Towards a Responsible Land Administration Curriculum

David MITCHELL (Australia), Siraj SAIT (U.K.), Jean DU PLESSIS (Kenya), and Dimo TODOROVSKI (The Netherlands)

Key words: land administration, knowledge sharing, SDGs, New Urban Agenda, Voluntary Guidelines.

SUMMARY

In line with the GLTN focus on strengthening land policy, improving global knowledge, and strengthening capacity of partners, the GLTN Secretariat engaged ITC (University of Twente) to explore the feasibility of the design and development of curricula in Responsible Land Administration. The general objective is to strengthen the capacity of higher education and other relevant networks or institutions globally and provide quality undergraduate and post-graduate courses on the theme of pro-poor, gender responsive land tools. In inception phase representatives from ITC and the Technical University of Munich (TUM) in consultation with GLTN secretariat, guided by the project's general objective, developed a framework with overall approach. The main output was a curriculum design entitled "Teaching Essentials for Responsible Land Administration" with a course title "Responsible Land Administration 101" was created and distributed for review and comments. A final report included a brief outline of a draft curriculum and recommendations for next phase/s of curriculum development.

This preliminary work forms the basis for the next stage of development, which is coordinated by RMIT University and University of East London under project 2 of the GLTN Research and Training Cluster. This project aims to develop detailed outlines for each of the 6 Modules, and commence development of full curricula. Based on the original design by ITC expanded outlines for each Module have been developed and it is on these that we are seeking expert input with key stakeholders. In November 2016, an expert group meeting (EGM) was held at the University of East London. The EGM was organized by GLTN partners UN-Habitat, the University of East London and RMIT University. A total of 18 experts, from various countries and academic and professional disciplines within the land sector, discussed and agreed on next steps in the production of a structured knowledge base to support the development and delivery of the curriculum. The potential users include any land-related academic program and self-study courses with potential for certification.

This EGM has established a firm foundation for the development of the structured knowledge base, which is planned for completion during 2017. Six modules are planned, including an introductory, module on responsible land administration, plus five substantial modules covering

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the key subject areas of access to land & land tenure security, land management & planning, land policy & regulatory frameworks, land based financing / land value sharing, and responsible land administration and information.

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1. INTRODUCTION AND BACKGROUND

Global challenges affecting and informing modern land administration systems include poverty reduction, the challenges related to food and water insecurity, the growth of informal settlements and slums, climate change and natural disasters. More than half of the world's population already lives in urban areas, with projections for another 2.5 billion people by 2050. Urbanisation is often unplanned and under-resourced, leading to land and housing shortages, rising costs of land for housing, and limitations in the availability of suitable land for housing. The international community has responded with the Sustainable Development Goals (SDGs), the New Urban Agenda (NUA), informed by international human rights treaties and the Voluntary Guidelines on the Responsible Governance of Tenure (VGGTs). The SDGs and related targets recognize that ending poverty requires strategies that build economic growth, while addressing education, health, and social protection, climate change and environmental protection. Under the SDGs governments have the primary responsibility for review of the progress made in implementing the 17 Goals. This will require quality, accessible and timely data collection.

The NUAcommits UN member states to promote increased security of tenure for all, recognizing the plurality of tenure types, and to develop fit-for-purpose, and age-, gender-, and environment-responsive solutions within the continuum of land and property rights, with particular attention to security of land tenure for women as key to their empowerment, including through effective administrative systems (United Nations, 2016, Para. 35). Further, the right to property is contained in the major international human rights treaties, including Article 17 of the Universal Declaration of Human Rights (UDHR). The right to adequate housing in international also instruments generally includes security of tenure as a key component (Gilbert 2013, Thiele 2013, van der Molen, 2017).

Effective land administration systems support poverty alleviation, security of tenure, management of land disputes, inclusive planning, and environmental protection. However, land administration must adapt to support these global challenges in a way that is consistent with the international goals and instruments. In low- and middle- income countries it has been estimated that 70% land rights are not recorded - especially for the more vulnerable, including women, the elderly, youth, poor, displaced peoples, indigenous communities, and ethnic minorities.

