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Capacity Building for Institutional Development in Surveying and Land Management

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SUMMARY

Good governance, comprehensive land policies, and sound land administration institutions are essential components for addressing the problems related to land management and land information infrastructures. Both an efficient land market and an effective means of land-use control must be developed as the basic tools for achieving a sustainable approach. However, in many countries, and especially in developing countries and countries in transition, the national capacity to manage land rights, restrictions and responsibilities is not well developed in terms of mature institutions and the necessary human resources and skills.

In this regard, the capacity building concept offers some guidance for analysing and assessing the capacity needs and for identifying an adequate response to these needs at societal, organisational and individual levels. The paper analyses the various means of capacity building for institutional development within surveying and land management.

Finally the paper discusses the role of FIG in this regard. Three areas are identified:
- Professional development through providing a global forum for exchange of experiences and new developments;
- Institutional development through support for developing the basic capacity in terms of educational programs and professional organizations; and
- Global development through cooperation with other international NGO´s such as the UN agencies, the World Bank and sister organizations in surveying.

FIG, this way, plays a strong role, in improving the capacity in surveying and land management at a global scale.

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Capacity Building for Institutional Development in Surveying and Land Management

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1. INTRODUCTION

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 paper agues that capacity building measures should be seen in a wider context of developing and maintaining institutional infrastructures in a sustainable way.

Land administration systems (LAS) are concerned with the social, legal, economic and technical framework within which land managers and administrators must operate (UNECE 1996). These systems support efficient land markets and are, at the same time, concerned with the administration of land as a natural resource to ensure its sustainable development. However, in many developing and transition countries, there is a lack of institutional capacity to undertake land administration action activities in an adequate and sustainable way. In this regard, the capacity building concept offers some guidance for assessing the capacity needs and for identifying an adequate response to these needs at societal, organisational and individual levels.

2. CAPACITY BUILDING

Good governance, comprehensive land policies, and sound land administration institutions are essential components for addressing the problems related to land management and land information infrastructures. Both an efficient land market and an effective means of land-use control must be developed as the basic tools for achieving a sustainable approach. However, in many countries, and especially developing countries and countries in transition, the national capacity to manage land rights, restrictions and responsibilities is not well developed in terms of mature institutions and the necessary human resources and skills. In this regard, the capacity building concept offers some guidance for analysing and assessing the capacity needs and for identifying an adequate response to these needs at societal, organisational and individual levels.

The term capacity building is relatively new, emerging in the 1980s. It has many different meanings and interpretations depending upon who uses it and in what context. It is generally accepted that capacity building as a concept is closely related to education, training and human resource development (HRD). However, this conventional understanding has changed over recent years towards a broader and more holistic view, covering social, organisational and educational aspects.

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 sustainable."* This definition has three important aspects: (i) it indicates that capacity is not a passive state but part of a continuing process; (ii) it ensures that human resources and the way in which they are utilised are central to capacity development; and (iii) it requires that the overall context within which organisations undertake their functions will also be a key consideration in strategies for capacity development. Capacity is seen as two dimensional: capacity assessment and capacity development.

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 out 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 on a specific capacity with 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 more complete definition offered by the UNDP and also the OECD for capacity development is:

> *"… the process by which individuals, groups, organisations, institutions and societies increase their abilities to: perform core functions, solve problems, and define and achieve objectives; and to understand and deal with their development needs in a broader context and in a sustainable manner."*

Capacity development in society can, in this regard, be addressed at three levels as outlined by UNDP and summarised in (Enemark and Williamson, 2003):

• *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. The dimensions of capacity at a systems level may include areas such as policies, legal/regulatory framework, management and accountability perspectives, and the resources available.

• *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

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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. The dimensions of capacity may include areas such as mission and strategy, culture and competencies, processes, and infrastructures.

