

Ardhi University, Dar Es Salaam, Tanzania

School of Urban and Regional Planning

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1. Introduction

This paper begins by providing an overview of the context (political economy, legislative and institutional arrangements) within which planners graduating from Ardhi University (ARU) operate. It then moves on to describe the planning programme at the School of Urban and Regional Planning at ARU, with a view to showing what knowledge and skills graduates are equipped with and how this is achieved. The ultimate aim of the paper is to identify what needs to be done to revitalise the planning education offered at ARU so as to enhance the effectiveness of planning and hence its efficacy in the management of change of the natural and built environment, to ensure sustainable urbanisation.

2. The political and economic context

Tanzania, like all other African countries, has in the past two decades or so been engaged in major political and economic reforms that have entailed review and/or formulation of policies, legislation and institutional rearrangements. The ultimate goal of these processes has been to reduce poverty by improving income generation opportunities and access to social services, and ensuring citizen participation in decision-making. It has therefore been necessary to improve the economy and reform the political system to make it more just and democratic. Economic reforms in Tanzania, which commenced in the mid-1980s, entailed moving from a command economy of the kind pursued by the government since 1967 to a market economy, while political reforms, which commenced in 1992, involved shifting from a single-party political system to a multi-party system.

Given these changes, the form of governance, the roles of various actors in the public, private and popular sectors and their power relations need to change. This has implications for the planning system, the form taken by planning practice and planning education. In this regard, if planning is to contribute meaningfully as envisaged, there is a need to examine its substance, approaches and methodologies, as well as that of the planning system (legislative and institutional framework), and the contents and adequacy of the planning education curriculum and how this is delivered. This paper focuses on the last of these concerns, the planning education curriculum, and examines its content, how it is delivered and the extent to which it meets the needs of its context.

2.1 Demographic features

The United Republic of Tanzania (URT) comprises Tanzania mainland and Zanzibar (the Islands of Unguja and Pemba). The latest population census of 2002 recorded the total national population as 34.4 million people, having increased annually at a rate of 2.4% from the total population of 24 million people recorded in the previous national population census of 1988. The total urban population as per the 2002 national population census was about 8 million people, or 23% of the total population. This proportion of urban population had increased from 13.8% in the previous census (URT 2007).

Out of the total urban population, about 2.3 million people or 30% were living in Dar es Salaam, the largest city and seat of government, in 2002, increasing from about 1.4 million people recorded in the 1988 population census. According to the 2002 census, Mwanza, the second-largest city, had only about 386 000 inhabitants, followed by Arusha with about 280 000 people and Morogoro with 200 000. The rest of the urban areas together had fewer than 200 000 inhabitants.

The urban population growth rate is 4.5% per annum, resulting from both the natural increase of the population already living in the urban areas and migration from the rural areas or migration into cities with relatively greater employment and business opportunities such as Dar es Salaam, Mwanza, Arusha, Morogoro and Mbeya.

2.2 Urbanisation patterns

What is classified as urban population in Tanzania by the Central Bureau of Statistics is less than the actual size of the urban population. This is particularly so if the density criterion is used. There are many dense rural settlements which are classified as villages because of their registration as villages, but where over time the population has increased naturally and agglomerated around available infrastructure and services such as water, primary schools, markets and shops. In most cases these high-density settlements are located in the centres of villages established during the villagisation/rural resettlement programme which was implemented between 1973 and 1978 throughout the country; the exceptions are in some administrative districts such as Moshi Rural, parts of Hai and Rombo in Kilimanjaro Region, where people already lived in nucleated villages, growing permanent crops.

In the latter case, where resettlement was not effected, a different pattern of urbanisation is evident and continues to take place unguided and unregulated. In these areas, land fragmentation and densification have proceeded and continue, to the extent that individual landholdings in some villages are not larger than 0.12 hectares. In such villages, due to shortage of agricultural land, it is not only densification which has taken place and continues to do so; economic activities have changed inevitably from agriculture to other, more urban activities and this process also continues. Generally, unemployment has become an issue of concern, particularly so among the youth.

A third scenario of urbanisation in Tanzania depicts what is taking place in trading centres, a category of settlement that lies between district administrative headquarters and villages. These settlements are fast urbanising in terms of densification and type of economic activities. Most of them are ward administrative centres but at the same time are registered and regarded as villages. Migration from these centres and the villages described above to the settlements which are categorised as urban, such as district and regional administrative headquarters, is thus prompted by the high unemployment levels in the villages or by limited business opportunities for those who are already engaged in business while living in the villages.

2.3 The economic environment

After years of enduring structural reforms to redress economic decline and stagnation during the 1980s and 1990s, the socio-economic policy measures implemented from the mid-1980s through the 1990s began to show positive results, so that the present decade has been characterised by a steady economic recovery. The GDP growth rate has risen consistently, reaching 6.2% in 2002 and 6.7% by 2004. During the same period inflation dropped from double digits in the 1990s to 4.4 per cent in 2003. At the end of 2004, foreign reserves reached 8 'months of imports' compared to only 6.3 'months of

imports' in 2000 (URT 2005).

There have been significant investments in infrastructure such as roads, telecommunications, mining and tourism due to increased inflows of direct foreign investment, and the government's efforts to collect revenue have enhanced its capacity to invest in social services. This is evident in services such as primary education, water supply and health. The improvements made are also linked to funds received by the government under the enhanced Highly Indebted Poor Countries initiative.

However, the prevalence of income poverty is still high in Tanzania. According to the Household Budget Survey of 2000/01 (URT 2005) the proportion of the population below the national food poverty line was 18.7% and that below the national basic needs poverty line was 35.7%. Poverty remains high in rural areas, where about 87% of the poor population lives. It is highest among households who depend on agriculture. There is also a big disparity between urban and rural poverty, in terms of both food and basic needs poverty. The Household Budget Survey 2000/01 results reveal growing income inequality, as measured by a rise in the Gini coefficient from 0.34 in 1991/92 to 0.35 in 2000/01. There are also disparities in poverty status across and within administrative regions and districts (URT 2005).

Agriculture is the lead economic sector, accounting for 45% of GDP and about 65% of export earnings. It is a source of food and raw materials for industries, and it provides livelihoods to 82% of the population. Other significant sectors include manufacturing and processing, mining and tourism. The last two sectors have become increasingly important contributors to GDP.

2.4 Land use and development

Soon after independence in 1961, Tanzania (then Tanganyika) adopted a single-party political system and in 1964 agreement was reached with Zanzibar to form the United Republic of Tanzania. In 1967 the ruling party on the mainland, the Tanganyika African National Union (TANU) adopted the Arusha Declaration, a blueprint for socialist transformation in Tanzania. Following the adoption of the Declaration, major means of production, privately owned industries, financial institutions, large-scale plantations and non-owner-occupied buildings were nationalised by the government. A number of government-owned parastatal organisations were established to run the nationalised farms, industries and financial institutions, but already in the early 1980s these organisations had become a huge burden to the economy, for most of them were running at a loss and required subsidies from the government for their survival (Maliyamkono & Bagachwa 1990).