Scaling up land administration systems to include this majority of households is a central challenge.

Improving the capacity of higher education institutions to teach responsible land administration will be needed to achieve the NUA goals. Although there is considerable knowledge on land related issues and innovative land tools to address these global challenges, most of this knowledge is partly unknown or hidden within broader land related curricula. Existing land administration programs are largely based on traditional approaches to land administration, with many strongly informed by colonial regulatory frameworks.

To redress this, a need was identified to consolidate this knowledge in the form of university 'teaching essentials for responsible land administration'. This work is specifically aimed at fitting within the accredited academic learning approaches of undergraduate or postgraduate programs in land related topics. The knowledge developed also makes a valuable contribution to the Strategic Objective 1 of the GLTN capacity development strategy: "Key capacity developers (national and international level universities, training institutes and others) have moved from conventional technical training curricula to include also pro-poor, gendered, multidisciplinary approaches" (GLTN/UN Habitat, 2014).

In line with the GLTN focus on strengthening land policy, improving global knowledge, and strengthening capacity of partners, the GLTN Secretariat engaged the University of Twente (ITC) to explore the feasibility of the design and development of a set of higher education modules on responsible land administration. The general objective was to strengthen the capacity of higher education globally, including in developing countries, to provide quality undergraduate and post-graduate courses on the theme of pro-poor, gender responsive land tools for tenure security along the continuum of land rights.

The main inputs during the feasibility and inception phase were from ITC, the Technical University of Munich (TUM), the GLTN secretariat, the East African Land Administration Network (EALAN) and UN-Habitat. Guided by the project's general objective, a framework with an overall approach was developed. The project assessed the needs and defined objectives and strategies in relation to students, content of teaching, teaching approaches and teachers / institutions. The methods included a literature review, a survey and an expert consultation (held in Enschede, Netherlands). A final report was prepared which included a brief outline of a draft curriculum and recommendations for next phase/s of curriculum development process, indicative budgets, and timeframes. The main output was a curriculum design entitled "Teaching Essentials for Responsible Land Administration" with a course title "Responsible Land Administration 101" comprising 6 recommended modules. The final report envisages a flexible curriculum provided online for the use of higher education institutions who can choose to include all or part of the curriculum in their existing program.

The preliminary work in phase 1 formed the basis for the next stage of development, which was coordinated by RMIT University and University of East London under Project 2 of the GLTN Research and Training Cluster. This project aims to develop detailed outlines for each of the 6

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Modules, and commence development of full curricula. Based on the original design by ITC expanded outlines for each Module were developed and discussed at an Expert Group Meeting in late October and early November 2016. This EGM was organized by GLTN partners UN-Habitat, the University of East London and RMIT University. Held at the University of East London, it was attended by 20 experts from various countries and academic and professional disciplines within the land sector. At the EGM it was agreed that this project focus on developing a "Knowledge base" to support the development of a responsible land administration across a variety of contexts.

2. WHAT IS RESPONSIBLE LAND ADMINISTRATION?

Recent use of the term 'responsible' in relation to land administration and land governance involves incorporating innovations with an understanding of the possible ethical and societal implications, supporting socioeconomic development, poverty eradication, and food insecurity (Zevenbergen et al 2016, CFS and FAO 2012). This is a difficult concept as many people involved in land administration would consider their land administration system 'responsible'.

A recent book "Advances in Responsible Land Administration" (Zevenbergen et al 2016) aimed to redress the limitations of conventional land administration research and provides a foundation for this knowledge base. While 'Responsible" land administration is a qualitative term or an ideal that may be difficult to achieve, we seek to build on this work by proposing 11 key principles for implementation of responsible land administration based on in turn, the VGGTs, the GLTN core principles, the International Guidelines on Urban and Territorial Planning, Advances in Responsible Land Administration, and the Fit-For-Purpose Land Administration Guiding Principles. These 11 principles are: secure land rights for all, non-discriminatory, equitable, gender sensitive, inclusive and participatory, rule of law, transparency, accountable, affordable, scalable, and sustainable land administration. LGAF indicators and VGGTs also inform what the international development community sees as 'responsible' governance and how this translates to responsible land administration. More discussion is needed to reach agreement on a definition of responsible land administration and the indicators that might

