOBAL LAND TOOL NETWORK

SUSTAINING URBAN LAND INFORMATION: A FRAMEWORK BASED ON EXPERIENCES IN POST-CONFLICT AND DEVELOPING COUNTRIES

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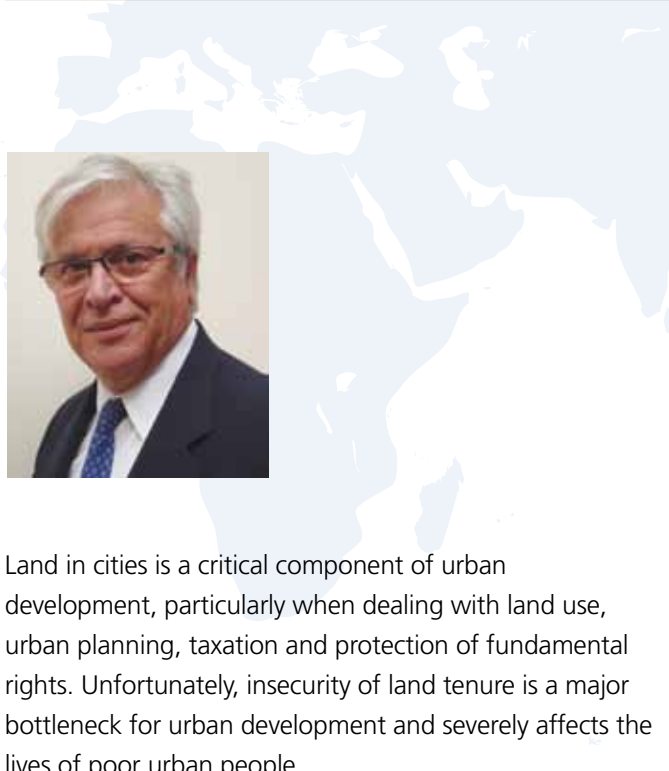*A FRAMEWORK BASED ON EXPERIENCES IN POST-CONFLICT AND DEVELOPING COUNTRIES*

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FOREWORD

Land in cities is a critical component of urban development, particularly when dealing with land use, urban planning, taxation and protection of fundamental rights. Unfortunately, insecurity of land tenure is a major bottleneck for urban development and severely affects the lives of poor urban people.

To address this challenge many urban projects have been implemented to develop comprehensive spatial databases on land that are intended to improve urban and environmental planning, raise revenues through property taxation and improve land tenure security.

New technologies, such as very-high resolution satellite images, geographical information systems, the processing capacity of computers and the internet, have developed rapidly over the last 10 years and are a driving force behind the development of urban digital databases.

Unfortunately, many urban land information projects have partially or completely failed, mainly because they have ignored or underestimated the fact that land information needs constant updating and, above all, has to be anchored in stable and capable land institutions.

This publication and the collection of pertinent case studies show that where there are no good land governance practices, such as in many post-conflict countries, land information can only be used to a limited extent. Projects should be designed with these limitations in mind but should also be seen as building blocks and experiences for the development of more comprehensive and integrated land information systems.

I am convinced it is useful to examine UN-Habitat's experiences in countries that have developed and use land information, for example Libya, Somalia and Afghanistan, which demonstrate how to create land databases that have information that can be fully used.

Dr. Joan Clos,
Under-Secretary-General of the United Nations,
Executive Director UN-Habitat.

Sustainable urban development depends on how well land is accessed, used, transferred and managed for the benefit of the current and growing urban population. Ensuring sustainable urban development requires targeted land information. However, it is not enough merely to collect and store land-based data. Equal attention needs to be paid to the optimum use of available data. This does not always happen and collected land-based data are frequently not shared among projects and programmes. Scattered databases and duplications of land-related data are common. There is also a general tendency to focus too much on data and too little on governance issues.

This document is intended to support the development of information about land (use, access, ownership, taxation, value, transfer and development potential) in a sustainable and effective way to facilitate urban land management. This framework draws on a range of field operations by UN-Habitat and others. It is the culmination of lessons learnt from a number of case studies covering a variety of developing and post-conflict countries (UN-Habitat, 2012). The study of countries' experiences, based on the framework, focused on three main urban land management applications, namely: land administration (security of tenure and property

administration), spatial planning (including regional and urban planning, settlement upgrading and regularization) and environmental management and planning. This framework is developed as a normative product in line with UN-Habitat's Medium Term Strategic and Institutional Plan (MTSIP) and its Enhanced Normative and Operational Framework (ENOF).

