SPATIUM International Review No. 25, September 2011, pp. 30-38

UDC 711(688.3)
Professional paper

DOI: 10.2298/SPAT1125030C

EVOLUTION OF BOTSWANA PLANNING EDUCATION IN LIGHT OF LOCAL AND INTERNATIONAL REQUIREMENTS

Branko Cavrić¹, University of Botswana, Faculty of Engineering and Technology, Department of Architecture and Planning, Gaborone, Botswana

Planning problems have been with us ever since human beings realised that their wellbeing is very closely linked to the quality of their settlements and the environment. Over the last century this has led to the worldwide emergence of built environment education in general, and planning in particular. In many African universities planning education is a rapidly growing phenomenon reaching its maturity in terms of structure and number of programs. This development has been most significant in those countries that underwent rapid urbanisation and environmental changes similar to those occurring in Botswana. The first Urban and Regional Planning Programme at the University of Botswana was established in 1993 as part of the Department of Environmental Science at the Faculty of Science. The continued growth and expansion of the planning profession world-wide as well as in Botswana, and its interdisciplinary ties with allied built-environment disciplines, have reached the point at which the University of Botswana is ready to continue with a new internationally recognized planning school. There is a belief that a combined (spatial and specialist) accredited planning programme should support local and regional interests, focusing on the Southern African Region, while acknowledging global standards and innovation in teaching, research, and technology.

Key words: planning education, interdisciplinary, built-environment disciplines, accreditation.

INTRODUCTION

The introduction of modern planning in the former British Protectorate Bechuanaland, which is nowadays Botswana, emerged in the second half of the 20th century. This was a reaction provoked by the country's challenges and enormous rural-urban shift brought about by the discovery of diamonds and mushrooming of urban settlements thereafter. The birth of formal planning in the early 60's was naturally linked to British origins. This was due to the fact that the planning of the new capital, Gaborone, and the emerging mining towns involved British planning and legal prosecutors who were sourcing their expertise from the British Town and Country Planning model (Rankhuna, 1997). The beginning of Botswana's contemporary urban era started with the capital City of Gaborone (for administrative reasons), followed by mining towns of Selebi-Phikwe, Orapa and Jwaneng (enabling the exploitation of diamond resources). At the same time, the major urban villages (traditional agro-towns) have begun to transform from settlements with exclusively traditional patterns to communities exhibiting changing land administration systems, adopting new building technologies, and developing social and physical infrastructures.

At these early stages, there was no locally organised formal planning education. The only available options were self-learning and tailoring practical skills by linking the colonial heritage with the involvement of "First-World" donor organisations (Diaw et al., 2002). The majority of local professionals did not have any option but to be trained abroad, mostly in the UK, USA. Sweden and Australia. The whole range of experiments, from Gridiron and Howard's Garden City concepts in Gaborone, to neighbourhood units in Francistown and planning for new towns in Orapa, Jwaneng, Gaborone, and Selebi-Phikwe, Radburn Superblock and Planned Unit Development in Gaborone, proved that Botswana is a fertile ground for the proliferation of different planning ideas and concepts (Ward, 2000). The dominant rectangular shapes over the traditional semicircular and horse-shoe patterns, as well as economic segregation of residential areas (low, medium and high incomes), are becoming more and more evident, especially in newly established towns.

The high level of attention given to technical design skills emphasised the context of planning practice at that time, irrespective of whether a planner's education was obtained in the developed West or North. Nevertheless, Okpala (2009) reports that at these early beginnings planning education in Sub-Saharan Anglophone African countries was largely physical and design-oriented focusing on lay-out of settlements or their parts and ensuring broad compatibility of major land use locations. In addition to design based skills and importance technical knowledge, Harrison (2006) acknowledged that the body of planning work and development of educational programmes has developed almost entirely within the framework of Western intellectual traditions and in response to lived experiences in the West (or global North), in a world where two-thirds of the population, and the overwhelming volume of urban growth, is located in the global South -Africa, Asia and Latin America.

In a similar light, Wareus (2000) insightfully concludes that the planning and design of new

¹ PO Box 70424, Gaborone, Botswana, <u>cavra@mega.bw</u>

towns in Botswana has been handled by planners who are well educated and familiar with contemporary international concepts. However, the revival of traditional spatial concepts has come late, due to the fact that much planning has been done by expatriates and by local planners who were trained in institutions that have little or no sense of the cultural and traditional values existing in Botswana. Western values have become predominant. This is now changing and the future planning is expected to be more sensitive to the cultural values and spatial characteristics unique to Botswana and, thus, more sustainable than the other concepts.

However, with recent developments and socioeconomic diversification at many African universities (including UB), planning education is reaching its maturity in terms of structure and number of programmes. Throughout the continent it has been recognised that design and technical based approach to the built and natural environment planning is no longer sufficient, especially when addressing complex issues of sustainable development in emerging African economies (e.g. South Africa, Botswana, Angola, Namibia, Mozambique, Mauritius). Consequently, the wider, globalised (Hague, 2001: Afshar 2001) and more internationalised (Goldstein et al., 2006) framework in combination with local and specific requirements (Horen et al., 2004) becomes paramount to the planning theory and practice. As Friedman (2005) points out, the mantra of globalization impacts heavily the emerging culture of planning which is more or less the same regardless of where it is practiced, but major differences exist in the ways that planning is conceived, institutionalised, and carried out.

Since the establishment of the first Botswana planning program (1993), there has been a lively debate over the nature and structure of its curriculum. The main questions were: "In which direction will the Botswana planning education develop further?" and "What are its existing experiences?" Does planning have to be firmly rooted in environmental science or is now the time to go "back to basics" grounded in "design", or might there be a global repositioning way (Hague, 1994, 2001 & 2006) for Botswana, perhaps a combination of these.