In this paper, we conceptualize responsible land administration as a nested system that is framed by land policy, custom and land law. This framework shapes and defines processes such as land information management, land financing and land use planning which in turn contribute to the everyday function of land administration. These functions include those required to formalize property (adjudication, surveying and registration) as well as land valuation or assessment which form the basis for land taxation. At the core of our conceptual framework we recognize that land tenure forms the foundation of the human-to-land relationship, of which land administration is one part.
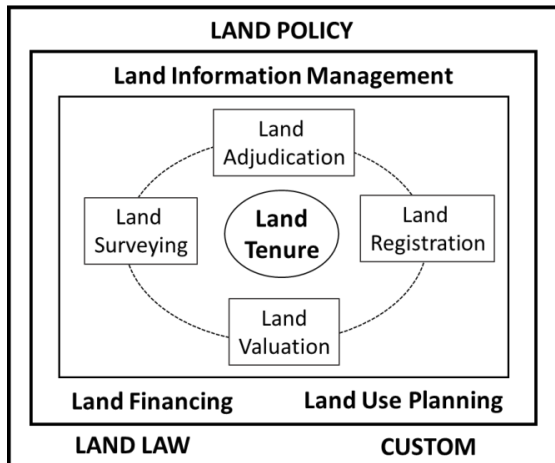
Figure 1 Conceptual Framework for Responsible Land Administration (Source: G.Barnes)

Improved management of urbanization and urban growth, and changes in rural populations will be the responsibility of many stakeholders, including local governments, the private sector, civil society, communities and customary land groups. Decisions made by all these stakeholders about future land use will define the way urban growth occurs. In many countries, local governments cannot do this alone. Partnerships will be required to support decisions about housing and the provision of infrastructure. More effective management of urban growth will require urban and rural authorities to adopt a coordinated approach that involves the effective urban and territorial planning and control, and gender-responsive, pro-poor and fit-for purpose land administration. This approach is about acknowledging informal development is the prevailing form of development, and seeking incremental improvements.

3. STRUCTURE AND LEARNING MATERIALS

It represents an attempt to organise the content of the knowledge and learning base into modules and lessons that include guidance on the learning steps, key literature, and links for further study. The structured knowledge and learning base on responsible land administration also will also illustrate local and regional diversity through the inclusion of practical local examples and case studies in each of the Modules.

The structured knowledge and learning base is to be arranged under the following topical areas and modules:

1. Core values of responsible land administration
2. Access to land and tenure security
3. Participatory Land-Use Planning and Management
4. Responsible land administration and information in practice
5. Land-based financing
6. Land policy and regulatory frameworks

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3.1 Module 1 Core Values of Responsible Land Administration

Land is a finite resource and competition for it is intensifying because of rapid urbanization and population growth, economic development, insecurity of food, and the effects of conflicts and disasters. Changes in land use affect the economy, society and ecology. The divide between urban and rural is diminishing. These areas are today interconnected by flows of goods, money, resources and people. Climate change and different land-use patterns also affect rural areas, including farmland, drylands, wetlands and forests. Ultimately, the failure to reconcile competing interests in land can contribute to the outbreak of violent conflict. This is the most acute outcome of failed efforts to manage the opportunities that land provides.

Land involves a wide range of rights and responsibilities. Competing claims over land often occur under conditions of unequal power and resources. In low income countries many people lack the resources to protect their rights to land. Without any official rights to the land they live on, these residents have no security of tenure, little incentive to invest in their homes, and no way of getting loans to do so. Women are particularly at a disadvantage. In many countries, by law, practice or custom women cannot own land or make decisions on how to use it. Widows and single mothers are particularly vulnerable; when her husband dies or leaves her, a woman may lose the rights to her home and to the land she farms. Often, women are not allowed to buy land or register it in their own name, even if they have the money.

