## CONSULTATIONS

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<th>COMMITTEE</th>
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<tr>
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<td>Faculty of Humanities</td>
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INTRODUCTION
The University of Botswana is a broad-based institution with a wide range of academic and professional programmes and an increasing number of graduate students. Alongside the steady growth of its primary teaching mission, it has hitherto taken a gradualist approach to the development of its research mission. However, in order to achieve its vision of becoming “a leading academic centre of excellence in Africa and the world”, the University has recognised that it must now undertake a major qualitative and quantitative transformation of its research performance.

To develop the University’s research capacity and intensify its research performance to a significantly higher level is a long-term task that will take two strategic planning periods, namely National Development Plan 10, 2009-2015, and National Development Plan 11, 2015-2021. Thus for National Development Plan 10, the University has set the strategic goal of “Intensifying Research Performance”, with the intention of laying the foundations for the attainment of a research-intensive institution by 2021. The aim of the University Research Strategy is to elaborate the meaning of increased research-intensiveness for the University of Botswana at this stage of its development and to specify the strategic measures that must be taken to develop the necessary culture of research excellence by 2015.

CONTEXT
The necessity for the University of Botswana to transform its research performance has national and international drivers. At the national level, the draft policy on tertiary education, *Towards a Knowledge Society*, clearly sets the expectation that the University must contribute more significantly to the new national research and innovation system which is critical for the next stage of Botswana’s development. The University has the largest concentration of research-qualified staff and research facilities in the country and has an obligation to develop the full potential of these resources. By doing so, it can play a central part in the multiple strategies for promoting research, development and innovation that are now on the national agenda. At the international level, global trends show the growing importance of collaboration between institutions for the processes of research in order to obtain synergies of expertise, facilities, data access, and knowledge generalization. Indeed, many key research challenges, such as climate change, are global in scope and can only be investigated from an international perspective. An increasing number of research funding bodies explicitly support collaborative international research. For the University of Botswana to attract international scholars and graduate students it is essential to have a research profile that is internationally recognized and competitive. It is within this context that a new research vision becomes important.
3 THE RESEARCH VISION
The University of Botswana by 2021 will be a research-intensive university internationally recognized for the volume, quality and impact of its research.

4 DEFINITION OF RESEARCH
The definition of research used in this document is that adopted for the 2008 Research Assessment Exercise (RAE) in the United Kingdom:

“Research’ for the purpose of the RAE is to be understood as original investigation undertaken in order to gain knowledge and understanding. It includes work of direct relevance to the needs of commerce, industry, and to the public and voluntary sectors; scholarship; the invention and generation of ideas, images, performances, artefacts including design, where these lead to new or substantially improved insights; and the use of existing knowledge in experimental development to produce new or substantially improved materials, devices, products and processes, including design and construction.” (www.rae.ac.uk)

5 STRATEGIC GOALS FOR RESEARCH
As noted above, the realisation of the Research Vision will be a long-term process spread over two strategic planning periods. In order to achieve the National Development Plan 10 priority of “Intensifying Research Performance”, there will be the following strategic goals for research each of which represents one dimension of research-intensiveness. Hence the concept of research-intensive is defined by the full achievement of the following goals.

