The Role of Training Institutions in Promoting Sustainable Land Management in Kenya

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Abstract

Land is critical to the economic, social and cultural development of a country. In Kenya, land issues are emotive and have dominated the debate since independence in 1963. Indeed, the struggle for independence from the colonial rule was closely linked to the fight for land rights. As a nation Kenya therefore recognized at an early stage, the important role of experts in the acquisition, development, valuation, management and disposal of property.

The approaches of Land Administration processes and outputs have evolved with time. Of particular concern is the global realization that land administration should not just aim at the eventual issuance of paper title but has to be consistent with the historical, economic and social background of each country. This realization also calls for a multi-disciplinary approach in terms of core competencies with incorporation, for example, of modern land information systems and programmes of administering land. The education and training in the land sector has not critically responded to the needs of the country and continued to promote specializations at the basic university level, a trend that is worrying. The past products from Kenya Universities have not been adequately equipped to effectively offer land administration services in order to achieve sustainable land management. Land administration as a discipline has largely been ignored in this institutions.

This paper, therefore, highlights the training programmes in the built environment and particularly the land sector within the Kenya Universities. It further examines the emerging trends in the training programmes. It calls for a re-orientation and a more comprehensive programme that will meet the inherent challenges of land administration education and training.

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1.0 Introduction

Land is critical to the economic, social and cultural development of a country. In Kenya, land issues are emotive and have dominated the debate since independence in 1963. Indeed, the struggle for political independence from the colonial rule was closely linked to the fight for land rights. As a nation, Kenya therefore recognized at an early stage, the important role of experts in the acquisition, development, valuation, management and disposal of property.

The approaches of Land Administration processes and outputs have evolved with time. The same can be said of the training of landed professionals in Kenya. For example, the first courses addressing the issues of land management were launched in 1956 at the then Royal Technical College of East Africa (later the University of Nairobi) and was covered by two distinct schools:(i) The Department of Surveying and Photogrammetry in the Faculty of Engineering, and (ii) The Department of Land Development in the Faculty of Architecture, Design and Development. These two departments have generally been the main source of land management graduates. While the Department of Land Development concentrated more on the Valuation and Management of land, the Department of Surveying and Photogrammetry tended to be more technical but with a stronger leaning to cadastral surveying.

1.1 Problem Statement

Land Administration for sustainable development should be consistent with the historical, economic and social background of a country. This calls for a multi – disciplinary approach to teaching in core areas, with incorporation of modern Land Information Systems. The education and training in the land sector has not critically responded to the needs of the country and has continued to promote specializations at the basic university level. This trend is worrying, particularly in Africa, where there is still a considerable need for studies in land management covering land rights and land tenure systems, economics of land use, land laws, surveying and physical planning amongst others.

The past graduates from Kenyan Universities have not been adequately equipped to effectively offer land administration services in order to achieve sustainable land management. Land Administration as a discipline has largely been ignored in these institutions.

1.2 Objectives

This paper, therefore, highlights the training programmes in the Built Environment and particularly the land sector within the Kenyan Universities. These include areas of: Geospatial Engineering, Land Economics, Physical Planning and Construction Management. The paper further examines the emerging trends in the Training programmes and calls for a re-orientation and a more comprehensive programme that will meet the inherent land administration challenges of the 21st century.

2.0 Land Administration

Access to land and other natural resources is an important basis for the livelihood of people in the country. In order to provide an opportunity for economic growth and the incentive to invest, there has to be security of tenure. The objective of land administration and management is therefore to ensure that there is stability and sustainability in the division of land between individuals and other legal entities.

The terms land management and land administration are often used interchangeably in relation to sustainable development. This is because the functions of the land administration and land management overlap and frequently are implemented by one body. However, the distinction should be clear from the onset. UN- ECE (1996) defines land administration as the processes of recording and disseminating information about the ownership, value and use of land and its associated resources. Such processes include the determination (sometimes known as the "adjudication") of rights and other attributes of the land, the survey and description of these, their detailed documentation and the provision of relevant information in support of land markets. Land administration covers institutions and processes associated with land rights regulation including the recording

of the rights. On the other hand, land management refers to land use regulations that are associated with zoning, placing a ceiling upon the size of holdings, conditions and environmental protection measures. It lays framework for the protection of the land interests of selected vulnerable groups, women, children, pastoralist and others.