Module 1 is designed as a stand-alone overview of the key learning steps in the structured knowledge and learning base and is structured as illustrated in Figure 2.
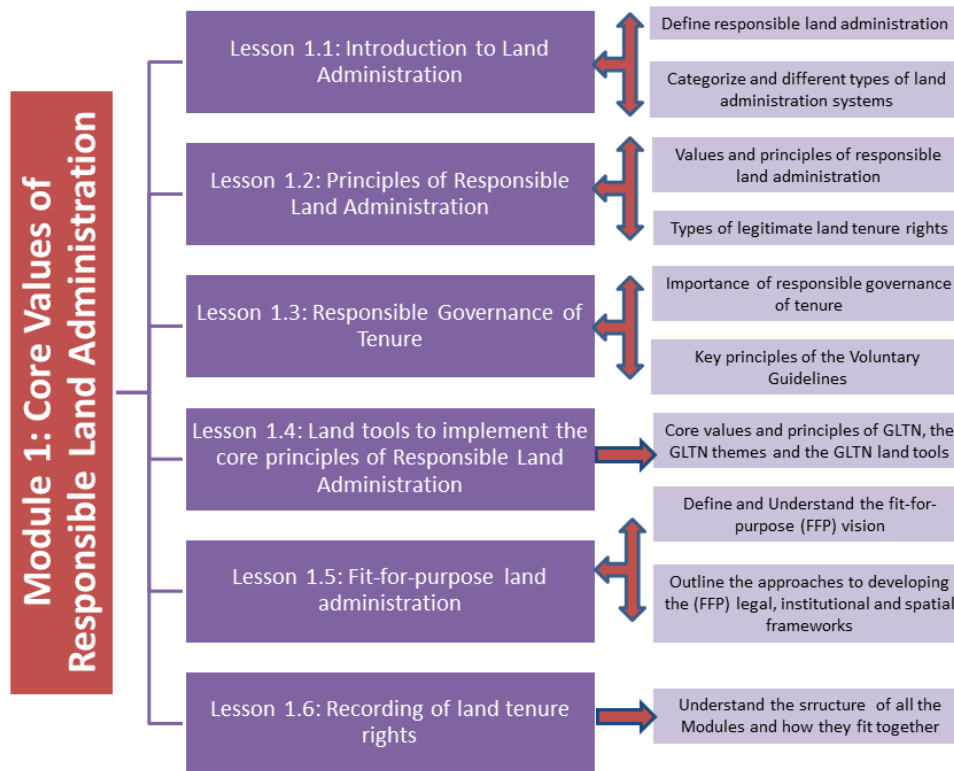
Figure 2 Conceptual Diagram of Module 1 (Source: N. Eltinay)

In this Module learners will appreciate the importance of responsible land administration; understand the scope, objectives and the principles promoted by the VG; understand the different roles involved in land administration and management, and the importance of collaboration among different levels and organizations. This Module, and those that follow, will be grounded in the 11 principles for implementation of RLA outlined above (secure land rights for all, non-discriminatory, equitable, gender sensitive, inclusive and participatory, rule of law, transparent, accountable, affordable, scalable, and sustainable).

The aim is to develop in the learner an interest in the topic through the use of effective and interesting examples. At the end of this Module, learners should be able to:
- Defend the underlying values and principles of responsible land administration; and
- Recognize the need for responsible land administration. Discuss past and current land administration approaches.
- Reflect on their own perception of responsible land administration

3.2 Module 2 Land tenure security

In many countries, the land administration system deals only with formal, statutory land rights, usually subject to legislation passed during the colonial period. Statutory or formal tenure is where someone's right is specified in the law. That enables the owner or rights-holder to use the law to defend his or her rights. But the poor typically hold their land through customary or informal tenure systems. In some countries informal and customary land tenure is considered insecure and not recognized in law or in practice, in others customary tenure is recognised. Informal tenure is also found in slums, and in areas where not all legal and planning requirements have been met during the development and building period. People whose rights are not registered find themselves in a weak position, without support from government agencies or the courts, if their rights to the land are threatened. Threats may come from many sources: government projects, large developers or local elites may claim a right to the same land.