- *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. Human Resource Development (HRD) is about assessing the capacity needs of people and addressing the gaps through adequate measures of education and training and Continuing Professional Development (CPD) activities. Capacity assessment and development at this third level is considered the most critical. The dimensions of capacity should include the design of educational and training programmes and courses to meet the identified gaps within the skills base and to provide the appropriate number of qualified staff to operate the systems.

Strategies for capacity assessment and development can be focused on any level, but it is crucial that strategies are formulated on a basis of a sound analysis of all relevant dimensions. Often capacity issues are first addressed at the organisational level. Organisational capacity – such as the capacity of the national cadastral agency or the cadastral infrastructure and processes – is influenced by not only the internal structures, and procedures of the agency, but also by the collective capabilities of the staff on the one hand and a number of external factors on the other. Such external factors may be political, economic or cultural issues that may constrain or support performance, efficiency, and legitimacy as well as the whole level of awareness of the values of land administration systems. By taking this approach, capacity measures can be addressed in a more comprehensive societal context.

Capacity development takes place not just in individuals, but also between them, in the institutions and the network they create – through what has been termed the "social capital" that holds societies together and sets the terms of these relationships. Most technical cooperation projects, however, stop at the individual skills and institution building – they do not consider the societal level (UNDP, 2002).

It should also be noted that capacity building is not a linear process. Whatever the entry point is and whatever the issue currently in focus is, there may be a need to zoom in or 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 aimed at providing a sustainable outcome through assessing and addressing a whole range of relevant issues and their interrelationships.

Taking the above approach, capacity is seen as a development outcome in itself and distinct from other program 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 and Williamson, 2004).

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3. A NEW PARADIGM FOR CAPACITY DEVELOPMENT

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 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 not usually been 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 that it is only through recent years that the capacity building aspect have developed into a more overall methodology. To address these problems, there is a need to establish an equal partnership between doing the project and building the capacity to sustain the project. The lesson learnt is:

> Where a donor project is established to create land administration infrastructures in developing or transition countries, it is critical that capacity building is a main steam component that is addressed up front, not as an add-on.

An example of good practice in this regard is the project in Malawi on capacity building for implementing land management (Enemark and Ahene, 2003). Land policy reform requires a long-term vision and commitment for implementation. In the case of Malawi the process was estimated to take fifteen to twenty years to complete. The process was initiated in 1995 by the World Bank in providing support for guiding a land policy reform process and strategic action plan towards creating a modern environment for protection of property rights, to facilitate equitable access to land for all and to encourage land based investment. Implementation of this land policy included institutional reform and capacity building as key components. The project included a number of projects such as drafting a new land law and formalization of customary land law, pilot district land registration including mapping and demarcation, rural/urban land use planning and development controls, and land resettlement project etc. Furthermore, the deficit in terms of qualified personnel was addressed through developing an integrated curriculum at certificate, diploma and bachelor levels. The implementation was initiated in 2001 by placing the issue of capacity building right up front. Unfortunately, the project was not fully realized due to some changed priorities within one of the donor countries.

Donors, in general, will often have a long term vision of what they want to achieve. At the same time however, they will have to account to their constituencies and superiors at home for the progress of the project. This tends to shape the project in a "manageable" way by using accountable deliverables for short term achievements (such as the number of parcels registered, number of training courses provided etc) while the long terms goals (such as

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building the institutional capacity, designing and implementing tertiary educational programmes, etc) are more difficult to turn into visible and accountable activities. This kind of accounting management will work as a self-justifying system that pumps huge amounts of money to developing countries. At the same time, the consultants have a strong interest in maintaining status quo and have little incentive to criticise the basic system since, if they do, they will risk to be replaced by more compliant staff. Donors have certainly addressed these problems to some extend. However, many of the fundamental issues still remain. This is reflected in the new paradigm presented below.

The new paradigm for capacity development is also influenced by today's globalised way of knowledge transfer. In developing countries there are often two systems of knowledge and production that exist in parallel: indigenous and modern. When new knowledge is not integrated into indigenous knowledge and production systems, it fails to be useful, despite its potential.