In brief, the program has been developed through the three evolutionary phases. At the beginning it was a reflection of the design and post-colonial tradition. In the second phase it has accepted more innovations coupled with local needs. Finally, it opened the door to Africa and the Commonwealth at large, as well as to the rest of the global planning arena. Drawing on the wider

academician group experience, intensive local consultation and the dialogue with prominent international (e.g. Commonwealth) consultants, the creators of Botswana's most recent planning education framework have anticipated a common tension between the content of planning curricula and research outputs, and the formal planning system, with respect to the requirements of planning regulations and the planning departments implementing them, as well as, the systems of accreditation of planners (Levy et al., 2009).

When evaluating the potential effectiveness and branding of the new provisionally accredited planning programme at UB it is evident that the programme departs from the three typical categories recognised by the Association of African Planning Schools (AAPS) documented by Duminy (2010). It combines spatial and **specialist** components securing flexible merger between 1) technical and design, 2) policy, management and administration, 3) geographical, regional and environmental, and 4) comparative, international, project management and sustainability issues. Moreover, the programme introduces profound aspects of contemporary planning paradigms, as well as the climate change and planning ethics requested bv international accreditation agencies (e.g. Roval Town Planning Institute, RTPI, UK).

In this regard, the idea to launch an accredited planning program came as a priority due to the urgent need to organize combined undergraduate and graduate training with a focus on **spatial** and **specialist's planning aspects** for those wishing to pursue specialization and acquire professional master's degree and professional registration as chartered planners.

Nevertheless, this professional registration will assist Botswana planning graduates in their international ventures and give them additional employment prospects, since there is growing acknowledgement in the education community and among the public at large of the students' need to gain skills and knowledge that will allow them to function effectively across cultures and nations (Goldstein et al., 2006). In light of this fact, it is expected that the program will develop the ability to attract and retain students, to be awarded consulting and research contracts, and win prizes in research assessment competitions, catering for the future of both planning academics and planning practitioners.

Central to the new planning program at the University of Botswana is the future role of planner as enabler, negotiator, collaborator,

mediator, communicator, scenario developer, the provocateur and the judge, a professional who will be able to work across these roles (Bradwell et al., 2007). In practice, this approach aims at a shift, where the passive "planning administrator" should become a "manager of environmental change". This requires ability to enrich his/her analytical and interpretative views on built, natural and human environs from a single towards multidisciplinary perspective. It also entails understanding of a legal, political, and organizational context within which Botswana and international planning occurs, and ensures that future planners are able to function effectively and creatively in different settings and situations, working towards the wellbeing of all people (Cavric, 2004).

THE CONTEXT OF BOTSWANA DEVELOPMENT AND PLANNING

Basic development indicators

Botswana is a continental desert country located in the heart of the South-African plateau (Fig. 1). Its area of 582,000 km² is approximately equal to that of France, Kenya or Texas. According to the CIA (2011), the country has reached population of over 2 million (2,065,398: July 2011 est.), 61% of which live in urban areas. Botswana gained independence in 1966, after 88 years spent under British protectorate known as Bechuanaland. At that time, Botswana was one of the poorest countries in Africa. It is situated in SADC region (Southern African Development Community) characterized by social, economic, and political tensions that in many countries led to economic stagnation or even decline.



Fig. 1 Botswana geographic setting, Source: ESRI Data & Maps, Global Imagery and Shaded Relief, Europe and Africa, USA, 2001-2006. Compiled by A. Šiljeg

For over 40 years the socio-economic development of Botswana has represented a unique phenomenon not only in Africa, but in the world. According to the World's Human Development Report (UNDP, 2011), between 1980 and 2010 Botswana's HDI rose by 1.3%

annually - from 0.431 to 0.633 today, ranking the country's human development as medium and placing it at 98th place out of 169 countries with comparable data. The HDI of Sub-Saharan Africa as a region increased from 0.293 in 1980 to 0.389 today, placing Botswana above the regional average (Fig. 2). In spite of Botswana's rapid "diamonds fuelled" economic growth, 30.6% of its population lived below the poverty line in 2003. Nevertheless, this was a significant improvement compared to 1985 and 1993 when 59% and 47% of the population respectively, lived in poverty. Both in extent and severity, poverty is concentrated in rural areas (44.8% in 2003). As Jefferis (1998) noted, Botswana's approach towards the spending (or saving) of its mineral revenues has not been universally popular within the country. There has been frequent criticism of the government from the opposition parties advocating higher spending of the mineral-generated revenues, given the persistence of poverty in some parts of Botswana and the existence of unmet social and economic needs (Jefferis, 1998).

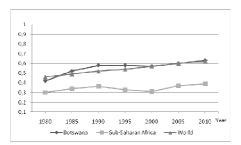


Fig. 2 Comparative profile of Botswana's HDI in period 1980-2010, Source: UNDP, 2011

Among many of the challenges Botswana faces today, the most important one has to do with diversifying the economy in order to decrease the dependence on diamonds and to open other development opportunities, such as eco-tourism, light industry assembling, financial management, manufacturing, etc. In addition, there are substantial income inequalities and rising unemployment both related to economic hardships and social tensions. Also, the spread of HIV/AIDS represents a serious threat to Botswana's development and the country has had one of the highest rates of HIV prevalence in adults in the world (24.9%) according to UNAIDS (2010).

With regard to the above, Mosha (1998) emphasizes that although the capital of Botswana, Gaborone, and other towns are centres of productivity and wealth, they are surrounded by considerable poverty that has shifted from the countryside to urban villages and peri-urban areas. For example, the intensive migration to the periphery and urban fringes of the capital of Gaborone is coupled with unprecedented and ever-rising levels of poverty.