Learners should be aware of the range of tenure types existing along the continuum of land rights and innovative approaches towards responsible land administration which increases tenure security for all. This module explores further the topic of tenure security as a basis for the modules that follow. Upon completion of this module students should be able to:

- Recognise customary and informal land tenure systems with reference to specific case study examples and statistically describe the population of society that live under customary and informal land tenure.
- Reflect on the issues, limitations and constraints arising from customary and informal land tenure systems with reference to specific groups within society (e.g. women, youth, minorities, handicapped, indigenous communities, slum dwellers) and illustrate consequences.
- Choose and apply appropriate tools from a range of options to improve land tenure security: enumeration, social tenure, domain model, pro-poor land records, deeds and titles.

3.3 Module 3 Participatory land-use planning and management

Population growth, migration, economic growth and climate change increase the scarcity and pressure on land, leading to competing claims. Litigation about land is commonly the most numerous in civil courts. Therefore, innovative strategies are needed which balance and reconcile the different claims in an inclusive, responsible, participatory and integrated manner, which do not jeopardize the livelihood and shelter options of the disadvantaged groups in society. This is where the political aspects of land become central.

The most obvious problem with traditional planning is that it fails to recognize the way of life of the majority of inhabitants living in rapidly growing and largely poor informal cities. Other challenges exist where rural land is engulfed in an urban environment due to city growth, such as changes to rural populations, and the impact on food production. These issues indirectly contribute to social and spatial marginalization. Outdated planning approaches may fail to take into account important challenges such as climate change, city residents' dependence on fossil

fuels, food insecurity, informality, and inadequate community and stakeholder participation. Excessive planning regulations may also encourage segregation of communities. New approaches to planning are therefore needed to enable cities to respond better to challenges of the 21st century.

Planning takes place at different levels: regional, city and community. The responsibility of managing and administering land is the task of a range of formal and informal organizations and institutions. These include government, private and non-government actors. "Government" can be the national government (typically the ministry in charge of land affairs or its equivalent), district or city councils, and a range of local authorities. They have many functions, including land administration, taxation, planning and infrastructure provision. Private-sector providers include lawyers, notaries, estate agents (realtors), surveyors, valuers and financial institutions. "Non-government" can be informal leaders, academics, residents' associations, and interest groups that focus on the land rights of marginalized groups, and on specific aspects such as forests, irrigation water or pasture.

A focus of Module 2 is on the main tools by which land use planning takes place. These are the creation of plans that identify zones or other locations where particular types of development will be permitted, the process by which permission is granted for development, and the granting for consent for the actual method of carrying out the development (eg building controls). The granting of development consent has to recognise the major differences between an application for a major infrastructure project (such as a hydro-electric dam, oil pipeline, or high speed rail link) and the building of 40 houses on farmland, or converting a site with a commercial business into a light-industruial use. At the heart of all of these is a process by which the permitted land use is changed from form to another. This invariably changes the value and may result in those who wish to carry out the development having to acquire the land for existing users, a process that may involve compulsory acquisition or eviction. Therefore this is where there is potential for conflict. It is also where problems of illegality and informality arise if a change of use takes place without the necessary permissions or construction occurs without permits. Governments may at some time in the future be faced with how to deal with these, including creating processes of legalisation. Upon completion of this module students should be able to:

- Recognise the procedures for participatory and integrated approaches to urban and rural planning at different administrative levels,
- Reflect on how to make planning mean something to the community?
- Design responsible and sustainable interventions to re-develop areas of sub-optimal land use, e.g. land consolidations, slum upgrading land re-adjustment, infrastructure development etc.