Besides being a burden to the taxpayers in many ways, nationalisation had far-reaching and long-term adverse impacts on the economy. These included a decline of production in some of the nationalised agricultural plantations and industries, discouragement of private direct investment in all the sectors that were affected by nationalisation, and subsequently loss of employment and income opportunities. For instance, nationalisation of buildings totally discouraged large-scale real estate development; this explains why cities and real estate development in Tanzania are characterised by subsistence housing production to cater for individual households' accommodation demands, rather than responding to more general housing demands. This subsistence nature of housing production has left urban planners and other managers in local authorities facing the daunting challenge of managing change of a built environment characterised by numerous disjointed initiatives of individual land developers.

Local authorities have apparently failed to coordinate and guide spatial development resulting from individual development initiatives. Coupled with inadequate capacity to deliver serviced land, housing development is increasingly taking place in unplanned settlements where services are inadequately available. The growth of the informal settlements has also been a result of the failure of

the formal housing delivery systems to include the National Housing Corporation and private real estate developers in efforts to cater for the housing demand. The main explanation for this failure is the total lack of a housing mortgage system in Tanzania. This means that housing developers have had to depend on their own savings to finance housing, which is normally built incrementally on un-serviced land mostly available in the informal settlements.

The situation regarding availability of surveyed plots in Dar es Salaam, Mwanza, Mbeya and Morogoro (the fast-growing urban areas) has undergone a positive change in the recent past following implementation of a project to deliver partially serviced plots to check informal settlement development. Besides the lack of basic infrastructure and services in the project areas, location of the project sites in Dar es Salaam is at least 15–20 km away from the city centre and also far from the areas where employment is available. *The issue for planning here is the apparent lack of strategic thinking about the provision and financing of basic infrastructure and services in the project areas, the location of the projects, and the promotion of employment opportunities so as to make the housing areas liveable and consequently eliminate unnecessary commuting between the project areas and the existing services and employment centres. There is also insensitivity to the environment, when one considers the long distances that have to be travelled and the resultant implications for energy consumption and environmental pollution.*

Since 1972 the government has pursued a progressive and supportive policy on the informal settlements so that they are upgraded and the tenure security of property owners is ensured. This policy was incorporated into the Land Policy adopted by the government in 1995 (URT 1995) and into Land Act No. 4 of 1999, which became operational in 2001. The policy and legislation stipulate that all informal settlements should be recognised and regularised. To translate this policy and legislation into action the Ministry of Lands, Housing and Human Settlements Development, in collaboration with the Dar es Salaam City Council and its three local authorities, has registered at least 230 000 informal properties (estimated to be slightly over 50% of properties in the informal settlements) in Dar es Salaam with a view to providing property owners with two-year residential licences as an intermediate step before settlements are regularised. The next step will be to prepare regularisation plans for the respective settlements, conduct a cadastral survey and issue certificates of occupancy for 33-year leases. Regularisation of the informal settlements and prevention of their further growth is envisaged in all urban areas. This issue will preoccupy the planning system and planners in Tanzania for several years to come and consequently should receive the attention of the planning education system.

Following the economic reforms adopted by the government from the mid-1980s to redress the ailing economy, the nationalisation policy has been replaced by a privatisation policy, the result of which has been outright selling by the government of industries, financial institutions such as banks and large-scale plantations/farms, or entering into partnership with private businesses in running the institutions. The economic reforms have also seen a restructuring of central and local government, involving the streamlining of the civil service to reduce the size of the government (URT 1998). As part of these economic reforms, many civil servants and employees of parastatal organisations were retrenched and therefore lost income-earning opportunities. In order to continue surviving in their urban localities, engagement in informal economic activities has been the only available option for most of them. This has greatly contributed to increasing the importance of the informal economic sector, so that it is now a common feature in all urban settlements.

2.5 The informal sector

Due to limited formal employment and income opportunities, about 60% of the urban labour force is engaged in the informal sector. This is an issue for planning because normally such activities are

located where they conflict with other formally designated activities such as pedestrian walkways, bus terminals, road junctions etc. (Nnkya 2006). Such locations are preferred by the informal operators because of their proximity to customers. The fact that existing plans do not provide for informal-sector activities in appropriate locations means that sharing of such space results in conflicts, which currently dominate the urban environment. In some cases operators of such informal businesses are temporarily permitted to use the space by its owners, for example shop owners who may permit them to operate temporarily in front of their shops; this is also the approach taken by local authorities, which may permit them to operate temporarily on road reserves. The issues in these cases would be tenure security and certainty of investment in such space.

Conflicts with the informal sector have occurred because there are no spaces provided for their activities at the appropriate locations. Evictions of these operators have not succeeded, and should not succeed, because by so doing we defeat the ideal of an inclusive and just city. The question for planning education is the extent to which planning students are equipped to understand the dynamics of the informal sector and plan for such activities, instead of pretending that they do not exist or assuming that they represent a temporary phenomenon that will disappear with time.

3. The Tanzanian planning system

The present institutional arrangements for planning have been influenced by a civil service and local government reform programme implemented in the last ten years with the overall objective of enhancing the capacity of the local government authorities to effect service delivery. Guided by the principle of decentralisation by means of devolution of functions and finances to local levels, reforms targeted four policy areas: political, financial, administrative and changed central-local relations. Implementation of the reform programme and decentralisation by devolution has involved institutional rearrangements and review and/or formulation of laws and regulations, as well as administrative procedures in 1995 and 2000 respectively (URT 1995, 2000).

Both the central and local government authorities are responsible for urban and rural planning in Tanzania within the legislative framework of the Land Act Nos 4 and 5 of 1999, the Urban Planning Act and the Land-use Planning Act, both of 2007. The Land Act Nos 4 and 5 provide the legal framework for land tenure and land administration in Tanzania. All the land is under public ownership, the President of the URT being the custodian on behalf of the citizens. Two types of rights to use land are recognised: government-granted right of occupancy for 33- and 99-year lease periods to the holders of urban land, and deemed rights of occupancy for land occupied under the customary land tenure system. These are currently being registered and holders of land rights are issued with certificates of customary right of occupancy so that they may use the registered land as collateral for a loan.

The Urban Planning Act and Land-use Planning Act are the principal legislation for urban and regional planning in Tanzania. These recently adopted pieces of legislation have replaced the Town and Country Planning Ordinance Cap. 378 of 1956. The Urban Planning Act and Land-use Planning Act are based on the Land Policy and Human Settlements Development Policy endorsed by the government in 1995 and 2000 respectively. Both policies are inspired by democratic principles and contemporary thought in planning which advocate involvement of stakeholders and consensus-building planning processes.

