Capacity Building in Land Administration
– A Conceptual Approach

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Abstract

Capacity building is increasingly seen as a key component of land administration projects in developing and countries in transition undertaken by the international development banks and individual country development assistance agencies. However, the capacity building concept is often used within a narrow meaning such as focusing on staff development through formal education and training programmes to meet the lack of qualified personnel in a project in the short term. This article argues that capacity building measures should be addressed in the wider context of developing institutional infrastructures for implementing land policies in a sustainable way.

Where a project is established to create land administration infrastructures in developing or transition countries, it is critical that capacity building is a mainstream component, not as an add-on, which is often the case. In fact such projects should be dealt with as capacity building projects in themselves.

The article introduces a conceptual analytical framework that provides some guidance when dealing with capacity building for land administration in support of a broader land policy agenda.

Introduction

In most developing and transition countries there is a lack of institutional capacity to undertake land administration activities in an adequate and sustainable way. Many projects undertaken by the international development banks and individual country development assistance agencies have been carried out to respond to this problem. However, responding to the problem is not simple. This is partly due to the complex nature of the land administration paradigm, and partly due to the lack of emphasis on long-term capacity building measures aimed at developing sustainable institutional infrastructures.

It is generally understood that security of land tenure, efficiency of land markets and effectiveness of land use controls are crucial components in any land policy. These activities rely on some form of land administration infrastructure that permits the complex range of rights, restrictions and responsibilities in land to be identified, mapped and managed as a basis for policy implementation. In this context there is a whole range of capacity building and human resource development (HRD) principles and options to be considered.
Capacity Building

The term capacity has many different meanings and interpretations depending on who uses it and in what context it is used. It is generally accepted that capacity building as a concept is closely related to education, training and HRD. However, this conventional concept has changed over recent years towards a broader and more holistic view, covering both institutional and country specific initiatives.

A recent UN publication on Capacity Assessment and Development (UNDP, 1998) offers this basic definition: “Capacity can be defined as the ability of individuals and organizations or organizational units to perform functions effectively, efficiently and sustainably.” This definition has three important aspects: (i) it indicates that capacity is not a passive state but is part of a continuing process; (ii) it ensures that human resources and the way in which they are utilized are central to capacity development; and (iii) it requires that the overall context within which organizations undertake their functions will also be a key consideration in strategies for capacity development. In this UNDP publication, capacity is seen as two-dimensional:

- **Capacity Assessment** or diagnosis is an essential basis for the formulation of coherent strategies for capacity development. This is a structured and analytical process whereby the various dimensions of capacity are assessed within a broader systems context, as well as being evaluated for specific entities and individuals within the system. Capacity assessment may be carried out in relation to donor projects e.g. in land administration, or it may be carried as an in-country activity of self-assessment.

- **Capacity Development** is a concept that is broader than HRD since it includes an emphasis on the overall system, environment and context within which individuals, organisations and societies operate and interact. Even if the focus of concern is a specific capacity of an organization to perform a particular function, there must nevertheless always be a consideration of the overall policy environment and the coherence of specific actions with macro-level conditions. Capacity development does not, of course, imply that there is no capacity in existence; it also includes retaining and strengthening existing capacities of people and organisations to perform their tasks.

The OECD has defined Capacity Development as “… the process by which individuals, groups, organisations, institutions and societies increase their abilities to: (i) perform core functions, solve problems, define and achieve objectives; and (ii) understand and deal with their development needs in a broad context and in a sustainable manner.” This definition is adopted by various donors and is in accordance with the UN definition of capacity above.

Taking the above approach, capacity is seen as a development outcome in itself and distinct from other programme outcomes such as building technical and professional competence in certain fields through HRD activities. Measures such as education and training become a means to an end while the end itself is the capacity to achieve the identified development objectives over time - such as to establish and maintain national land administration infrastructures for sustainable development (Enemark, 2003).
Levels and Dimensions of Capacity Building

The previous section defined the broad concept of capacity building. However capacity building is a much more complex activity than defined above. It can be viewed at different levels, with each of these levels including different dimensions.