3.4 Module 4 Responsible Land Administration and information in practice

Land governance is about the policies, processes and institutions by which land, property and natural resources are managed. This includes decisions on access to land; land rights; land use; land development. Land governance is about determining & implementing sustainable land

policies. Land Administration Systems provide the infrastructure for implementation of land polices and land management strategies. Land administration systems document and map people's tenure rights to "parcels" (pieces of land) in different ways. Examples are cadastral maps, land registries and other forms of land records. Having your rights registered or recorded in such a system brings various benefits. In general, it gives you greater security of tenure, and reduces the chance of your losing your land or being evicted from it.

Current problems facing the land administration sector include social exclusion, operational challenges, insufficient land tenure information, land disputes, growing informality and tenure insecurity, and a lack of high level administrative and political continuity. Recent breakthroughs in understanding the importance of land tenure security for all as well as innovations in geospatial technologies make it necessary and possible to address these challenges. Another challenge is the need to create, maintain and operate institutions to provide a range of services related to land, property and property rights, including taxation. Crucial to protecting property rights in general and tenure security in particular is the ability to publicly register and defend those rights.

In developing countries, formal land administration systems are often not sufficient to cater for the continuum of rights: they are too cumbersome and expensive. We need innovative alternatives that involve a fit-for-purpose approach to land administration. Learners in this Module should be able to:

- Recognise the key principles, challenges and opportunities for responsible land administration and information management.
- Reflect on the different levels of land governance, the stakeholders and the roles they play in land administration.
- Demonstrate application of (at least one) innovative land information management tool.

3.5 Module 5 Land-based financing

One of the core challenges in cities across the world is raising the revenue necessary to provide key public services and improvements in urban infrastructure and services. The challenge is particularly acute in cities in developing countries. As cities grow, the pressure to improve services and provide essential infrastructure can be immense. Because land cannot be moved, it can be a unique foundation for local revenue. But it also presents important challenges for local officials. In many developing countries, revenue systems are largely centralized, with most of the revenue flowing to the national government. Local authorities do not control sufficient revenue sources, so cannot respond to unique local needs. Local officials are not accountable to local residents. Local taxes based on land can provide an important source of revenue to support local public services delivered by local governments, which are accountable to taxpaying citizens.

One on-going dilemma is the extent to which poor households should be included in the revenue system. There is a tendency on the part of some governments to simply exclude the households which are seen as administratively difficult to identify and from which the revenue yield is

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expected to be low. Such policies may undermine grassroots community engagement and allow local authorities to focus attention and resources outside areas of critical need.

Growing urbanization and the need for infrastructure requires land based financing that should be mainly captured by the national or local government. However, local governments often lack financial resources to deliver even the most basic public services and capacity to assess and collect land-based taxes. National governments may find it difficult to incorporate land-based taxes in administrative systems that are geared towards income, sales and company taxes. Proper instruments which enable capturing revenue or incentives for delivery of public services without jeopardizing land rights are increasingly recognized. The challenge is to organize and financially support land-related services efficiently and sustainably.

This module focuses on land-based financing tools for land administration, public infrastructure and other public services. It links to the other Modules in terms of land registration (taxation, public/private land, land valuation, regulations on how the authorities deal with land-based financing, financing infrastructures). This is intended for a wider target audience as it is important for many stakeholders to understand how finances work regarding land. Upon completion of this module students should be able to:

- Recognise the different land valuation techniques for compensation and taxation purposes.
- Reflect on the advantages and disadvantages of costing and financing of land administration structures.

3.6 Module 6 Land policy and legal and regulatory framework

A national land-use policy is part of the enabling environment and aims to achieve objectives relating to the security and distribution of land tenure rights, land use and land management, and access to land and the forms of tenure under which it is held. It is an expression of the government's perception of the direction to be taken on major issues related to land use and the allocation of land resources and should cover all uses of land. Developing national land-use policies using a participatory, integrated and iterative process, has a much greater likelihood of success. Land-related problems are common in many countries around the world, and pose particularly difficult policy problems for governments. In some countries, the ministry responsible for land focuses on delivering titles to the formal sector only. In other countries, the government has limited capacity to handle land issues at the national level, or conflict within the country prevents systematic initiatives to solve the land problems.