Capacity development is arguably one of the central development challenges of the day, as much of the rest of social and economic progress will depend on it. UNDP (2003) offers this understanding of the new capacity building paradigm:

	Current paradigm	New paradigm
Nature of development	Improvements in economic and social conditions	Societal transformation, including building of "right capacities"
Conditions for effective development cooperation	Good policies that can be externally prescribed	Good policies that have to be home-grown
The asymmetric donor-recipient relationship	Should be countered generally through a spirit of partnership and mutual respect	Should be specifically addressed as a problem by taking countervailing measures
Capacity development	Human resource development combined with stronger institutions	Three cross-linked layers of capacity: societal, institutional and individual
Acquisition of knowledge	Knowledge can be transferred	Knowledge can be acquired
Most important forms of knowledge	Knowledge developed in the North for export to the South	Local knowledge combined with knowledge acquired from other countries – in the South or the North.

The New Capacity Building Paradigm (UNDP 2002).

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4. CAPACITY BUILDING IN LAND ADMINISTRATION

Land administration systems (LAS) and particularly their core cadastral components, are important infrastructures that facilitate the implementation of land policies in both developed and developing countries. LAS are concerned with the social, legal, economic and technical framework within which land managers and administrators must operate (UNECE 1996). These systems support efficient land markets and are, at the same time, concerned with the administration of land as a natural resource to ensure its sustainable development. This global approach to modern land administration systems is shown in the figure below.
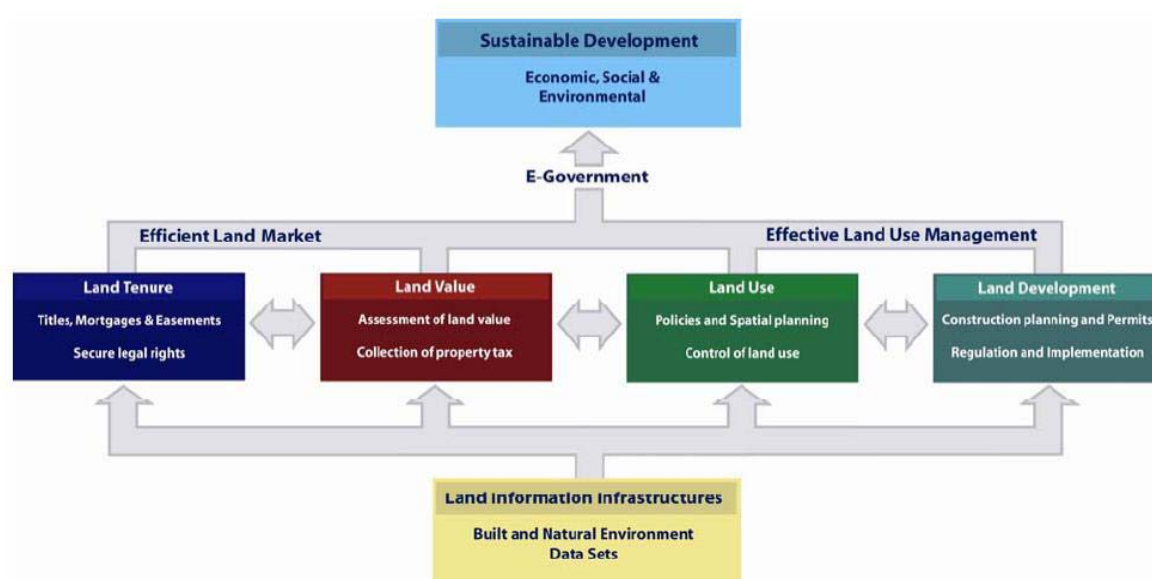
A Global perspective of Land Administration Systems (Enemark, 2004).