Capacity is the power/ability of something – a system, an organisation or a person to perform and produce properly. Capacity issues can then be addressed at these three levels. The levels relate to their application of capacity in society and have been identified as follows (UNDP, 1998):

1. **The broader system/societal level.**
   The highest level within which capacity initiatives may be considered is the system or enabling environment level. For development initiatives that are national in context, the system would cover the entire country or society and all subcomponents that are involved. For initiatives at a sectoral level, the system would include only those components that are relevant.

2. **The entity/organisational level.**
   An entity may be a formal organisation such as government or one of its departments or agencies, a private sector operation, or an informal organisation such as a community based or volunteer organisation. At this level, successful approaches to capacity building include the role of the entity within the system, and the interaction with other entities, stakeholders, and clients.

3. **The group of people/individual level.**
   This level addresses the need for individuals to function efficiently and effectively within the entity and within the broader system. HRD is about assessing the capacity needs of people and addressing the gaps through adequate measures of education and training.

Strategies for capacity assessment and development can be focused on any level, but it is crucial that strategies are formulated on the basis of a sound analysis of all relevant dimensions. It should also be noted that the entry point for capacity analysis and development may vary according to the major focus of the project. However, it is important to understand that capacity building is not a linear process. Whatever is the entry point and whatever is the issue currently in focus, there may be a need to zoom in or zoom out in order to look at the conditions and consequences at the upper or lower level(s). Capacity building should be seen as a comprehensive methodology aiming to provide a sustainable outcome through assessing and addressing a whole range of relevant issues and their interrelationships.

Basic Land Administration Principles

Land administration systems are concerned with the social, legal, economic and technical framework within which land managers and administrators must operate (UNECE, 1996). Land administration includes an extensive range of systems and processes:

- **Land Tenure:** the allocation and security of rights in land; the legal surveys to determine the parcel boundaries; the transfer of property or use from one party to
another through sale or lease; and the management and adjudication of doubts and disputes regarding rights and parcel boundaries.

- **Land Value:** the assessment of the value of land and properties; the gathering of revenue through taxation of land; and the management and adjudication of land valuation and taxation disputes.

- **Land Use:** the control of land use through planning policies, regulations and enforcement; the implementation of planning through granting of permits to use and develop land according to the controls; and the management and adjudication of land use conflicts.

Land administration systems are considered to include a core parcel based cadastral and land registration component, multi-purposed cadastres and/or land information systems, and in many systems facilitates or includes information on land use planning and valuation/land taxation systems – although land administration does not usually include the actual land use planning and land valuation processes.

Land administration systems, and particularly their core cadastral components, are an important infrastructure that facilitates the implementation of land policies in both developed and developing countries (UN/FIG 1999). These systems are concerned with the administration of land as a natural resource to ensure its sustainable development.

The modern land administration system is concerned with detailed information at the individual land parcel level. As such it should service the needs of both the individual and the community at large. As a result the system acts as a kind of backbone in society since it is the key to administering the relationship of people to land. Benefits arise from efficient land administration through its role in guaranteeing ownership, security of tenure and access to credit; facilitating efficient land transfer and the operation of land markets; supporting management of assets; and providing basic information in processes of physical planning, land development and environmental control. In short, benefits arise through cadastral applications for land management in general.

Throughout the world, the cadastral concept has developed significantly over the past few decades. The most recent examples focus on current world concerns of environmental management, sustainable development and social justice. Due to this, multi-purpose cadastres are increasingly seen as fundamental to economic development, environmental management and social stability in both the developed and developing worlds (Williamson, 2001a)

Land administration projects are basically institution building projects – as distinct from construction projects such roads, bridges or irrigation projects. Land administration projects should therefore be seen in a wider context that includes not only doing the project but, instead, building the institutional infrastructure and developing the necessary human resources to sustain the system in the long-term.