More specifically, the framework addresses the mismatch between the supply of land information systems and the demand for and use of land information by urban management practitioners. The framework pays particular attention to land information projects in developing countries, especially post-conflict countries, where there is limited capacity in local and central government agencies, where institutions are weak and unstable and which often experience a high staff turnover. These challenges are identified and guidance is provided on the possible way forward.

The framework also provides tangible options on how to take advantage of donor-funded projects and programmes to make effective use of land information. It addresses how to deal with pressure and funding intended "to do something about land". The fact

that urban interventions (irrespective of the funding source) have different agendas and ideas results in all kinds of stand-alone projects and programmes on issues related to land information. These include evaluation of land policies, land laws and regulations, upgrading and regularization of informal settlements and capacity building. The framework shows how to bring together scattered urban land information initiatives and experiences, and how to strengthen the role of the various stakeholders, including local and national institutions, and their coordination. It recommends an incremental approach for implementing land information for sustainable city development. A five-step process is proposed as a way to manage sustainable land information, particularly for developing and post-conflict countries.

The framework encourages raising awareness on the importance of land information and improving the quality of land information through sharing experiences and lessons learnt. It also encourages gradually streamlining approaches and developing land laws, land tenure policies, and incrementally strengthening land information offices. It is intended for all urban actors involved in management and use of land information to bridge urban

policies and implementation needs in post-conflict and developing countries.

One of the main arguments in this framework document is to approach the development of land information systems for urban management as an integral part of broader urban land governance. While LIS technology is increasingly available and powerful, and has more software functionalities, it is very important to keep land information systems simple with a view to adding value to existing initiatives.

The framework document offers a step-by-step guide to developing and implementing relevant land information for sustainable urban development. The analytical framework aims to facilitate a situational analysis of land information systems in a given country in order to assess what is feasible under specific conditions and what the limiting and enabling factors are. Such an analysis would form the basis for the development of sustainable and relevant land information that could support urban land management projects and programmes.

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[1] In this document, a land information system is broadly understood to mean the combination of technology, data, people and institutional capacity for collecting, managing, disseminating and using land-related data.

INTRODUCTION

1. INTRODUCTION

Urban land management deals with ensuring land resources are used efficiently, for example to provide shelter and urban infrastructure, services and other amenities. Land administration is primarily concerned with a government's responsibility to provide security of tenure and information about tenure issues for the property market, and governmental (for example urban and spatial planning) and private business activities. The urban environment needs relevant data to function efficiently, now and in the future, which land information systems such as cadastre and land records can provide. In other words, governments at local and central levels need to provide an institutional setup, including policy, legislation and organization, for the implementation of sustainable land information. Governments should also ensure enforcement of legislation and dissemination systems to make the information widely available, to benefit tenure security, property markets, land administration, land management, land-use planning, taxation, business and the community in general. Land information is often collected for various projects and programmes, for a range of purposes and by a multitude of actors. Tools and mechanisms are needed to ensure that data collection exercises contribute to the overall objective of sustainable urban development.

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Techniques to support efficient land management and administration may include the establishment of efficient organizations, transparent procedures for decision-making and information technology for collecting, processing, archiving and disseminating information. To be meaningful, the information needs a geographical component, which includes tools for surveying and mapping and geographical analyses, using, for instance, geographical information systems (GIS). Such systems must be able to produce data

and information to service the general public and support urban management decisions at an affordable cost. Land users and managers who will benefit must feel that the fees and rates they have to pay for the services are worth the value that the system produces for them. This is particularly important for pro-poor systems if improved land administration is to contribute to the eradication of poverty.

Management of institutions dealing with land information could be independent from the general public administration. For instance, it is possible to control income and expenditure, staffing and salaries within a particular frame given by government through a goal- and result-based management system. The responsible officers should be able to make decisions, based on law, without political influence. National land laws should define certain criteria for decision-making, providing room for economic development and also protecting existing rights, whether formal, customary or informal. The legal and policy frameworks should give women and men equal opportunities and protection in owning property or accessing land and its resources. The rules should promote efficient land management and protect environmental and cultural values. Appeals against decisions should be made to courts that are specially designed for land administration. Adequate and up-to-

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Since various interests exist in land and are vested in people (including non-natural people), there is a clear benefit to establishing and sustaining reliable land-related information that is accessible to all. Reliable land information is also critical for urban planning, particularly in post-conflict, post-disaster and developing countries. The purpose of urban planning is to make cities liveable and sustain human activities in a sustainable environment. More often than not, urban planning is ad hoc and is not based on sound information and technologies.