The benefits of comprehensive land administration and land management in any country have been identified and include:

- Guarantee of ownership and security of tenure
- Support for land and property taxation
- Provide security for credit
- Develop and monitor land markets
- Protect state lands
- Reduce land disputes
- Facilitate rural land reform
- Improve urban planning and infrastructure development
- Support environmental management

The need to train in the areas of land administration and management is the first step for any country in achieving an understanding of land, the importance of land as a resource, and how it should be administered and managed. The land administration guideline (UN-ECE, 1996) has identified core areas that should be understood and taken into consideration so as to achieve the holistic benefits of land administration. Therefore, appropriate training programs related to the land discipline must include and not be restricted to the following areas:

- Land and land administration
- The legal framework
- Financial matters
- Land-use planning
- Institutional arrangements

- Technical matters
- Procedures for introducing land administration system

In recognition of the role of land and land administration in development, various governments have supported training institutions in their countries to set up programmes that are relevant and up to date as far as land administration, operations and management of institutions is concerned. This is the scenario in many developed countries and other emerging economies of the world. In the case of LDCs and sub-Saharan Africa in particular, the development of land administration and management as holistic discipline has not been entrenched. With the exception of a few countries, land economics and surveying training has continued to take the traditional approach of basic understanding of theories of land economics, valuation, surveying and photogrammetry amongst others. This is totally oblivious of the emerging areas that should have long been embraced such as modern land information systems, technical matters of surveying like GIS and GPS technology, land administration processes, facilities management and modern methods of real estate appraisal. This is not to say that these areas have not emerged in the training institutions.

3.0 Training programmes in the Built Environment in Kenya

As a nation, Kenya recognized at an early stage the important role of experts in the built environment discipline including acquisition, development, valuation, management and disposal of property. This recognition is manifested in the country's investment in education and training of such experts as Land Surveyors, Valuers, Estate/Property Managers, Lawyers, Architects, Quantity Surveyors and Physical Planners (Olima, 2006:468). The training of built environment professionals in Kenya has mainly been the monopoly of the University of Nairobi which was established in 1956 as the Royal Technical College of East Africa. In 1967 the departments of Surveying and Land Development were created and mandated to teach and train surveying and land economics.

3.1 B.A in Land Economics

The syllabus and curriculum of Bachelor of Arts in Land Economics covered broad areas of land economics, valuation, property management, building materials, and land laws. This was, however, supported by other service courses such as theory of structures, surveying, physical environment and economics so as to give the student a holistic understanding of issues touching on land, buildings and economics of real property markets.

In 1985, a new system of education was introduced in Kenya called the 8-4-4 system which meant 8 years in primary school, 4 years in secondary school and minimum 4 at the university. The course land economics had to be done in 4 years. This meant that there was to be a change in the curriculum in 1992, when the first group of 8-4-4 students joined the universities. The changes incorporated the addition of the following areas:

- Agriculture and Forestry
- Introduction to computing
- Introduction to management
- Elements of organizational theory
- Elements of agricultural economics and management
- Principles of land information systems
- Housing policy studies
- Land policy studies.

This review and its contents have continued to be subject of criticisms, particularly that:-

- The review was done in a hurry to suit a political system and to fill a fourth year
- The courses and contents are not in tune with the contemporary market demands
- The crafters of the course ignored fully aspects of land administration and management

The above concerns are cutting across all the departments and have led the University of Nairobi administration to demand that departments review their curricula. It is within the newly created department of Real Estate and Construction Management that the review of the course Bachelor of Arts in Land Economics has been undertaken and the degree

programme renamed Bachelor of Real Estate with the Valuation and Property Management option and Land and Housing Administration option. The following new areas have been incorporated:

- Property and Infrastructure development
- Natural resource economics
- Entrepreneurial studies
- Environmental Impact Assessment and audits
- Contracts and procurement in Real estate services
- Project Management Theory and Practice
- Construction Maintenance
- Property Agency and Marketing
- Professional Practice and ethics
- Property Dispute resolution
- Property and facilities Management
- Land administration and Management

Whereas the above review is a step towards the right direction in the making of a landed professional, the following shortcomings are inherently noticeable;

- The course neither brings out a land administrator nor a real estate financial expert
- The fundamental areas of land administration can only be inferred but are not emphasized
- Both land policy and land administration management appear to be an after thought, coming a little too late in the course
- The aspects of cadastres and applications of technology in land administration have been left out.

3.2 Bsc in Geospatial Engineering

The joint British Institute of Civil Engineering (IEC) and the Institution of Civil Engineering Surveyors (ICES) have defined Geospatial Engineering as:-

The professional discipline concerned with measurement, analysis and graphic representation of dimensional geospatial relationships, as well as with the design, construction, maintenance, and the use of geospatial databases. It has its roots in Land Surveying and Mapping and encompasses the specialization in geodesy, surveying, topometry, hydrograph, geo-informatics and navigation.

The department of Geospatial and Space Technology at the University of Nairobi decided to re-organize its old curriculum in surveying to create a new five year curriculum of Bsc in Geospatial Engineering. This was necessitated by recent developments in Satellites Positioning Systems (particularly GPS, Remote sensing technology, digital mapping and geo-information).

Today, the discipline of surveying is involved with measurement science covering areas such as precise industrial metrology, geo-positioning and navigation and large scale measurements into space. It was therefore felt that the new discipline of geospatial engineering would broadly cover the new areas of surveying and mapping such as:-

- Geodesy and Geodynamics,
- Positioning and Navigation,
- Topometry and Measurement systems,
- Geo-information and Visualization;
- Land and Infrastructure Management

The problem, however, is that this curriculum has been tailored more as an Engineering course rather than Land Management course. Consequently, the Government cannot attract the geo-spatial engineering graduates to join the main stream land survey organizations let alone the Land Administration sector.

3.3 B. Architectural Studies / B. Architecture (University of Nairobi and Jomo Kenyatta University of Agriculture and Technology)

These programmes aim to equip graduates to comprehend the environmental context of their society in order to evolve design solutions of the built forms. The programmes are concerned with organization of space on a small scale as opposed to urban and regional planning. The strength of these programmes lie in architectural design and graphics. Housing and human settlements, building costs, real estate studies and land economics are included in recognition of the critical impact they have on land.

However, these areas of study do not take into account issues relating to land beyond land ownership document. The programmes give little attention to socio-cultural perspectives on land. For instance, the programmes have no concern for urban sprawl into farmlands which require appropriate policies to guard against food insecurity.

3.4 Bachelor of Quantity Surveying (University of Nairobi)

Quantity surveyors concern themselves with competencies in reliable capital assessments for physical development. While the actual value of investment includes the land, quantity surveyors are only trained in actual costing of construction or physical developments.

The quantity surveying programme fails to acknowledge the implications of socio-political setting that drives certain human settlements. While the programme embraces various laws, it does not include land laws which have serious effects on developmental costs of the built forms. In this regard, the programme does not explore policies that govern land rights. This deficiency produces a quantity surveyor with some basic knowledge of land measurements but virtually no knowledge that would inform accurate assessment of real cost. Property law, law of tort and commercial law, for instance, are not enough to deal with complex land issues in so far as conflicts in land are concerned.

3.5 Bachelor of Construction Management (University of Nairobi and Jomo Kenyatta University of Agriculture and Technology)

The programme in construction management is multifaceted drawing upon experiences in management, economics, law and technology. The programme of study is designed to

produce professionals capable of making rational decisions and providing solutions in situations where construction is undertaken. The principal aim of the programme is to develop skills for resolution of problems of cost and time overruns that characterize construction projects.