There often a gulf between the legal framework for land and actual land tenure practices. The poor, women and marginalized are left on their own to solve their land-related problems without access land-dependent services such as water supply or roads, and they have little say in decision-making. Unfortunately, many countries have not changed their land policy and land management approaches to fit the 21st century. Existing policies and laws on land often pursue economic productivity at the expense of other equally important values, such as equity, sustainability, transparency and efficiency. Reforms require a high level of sensitivity to

political, social, cultural and economic factors. Progress depends on appropriate constitutional and legal frameworks, public consultation and political will. Coordinated mechanisms and structures need to be set up to institutionalize public consultation and access to information. Coherent linkages, harmonization and feedback are needed between the national and local levels. Innovative ways are required to ensure that laws guarantee rights to marginalized groups such as women and children.

Responsible approaches and initiatives that are socially acceptable (participatory and inclusive) are needed to shape policy design and implementation, and their impact upon society. Learners in this module should be able to:

- Recognise elements to be included in land policy formulation
- Reflect on the implementation of law (on paper) and practice (in reality).
- Evaluate the weakness of strengths of various land related laws and regulations.

4. DEVELOPING THE KNOWLEDGE AND LEARNING BASE

4.1 The knowledge and learning base

We see this knowledge and learning base as supporting a continuum of needs from a self-learner (with instructions on how to use the material) at one end, to an academic who customises the knowledge and learning base to fit into part of an existing undergraduate or postgraduate program (with instructions to designers on how to use the material) at the other end. The ultimate aim is to strengthen the capacity of higher education, and the quality of undergraduate and post-graduate learning on the theme of responsible land administration and the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGTs).

The entire knowledge and learning base will comprise approximately 300 hours of study load - (12 ECTS), which represents between 15% and 25% of one year of many undergraduate programs. Each Module is designed to support a curriculum of approximately 50 hours of study load (2 ECTS). Study load will be generally divided into 15 hours teacher-directed learning, and 35 hours learner-directed learning (self-study). However this can vary for each lesson. Each lesson is then designed to support approximately 3 hours of teacher-directed tuition within the classroom or training session. It includes teaching resources that support approximately 15 hours of teacher-directed tuition within the classroom or training session. A typical lesson may involve lecture material and short video lectures, interactive exercises and group discussion. The knowledge and learning base includes a nested design that allows selection by the designer, teacher or learner, of parts or the whole of the knowledge and learning base as needed. Each module will be structured around learning resources that support approximately 10 hours of teacher-directed tuition within the classroom or training session.

It is widely recognised that much of the existing information and knowledge on land tenure and administration is scattered across numerous disciplines, sources and formats. As illustrated in Figure 3, inputs including the Students' experiences, country background, International agreements and declarations, the Land Portal, and Journal Articles will inform the development

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of a series of learning objects. The structured knowledge and learning base will draw on existing literature (articles, reports, etc), case studies, short videos, GLTN tools and several voluntary guidelines (VGs) associated with governance and responsible land administration.
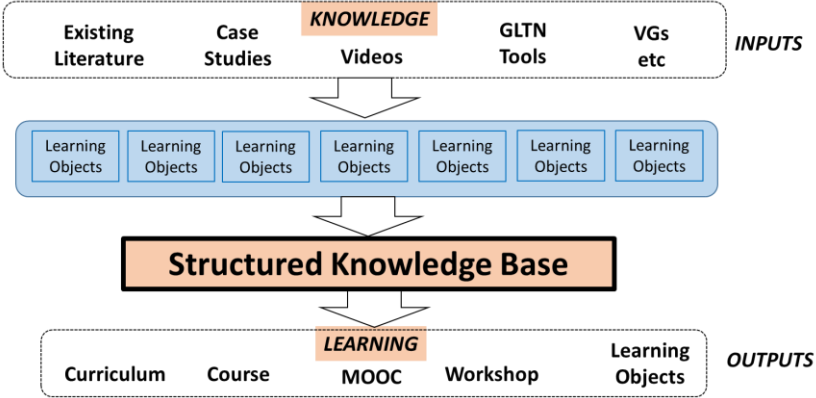
Knowledge-Learning Continuum

Figure 3 Structured Knowledge and Learning Base (Source: G. Barnes)

Drawing on these sources we will develop learning objects that are relevant to an issue, aspect or process within RLA. Each Module within the structured knowledge and learning base will therefore be comprised of learning objects that can (if needed) stand alone as a learning exercise. The structured knowledge and learning base is made up of these learning objects, but organized in specific modules.