5.1 To increase staff participation in research
The first strategic goal is to significantly increase the number of staff that are producing high quality and high impact research. In order to achieve an increase in research-active staff, a number of interventions will be required. Firstly, there is need to create more time for staff to engage in research through introducing workload guidelines and a new staff allocation model, through improving the management of sabbatical leave, research leave and course release time for those receiving external grants, and through the use of PhD students. Secondly, there is need to establish positions for Research Chairs, Research Fellows and Post-Doctoral Fellows, to ensure a strong professoriate, and to include research considerations in the recruitment and retention strategy for academic staff. Thirdly, capacity-building activities must be undertaken to increase the ability of staff to attract and manage research grants and contracts, to train and mentor junior researchers, and to meet the research dimension of Individual Development Plans. The management of the University’s Training and Development Policy will be improved to ensure optimal benefits from the funding of staff for PhDs to strengthen the research orientation of new junior staff. Fourthly, there is need to encourage increased collaboration amongst staff, particularly on inter-disciplinary research projects. Finally, there must be incentives for staff participation in research through the Performance Management System, the promotion criteria and other modes. The University Research Committee will be mandated to identify a full range of appropriate interventions.
5.2 To increase and enhance student research training
The University’s enrolment growth strategy for the next two strategic plan periods places great emphasis on increasing both the proportion and absolute number of graduate students. In particular, it is envisaged that by 2015 1.5% of the student body should be M.Phil/PhD students, rising to 3% by 2021. The target for 2015 is 250 M.Phil/PhD students. Growing the student body will be a key task for the School of Graduate Studies and for the professoriate, and the University will approach the Government to establish a scholarship scheme for citizen graduate study. However, it will be important not only to focus on increased numbers, but also to ensure high quality M.Phil/PhD supervision and good completion rates. Attention will also be given to improved research training at the senior level of undergraduate programmes and in Masters programmes in order to strengthen the potential of students to follow research careers.

5.3 To increase internal and external research funding
In order to achieve an intensified research performance, the University will seek to mobilize increased internal and external funding for research. An increase in internal recurrent and capital funds allocated to research will be achieved through the budget process within the University’s overall resource allocation model. Additionally, a significant increase will be sought in the proportion of research funding derived from external grants and contracts. The University Research Committee will have responsibility for the development of a comprehensive research funding strategy to increase the investment made in research.

5.4 To increase international collaborative research
Significant research increasingly depends on researcher involvement in international scholarly networks and on research projects that are undertaken through international collaboration. The University’s Policy on Internationalisation already expresses a commitment to expand international research cooperation and actions will be undertaken to realize this commitment. Research collaboration will be emphasized in memoranda of understanding with foreign universities, and the professoriate will be expected to provide leadership in the establishment of international projects. In particular, under the leadership of the University Research Committee, a select number of strategic research partnerships will be formed at the institutional level with internationally renowned foreign universities (exemplified by the University of Botswana – University of Pennsylvania partnership established in 2006).

5.5 To increase the volume and quality of research outputs
A central aim of the University Research Strategy is to increase the number of research outputs by University staff, particularly in terms of publications in the scholarly literature. It is expected that the increase in volume of research will also be matched by increasing quality as judged by peers, including international recognition (for example, through awards, invitational lectures or participation in key research bodies) as well as publication in prestigious peer-reviewed journals. The Office of Research and Development will continue to develop strategies for encouraging publication and promoting research quality assurance.
5.6 To enhance the impact of research
A new emphasis will be given to the impact of research on the wider society and the goal of ensuring that research has tangible public benefits, so that wherever possible new knowledge is turned into action, innovation, products or services. Thus encouragement and incentives will be given to research proposals that clearly specify how dissemination and application will be undertaken and impact achieved. A particular area of development will be that of innovation and the commercialization of research outputs and the University will aim to be a leading participant in the Botswana Innovation Hub. Other forms of impact will also be facilitated, especially with regard to changes in public policy, professional practice and community well-being. Consistent with the inclusive concept of research adopted in this strategy, the public display and performance of original creative works will be given due recognition. The establishment of the digital research repository will provide scholarly access, visibility and usability to the University’s research output, whilst an active programme of dissemination in non-scientific media will be developed.

5.7 To improve the integration of research and teaching
One of the distinguishing features of a research-intensive comprehensive university is that the majority of the teaching staff are active researchers who are able to include in their undergraduate and graduate courses the most up-to-date research information, including the findings from their own recent research. The integration of research perspectives, processes and findings into academic programmes adds an important qualitative dimension to the curriculum, enriching the learning experience and promoting inquiry-based attitudes amongst students. Research-led teaching is encouraged in the University’s Learning and Teaching Policy and Heads of Department will be expected to facilitate the full benefits to students and staff of the synergies between research and teaching.

6 PRIORITY RESEARCH THEMES
The University will continue to encourage research in all disciplines. However, international experience suggests that selective investment in a relatively small number of strategic research areas is a key driver of research quality. In order to provide the necessary focus for achieving research excellence, the University will identify from time to time priority research themes based on the following considerations:

a) Its existing areas of research strength;
b) National research priorities;
c) International trends in research;
d) Emerging societal needs and new research areas.