According to the legislation, the minister responsible for urban and regional planning is the Minister for Lands, Housing and Human Settlements Development. The Director of Physical Planning is the

chief technical advisor to the minister on matters of physical planning and the approving authority for all urban and rural plans prepared by local authorities in Tanzania mainland.

The Division of Physical Planning, one of the four technical divisions of the Ministry, is currently organised into five sections: a) Physical master planning; b) Urban physical planning; c) Rural physical planning; d) Settlement regularisation; e) Physical development control. The division undertakes planning activities in collaboration with other technical divisions of the Ministry, namely the Housing Division, the Land Administration Division and the Surveys and Mapping Division. Until 1998, the division was represented in all the administrative regions by regional town planning offices. However, as part of the decentralisation and civil service reform process, the planning offices were abolished so that planning functions hitherto executed by the regional offices were assigned to local government authorities and regional secretariats which are supposed to coordinate and oversee overall regional development. Rural planning functions are also carried out in collaboration with the National Land Use Planning Commission, which serves also as advisory body to the Ministry of Lands, Housing and Human Settlements Development.

4. The planning education system in the School of Urban and Regional Planning

4.1 An overview

In Tanzania, the training of town planners commenced in 1972 when a three-year course entitled 'Town Planning' was introduced by the government, with assistance from the United Nations Development Programme (UNDP), at then Ardhi Institute, now Ardhi University (ARU). The course curriculum was originally aimed at producing operational planners needed for the planning and management of change in the towns and villages, as well as to cater for the land development and environmental management programmes and policies implemented by the government.

Drawing inspiration from town planning education in Britain, the colonial administrator of Tanzania after World War II, the original course curriculum was based on a conception of planning as design and land use arrangements, not very different from how planning was conceived and practised in England during the 1940s (Diaw et al. 2002). It further focused on teaching students the skills of producing plans. This is evident in the Ardhi Institute Prospectus 1993–1995: '[a graduate of the course is expected to be] adequately competent to make and design village and urban plans and to participate fully in the preparation of urban master plans and district and regional physical plans'. This focus was enhanced by expatriate architect-planners from European countries (Poland, Sweden and Denmark) who were involved in the training of planners, following the technical support received from the UNDP. Finnish architect-planners had indirect influence through their involvement in the preparation of several master plans and regional integrated development plans in the 1970s.

From 1978 the Danish Government, through the Danish International Development Agency (DANIDA), took over support of the training of planners for nearly twenty years, until February 1997. They provided expatriate staff, training equipment, development of training infrastructure, and scholarships for the training of academic staff at postgraduate level. The expatriate staff were primarily Danish architects who, according to their education system, had also been trained in urban planning. They have had a remarkable impact on the design-focused nature of planning education in Tanzania and project-oriented or context-based teaching. From the mid-1980s the training of planners began to change hands, from the Danish architect-planners to Tanzanian planners who had received postgraduate planning education in England and Denmark.

While maintaining the design- and context-based plan production focus, the contents of the planning education curriculum have been changing to reflect the changing local context as well as changes in planning ideas and approaches. From the mid-1970s, in response to a change in government policies to prioritise rural development and recognise and upgrade informal settlements, the curriculum was reviewed to include village planning and settlement upgrading. Reflecting the policy focus on rural development, the course title was changed from 'Town Planning' to 'Urban and Rural Planning', and from 2002 the course name has been 'Urban and Regional Planning'. Teaching on village planning was broadened in the 1980s to include rural resources assessment as a tool for determining village carrying capacity.

In the 1990s, the changing paradigms of planning – from top-down prescriptive planning to bottom-up participatory and collaborative approaches – have had a significant impact on the orientation of planning education in Tanzania. Adoption of the UN-Habitat's Global Sustainable Cities Programme

in Dar es Salaam from 1992, and active involvement of the staff of the School of Urban and Regional Planning in the implementation of the programme, have been the main vehicles for the changed planning education curriculum. Aspects of collaborative and participatory urban planning and management approaches were introduced into the planning education curriculum as early as 1996, coinciding with extension of the training period to four years, after which graduates were awarded a degree of Bachelor of Science in Urban and Regional Planning.

The shifts in policy focus from *ujamaa* (socialism) to market-oriented policies, and in planning from top-down prescriptive to bottom-up participatory approaches, have had a significant impact on the orientation of planning education in Tanzania. The fact that in the 1960s, the national development agenda had put major emphasis on rural development, and the training programme for planners was named 'Urban and Rural Planning' reflected the national focus of the period. Rural concepts were borrowed in planning urban areas such as 'urban villages'. Planning in the rural areas focused on village settlements' layout and land use plans. Master plans were prepared for urban areas. Planners were equally trained to prepare master plans for urban and village plans for rural areas. Planning activity was essentially a public-domain process with limited participation from other stakeholders.

The period from 1985 to 1995 observed the collapse of state controls in the economy and the introduction of a liberal and market-oriented economic system. The role of the private sector increased, while government control of the economy was diminishing. More participatory planning was called for. Planning was obliged to be more inclusive and community participation became more prominent, especially in informal settlement upgrading schemes. Planning education shifted from prescriptive to participatory concepts, as manifested in the shift from preparation of master and upgrading plans to strategic urban and regularisation plans. Application of an environmental planning and management (EPM) approach in the preparation of planning schemes has been employed. The name of the School also changed from Urban and Rural Planning to Urban and Regional Planning. The impetus here was to capture the regional aspects and dynamics of planning rather than village planning per se.

4.2 Overall objectives of the curriculum

The main objective of the School of Urban and Regional Planning is to prepare students for a career in the fields of urban and regional development planning, housing and infrastructure planning and management, by imparting theoretical and practical knowledge and skills in spatial development planning that include coordinating the preparation and implementation of plans, with a view to resolving conflicts and solving problems related to interactions between development and environment in all human settlements. In addition, the School's objectives are to carry out research and provide public service in relation to challenges, problems, threats, constraints, opportunities and strengths that obtain in urban and rural places.

Critical thinkers to operate the planning system

Initially, when urban planning education was established in the early 1970s, the main thrust was to produce urban and rural planners who could prepare plans for urban and rural settlements. Thus the villagisation programme that was implemented in the 1970s and the adoption of the National Agricultural and Livestock Policy of 1984 required planners to prepare settlement layout plans for the selected villages and prepare village land use plans as per the policy requirements. Emphasis was therefore placed on technical competence to prepare planning schemes.