Arising from the realization that construction is an integral part of business and society, the programme has been enhanced to include laws of property, contract, tort and business. However, these laws are still confined to the construction process. There is no recognition of importance of the land on which the projects are based. In this regard, socio cultural issues. This has culminated in violent protests which undermine governments' efforts in improving human settlements.

3.6 B.A in Urban and Regional Planning (University of Nairobi and Maseno University)

This programme has been developed in response to changes in human settlement patterns, social and economic conditions as well as changes in our natural resource base. These changes significantly impact on land which is a key resource in human settlement development. This realization calls for concrete measures to steer the planning of cities and rural areas to achieve sustainable development. Furthermore, United Nations Agenda 21 of 1992 and the Habitat Agenda of 1996 allude to the importance of planning by recognising that human settlements will not be sustainable unless proper management of resources and distribution of space is right. Indeed, the debate over land rights continues to dominate national politics.

Need for equitable access to land, underpins the importance of holisitic approach to planning of urban and rural areas. Arising from this realization, the urban and regional planning programme, has been transformed to equip planners with competencies to face emerging challenges. The programme recognizes the need to enhance planners' professional skills towards enactment of legislation to guide, regulate and manage urban and regional development. In this regard, the programme aims to produce planners with competencies in planning, land surveying, law and GIS.

An examination of this programme clearly reveals that it fails to resolve issues that underlie the land question in Kenya. First, the programme offers very little emphasis on the need to develop comprehensive databases for management of land resources. The training in land information systems is appallingly lacking. As a result, the planners delivered to the market by the programme are not prepared to resolve land problems which bedevil the nation. Furthermore, the programme lacks emphasis on an efficient land information system which is fundamental in transparent land transactions.

4.0 Rationale for the Land Administration Curricula

Land ownership is critical to virtually every Kenyan. Lack of properly defined land rights exacerbates the problem. Currently, the definition of these rights is arbitrary leaving them at the whims of the planning agencies. Lack of clearly defined rights to access land resources is a recipe for violent conflicts. The situation is exacerbated by lack of a coherent land policy in Kenya.

Land administration revolves around laws that guide access to land. The urban and regional planning programme covers planning law only, which is not adequate to deal with complex land issues. Lack of adequate knowledge of law leaves the graduate of planning vulnerable to legal conflicts. Insufficiency of law in this programme is a clear illustration of existing gaps that undermine sustainability of land management in Kenya.

In Kenya today, the administration and management of land remain the responsibility of professionals in the traditional disciplines of land surveying, land economics, lawyers and agriculturalists. These professionals lack requisite competencies to deal with the complex issues in land administration.

Whereas the existing universities have successfully trained their graduates in the respective disciplines, none so far is involved in equipping the graduates with the temporary tools of land administration. It is within this context that, upcoming universities have attempted to fill this gap. In particular, newly incorporated Kenya

Polytechnic University College, has developed a curriculum for Bsc in Land Administration. It is hoped that this programme will commence during 2009/2010 academic year. The course has been receiving applause from the landed professionals as one of the best courses to be developed in Kenya for addressing the emerging trends and challenges in land administration and management. The course has the following key aspects:

- In depth units in land administration
- Land management's institutional set ups
- Cadastral surveying and mapping
- Various units in land information systems
- Applications of land information systems
- Detailed units in land policy development
- Land laws
- Urban, rural and regional planning.

The curriculum uses a four tier approach to achieve this objective and these are: - General courses, Technical courses, Application courses and Professional courses. It aims to produce Land Administration graduates suitable for careers in all government and non-government organizations, institutions dealing with research and advocacy on land issues, and development partners with interest in the management of land resources. These include; utility companies, Local Authorities, United Nation Agencies, Private Property Management firms and Law firms.

At the end of the course the land administrator should be well equipped to:

- Understand the practice of land administration and management
- Be part of the strengthened capacity in land administration and management institutions
- Assist in enhancing citizenry participation and knowledge in land administration
- Understand and assist the country in development of efficient and effective land markets

- Champion the adoption of modern land information systems so as to reduce bureaucracy and corruption in land administration
- Be able to participate in policy development in land, land use, housing and environmental matters.

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