The breakup of teaching approach may vary per module but a typical structure for each Module (or Lesson) may be in the form of pdf document and containing the learning text, and recommended reading material, suggestions for assessment and instructions for designers as to how they might adapt the material for various uses. The structured knowledge and learning base will be framed as a series of issues or questions - the idea of leading with questions/issues in each section. The local context will be provided through case studies and guidance on how the students can be challenged to adapt this to their own contexts.

4.2 Users and delivery

The knowledge and learning base will be designed with the flexibility to support a continuum of formats of learning that range between the following:

A. Knowledge and learning base adapted to be embedded by a course in an existing undergraduate or postgraduate program. Users customise the material in the knowledge and learning base into their own programmes. Responsibility for the adaptation and the eventual programme would be with the body customising the material.

B. Guidance to support a self-directed learner. These learners would have access to a self-contained module that could be taken as a whole or in parts without the need for customisation. This could be in the form of a MOOC (massive open on-line course), independent study module in a university, part of dissertation preparation programmes in a university, or continuing professional development for a professional body.

4.3 Peer review

The learning materials in each Module will be developed by experts and peer reviewed by GLTN, members of the advisory committee and various partners. The learning materials in each Module will be developed by experts selected for their expertise in the relevant area. They will develop the draft outline for their particular module into a fully structured knowledge and learning base comprising learning objects. Each Module author will firstly develop an expanded outline for the Module for review, then the full structured knowledge and learning base for that module, to peer review another module, amendment their Module based on peer review, and develop a final report to feed into our GLTN reporting. To support them in this work they will be provide detailed guidance on how to develop the knowledge and learning base and the structure and outputs expected. Peer review will be undertaken by the project team at RMIT University, the University of East London and the GLTN Secretariat, as well as being distributed to the GLTN clusters for comment.

5. CONCLUSIONS

The outcome of the inception phase and discussions at an Expert Group Meeting were agreement on the development of a structured knowledge and learning base to support the strategic objectives of the GLTN capacity development strategy. The theme of this structured knowledge and learning base is on the emerging concept of Responsible Land Administration and this paper has outlined the proposed aims and structure of the knowledge and learning base, as well as the next steps for implementation.

A challenge will be to balance the fundamentals of responsible land administration with country-specific aspects of land administration. The knowledge and learning base will also be developed on the awareness that the challenges facing the land sector are significant and complex. There are no quick solutions, and that the effect and impact of land administration depends on many contextual issues in different cases. Effective solutions involve going deeper into the actual tenure forms in existence, with solutions building on what are already there and in response to particular historical, cultural, legal etc. context. Key principles such as found in the VGGTs, and the continuum of land rights, and fit-for-purpose land administration will be central to the knowledge base, as will the principles of pro-poor land recordation and gender-responsive land administration. Learning objects will include knowledge of international conventions and guidelines, as well as good local and regional case studies that illustrate the importance of responsible approaches to land administration.

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BIOGRAPHICAL NOTES

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FIG Working Week 2017 Surveying the world of tomorrow - From digitalisation to augmented reality Helsinki, Finland, May 29–June 2, 2017

David Mitchell is an Associate Professor at RMIT. He has a PhD in land administration. David is co-chair of the GLTN Research and Training Cluster (with Siraj Sait), and member of the GLTN International Advisory Board. At RMIT University he teaches cadastral surveying and land development and undertakes research focusing on the development of effective land policy and land administration tools to support tenure security, improved access to land and pro-poor rural development. He also has a strong research focus on land tenure, climate change and natural disasters.

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