The upgrading of the programme to a bachelor's degree and the changing socio-economic, political

and physical environment have called for reorientation in training to facilitate critical thinking, enhanced analysis and problem-solving capabilities. Both undergraduate and postgraduate students in the School of Urban and Regional Planning are required to identify a problem area in their dissertation through which theoretical knowledge that frames the research issue can be solicited, but also come up with some practical solutions to the problem. Research projects and dissertations usually range from case-specific problem areas to policy-level analysis. The intention has been to inculcate critical thinking and application of acquired knowledge and skills in addressing problems.

Extent of conceptual or technical bias in the curriculum

The conceptualisation of all programmes in the School is such that a studio project provides a ground for the application of theoretical knowledge acquired during a particular semester through the theoretical courses (see Figure 1). For example, for the building design studio which aims at imparting skills on design of a single-storey house in year 1 semester 1, supporting theoretical subjects are Building Design and Construction and Landscape Planning and Design. Studio projects have been designed with increasing scope, starting from the building or plot, and expanding to cover the site with a group of houses, the village, and the neighbourhood to urban and regional scale levels (Figure 2). The first semester in the fourth-year studio focuses on project planning, whereby students and studio masters choose a specific studio project and prepare a detailed project plan. Although there are slight variations for the three undergraduate programmes in years three and four, the idea behind the design of respective studio projects is the same throughout.

Figure 1: Links between studio project and theoretical courses

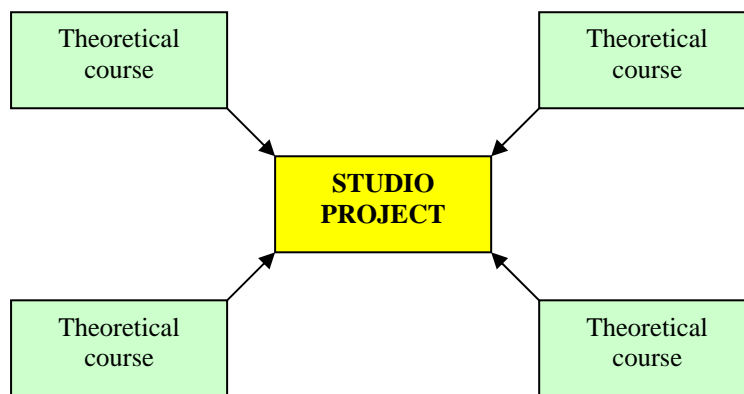
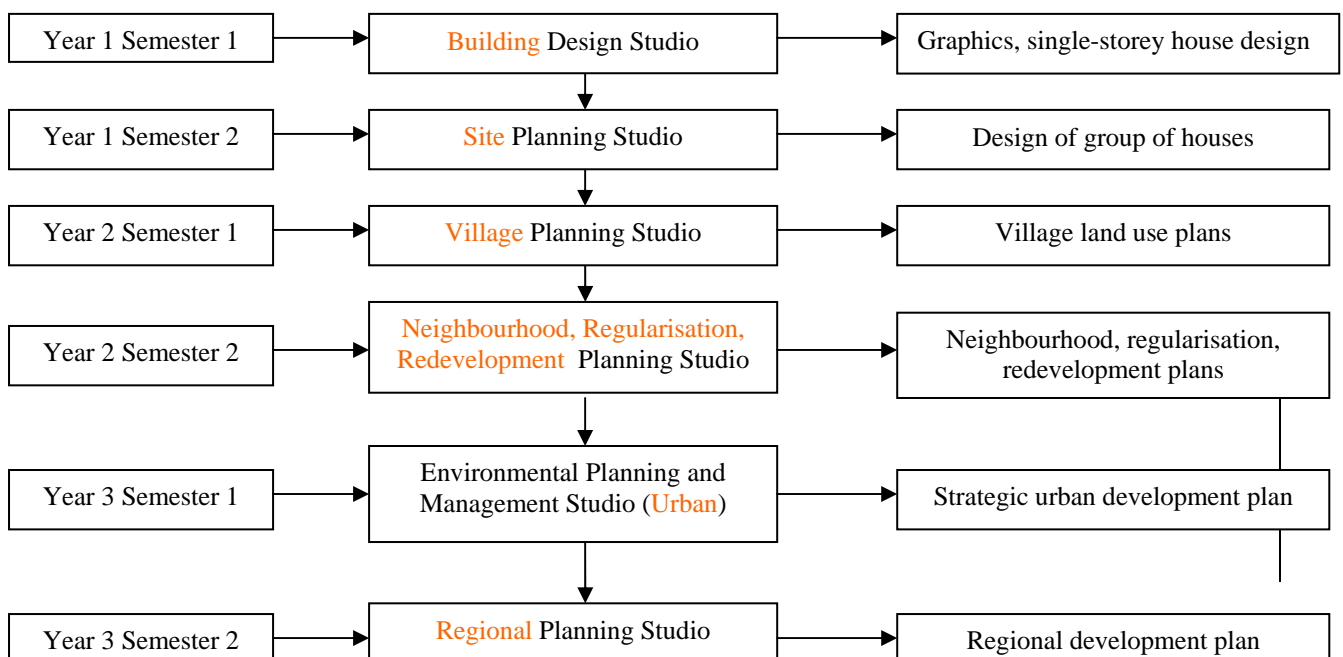


Figure 2: Studio projects designed with increasing complexity



4.3 Programmes offered

The School of Urban and Regional Planning offers undergraduate and postgraduate programmes. There are three undergraduate bachelor of science (BSc) programmes (Ardhi University 2008a):

- Urban and Regional Planning (URP)
- Regional Development Planning (RDP)
- Housing and Infrastructure Planning (HIP).

The URP programme, which is the oldest in the School, prepares graduates to become planners and managers of change in the natural and built environment. The RDP programme prepares graduates to deal with district development planning, rural-urban migration and livelihood enhancement at regional level. The HIP programme prepares students to deal with problems of housing and human settlements, with greater emphasis on infrastructure planning and management. Skills such as environmental management information systems, participatory methods in planning, development and management, coordination mechanisms in implementing housing and infrastructure strategies are imparted.

Over the thirty years prior to 2003 the School was offering only one undergraduate programme in URP. Starting from 2003, the following postgraduate programmes were introduced (Ardhi University 2008b):

- Postgraduate Diploma in Urban Planning and Management (PGD UPM)
- Master of Science in Urban Planning and Management (MSc UPM)
- Master of Science in Urban and Regional Development Planning and Management (MSc URPM).

While the PGD UPM was designed to provide practitioners with improved analytical capacity in the field of human settlements development and also provide a window for candidates who want to upgrade from Advanced Diploma programmes to master's level, the MSc UPM and MSc URPM were designed to provide advanced training in urban and regional planning, focusing on the planning and management of change in urban and rural areas. The latter two programmes aim at producing urban and regional development managers who are equipped with the requisite skills in policy formulation, developing strategies, and planning and managing sustainable urban and regional development in developing countries. The School also offers a PhD by research.