These themes will be inter-disciplinary in nature and investigation involving collaboration across disciplines will be expected. It is intended that the University will build a strong international reputation in these selected areas and hence the themes will provide the basis for targeted excellence and prioritised resource allocations.
The themes for the NDP 10 period, 2009 – 2016, are as follows (in alphabetical order):

- **Culture, the arts and society** encompasses the analysis of cultural structures, discourses and phenomena, including particularly African languages, arts, media and epistemologies. It also includes the creation of new images, performances, artefacts and designs.

- **Economic diversification and entrepreneurship** focuses on the study of the economy and the particular issues involved in the diversification of resource-based economies. It gives special attention to small and medium enterprises and to the role of entrepreneurship in business development.

- **Environmental systems and natural resources management** studies environmental issues at the local, national, regional and global levels, emphasising the interrelationship of human and ecological concerns in achieving sustainable development, including the management of natural resources and ecosystems.

- **Health** research utilizes the biomedical, behavioural and social sciences to generate new knowledge about human health study applications in clinical and community settings as well as sport, and develop strategies for the prevention, treatment and care of illness, particularly in developing countries.

- **Indigenous knowledge systems** are the specific historically-developed systems of knowledge and practice of a particular cultural group and region and this research theme considers their value for contemporary practices and innovation in areas such as human and animal health, agriculture and food production, natural resources management and conservation, and local economic development, as well as social policy.

- **Minerals, water and energy** research includes scientific analysis of these key resources as well as engineering studies on the technologies for their sustainable utilization and studies of the policy and socio-economic dimensions of the choice, development and application of technologies.

- **Social and political development** research addresses issues of social policy, such as poverty, education, social welfare, gender equity and the status of minorities, and the key dimensions of political development, including citizenship, security, peace, human rights, democracy and governance.

These themes will be reviewed periodically by the University Research Committee, which will recommend to Senate any changes to the list.

7 IMPLEMENTATION

The implementation of the research strategy is dependent on having in place appropriate policies, structures for research management, research plans that identify detailed actions, strong leadership, appropriate incentives and the necessary resources.
7.1 Research Policies
The University currently has in place four policies covering different aspects of its research enterprise, namely:

- Research and Development Policy (2002)
- Policy on Centres of Study (2004)

The University Research Committee will review regularly these policies to ascertain their continuing relevance, and will consider the development of new policies as necessary.

7.2 Structures for Research Management
A variety of committees and organizational units are required to implement the research strategy, some of which currently exist and some which need to be established.

a) University Research Committee. The University will establish a statutory University Research Committee as a sub-committee of Senate chaired by the Deputy Vice Chancellor – Academic Affairs. The task of the Committee will be to oversee and review the implementation of this strategy.

b) Research Risks Committee. The Committee is responsible for implementing the research Ethics Policy, which it does in conjunction with three sub-committees, namely the Institutional Review Board, the Chemical and Other Hazardous Materials Subcommittee, and the Animal Care and Use Subcommittee. This Committee and its sub-committees will in future report to the University Research Committee.

c) Faculty Research Committees. Each Faculty will continue to have a Faculty Research Committee. The main responsibility of the Committee will be the development, implementation and monitoring of the Faculty Research Plan. The Committee will provide semesterly reports to the University Research Committee. Consideration will be given to establishing the position of Associate Dean for Research and Graduate Studies.

d) Departmental Research Committees. Each Department will establish a Departmental Research Committee to develop, implement and monitor the Departmental Research Plan. The Committee will provide semesterly reports to the Faculty Research Committee.

e) Office of Research and Development. The Office will continue to have the mandate for coordinating research, providing and facilitating research funding, organizing research training, facilitating multidisciplinary and collaborative research, promoting the commercialisation of research and the development of intellectual property, and ensuring research quality assurance. Consideration will
be given to renaming the Office and clarifying its relationship to the proposed Enterprise Office. Additionally, it will provide the Secretariat to the University Research Committee.