It is clear that Botswana is now at an important crossroads and must decide which direction to follow for the country to continue down the road of prosperity. In order to continue steering the country towards success, the people of Botswana do not only need the crucial political and economic vision but also the essential professional services of people trained at home and abroad. In this respect, the University of Botswana (UB) has been a centre of excellence for a number of years already. The education and training of engineers, urban and regional planners since 1993, and also architects (since 2003), are good examples of the proper ways to continue developing the country (DES 1993. Anderson and Mokgwathi, 2000).

The rise of planning awareness

The aforementioned socio-economic development brought about changes in the system of settlements. New towns sprung up, traditional villages were restructured and transformed into urban villages and agro-towns and there has been considerable migration from villages to towns and cities (Budic-Nedovic, Cavric, 2001). Today, more than half (61%) of the country's population live in urban settlements.

In order to be able to direct these processes, the government decided to launch planning services. However, because of the inherited colonial structure and lack of trained professionals it was impossible to have a major impact on the process of urbanisation right away. As there was not enough local staff, experts were often hired from the former colonial master (Diaw et al., 2002; Qadeer 1993).

The post-colonial period up to the mid-eighties was marked by significant drawbacks due to poor management in the spatial development of Botswana's urban and rural areas. Botswana became an ideal site for testing foreign theoretical models and legislation frameworks (Nedovic-Budić&Cavrić, 2006; Njoh, 1999; Rankhuna, 1997; Ward, 2000). However, the situation started to change with the arrival of the first generations of local planners. Initially, there was a sort of mental confrontation between what had been learnt abroad and the requests of the local environments. Slowly but surely there was an increasing demand to blend the foreign concepts into traditionally recognised schemes, taking the local context and indigenous legal foundation as a prerogative (Budic-Nedovic, Cavric, 2001).

Towards the end of the 80's and the beginning of the 90's, physical planning in Botswana became a significant counterpart to socioeconomic planning. It started to play an essential role in the organisation of regional territorial systems (e.g. urban and rural districts) as well as

in the design of settlements and their parts, with the aim of creating better living and working conditions in an orderly manner. The ever increasing concentration of population and activities, the development of infrastructure, improved conditions for foreign investment, the implementation of new technologies and various influences affecting the quality of the environment have all made spatial planning a very attractive interdisciplinary field which has resulted in the opening of Botswana's first School for Planners.

Early initiatives for launching a planning school

The first attempts to educate planners locally were made in the 1980s when the government of Botswana asked the then Polytechnic (now the Faculty of Engineering and Technology — FET) to launch a program leading to a Diploma in Land Use Planning with a Town Planning Option. However, it was only ten years later that the Ministry of Local Government, Lands and Housing addressed the UB. The initial request was to introduce the MSc. Programme. However, it was soon decided that it would be better to begin with an undergraduate programme and later proceed to the masters.

That same year the Department of Environmental Science — DES (former Department of Geography until 1979) ventured into graduate training by launching the MSc. Degree in Environmental Planning, aiming to train land use planners for the Ministry of Agriculture and Ministry of Local Government, Lands and Housing (Cavrić, 1998). A new line of courses was introduced in 1992/3 with the initiation of a new town planning specialisation, and then, since the 1994/95 academic year, the planning option has been replaced with a fully-fledged BSc. Degree in Urban and Regional Planning (URP). The first crop of planning students graduated in 1997.

The same year -1994 saw the opening of the professional association of planners, i.e. the Botswana Institute of Town Planners - BITP, which in 2008 was replaced with the PULA (Botswana Institute of Urban and Regional Planners). This gave planners in Botswana an official forum where they could articulate and voice the interests of the profession and actively exchange theoretical and practical experiences. The academic 1993/1994 year is a historical landmark in the development of this young and modern discipline.

Before the program was launched a number of agencies and individuals had been consulted. For example, consultants from Manitoba (Bargh, Carvalho, 1992) had suggested the opening of a Department of Architecture and Planning, where

the first year would be a common year of studies devoted to gaining a basic understanding of the concepts underpinning the professional programs in architecture and town and regional planning.

THE 1993 PLANNING PROGRAMME

The 1993 programme anticipated the three-year full-time planning studies. First, the candidates had to complete a common year of studies at one of the Departments of the Faculty of Social or Natural Sciences, and then to proceed with a core planning subjects (Tab. 1). The courses of study in the qualifying subjects for all three professional years (year 2, 3 and 4) were single major subjects, which means that there were no optional (subsidiary) subjects and one wishing to complete the programme had to pass every single major subject before proceeding to the next year.

When analysing the 1993 program, the basic problem encountered pertained to the limited number of planning courses compared to the general ones. Students were introduced to planning core only in the second year. This made it practically impossible for them to master in detail most of the theory and practice. In fact, students had planning subjects only during three years of studies. On the other hand, in other countries the training of planners takes minimum four years (BA/BSc.), which was not the case in Botswana.

It was also envisaged that the quest for specialists and advanced (M.Sc., MPhil and PhD studies) programmes should be considered in order to provide further training opportunities and diversify professional portfolio of recent graduates and

senior planning staff. The main tasks of these "specialists" would be the plan implementation, development impact assessment (DIA), urban design, development and environmental control, and application of GIS and decision support system (DSS). They would also have to continue with the plan's reviews for the second group of the fast growing major urban villages identified as growth centres in the National Settlement Policy. It was considered that the proper planning and monitoring would be critical as these urban villages became transformed into "urban" centres that would start to play a key role in accelerating the economic re-development in the Districts.