**Building Capacity in Land Administration**

The three levels of capacity building (the systems/societal, entity/organisational, and group of people/individual level) can be considered in the context of land administration systems as follows.
Land Administration is very much about systems and processes – cadastral systems, land registration systems, valuation and taxation systems, planning control systems, and the embedded processes to carry out the tasks such as the processes for adjudication, subdivision and land transfer. The purpose of the systems is to identify, map and protect land rights; to build efficient land markets; and to ensure effective and sustainable management of the use of land. Land Administration is embedded in an overall land policy and the connected legal framework. This is the system/societal level.

Secondly, Land Administration is about building entities or organisations – such as institutional infrastructures for management of the systems and building efficient relations between the systems e.g. in terms of building an efficient national Spatial Data Infrastructure. Building infrastructures is also about developing administrative policies and good governance. It is about building “capable government” which is able to perform key functions effectively based on trust and clearly defined responsibilities. This the entity/organisational level.

Thirdly, Land Administration is about individuals or people – from politicians, senior professionals and managers, middle managers and administrators, to office and field personnel - whether in the public or private sector. At the senior level a broad vision and understanding about land is required. At the more practical level, the players in the system need to have some understanding of the overall system but will have much more detailed and specific skills that need to be developed. This is the people/individual level.

Land Administration is a cross-sectoral and multi-disciplinary area. It includes, technical, legal, managerial, policy, and institutional dimensions. An adequate response in terms of capacity building measures must reflect this basic characteristic. However, the relationship of people to land determines the form of land administration response. This relationship is dynamic and driven by global drivers such technology development, micro economic reform, urbanisation, globalisation, and sustainable development. The relationship of people to land varies in and between countries and regions, and adequate responses in terms of capacity building must reflect these fundamental conditions.

For example if a country such as Indonesia wished to have a land administration system supported by a land title and cadastral surveying system similar to Denmark or Australia, this could possibly require 40,000 professional land surveyors and 30 or more university programs educating professional surveyors (based on Steudler et. al., 1997). Clearly this is not realistic even from a medium term perspective. As a result, there is a need to develop appropriate solutions matching the stage of development and specific characteristics and requirements of the individual country.

**A Conceptual Analytical Framework**

On the basis of the analysis presented above this section proposes a conceptual framework for applying the concepts of capacity assessment and development in the area of land administration. The framework is organised in the three levels (societal, organisational and individual) and identifies the dimension of capacity assessment and capacity development at each level. The components of land administration “best practice” and options within the land administration “tool box” can be used to further extend the conceptual analytical framework (Williamson, 2001b).
Dimensions of Capacity at the Societal Level

Capacity assessment at the societal level may include a number of dimensions such as:

- **Policy dimension**: Assessment of the people to land relationship within the country or region. This includes an overall assessment of the geography and the use of land in categories such as urban/rural, forests, agriculture, waste land mountains, coastal areas and an assessment of the pattern of land tenure in urban and rural areas including categories such as titled land, state lands, informal settlements, indigenous rights and customary tenure. An overview of the history of the country in terms of colonisation for example should contribute to the overall understanding of the range of land tenures in the jurisdiction area.

- **Social and institutional dimension**: An overall assessment of the stage of development of the specific country or region.

- **Systems dimension**: An assessment of the overall land administration system, and the embedded processes for adjudication, subdivision and land transfer.

- **Legal/regulatory dimension**: An assessment of the current legal framework and administrative arrangements, with a special emphasis on the land administration issues.

Capacity development at the societal level is crucial in terms of building the overall political basis for implementing land policy reforms. This should include:

- **Land policy issues**: A statement on the roles and responsibilities of the various land related activities such as land management, land reform, land registration, cadastre, and particularly the role of land administration as an infrastructure. The overall principle is that land policy drives legislative reform which in turn results in institutional reform and finally implementation with all its technical and human resource requirements. (Williamson, 2001b).