Land administration is a cross sectoral and multidisciplinary area that includes technical, legal, managerial, political, economical and institutional dimensions. An adequate response in terms of capacity building measures must reflect this basic characteristic that includes assessment and development at all three levels: societal, organisational and individual. In this regard, a conceptual analytical framework is developed (Enemark and Williamson, 2004) that identifies and analyse the relevant dimensions and options to be considered for building sustainable land administration infrastructures in support of a broader land policy agenda. The framework is shown in the diagram below:

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Capacity Building in Land Administration		
Level	**Capacity Assessment Issues**	**Capacity Development Options**
Societal Level	• Policy dimension • Social and Institutional dimension • System dimension • Legal and regulatory dimension	• Land policy issues • Land administration vision • Land administration system • Land tenure principles • Legal principles
Organisational Level	• Cultural issues • Managerial and resource issues • Institutional issues and processes	• Institutional infrastructures • Spatial data Infrastructures • Professional Institutions
Individual Level	• Professional competence • Human resources needs • Educational resources	• Education and training programs • CPD programs • Virtual programs • Education and research centre

5. GUIDELINES FOR SELF-ASSESSMENT OF CAPACITY NEEDS

The framework presented above relates to donor projects on land reform and the design and implementation of a land administration system to secure rights in land, facilitate an efficient land market, and ensure effective control of the use of land. However, there is also a demand for a framework or some guidelines that will enable the countries themselves to asses the capacity of their systems and identify specific needs for capacity development. These needs may then – within the limited financial resources available – be met by measures of capacity development.

FAO, the Land Tenure Service have initiated a project to develop such guidelines for self-assessment of capacity needs (Enemark and van der Molen, 2003). The guidelines should serve as a logical framework for addressing each step from land policy, policy instruments, and legal framework; over mandates, business objectives, and work processes; to needed human resources and training programs. The guidelines should for each step pose a number of questions to be considered based on some comments reflecting a best practice approach. For each step the capacity of the system can be assessed and possible or needed improvement can be identified.

Such guidelines are mainly aiming at developing countries as a basis for in-country self-assessment of the capacity needs in land administration. The government may form a group of experts to carry out the analysis, as a basis for political decisions with regard to any organisational or educational measures to be implemented for meeting the capacity needs. It is of course recognised that individual countries are facing specific problems that may not be addressed in these guidelines at all. Hence, the guidelines are meant as a tool for undertaking

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structured and logical analysis of the capacity needs by posing the right questions rather then providing all the right answers.

6. INSTITUTIONAL DEVELOPMENT IN LAND MANAGEMENT

Land management is the process by which the resources of land are put into good effect (UN-ECE 1996). Land management encompasses all activities associated with the management of land and natural resources that are required to achieve sustainable development. The concept of land includes properties and natural resources and thereby encompasses the total natural and build environment.

The organisational structures for land management differ widely between countries and regions throughout the world, and reflect local cultural and judicial settings. The institutional arrangements may change over time to better support the implementation of land policies and good governance. Within this country context, the land management activities may be described by the three components: Land Policies, Land Information Infrastructures, and Land Administration Functions in support of Sustainable Development. This Land Management Paradigm is presented in the figure below:
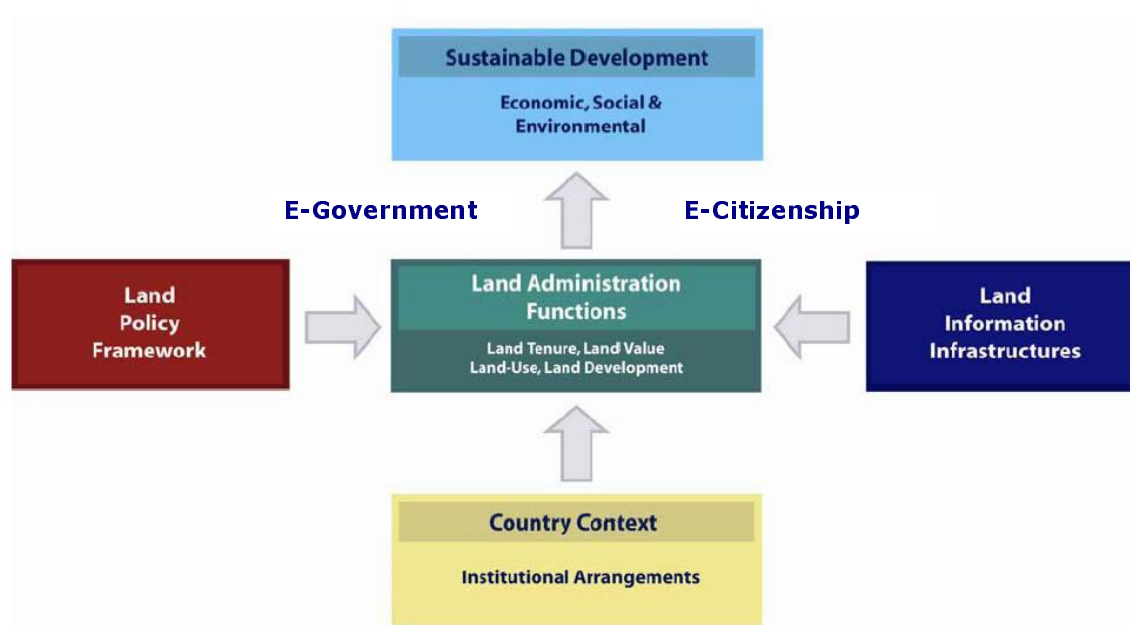
The Land Management Paradigm (Enemark et al., 2005).