Furthermore, the new planning specialists were expected to raise public awareness and knowledge about the built and natural environmental, urban governance and management, gender, HIV/AIDS, urban agriculture, globalisation and communication, and other important issues ranging from local to national, and even beyond the country's horizons. In addition, they would be recognised as the future team leaders engaged in integrated development projects along with professionals from other allied built-environment disciplines (Cavric, 2004).

THE 1993 PLANNING PROGRAMME REJUVENATION AND ACCREDITATION

After ten years of existence the 1993 programme required rejuvenation and international recognition. This came as a result of the changing planning education paradigms concerned with sustainability, millennium

goals, globalisation and climate change. There was also another shift to a more holistic approach to understanding planning and built-environment processes and systems in an interdisciplinary manner.

It was also contended that "urban planning in new century is not what it used to be in the past, and what it will be tomorrow. Change will be continuous and evolution prolonged due to the fact that the current planning practices are deeply involved in the social, economic, environmental and political aspects of urban and regional development and the students who graduated this year will have spent at least a third of their time specialising in particular aspects of planning" (Batey, 1994).

When asking practising planners what recent graduates mostly lack, they will answer that they lack an understanding of development funding, as well as graphical and written communication skills. In addition, they will require skills in identifying policy, evaluating service options, letting and monitoring contracts, and management, including an understanding of the principles of quality assurance. All these novelties lead to a more fundamental change of the context and ethos of central and local government authorities (Hague, 1994).

Due to these barriers it was suggested that the educational improvement may be considered through the establishment of a four-year planning programme and semesterisation which involves a reasonable increment of subjects and restructuring of existing courses. In addition, the new or rejuvenated planning courses were also seeking international accreditation to strengthen their market position (UN Habitat, 2009). Finally, there were requests to introduce graduate and MSc, MPhil and post-graduate PhD programmes in planning and the Built Environment, which would require a more science-based approach focusing on a fundamental understanding of social, economic and environmental phenomena.

One of the most challenging aspects for the new setting of the Faculty of Engineering and Technology — FET (Fig.3) at the UB was to launch the new, modern and innovative Department of Architecture and Planning — DAP (Fig.4). The establishment of an undergraduate programme in architecture, upgrading existing urban and regional planning programme, and launching a masters programme in planning and allied disciplines are primarily designed to meet a perceived need in Central and Local Government agencies, parastatal and the private sector. Following these winds of change, the idea was mooted for quite some time, but was not materialised until January 2003 and 2010

Tab.1 The 1993 Planning Syllabus

Year 1	Year 2
General Mathematics	Planning Theory I
Introductory concepts of Mathematics	Planning Methods and Techniques
Computing	Introduction to Transport Planning
Mathematics for Social Science	Introduction to Urban and Regional Economics
Elements of Statistics	Infrastructure Planning
Introduction to Elements of Statistics	Land Surveying and Cartography
Introductory Biology	Planning Studio II
First year Chemistry	
Physics	
Introduction to Earth's Environment	
Basic Economics	
Introduction to Demography	
Introduction to Sociology	
Communication Skills	
Introduction to Literature	
Year 3	Year 4
Planning Theory II	Planning Theory III
Advanced Planning Methods and Techniques	Professional Planning Practice
Land and Planning Law	Transport and Traffic Engineering
Regional Development Planning	Regional Physical Planning
Urban and Rural Housing	Project Planning and management
Urban Design & Environmental Management	Project Dissertation
Planning Studio II	Planning Studio III

Source: Department of Environmental Science, 2000

respectively when planning programme managed to acquire provisional international accreditation from the RTPI (UK).

It was believed that the new accredited planning programme should primarily support local and regional interests, focusing on the Southern African Development Community (SADC), while acknowledging international planning portfolio and focusing on the two major planning components: 1) **spatial** and 2) **specialist** for those wishing to pursue specialization, acquire professional master's degree and to be registered as "chartered planners".



Fig. 3 The new FET building complex, Source: Author's photo, 2011



Fig. 4 The new DAP Building, Source: Author's photo. 2011

THE RATIONALE FOR COMBINED PLANNING PROGRAMME

The splitting of the degree/s around spatial general and **specialist's** planning subjects introduces a level of flexibility for students. It enables students to gain work experience and earn income between the two degrees. It also provides an exit degree for those students who struggle to complete a dissertation report. which is required in the fourth or specialist year. The time spent for practice enables them to gain the maturity to undertake the specialist year. In the design of the degrees, it was expected that all students would eventually complete a Bachelor of Science (BSc. URP) path first, and then continue the studies for another year to acquire the additional professional Masters Degree (MA URP) and the title of "chartered planner". The new URP degree thus correlates with professional degrees recognized by the Royal Town Planning Institute (RTPI). The major rationale for and logic of the content revisions was:

- bringing theory and practice together in topic-based courses;
- increasing flexibility by moving from yearlong to semester-based courses;
- strengthening the emphasis on contemporary planning issues, technologies and techniques, policies and strategies, sustainability agenda, small town, rural and environmental planning economic and development diversification, responsive urban design, public processes and participation, to list a few;
- allowing for three-tier degree of specialisation in the fourth year of study;
- introducing areas of study which were underplayed in the past (responding to changes in practice and development through the introduction of a series of newly revised courses with strong management component); and
- refocusing courses taught by other departments on the specific needs of planning.

THE NEW PROGRAMME EDUCATIONAL PHILOSOPHY

In concert with the missions of the University and the Faculty, the overall aim of the programme is to provide an excellent environment for teaching, learning and research in the field of planning and allied disciplines. The philosophy is therefore centred on developing critical thinking and problem solving abilities and maintaining interactive relationship between theory and practice (Bayer *et al.*, 2010).