Undergraduate courses, levels (year) and time allocated to each

At undergraduate level one course unit is equivalent to 15 hours of lecture time for theoretical subjects and 30 hours for studio projects. Candidates are expected to carry out not fewer than 15 and not more than 22 course units per semester. Over a 4-year period they are expected to accumulate a minimum total of 148 units. The three undergraduate programmes are run together in years one and two. Students branch off into their respective programmes in the third year of study. The courses offered in each year are the following (number of course units given in parentheses):

- *Year 1 Semester 1 courses*
Building Design Studio (6), Building Design, Materials and Construction (2), Landscape Planning and Design I (2), Quantitative Methods I (2), Computer Applications I (2), Communication Skills I (2), Principles of Economics (2), Land Surveying (2) and Development Perspectives I (2)
- *Year 1 Semester 2 courses*
Site Planning Studio (6), Planning and Design Theory I (2), Infrastructure Planning and Management I (3), Quantitative Methods II (2), Computer Application II (2), Principles of Law and Administration (2), Communication Skills II (2), Development Perspectives II (2) and Industrial Training (2)
- *Year 2 Semester 1 courses*
Village Planning Studio (6), Village Development Planning Theory (2), Infrastructure Planning & Management (Rural) II (2), Quantitative Methods III (2), Computer Application III (2), Planning and Land Laws (2) and Housing (2)
- *Year 2 Semester 2 courses*
Urban (Neighbourhood) Planning Studio (6), Urban Planning Design Theory (2), Environmental Planning and Management I (2), Urban Economics (2), Quantitative Methods IV (2), Computer Application IV (2), Landscape Planning & Design II (2), Urban Transport Planning & Traffic Management (3) and Industrial Training (2)
- *Year 3 Semester 1 courses in URP Programme*
Environmental Planning and Management Studio (6), Environmental Planning and Management II (4), Project Planning and Management I (4), Infrastructure Planning and Management III (2) and Professional Practice I (2)
- *Year 3 Semester 2 courses in URP Programme*
Regional Planning Studio (6), Regional Development Planning Theory (2), Project Planning and Management II (3), Regional Transport Planning and Management (2), Research Methods (2) and Industrial Training (2)
- *Year 4 Semester 1 courses in URP Programme*
Project Planning and Management Studio (6), Local Governance (4), Professional Practice II (4), Property Development and Management (2), Entrepreneurship (2) and Dissertation I (2)
- *Year 4 Semester 2 courses in URP Programme*
Dissertation II (15)
- *Year 3 Semester 1 courses in RDP Programme*
District Profile Studio (6), Theories of Regional Development (4), Population and Development

(2), Rural Industries Planning (2), Regional Transport Planning (2), Agriculture and Development (2) and Local Governance (2)

▪ *Year 3 Semester 2 courses in RDP Programme*

Ecological/Regional Planning Studio (6), Theories of Regional Development Planning II (4), Regional Settlement Pattern Analysis (2), Rural-Urban Linkages (2), Research Methods (2), Project Planning and Management I (4) and Industrial Training (2)

▪ *Year 4 Semester 1 courses in RDP Programme*

Project Implementation Monitoring Studio (6), Professional Practice (4), Financing and Budgeting (2), Project Planning and Management II (3), Entrepreneurship (2), Property Development and Management (2) and Dissertation I (2)

▪ *Year 4 Semester 2 courses in RDP Programme*

Dissertation II (15)

▪ *Year 3 Semester 1 courses in HIP Programme*

Geographical Information Systems Studio (6), Housing Theory and Policies (2), Housing Delivery Systems (2), Project Planning and Management I (4), Housing Programmes (2), Housing Finance (2), Gender Aspects in Housing and Infrastructure (2)

▪ *Year 3 Semester 2 courses in HIP Programme*

Infrastructure Planning and Design Studio (6), Theories in Infrastructure Planning and Management (4), Infrastructure Economics (2), Infrastructure Costs and Financing (2), Project Planning and Management II (3), Civil Engineering and Construction (2), Research Methods (2) and Industrial Training (2)

▪ *Year 4 Semester 1 courses in HIP Programme*

GIS Modelling for Infrastructure Planning and Management Studio (6), Housing and Infrastructure Maintenance (2), Local Governance (4), Entrepreneurship (2), Professional Practice (4), Property Development and Management (2) and Dissertation I (2)

▪ *Year 4 Semester 2 courses in HIP Programme*

Dissertation II (15)

The Postgraduate Diploma in Urban Planning Management (PGD UPM)

The PGD UPM was designed to cater for the former Ardhi Institute graduates with Advanced Diploma qualifications who could not qualify to join the master's degree programmes of the University of Dar es Salaam and ARU. The PGD UPM programme was therefore meant to upgrade the many practising professional planners in the field by providing them with the requisite skills and new knowledge in planning and providing them with access to higher degrees. Courses offered in this programme include the following:

▪ *Semester 1*

Urban Planning and Management Studio (4), Principles and Theories of Spatial Planning and Management (3), Professional Practice I (2), Research Methods (2), Introduction to GIS (2), Communication Skills (2) and Final Paper I (2)

▪ *Semester 2*

Professional Practice II (2), Infrastructure Economics (2), Environmental Impact Assessment (2), Project Planning (2) and Final Paper II (6)

The Master of Science in Urban Planning and Management (MSc UPM)

The MSc UPM was developed to upgrade the professional capacity of practising planners to enable them to contribute more meaningfully to national development. The course also addresses contemporary issues in land development, planning and management of human settlements such as development-environment interaction, sustainable resource utilisation, land servicing and infrastructure maintenance, gender issues and poverty alleviation. The programme aims at re-equipping planners with relevant methods of analysis, collaborative action planning and implementation, as well as of facilitating stakeholders' consensus and appropriate action on issues of common concern. The MSc UPM runs for three semesters (18 months) and the courses offered in this programme are as follows:

▪ *Year 1 Semester 1*

Urban Planning and Management Studio (7), Theories and Principles of Urban Planning and Management (4), Environment and Development (1), Gender Issues in Urban Planning (1), Participation and Community Empowerment (1), Planning and Management Information Systems (2) and Housing Development and Management (1)

▪ *Year 1 Semester 2*

Compulsory subjects

Urban Environmental Planning and Management Studio (6), Project Planning Management (4), Research Methods (1) and Dissertation I (4)

Elective subjects

Urban Land Development and Property Management (2), Integrated District Development Planning (2), Urban Design (2), Landscape Planning and Design (2), Urban Housing (2) and Infrastructure Planning and Design (2)

▪ *Year 2 Semester 2*

Dissertation II (6)