- **Land administration vision**: It is recognised that cadastral systems are not ends in themselves and land administration is not just about supporting land markets. Land administration systems provide an essential land information infrastructure. This leads to the need for the formulation of a land administration and/or cadastral vision for a country, such as to: “develop modern cadastral infrastructures that facilitate efficient land and property markets, protect the land rights of all, and support long term sustainable development and land management”(UN-FIG, 1996).

- **Land administration system**: When designing the system it should be recognised, that the success of a land administration system is not dependent on its technical or legal sophistication, but whether it protects land rights adequately and permits those rights be traded efficiently, simply, quickly, securely and at low costs (UN-FIG, 1996). This may include re-engineering of existing processes and procedures to make them more efficient and effective; or it may include the design of a new system in the country context based on international best practice.

- **Land tenure principles**: The determination of future land tenure principles with regard to titled land (ownership, leasehold, use of land), customary tenure, informal tenure and indigenous rights; the rules for foreigners to obtain tenure; and the rules concerned with adverse possession and flexible boundaries for example.

- **Legal principles**: The determination of the legal framework with regard to managing the land policy issues in a judicial context. The foundation of any system of social order is the framework of laws, which reflect the Constitution of the country, governs the administrative processes, and expresses the rights and obligations of the citizens. In the case of land laws relating to land administration, this includes
establishing an independent public land registration institution, with clear powers to establish administrative systems for land transfer and property formation, and quick and simple procedures for mortgage and forced sales (developed from ECE, 1998).

**Dimensions of Capacity at the Organisational Level**

*Capacity assessment* at the organisational level should include dimensions such as

- **Cultural issues:** Understanding the organisational and managerial structure and standards within an entity or organisation based on the political and cultural values within the country or region. This may include issues such as the degree of inequality among people accepted by the population, and whether there is a need for detailed regulations rather than a more flexible system (the degree of uncertainty avoidance). The cultural dimension in terms of bureaucratic behaviour and traditions is crucial to implementation of land policy reforms.

- **Managerial and resource issues:** Assessment of accountabilities in different entities or sectors and the responsibilities for design, management and implementation of land administration issues. Assessment of human, financial, and information resources available to support implementation of land policy reforms. Assessment of existing infrastructure in terms of physical assets such as property, buildings, computer systems and telecommunication infrastructures.

- **Institutional issues and processes:** Assessment of the dynamics between the public and the private sector, and the split of responsibilities between different levels of government. The inter-relationships and interactions between different entities in support of the overall system.

*Capacity development* at the organisational level should include consideration of:

- **Institutional infrastructures:** This is about establishing sound institutions, ensuring clarity of responsibilities, and enabling good governance. It includes co-ordination of the legislation related to planning, land use, land value and land registration by specifying the administrative role of the agencies and actors involved. It is about establishing an overall agreement and distribution of responsibilities between the involved governmental institutions. It is also about establishing a suitable balance and cooperation between public and the private sector activities, and between national policy-making and local decision-making. These challenges relate to good governance and to the issue of decentralisation with regard to the delegation of decision-making power between governmental levels.

- **Spatial data infrastructures:** SDI in a land administration framework provides the mechanisms for sharing geo-referenced information. These mechanisms are conceptual, political and economic, and are of course interrelated. Key elements include adoption and implementation of technical standards, access and cost recovery policies, and design of co-operative relationships between governmental levels and between the public and private sector (Rajabifard et al., 2002).

- **Professional institutions:** The development of professional bodies such as a national Institution of Surveyors being responsible for the development and control of professional standards and ethics, and enhancement of professional competence. The institution should also promote the wider land administration profession and interact with governmental agencies to develop the optimal conditions and services.
Dimension of Capacity at the Individual Level

Capacity assessment and development at this level is considered to be the most critical. This level addresses the need for individuals to function efficiently and effectively within the entity and within the broader system. Capacity building at this level is very much about HRD in terms of assessing capacity needs and addressing the gaps through adequate measures of education and training.