The URP education in Botswana was shifting emphasis from master and development planning and physical layout designs towards more complex spatial and specialist planning that includes a whole range of integrated issues at different scales of natural, built, socioeconomic and the political arena. The URP personnel considered these changes as a natural reaction on "state of the art" planning education, as well as aiming to ensure greater flexibility and recognisability of the Botswana planning school in Africa, Commonwealth and worldwide. Therefore, the decision was made to initiate accreditation process with the RTPI (UK).

Socio-economic contexts and flexibility of curriculum

The territorial and socio-economic context in which planning process occurs in Botswana differs significantly from neighboring countries

of the SADC, where Botswana's development is significantly ranked. The underlying premise of future planning in Botswana is careful monitoring and adaptation of all positive trends which may aid further diversification of overall development, with a special focus on sustainable practices, and the need to interact with professional and scholarly networks .For example, "planners" who have started their career recently will have to spend at least a third of their time specializing in particular aspects of planning. With this in mind it is natural to note an ongoing discussion about curriculum design, structure and focus of planning education where the ideal would be to "think locally and act globally".

Spatial and instrumental levels of educational context

The common view is that the city and spatial planning encompasses a broad spectrum of spatially co-coordinating subject planning areas ranging from local to the international level. A decidedly large diversity of areas for planning activity in practice emerges from the combination of a variety of references to the thematic content together with the different spatial levels of planning. It is thus a fundamental mandate of university education to ensure the ability to orientate oneself within these frameworks. This diversity, coupled with the vastly different talents and interests of prospective students themselves and the requirements of the job market, makes the educational base of planning very important.

Generalist and specialist education

The programme aspires to offer both a "spatial" and "specialist" planning components, where opportunity for specialisation is embodied in the last year of study. This allows graduates to intensify their focus on key contemporary themes and thereby be better prepared for the challenging planning world. It allows for a combination of general skills, but also enables greater depth of learning, in particular in areas required by planning markets.

The spatial part shown in Table 2 is seen as critical to the degree offered, thus many courses emphasise this dimension, and there are courses on almost all aspects of contemporary planning and allied disciplines available to students by planning staff and fellow colleagues from other programmes (e.g. environmental science, architecture, geometrics, economics, law). It also gives an adequate link for smooth transition when planning graduates wish to deepen some areas of study.

Tab. 2. Spatial planning education at the University of Botswana

Spatial planning component - Year 1	Spatial planning component - Year 3	Spatial planning component - Year 2
Introduction to Planning & Built Environment	Healthy City Planning	Planning Theory II
Planning Graphics and Communications	Land and Property Development	Transportation Planning & Management
Principles of Cartography	Regional and Rural Planning and Development	Environmental Land Use Planning
Planning Methods and Techniques	Urban Regeneration & Renewal	Site Planning and Design II
Computer Aided Drafting	Gender and Planning	Public Facilities and Services planning
Site Planning and Design I	Land and Property Valuation & Management	Urban & Regional Economics
Remote Sensing Principles	Planning Practice and Project Management	Neighborhood Planning and Design
Planning Theory I	Urban Governance and Management	Infrastructure Planning & Management
Principles of GIS	Planning Implementation Techniques	Planning, Land and Environmental law
Planning Practice/Internship I	Planning Ethics	Planning Practice/Internship II
•	Planning for Climate Change	

Source: Department of Architecture and Planning, 2010

Tab. 3. Specialist planning education at the University of Botswana

Stream A. Urban & Environmental Design & Housing	Stream B. Planning Policy and Strategy	Stream C. Planning methods and techniques	Selected topic from A, B, or C. stream
Research Methods and Techniques New Urbanism Landscape Design Urban and Rural Design practice Integrated Housing Studies	Research Methods and Techniques Integrated Planning New Regionalism and Strategic Planning Comparative Planning Administrative and Policy Planning	Research Methods and Techniques Planning Support Systems Development Impacts Analysis Public Participation & Negotiations Techniques Community Planning Methods & Scenarios	Supervised Dissertation – Research Project

Source: Department of Architecture and Planning, 2010

It is suggested that at this point in time the specialism depicted in Table 3 should target the three distinctive areas: 1) **urban and environmental design and housing**, 2) **planning policies and strategies**, and 3) **planning methods and techniques**. Where possible, in due course there would also be an option for further specialism through the Faculty wide MPhil/PhD programme that responds to the increasingly complex and specialized nature of the market and its demand for a different type of the built environment professionals.

Scope of theoretical planning knowledge

The importance of theoretical planning knowledge, as the intellectual foundation of all planning activity, is stressed in the teaching courses for all years of study, including spatial and specialist components in which expertise and critical knowledge are at the forefront of a rejuvenated and potentially fully accreditable programme. In connection to this, the ability to conceptualise new research initiatives and leading theoretical paradigms enables the schooling of professionals who will employ new knowledge in the daily planning practice (Gunder and Fookes, 1997). That consolidates and extends the metaphor of "planning theory as a lens" for good practice, introducing several studio based courses where this theory-practice link runs throughout their calibration and execution (Durning, 2004). This is a significant contribution to applied scholarly debates around theories of planning knowledge and processes (McClendon at. al., 2003). At the same time this approach enables the development of reflexive practitioners. The programme proactive approach towards sustainable development and environment is a basic premise on how to operate in the world of limited resources where the "game of planning" is a mother of their distribution, and planners with multidisciplinary skills are in high demand.