The Master of Science in Urban and Regional Development Planning and Management (MSc URPM)

The MSc URPM is a joint degree programme offered by the University of Dortmund in Germany and ARU. As a joint programme, it aims at tapping the potential demand that exists in the country, the East African region, Africa and worldwide. MSc URPM students are required to study at the University of Dortmund for the first two semesters and subsequently at ARU for the last two semesters. The MSc URPM was designed to provide advanced training to graduate practitioners in urban development in basic and advanced theories and practices of urban and regional development planning and management, focusing on planning and management of change at urban and regional levels. The courses offered in the programme are as follows:

▪ *Year 1 Semester 1*

Development Theories and Strategies I (1), Regional Settlement Pattern I (1), Social Infrastructure and Demography I (1), Ecology and Environmental Planning I (1), Financing and Budgeting I (1), Promotion of Small Scale Industries I (1), Agricultural Development Planning I (1), Transport

Planning (1), Organisation and Management (2), Planning Workshop (Analysis) I (2), Planning Workshop II (2), Cartography and Aerial Photography (0.5) and Microcomputer Workshop (0.5)

▪ *Year 1 Semester 2*

Regional Settlement Pattern II (0.5), Social Infrastructure and Demography II (1), Ecology and Environmental Planning II (1), Financing and Budgeting II (1), Promotion of Small Scale Industries II (0.5), Agricultural Development Planning II (1), Transport Planning II (1), The European Planning System (1), Planning Workshop III (Implementation) (2), Final Paper Workshop (1) and Final Paper (Individual Research) (5)

▪ *Year 2 Semester 1*

Compulsory courses

Urban Planning and Management Theory (2), Urban Planning and Management Studio (5), Professional Practice (2), Research Methods (2) and Dissertation I (2)

Elective courses

Planning and Management Information Systems (2), Urban Infrastructure Planning and Management (2), Urban Housing Development and Management (2), Urban Land Management and Development (2) and Gender Issues in Urban Planning (2)

▪ *Year 2 Semester 2*

Dissertation II (15)

4.4 Teaching methods

Teaching methods vary from lectures where conceptual and theoretical ideas are discussed in the classes to practical studio sessions where theoretical knowledge is translated into practical studio projects. All theoretical courses have been designed with studio projects being the centre points for their application. The advent of ICT and increased student enrolment has necessitated the application of other teaching aids such as overhead projectors and LCDs. In particular courses such as Professional Practice and Urban Governance, students are further advised to conduct minor field studies and prepare reports. In some courses practising professionals are invited to offer lectures of practical value to students. With the increase in number, students are divided into groups for seminar sessions where they prepare papers that are assessed by a panel of examiners. Dissertations are assessed on a continuous basis (usually three times prior to sitting for the final examination) where students present their work to a panel of internal examiners for assessment and guidance. At the end of each academic year students are attached to practical training (industrial training) sites for a period of eight weeks. Industrial training exposes students to practical problems in the field of study under the supervision of practising professionals.

4.5 Admission requirements at undergraduate and postgraduate level

Generally, entry requirements for the three undergraduate programmes are the same except for a slight variation in the HIP programme. For postgraduate programmes, recommendations from referees are an additional requirement to academic certification. These requirements are summarised below.

BSc URP and BSc RDP programmes

Requirements are:

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1. Two or more principal-level passes in Physics, Chemistry, Biology, Mathematics, Geography, History, Economics, Commerce and Accountancy. In addition, a candidate must have at least a subsidiary pass in Mathematics at ACSEE or at least a D pass at CSEE level.
 2. Preferential consideration will be accorded to candidates with a combination of Economics, Geography, Mathematics and Biology and a pass in English in the event of a tie in points.
 3. An appropriate diploma of at least second-class level approved by the University Senate as an equivalent qualification.

BSc HIP programme

Requirements are:

1. Two or more principal-level passes in any of the following subjects: Physics, Chemistry, Biology, Geography, Economics, History, Mathematics, Commerce and Accountancy. In addition, a candidate *must* have at least a subsidiary pass in Mathematics at ACSEE or at least a D pass at CSEE level.
2. Preferential consideration will be accorded to candidates with a combination of Economics, Geography, Mathematics and Biology and a pass in English in the event of a tie in points.
3. An appropriate equivalent diploma/Full Technician Certificate of not less than second-class level approved by the University Senate as equivalent qualifications.
4. Applications from countries which follow an 8-4-4 education system need to complete at least one year of study at a university in their own countries before they can be considered for admission.

Postgraduate Diploma in Urban and Planning and Management (PGD UPM)

Requirements are:

1. An Advanced Diploma in Urban and Rural Planning, Architecture, Land Management and Valuation, Environmental Engineering, Building Economics and other related fields from a recognised university or institution of higher learning.
2. Positive recommendations from two referees, one from the academic institution where the candidate graduated and one from the practice where he or she is employed.
3. Working experience of at least two years in a relevant field.
4. Applicants without sufficient background in the urban and regional planning profession may be required to take additional courses offered in the undergraduate programmes.

Master of Science in Urban Planning and Management (MSc UPM)

Requirements are:

1. A first- or second-class honours BSc in URP, RDP and HIP, or relevant qualifications from programmes of the ARU Schools of Economics and Economic Planning.
2. An upper second-class or above PGD in Urban and Regional Planning, Architecture, Land Management and Valuation, Environmental Engineering or from relevant programmes of the Schools of ARU, or in other related subjects from a recognised university or institution of higher learning.
3. Positive recommendations from two referees, one from an academic institution where the

candidate graduated and one from the practice where he or she is employed.

4. Working experience of at least two years in a relevant field will be an added advantage.
5. Candidates without sufficient background in the urban and regional planning profession may be required to take additional courses offered in the undergraduate programmes.

Master of Science in Urban and Regional Development Planning and Management (MSc URPM)

Requirements are:

1. A second-class honours bachelor's degree in Urban and Regional Planning or Architecture or Land Management and Valuation or Environmental Engineering or Building Economics or Land Surveying/Geomatics or Geography or Economics or Economic Planning or Public Administration or Business Administration, and a postgraduate diploma of the University of Dar es Salaam or any other recognised institution or any other relevant field.
2. Positive recommendations from two referees.
3. Experience of at least two years in a relevant field would be an added advantage.

4.6 Forms of assessment

In practical course most weight is given to continuous exercise assessments, especially for studio project work. Studio work, which includes oral presentations, makes up 70% of the assessment, and the final examinations makes up the remaining 30%. For theoretical courses, continuous assessment accounts for 30% and final examinations for 70%. For postgraduate programmes, the same logic prevails except that the proportion is 60% : 40%. Coursework assignments can take the form of group work, individual exercises, tests and take-home assignments. Dissertations are accompanied by regular oral presentations which are also assessed, although the final submission and assessment is based on oral and written reports. While undergraduate and master's students write dissertations, the PGD students produce a final scientific paper.