The Land management 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.

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Institutional development in Land Management implies adoption of long-term strategic actions and capacity building activities. This includes the need to:

- Establish a strategic approach to donor projects and ensure that capacity building measures are addressed up front – not as an add-on.
- Develop in-country self assessment procedures to identify the capacity needs and thereby argue for establishing the necessary measures of capacity development in terms of policies, legal framework, institutional infrastructures, and human resources and skills.
- Promote the creation and adoption of a comprehensive policy on land development and establish a holistic approach to land management that combines the land administration/cadastre/land registration function with the topographic mapping function
- Establish a clear split of duties and responsibilities between national and local government (decentralisation). Ensure that the principles of good governance apply when dealing with rights, regulations and responsibilities with regard to land resources and land development.
- Promote the understanding of land management as highly interdisciplinary that includes a whole range of policy measures such as social, economic, environmental, judicial, and organisational.
- Promote the need for an interdisciplinary approach to 'surveying education' that combines both technical and social science and thereby links the areas of measurement science and land management through a strong emphasis on spatial information management.
- Establish strong professional bodies such as a national institution of surveyors who are responsible for the development and control of professional standards and ethics, enhancement of professional competence, and interaction with governmental agencies to develop the optimal conditions and services.
- Promote the need for CPD to maintain and develop professional skills and promote the interaction between education, research and professional practice.

Adoption of a comprehensive policy on land management is crucial since this will drive the legislative reform which in turn results in institutional reform and finally implementation with all its technical and human resource requirements. A good overall approach is to look at the four steps that constitute good strategic management: Where are we now; where do we want to be; how do we get there; and how do we stay there (UNDP, 1998 p.14).

This approach is in line with the broad capacity building concept which aims to assess, develop and sustain as shown in the diagram below:

Capacity Assessment	Capacity Development	Sustainability
• Are the policies on land management clearly expressed? • Is the legal framework sufficient and adequate? • Are the institutions adequate and are the responsibilities clearly expressed? • Are the guiding principles for good management well expressed? • Are the human resources and skills adequate and are the relevant education and training opportunities available?	• Adoption of an overall land policy • Design of a legal framework addressing the rights, restrictions and responsibilities in land. • Implementation of an organisational framework with clearly expressed duties and responsibilities • Adoption of clearly expressed guiding principles for good governance. • Establishment of adequate and sufficient educational options at all levels.	• Instigation of a self-monitoring culture in which all parties, national and local government, NGOs, professionals and citizens, review and discuss progress and suggest any appropriate changes. • Lessons learnt need to be fed back into the process for continuous improvement. • Implementation of adequate requirements and options for activities of Continuing Professional Development (CPD).