Planning literacy and research orientation

In response to the increasing complexity of rapid urbanisation, urban poverty and slums, sustainable urban development and climate change, spatial structures, provision of infrastructure and services, gender imbalances, inclusiveness, urban crime and violence, postconflict and post disaster situations, protracted disputes, constrained government budgets, and recent movements toward deregulation and property rights protection, new approaches have emerged. They aim to provide more effective, more efficient, and more publicly accepted decisions in spatial management, and creation of liveable and sustainable places. These approaches are given different labels: "strategic planning and its variants". "integrated spatial planning". "land regularisation and management", "participatory partnerships", processes and "urban management and sector programming", "new form of master planning", "environmental, natural resource and disaster management", "green and brown agenda", "new urbanism, healthy and compact cities, smart growth", to name a few (UN Habitat, 2009). In addressing these issues the Botswana program does not place its focus to any particular planning issue or approach. Rather, it promotes engagement with all of them trying to achieve necessary balance to suit both spatial and specialist interests through the debate on planning universalism and challenges of a globalizing world (Afshar, 2001).

Problem solving, critical & creative thinking

The proposed programme anticipates a considerable amount of problem and casestudy based learning. Thus the aim is to provide a balance between critical capacity, substantive understanding, practical skills, and creative approaches. There is a full awareness that the role of spatial planners varies and that it has been affected by growing democratization; increasing public value for environmental resources: an information revolution: and a movement toward more ecological, equitable, and sustainable forms of development. Planners educated in Botswana are expected to identify problems and devise solutions, to perform a wide range of roles as generalists and all-rounded planners trying to develop a brand identity (McClendon et al., 2003), and to become professionals able to address requirements of the corporate world (Hague, 2001) in any given working situation.

Mastering contemporary methods, procedures and technologies

On both spatial and specialist education level it is expected for students to acknowledge and master methods of visualisation, participation,

implementation, presentation, community scenarios generation, management, measurements, development and environmental impact analysis, negotiation, facilitation, mediation, and many more (Booher, Innes, 2002). The central objective for handling the above "planning tool kit" is affected by the increased needs for planners to use more objective and precise instruments in plan formulation, public participation, implementation, monitoring. review, and planning evaluation. The important fact is that the majority of these methods and techniques can be installed and applied with the assistance of a contemporary information technology focusing on GIS, remote sensing, planning support systems, indicator based systems, web based and e-government planning (Chapin, 2003; Shapira, Youtie, 2001).

Interdisciplinary team work, professional competences and skills

Derived educational background also tries to develop a spirit of interdisciplinary and team work from the very early stage because only through these frameworks may the students integrate knowledge of all complex social. cultural, technical, economic, political and ecological elements. Throughout the educational span the students are expected to nurture team spirit and ability to work with other professionals and representatives of diverse groups of stakeholders concerned with the evolution of the social framework and the quality of life (Zenia, 2003).

In such situations their methods of work will have to comprise analysis and synthesis, proposition and programming, creative design, management and administrative skills. The proposed education model also includes continuing professional practice to ensure that graduates have all the required competences whether as self-employed, contracted or salaried, independent or an employee, engaged in practice or research, in the public or the private sector. In summary, the programme prepares future planners to undertake the following tasks (Tab. 4):

Professional profile

The planner is increasingly gaining a key role in project design and project management for the protection of public interests. In addition, a future Botswana planner will need to act as negotiator, mediator, communicator, collaborator, to understand people and their communities, to be independent and be able to think in scenarios and to change the role where passive administrator' should become a "manager of environmental change" (Cavric, 2004). Through his/her education span a successful planning graduate could adopt all of the above skills and become generally skilful as a "jack of all trades", or concentrate and become a "specialist" for some of them. This needs an ability to enrich analytical and interpretative views on natural and built environs from a single perspective to a multidisciplinary perspective which includes architecture. engineering, planning, humanities, social, natural health and sciences.

Planning ethics and values

There is also strong support to the idea for improved planning ethics and values which need to be taught to all students before they are released to practice (Hoch, 1994; Kaufman, 1981). This will help them to continuously strive to achieve a high standard of integrity and proficiency so that the public could respect the job of planners. They need to inherit the basic concept of "fair, honest and independent judgement" that underlies all ethical principles in planning and other government service. According to Kelly and Becker (2000) planners need to follow the basic ethical issues as: abstaining from matters in which the planner has a direct or indirect conflict of interest: disclosing all personal interest in any matters of public interest; not seeking "gifts or favours" that might affect objectivity; not using confidential information for personal gain; and not misinterpreting facts or distorting information. There is believe that the UB planning

programme can make a case for a strong fight against corruptive practices in planning and land development fields.

Planning networks and international

The presence of the programme on the local. regional and international scene represents one of the conditions for a successful cooperation. a further development of the programme, as well as for planning profession on the whole. Consistent with the University and the Faculty ethos, the Planning Programme has actively pursued national, regional and international linkages with other planning schools and institutions. For many years it has developed sound cooperation with numerous government agencies, cities and districts physical planner's offices throughout the country. Regular student internships in Botswana are undertaken every year for 6 weeks, and students of the 3rd year of studies have 10 days of international educational trips. Moreover, the presence of students and colleagues from abroad coming to work together confirms that the programme is on the right course for establishing different international linkages in the areas of research. teaching and professional development with individuals and institutions in Africa, Latin and North America, New Zealand and Europe.

Reflections on gender, race, ethnicity and social status

In accordance with the University mission and Country's Vision 2016, the University is facing all the challenges of a transforming society, accommodating a diverse student and staff body, with particular focus on talented, creative and confident incumbents coming from all segments of Botswana society and from other African and world countries. The intention is also to support more diversified gender and ethnical representation (Johanna, Sesay, 1998) and to make provision for any disadvantaged students who would like to enrol into planning studies. The provision and use of numerous UB facilities such as the Centre for Continuous Education, the Career Advisory Services, the Counselling Services, the Student Welfare, and Admissions, Liaison and Exchanges Services, etc. is important in making programme accessible and inclusive for all.