4.7 Class numbers and staff-student ratios

Before 2004, the average number of enrolled students for each academic year ranged between 20 and 25 before dropout. From 2004 on, enrolment was increased in response to the increased demand for university education. In the 2007/08 academic year the school enrolled 237 undergraduate students, 4 postgraduate diploma and 17 master's students.

Until 2007, there were 17 full-time staff in the school and the staff student ratio was 1 : 14. The number of full-time staff has since increased to 30 after 13 new junior staff were recruited in the 2007/08 academic year. We expect that the ratio will change from 1 : 14 to 1 : 10 even after increasing the number of students to 300 in the 2007/08 academic year. It is important to note that many of the newly recruited staff are teaching assistants who need adequate orientation and further training to qualify to teach. The School usually hires part-time staff in case of shortages or uses service lecturers from other schools within ARU.

4.8 Student throughput rates

Except for the years 1980 and 1981, when there was a sudden increase in the number of graduates (30 and 28 respectively), the number of graduates from URP usually ranged from 8 to 22 for the whole period between 1977 and 2003. An increased number of graduates is notable from 2004 to 2007, as a result of increased enrolment starting from the year 2000 (Figure 3) (Ardhi University 2008c).

Increased student enrolment in higher learning institutions is being advocated by the Ministry of Education to address increased demand as a result of expanded secondary education. The planned expansion seeks to increase the transition rate of secondary to university education from 3% in 2005 to 15% in 2010. For the PGD programme between 4 and 10 candidates have been enrolled in the past 5 years. Throughput from the two MSc programmes has ranged from 6 to 10 graduates per academic year (Figures 4 and 5).

Figure 3: BSc URP graduates, 1977–2007

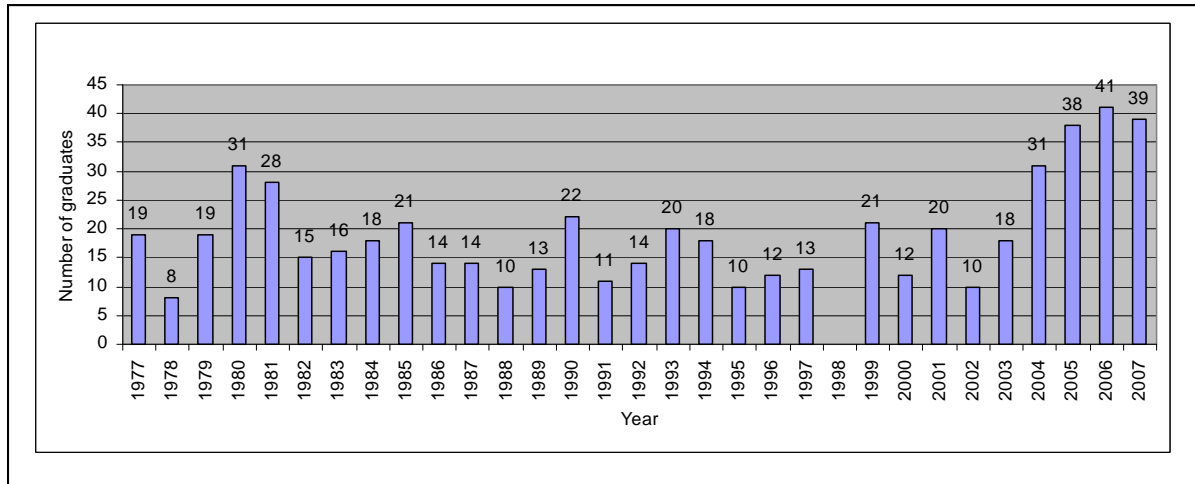


Figure 4: PGD UPM enrolment, 2003–2007

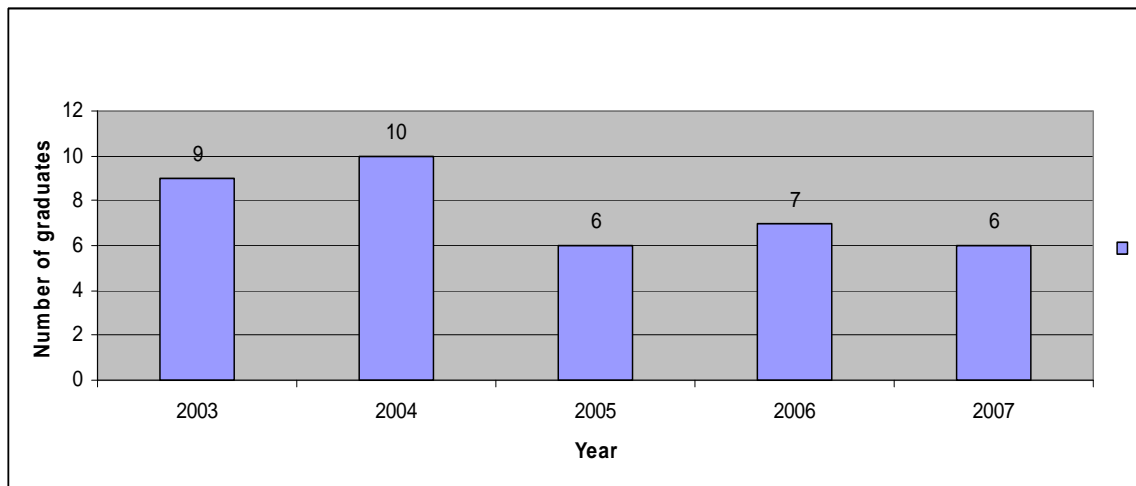
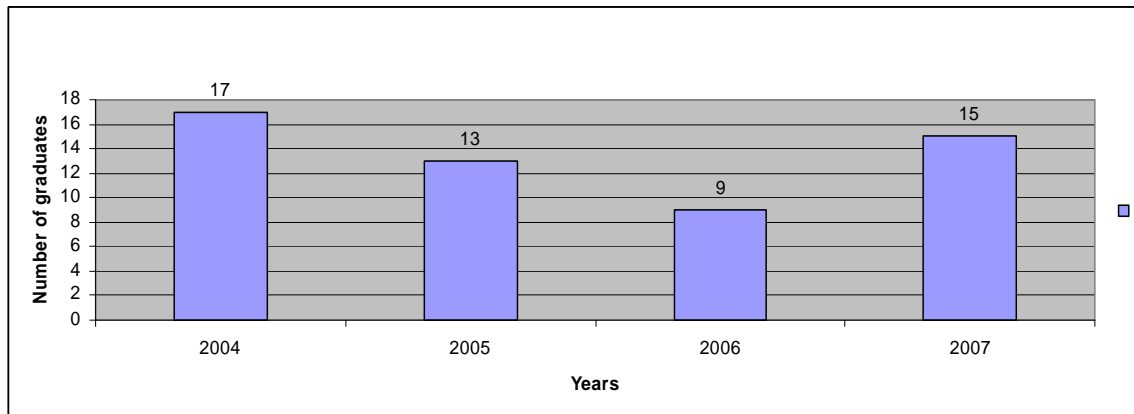


Figure 5: Graduates from MSc programmes, 2004–2007

4.9 Exposure to recent literature and ideas in planning

Exposure to recent literature and ideas in planning is inadequate due to the limited number of books and e-journals available. Recently published literature and books fall short in terms of numbers compared to the number of students. During the period under the University of Dar es Salaam the School was linked to a number of e-journals, but most of these journals were irrelevant to disciplines taught at ARU. With the trend towards increases in student enrolment numbers and intensified studio projects, there is a growing tendency for students to be dependent on lecture notes.