Capacity assessment at the individual level should include the assessment of

- **Professional and technical competence:** The identification of competencies needed within the land policy framework and across all land administration activities. The different tasks, positions and job profiles should be identified and described as a basis for developing the competencies needed.

- **Capacity needs:** Assessment of the capacity needs in terms of human resources required. This is simply to assess the gap between the existing capacity and the capacity needed to undertake the land administration tasks in the short, medium, and long term. The assessment should include both the public and the private sector.

- **Educational resources:** Assessment of the educational resources available in terms of in-country and out-of-country education and training, national and local educational institutions, existing educational programs, the range of qualified teaching staff and the range of equipment or technology such surveying instruments or computers available to support the existing educational activities.

Capacity development at the individual level includes a whole range of options with regard to the design of:

- **Educational programs:** The design of in-country programs at certificate, diploma, bachelor and masters level. The design of the programs should consider the immediate short-term needs for well-trained technicians as well as the longer terms needs for qualified professionals. The training policies should meet these needs by adopting a modular structure to ensure flexibility. A recently developed educational program in Malawi is an example of such a flexible and interdisciplinary approach (Enemark and Ahene, 2003). The programs should draw from local/regional expertise to ensure long-term sustainability.

- **Sandwich and franchise programs:** This should be considered to balance the lack of in-country educational capacity. Out-of country training, and study tours abroad may also be considered in this regard.

- **Training programs:** The design of training programs such as hands-on training in the workplace, including programs for training the trainers.

- **Continuing Professional Development (CPD):** Such programs may be designed to improve the competencies of the existing work force in relevant areas.

- **Virtual programs:** This includes distant training at local, regional, national and international level. Such programs are normally expensive and there is a demand for a well-established IT-infrastructure in the country.

- **Other measures:** This may include workshops and seminars for example to promote understanding, debate, and analysis of land issues at the policy, management and operational levels.

- **National education and research centre:** Such a centre may be established to ensure sustainability, continuity, and corporate memory of land administration experience within the country. This is further explored below.
## A Conceptual Analytical Framework for Capacity Building in Land Administration

The framework indicates the dimensions of capacity assessment and capacity development to be considered at societal, organisational, and individual level. The framework is intended as a tool or a checklist for assessing capacity problems and constraints, capacity gaps and opportunities.

### Discussion of Good Practice

Arguably many donor projects in land administration over the last decade have a rather narrow focus on access to land and security of land tenure. The focus has often been on doing the project, including mapping, adjudication, and registration, and on developing the necessary capacity for managing the processes within system. The focus has often been on the individual landowners, not usually on the wider land administration infrastructure or land policy issues. Institutional issues have been addressed mainly as a response to this more narrow perspective.

Many projects have therefore failed to meet the more overall objective of building a sustainable national land administration infrastructure. To a large extent this is because of the complexity in addressing national land administration issues. This is not a criticism of these projects since the economic driver has a high priority in developing.
countries and it is only in recent years that the capacity building focus has developed into a more overall methodology.

To address these issues there is a need to establish an equal partnership between doing the project and building the capacity to sustain the project. As such land administration projects should be seen equally as capacity building projects at a country level. The guidance proposed in the conceptual analytical framework described above is intended to facilitate this approach in support of implementing sustainable land policies.

Capacity building in land administration has gained increased attention through recent years. The FAO Land Tenure Centre in Rome has initiated a project to develop guidelines for self-assessment of capacity needs in land administration. Also the World Bank has initiated a series of virtual workshops and research activities to develop and support good practice in this complex area.