Programme management, structure and human resources

The latest administrative and managerial changes at UB speak about a new development phase where the focus is on the improvement in institutional efficiency, rationalisation and

Tab. 4 Planning skills and subject areas offered in UB planning program

Planning skills

- · Identifying planning issues and Priorities
- · Formulating Goals, Objectives, and Criteria
- · Identifying Policies, Principles, and Standards
- . Collecting and Analyzing Data
- Making Projections
- . Making (preparing) Plans and Designs
- · Preparing Plan Implementation Programs
- · Administering Plan Implementation Programs
- . Making Development Impact Analyses
- . Engaging Public Participation
- · Use of Communication & other Techniques Source: Department of Architecture and Planning, 2010

Planning subject areas

- Physical Planning
- Environmental Planning
- · Social Planning
- Advocacy Planning · Economic Planning
- Management Planning
- Comprehensive Planning
- · Other subjects
- · Internet technologies to support planning and public participation

formation of an interdisciplinary environment. The DAP is fully supportive and aware of the situation in which the planning programme needs to become closer to other programmes that can feed special and specific components of contemporary planning education. The day to day running will be handled through the school directors and programme conveners or heads. The URP staff appreciate the new university strategic directions which have a lot of in common with the re-shaping of our departmental image. Based on this, there is need for re-loading of the staff duties where the role of School directors, programme convener and professoriate will assist in changing the shape of the high education in Botswana. Especially interesting is the planning programme's interdisciplinary outlook which highlights the fact of future belonging to the extended family of built environment professionals.

CONCLUSIONS

By its nature the planning curricula at the University of Botswana integrates knowledge developed within many disciplines such as geography, environmental planning, architecture, landscape architecture, economy, sociology, ecology, engineering, aesthetics, information science, geographic information systems, etc. Provisionally accredited URP programme ensures professional preparation to allow students to take a variety of semester courses before they tailor the dissertation project to a particular area of planning specialization. The curriculum is organised as a single major subject combining core and optional courses. The combined BSc/MA degree should be completed in three spatial and one specialist year. Students must take all core subjects and a number of chosen optional courses before they defend their master thesis.

The schooling of planners is a long and expensive process, and their practical engagement falls under the category of problem solving development professions. In developing countries like Botswana, such orientation has much greater importance. The newly accredited programme makes it clear that there is a need for modern planners today and in the foreseeable future. The new programme attempts to build a case to show how important it was to restructure the existing planning curricula so as to include many more contemporary planning topics. More precisely, it is also an attempt to build a case to show the need for an internationally and regionally recognised planning school.

In summary, it is evident that a contemporary

planning career in Botswana is a challenging one and requires the ability to cope with any situation concerning spatial and environmental processes. The University of Botswana's provisionally accredited planning curriculum should continue to offer both, planning theory and practice. It should equip students with the technical expertise and support a commitment to democracy (traditional and modern), and equity and fairness as essential factors for the resolution of any burning spatial issue. The programme is designed to educate planners to operate effectively in a variety of institutional frameworks - government and parastatal agencies, private and development corporations, research centres and academia.

References

- Afshar, F. (2001) Preparing Planners for a Globalizing World The Planning School at the University of Guelph, *Journal of Planning Education and Research* 20, pp. 339-352.
- Anderson G.O., Mokgwathi T.S.(2000) Education and Training of Engineers: A Case Study, Botswana, *Journal of Technology*, Vol. 9, No. 2, Faculty of Engineering and Technology (FET), University of Botswana, Gaborone, pp. 24-30.
- Batey, (1994) Forward Planning, in Planning Week education special, A Special Supplement on careers and Education, London.
- Bayer, M., Frank, N., Valerius, J. (2010) Becoming an Urban Planner, APA, John Willey & Sons. New Jersey.
- Bargh, G., Carvalho, M. (1992) University of Manitoba and University of Botswana Link, Faculty of Architecture, Report on the proposed BSc Degree Programme in Urban and Regional Planning, Manitoba.
- Booher, D.E., Innes, J.E., (2002) Network power in collaborative planning, *Journal of Planning Education and Research* 21 (3) pp. 221-236
- Bradwell, P., Johar, I., Maguire, C., Miner, P. (2007) Future Planners Propositions for the next age of planning, DEMOS, London, pp. 1-26.
- Budic-Nedovic, Z.,Cavric B. (2001) Establishment of Planning Systems in Transitional and developing Societies, The First World Planning School Congress, ACSP-AESOP-APSA-ANZAPS, Shanghai
- Budić, Z., Cavrić, B. (2006) Waves of planning: a framework for studying the evolution of planning systems and empirical insights from Serbia and Montenegro, *Planning Perspectives*, Vol. 21, 393-425.
- Cavrić, B. (1998) Fizičko planiranje u perspektivnim zemljama u razvoju: Studija primera Bocvane, Arhitektura i Urbanizam, IAUS, Vol.6, No. 5, pp. 20-24
- Cavric, B. (2004) Planners' Roles and Techniques in Developing Sustainable Eco-City:

- The Case of Gaborone, Botswana, SPATIUM International Review, No. 11, pp. 53-76.
- Chapin, T. (2003) Revolutionising the core: GIS in the planning curriculum. *Environment and Planning B* 30: pp. 565-573