Spatial technologies now provide a range of means to collect data and information critical for effective urban and spatial planning. These technologies include GPS, GIS, remote sensing and geo-visualisation. It is important

that such technologies are used wisely to ensure that they also deliver to the poor and service future urban generations. Lack of resources and human capacity has often prevented urban managers from effectively using land information in their planning exercise. However, city councils and governments (local and central) around the world are also using innovations to add value to land information for urban planning. For example, a range of financial mechanisms have been attempted, such as cost-recovery and value-adding information strategies and public-private partnerships.

To bring the land information closer to the needs of sustainable urban development, several projects are screened in this document to assess what works and what does not. The assessment identified five critical elements essential to ensuring a sustainable land information system (LIS) for urban development. They are: good land governance, institutionalization and long-term approach, stakeholder involvement, balancing the essential components of the land information system, and ensuring wider access to and use of urban LIS.

The document is structured as follows: first, the purpose and objectives of the framework are presented; second,

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the scope of the framework is presented along with the key land information issues that will be addressed; third, the analytical framework of a LIS for sustainable urban development is presented where each of the five critical elements to ensuring a sustainable urban LIS are presented and illustrated with selected case studies; fourth, essential elements of good practices of LIS for urban land management are presented; fifth, step-by-step suggestions are made to assist the development and design of land information. Finally, the document summarizes the key elements and recommendations with illustrations compiled under a "do's and don'ts" of a LIS for sustainable urban management.

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[1] The full report on which this framework is based is available at www.gltn.net under the title Managing Urban Land Information.

The framework covers five main criteria relevant for the development and use of land information:

1. Level of land governance;

2. Approach (embedding of land information in stable land institutions);

3. Involvement of stakeholders;

4. Essential components of a land information system (LIS);

5. Access and use of land information.

These five criteria are used to analyse the case studies, to develop a step-by-step process to develop sustainable land information and to assist urban land management programmes with adequate, and above all, useful land information.

PURPOSE AND OBJECTIVES

2. PURPOSE AND OBJECTIVES

Accurate and up-to-date land information is a pre-requisite to develop and implement projects and programmes on urban land management. Without reliable and up-to-date spatial (referenced) data on land, spatial planning, for example, will be based on scattered and incomplete knowledge of local urban planners.

The more accurate and complete the data is and the more capable and efficient the land institutions are, the better the support that can be given to improve security of land tenure, land taxation, urban planning and to land transactions.

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the quality of and access to land information is not a guarantee that these developments have had a positive impact on the living conditions of poor people or increased the security of land rights especially, in post-conflict, post disaster and developing countries. The mushrooming of several incompatible and overlapping spatial databases, even within the same organization, is very common in many countries. Computers and databases can be found everywhere, but useful urban land information is limited and not easily accessible for everyone to use and build upon. It is common to find that urban data, especially land-based, are tailored to specific short-term projects and do not give a complete picture.

The need for standards, metadata, procedures and development of inter-institutional relations for data exchange and data sharing are emphasized in many reports. However, in many post-conflict countries, and developing countries, those recommendations are of limited value due to underdeveloped and unstable land institutions, weak governance and short-term and limited focus.

systematic hand-over, no proper archiving or documentation. Similarly, with the departure of key staff, land data and knowledge of the data structure also disappears.

The purpose of this framework on sustainable land information for urban land management is to learn from emergent and other practices and it is based on normative guidelines developed by GLTN. The framework document will illustrate how land information can be developed and used for a variety of urban land management applications; it will show how projects can act as incubators of lasting change, and will improve urban planning and the quality of land information in post-conflict and developing countries.

The framework is developed using a "how to" approach that is based on the lessons learnt from several UN-Habitat field experiences in post-conflict and developing countries. In particular, the framework outlines how to develop land information that is feasible, cost effective and can be applied, maintained and gradually improved and expanded to support urban development projects and programmes with tangible and user-required results.

The framework aims to assist, within the limiting factors of governance and land institutions, with cost-effective development, the use and expansion of land information for urban land management.

The suitable application of this framework will avoid wasting resources that cannot be used by institutions or that are too ambitious for the level of governance and capacity of land institutions. The framework stresses that land information goes beyond the possibilities of technology alone and that a modest, realistic, coordinated and incremental approach is needed. To achieve this, the framework advocates for urban land information projects to take into account the five successful criteria outlined in the introduction.

The framework recognizes the challenges of implementing a functional, urban LIS in a context of post-conflict and developing countries. It is therefore important to do a pre-evaluation of the status and situation before embarking on land information projects and programme. Such pre-assessment is essential to define the scale, scope and feasibility of a sustainable land information system for urban management. A quick checklist is provided below.