The World Bank “project cycle” ([www.worldbank.org/infoshop/projectcicle.htm](http://www.worldbank.org/infoshop/projectcicle.htm)) identifies a number of steps in the life span of a project. Basically these steps are about Identification/assessment of needs, Design/development of systems and solutions; Implementation; and Evaluation. In these terms, capacity building and capacity development are primarily concerned with the two former steps. However, if the processes of capacity assessment and development are carefully undertaken, problems with the following implementation and evaluation should be minimised.

Another approach to projects is the strategic management approach (UNPD, 1998:14) that looks at four steps: Where are we now; where do we want to be; how to get there; and how to stay there. This approach is in line with the broad capacity building concept aiming to assess, to develop and to sustain. The issue of sustainability and the need for continuity is further developed in the following section.

**The Need for Sustainability and Continuity**

A major problem in most land administration projects is that the focus is on the project as such, while the sustainability of the system in the longer term is only sporadically addressed within the project. There is need to ensure sustainability and continuity, and to develop a corporate memory of land administration experience within the country.

It is accepted that appropriately educated personnel and HRD are the keys to sustainability of land administration reform projects. In achieving this objective it is essential to build up resources to support an ongoing HRD strategy and corporate knowledge in land administration. At the same time it is important that a balance is achieved between tertiary education and technical education. Usually technical education is best undertaken by the implementing agency or government technical institutes, while objective policy and technical research and education is better undertaken at a university level.

The authors believe that most land administration projects would benefit from establishing a National Education and Research Centre in Land Administration as part of any national land administration reform strategy or project. The Centre could act as a repository of knowledge and experience in land administration in the country. The Centre would use the actual project as a long-term case study and operational
laboratory. The Centre could provide educational programs and supervise the establishment of educational programs at other institutions. The Centre could interact with international academics and professional bodies to assist the development of local academics. Such a Centre would most likely be established in an appropriate national university, possibly the lead academic department being in surveying/geomatics, but in conjunction with law, planning, valuation, sociology, anthropology and public policy departments, where appropriate.

The establishment of a Centre in a university could also capitalise on the independence and transparency which universities can provide. It is recognised that sometimes this independence can lead to some tension and needs to be managed, but the other option of having no university knowledge base or independent input to projects can lead to a far worse scenario.

While there is a commitment to HRD in all international organisations such as The World Bank, United Nations agencies and individual country development assistance organisations, the reality is that many efforts have only been marginally successful. Typically the major HRD focus in a land administration project is that significant numbers of government officials are sent overseas to do masters degrees, study tours are undertaken by senior government officials and some technical support is given to the responsible government departments. Unfortunately many major land administration reform projects leave little in the way of an ongoing in-country knowledge base.

The authors believe that the only way to adequately address HRD in support of long-term sustainability of land administration projects is to establish a long-term commitment to education and research within a university in the host country.

Conclusions

The main objective of this article is to apply the concepts of capacity building to establishing sustainable land administration infrastructures.

Where a donor project is established to create land administration infrastructures in developing or transition countries, it is critical that capacity building is a mainstream component that is addressed up front, not as an add-on. In fact, such projects should be dealt with as capacity building projects in themselves. While attention should still be given to doing the project, the key focus should be on building capacity to meet medium and long-term needs. In this regard land administration projects have much in common with other institution building projects.

For this purpose, a conceptual analytical framework is proposed. The framework identifies the dimensions of capacity assessment as well as capacity development for building sustainable land administration infrastructures at the country level. The framework offers some structured guidance when dealing with capacity building for land administration in support of a broader land policy agenda.

Finally the article develops the concept of a National Education and Research Centre in Land Administration as part of any large land administration project as a response to sustainability problems identified when discussing good practice. Such a Centre should
ensure sustainability and continuity, and develop a corporate memory of land administration experience within the country.

In the context of this article, donor projects for establishing or reforming land administration systems are basically about capacity building at a country level. Failure to recognise this may even contribute to projects being counterproductive.

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