CIA (2011) Facts Book

- Department of Architecture and Planning DAP (2010) Undergraduate Programme in Urban and Regional Planning, Submission to the Royal Town Planning Institute for provisional Accreditation, Gaborone, Botswana.
- Department of Environmental Science DES (1993) Proposal to Establish a BSc Degree Programme in Urban and Regional Planning, University of Botswana, Gaborone.
- Department of Environmental Science DES (2000) Handbook for Undergraduate Students, University of Botswana, Gaborone.
- Diaw, K., Nnkya, T., Watson, V. (2002) Planning Education in Sub-Saharan Africa: Responding to the Demands of a Changing Context, *Planning Practice & Research*, Vol. 17, No.3, pp. 337-348.
- Duminy, J. (2010) Revitalising Planning Education in Africa, Conference, Background Paper, Association of African Planning Schools (AAPS), 5th-8th October 2010, Coral Beach Hotel, Dar Es Salaam, Tanzania, pp. 1-32.
- Durning, B. (2004) Planning Academics and Planning Practitioners: Two Tribes or a Community of Practice?, *Planning Practice and Research*, Vol. 19, No. 4, pp. 435-44
- Fiedmann, J. (2005) Globalization and the emerging culture of planning, *Progress in Planning* 64, pp. 183-234
- Goldstein, H., Bollens, S., Feser, E., Silver, C. (2006) An Experiment in the Internationalization of Planning Education The NEURUS Program, *Journal of Planning Education and Research* 25, pp. 349-363
- Gunder, M., Fookes, T. (1997) In Defence of Planning Praxis, Knowledge and the Profession: Planning Education and Institutions for the New Century, *Planning Practice & Research*, Vol. 12, No. 2, pp. 133-146
- Hague, C. (1994) Forward Planning, in Planning Week education special, A Special Supplement on careers and Education, London.
- Hague, C. (2001) Planning and Planning Education under Conditions of Globalization, *Planning Theory and Practice*, Vol.2, No.3, pp.375-376.
- Hague, C. (2006) The Global Repositioning of Planning. A position paper developing themes from the Draft Vancouver Declaration for debate leading into the World Planners Congress, Vancouver 17-20 June, 2006., pp. 46-66.
- Harrison, P. (2006) On the Edge of Reason: Planning and Urban Futures in Africa, *Urban*

- Studies, Vol.43, No. 2, pp.319-335.
- Hoch, C. (1994) Values and planning education, In Values and Planning, edited by Huw Thomas, 205-222, Brookfield, VT: Avebury.
- Horen, B., Leaf, M., Pinnawala, S. (2004) Localising a Global Discipline — Designing New Planning Programs in Sri Lanka, *Journal of Planning Education and Research*, Vol. 23, pp. 255-268
- Jefferis K., (1998) Botswana and diamonddependent development, In Botswana — Politics and Societ (Eds. W.A.Edge& M.H. Lekorwe), J.L. van Schaik Publishers, Pretoria, pp. 300-318.
- Johanna, L., Sesay, A. (1998) Introducing diversity into the planning curriculum: A method for department- wide implementation. *Journal of Planning Education and Research* 18 (2) pp. 11-170
- Kaufman, J. (1981) Teaching planning ethics. Journal of Planning Education and Research 1 (1) pp. 29-35
- Kelly, E.D., Becker, B. (2000) *Community Planning: An Introduction to the Comprehensive Plan.* Island Press, Washington D.C.
- Levy, C., Wakely, P., Mattingly, M (2009)
 Review of Planning Education across the
 Commonwealth, Development Planning Unit
 (DPU), University College of London on behalf
 of Commonwealth Association of Planners
 (CAP), London, pp. 1-38
- McClendon, Bruce, W., Ernst, E., McCoy, M., Stollman, I. (2003) Abold vision and a brand identity for the planning profession, *Journal of American Planning Association* 69 (3) pp. 221-32
- Mosha C. A., 1998. The Impact of urbanisation on society, economy and environment of Botswana, In Botswana Politics and Society (Eds. W.A.Edge& M.H. Lekorwe), J.L. van Schaik Publishers, Pretoria, pp. 281-299.
- Njoh J.A., (1999) Urban Planning, Housing and Spatial Structures in Sub-Saharan Africa Nature, impact and development implications of exogenous forces, Ashgate Publishing, England.
- Qadeer, M. (1993) Planning Education in Less-Developed Countries of the Commonwealth: An Assessment, *Habitat International*, Vol. 17, No. 1, pp. 69-84
- Okpala, D. (2009) Regional Overview of the Status of Urban Planning and Planning Practice in Anglophone (Sub-Saharan) African Countries, Regional Study prepared for Revisiting Urban Planning: Global report on Human Settlements 2009, pp. 1-38, available from http://www.unhabitat.org/grhs/2009
- Shapira, P., Youtie, P. (2001) Teaching with the Internet and multimedia technologies: Insights from an online seminars on industrial modernisation. *Journal of Planning Education and Research* 21 (1), pp. 71-83

- Rankhuna, F.T., (1997) Evolution of Urban Planning in Botswana: A search for continuity and change, Unpublished BSc. Thesis, Department of Environmental Science, University of Botswana.
- UNAIDS, (2010) *Report on the global HIV/AIDS epidemic*, Geneva. pp. 189-191
- UNDP (2011) http://hdrstats.undp.org/en/ coun tries/ profiles/BWA.html
- UN HABITAT (2009) Planning Sustainable Cities, Global report on Human Settlements 2009, Earthscan, UK.
- Ward, S.V. (2000) Re-examining the International Diffusion of Planning in R. Freestone (edt) Urban Planning in a Changing World, E &FNSpon, London, pp. 40-60
- Wareus, J. (2000) The Traditional Tswana Village: A Neglected Planning Prototype, unpublished research paper, Gaborone, pp. 1-13
- Zenia, K. (2003) Teaching experiential learning in the urban planning curriculum. *Journal of Geography in Higher Education* 27 (3) pp. 297-308

Received September 2011; accepted September 2011