4.10 Adequacy of library and IT resources

Due to limited resource allocation for library services, both the reading space and library resources are inadequate. The present library has a reading space that can accommodate only 500 readers at a time, out of 1 700 potential users who include students and staff. It has a total collection of over 25 000 books and about 531 periodical titles, most of which are outdated. However, the library is fairly well equipped with 123 computers that are networked and connected to the internet. There are no bookshops for programmes taught at ARU. Purchasing a book is altogether a complex and time-consuming exercise. The few resource centres in the Schools are not well stocked and managed to assist students' access to literature in their specific fields.

The IT facilities at ARU are not good. The university has two computer laboratories with only 40 computers in total, making the ratio of computers to students 1 : 40. This ratio is too high and makes it impossible for some students to get access to computers. Similarly, some members of staff have no personal computers for conducting research and preparing teaching materials. Internet connectivity is generally poor and unreliable. Frequent electricity interruption compounds the problem.

4.11 Curriculum review

Major curriculum review is mandatory after the elapse of a four-year period of undergraduate programmes. The idea has been to assess the adequacy of teaching experience and identify shortfalls in addressing key objectives of the various programme curricula. Usually, major curriculum review has to be informed by the needs of planning practice, bringing in major stakeholders to participate in the review process. For example, the major curriculum review which was carried out in 2000 and subsequent years changed the focus in teaching from technical master plan preparation to

participatory strategic urban planning, employing an EPM approach. Students have been exposed to participatory tools in urban plan preparation, unlike the approach taken in preparing technocratic master plans in the past. The change in curriculum was informed by the reorientation of planning that was emerging from the sustainable cities programme piloted by the Dar es Salaam municipality and other municipalities in the country.

On the other hand, minor curriculum reviews are carried out when deemed necessary, especially when such reviews do not substantially disrupt the running of the programme. For example, in 2008 minor curriculum review was done to introduce a course, Dissertation I, in the undergraduate and postgraduate programmes essentially to provide adequate time for students to start early preparation work for their dissertations. It was seen as necessary because students were not finishing the dissertation in time, causing several problems. The main idea has been to enable students to develop an elaborate research question and provide ample time for fieldwork activities and writing in the semester reserved for dissertations. Curriculum review was also necessitated following the declaration of ARU as an independent university in December 2006.

4.12 Links with the planning profession and professional accreditation

The School of Urban and Regional Planning maintains close links with the Ministry of Lands, Housing and Human Settlements Development, which is the custodian of physical planning in Tanzania. In a recently conducted workshop to discuss pertinent planning issues in the country, informal urbanisation was unanimously acknowledged as the main issue that needed to be addressed by all key stakeholders. A team drawing representatives from the Ministry, ARU, utility agencies, NGOs and the Ministry of Infrastructure was formed to pursue further deliberations that emerged from this workshop. This team provides a link between the School and the planning profession.

The School also maintain links with the planning profession through a number of professional consultancy activities. For example, in February 2008 the School finalised the National Land Use Framework Plan (2008–2028) from which zonal, district, regional and village land use plans will be prepared. This was a national planning assignment which the School was entrusted to undertake. Other assignments that maintain links between the School and the planning profession include, for example, the preparation of the Urban Planning Guidelines following the approval of the Urban Planning Act of 2007, and membership of the Town Planners Registration Board following the enactment and approval of the Town Planners Registration Act of 2007.

The link with the community is crucial, especially in situations where the law of the land and planning practice require participation of key stakeholders in plan preparation. The School is desirous of establishing a planning support unit that will provide planning support services to local communities, in terms of assisting people to access land services such as getting their plots surveyed and provided with basic services and getting long-term titles to land. Although this idea complements efforts being undertaken by the Ministry of Lands through various regularisation programmes and projects, the accruing benefits from this unit will include, among others, serving as a research laboratory for community-based initiatives and developing knowledge on the crucial needs of the people on matters related to land development.

With regard to accreditation, the programmes in the School were accredited by the Tanzania Commission for Universities in 2006 when ARU was pronounced to be a university. Initial steps are being made to solicit accreditation by the Royal Town Planning Institute in the UK.

5. Curricula to prepare students to operate in the 21st century

Informal urbanisation and urban poverty are the key challenges confronting urban development in most of our cities in the developing world. Approaches and initiatives towards planning and regulating informality in these cities seem to be inadequate to cope with the pace of development and other dynamics in these settlements. Generally, there is an urgent need for a changed attitude, mindset and way of doing things, including planning education and its embedded technology, to address informal urbanisation. How to cope with informality in both physical space and as a basic source of livelihoods for the majority of the urban poor is perhaps the most critical question planning education should aim to address in the 21st century. While the curricula presented make strong inputs towards preparing graduates to prepare plans, attitudes geared towards viewing planning as implementation seem to be lacking. The planning education system is still entrenched in the state as a provider of services. There is therefore an apparent weakness in terms of preparing graduate planners to effectively play a role as change agents, and as coordinators of development in which the scope of stakeholder participation in planning and implementation of plans has been widened to include the private sector, civil society organisations, utility agencies, NGOs and CBOs. This is manifested in, for example, weaknesses in mobilising resources for planning and implementation. Only a few planners have managed to do so, but again with limited knowledge and skills in how to go about this important aspect of urban development promotion.

In a globalising world, mobility of capital investment in developing countries is becoming more prominent than ever before. This is manifested in the form and volume of, for example, foreign direct investment, partnerships and joint ventures. Most of these investments take place on the land, and mostly in urban areas. Conflict between local communities and investors, equity in joint venture projects, environmental pollution emanating from investment projects, and the role of the private sector in service provision are some of the key challenges emerging from the liberalised economic policies that predominate. Current planning education falls short of equipping graduate planners to effectively respond to these challenges amidst conditions of increasing poverty.

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