7. THE ROLE OF FIG

FIG can facilitate support capacity development in three ways:

- **Professional development**
  FIG provides a global forum for discussion and exchange of experiences and new developments between member countries and between individual professionals in the broad areas of surveying and mapping, spatial information management, and land management. This relates to the FIG annual conferences, the FIG regional conferences, and the work of the ten technical commissions within their working groups and commission seminars. This global forum offers opportunities to take part in the development of many aspects of surveying practice and the various disciplines including ethics, standards, education and training, and a whole range of professional areas.

- **Institutional development**
  FIG provides institutional support to individual member countries or regions with regard to developing the basic capacity in terms of educational programs and professional organisations. The educational basis must include programs at minimum Bachelor level that include the combination of Surveying andMapping, Spatial Information Management, and Land Management. Such programs combine the land administration/cadastre/land registration function with the topographic mapping function within a holistic land management perspective. The professional organisations must include the basic

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mechanisms for professional development including standards, ethics and professional code of conduct for serving the clients.

- **Global development**
  FIG also provides a global forum for institutional development through cooperation with international NGO´s such as the United Nations Agencies (UNDP, UNEP, FAO, HABITAT), the World Bank, and sister organisations (GSDI, IAG, ICA, IHO, and ISPRS). The cooperation includes a whole range of activities such as joint projects (e.g. The Bathurst Declaration, The Aguascalientes Statement), and joint policy making e.g. through round tables. This should lead to joint efforts of addressing topical issues on the international political agenda, such as reduction of poverty and enforcement of sustainable development.

The three means of development are of course interrelated and interdependent. Professional development at national level requires that both a professional organisation and an adequate educational basis are in place. Institutional development in terms of mature public agencies and policies requires a solid professional and educational base in order to establish a holistic and sustainable approach to land management based on principles of good governance and an adequate balance between the activities of the public and private sector. And global development requires the action of mature NGO´s with a strong political and professional base.

FIG, this way, plays a strong role in improving the capacity to design, build and manage surveying and land administration systems that incorporate sustainable land policies and efficient spatial data infrastructures.

8. FINAL REMARKS

The objective of this paper is to build an overall understanding of the Capacity Building Concept and its relevance for institutional development in the areas of surveying and land management. The paper initially develops a conceptual framework recognising the capacity building comprises capacity assessment and capacity development. It is accepted that the capacity building concept is complex and having different interpretation.. But even if the concept may be unclear to many, it is recognised that capacity building for institutional development is crucial especially in the context of a developing country. In this regard, a new paradigm for capacity development is presented for consideration that establish capacity development as not merely a stepping stone but as an end in itself.

The paper offers a framework for capacity building in land administration and some guidelines for self-assessment of capacity needs. It is also argued that institutional development in land management can be modelled through a focused approach that constitutes good strategic management in terms of capacity assessment, capacity development, and sustainability. Finally, the paper argues that FIG has a key role to play in this regard.

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BIOGRAPHICAL NOTES

Stig Enemark is Professor in Land Management and Problem Based Learning at Aalborg University, Denmark, where he was Head of the School of Surveying and Planning 1991-2005. He is Master of Science in Surveying, Planning and Land Management and he obtained his license for cadastral surveying in 1970. He worked for ten years as a consultant surveyor in private practice. He is President of the Danish Association of Chartered Surveyors (since 2003) and he is Vice-President of the International Federation of Surveyors (FIG) 2005-2008. He was Chairman of FIG Commission 2 (Professional Education) 1994-98, and he is an Honorary Member of FIG. His teaching and research are concerned with land administration systems, land management and spatial planning, and related educational and capacity building activities. Another research area is within Problem Based Learning and the interaction between education, research and professional practice. He has undertaken consultancies for the World Bank and the European Union especially in Eastern Europe and Sub Saharan Africa. He has more than 200 publications to his credit, and he has presented invited papers to more than 50 international conferences.

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