f) **Office of International Education and Partnerships.** The Office will continue to have the mandate under the *Policy on Internationalisation* to “Expand International Research Cooperation” (in co-operation with the Office of Research and Development) and its strategic plan will include actions and targets in this respect. It will also have an important role in recruiting international M.Phil/PhD students.

g) **School of Graduate Studies.** The School will continue to have the mandate to coordinate all aspects of graduate student programmes, which includes specific responsibility for ensuring that the growth strategy for graduate enrolments is implemented and that high quality and relevant research training is provided to graduate students.

h) **Research Centres.** The Policy on Centres of Study will be reviewed during 2008 so that these Centres are more clearly defined as inter-disciplinary research centres and more adequately resourced. A Research Centre will be defined as an organisational unit that is based on bringing together the expertise of existing academic staff members and which has a minimum of full-time designated staff. Each Centre will have a Director, who may be part-time or full-time.

i) **Research Institutes.** The University will establish a small number of Research Institutes in selected areas of strategic significance. This new organisational unit will be characterized by the employment of full-time research staff, both establishment and contract, including a designated Director. Research Institutes may be started ab initio or may consolidate existing areas of research strength. It is proposed that the Harry Oppenheimer Okavango Research Centre be upgraded to Research Institute status from April 2009.

### 7.3 Research Plans

The responsibility for carrying out research lies with the Faculties, Departments, Research Centres and Research Institutes. It is expected that each of these organizational units will develop strategic (three to six year) and operational (annual) research plans that identify actions, set targets, give timelines, establish performance indicators, identify responsibilities and specify resource requirements. The job descriptions of the Deans, Heads of Department and Directors will include responsibility for research management and they will be expected to oversee the development, implementation and monitoring of the research plans.

### 7.4 Research Leadership

In order to increase the University’s research-intensiveness to a new level, it is critical that strong research leadership is provided, particularly by the Professors and Associate Professors. The strategy requires that high expectations are made of the professoriate but
also that a facilitating environment is put in place to enable these expectations to be achieved. This requires individual and institutional change.

The expectations of the professoriate with respect to research are included in the revised *Criteria for the Appointment, Promotion and Review of Academic Staff*. These expectations will be included in Performance Agreements and promotion criteria and successful accomplishment will be reflected in the Performance Related Pay system and career progression. This will take effect from January 2009.

In order to facilitate these expectations of the professoriate, the University will steadily put in place mechanisms to ensure adequate time and resources are available to the professoriate, through appropriate workload guidelines, management of administrative duties, improved support services and funding strategies, and provision of post-doctoral fellows and research assistants, within an overall commitment to encourage the originality and creativity required of professors.

The University will also initiate a special strategy for the recruitment and retention of the professorial cadre to ensure a high quality professoriate and a low vacancy rate.

### 7.5 Incentives for Research

The major expansion of research activity envisaged in this strategy requires that there are incentives for both individuals and organisational units. At the level of the individual academic, the Performance Management System and the revised *Criteria for the Appointment, Promotion and Review of Academic Staff* enable the structuring of one’s professional role in terms of the proportion of time allocated to research, and successful research accomplishment will be recognized through the Performance Related Pay system, the promotion criteria and the Research Awards Scheme. The obtaining of external research grants and contracts provides opportunities for release time from teaching and access to a proportion of the overhead as discretionary funds for research purposes. Page costs for journal publication will also be met. At the level of the organizational unit, internal recurrent and capital budget allocations will be influenced by research performance (on the principle of investing in success), whilst a proportion of the overhead from external research grants and contracts also accrues at the unit level. The University Research Committee will be mandated to develop a comprehensive system of incentives for research.

### 7.6 Resources for Research

In order to achieve the strategic goals for research there will need to be a considerable increase in the resources available. A significant amount of the resources for research will be provided through the internal resource allocation model of the University which distributes the Government subvention for recurrent funding. It is expected that the new funding framework of the Tertiary Education Council will include specific provision for research funding. It is intended that improved research planning will enable a steady increase in internal funding for full-time research staff, post-doctoral fellows, research-related support staff, research grants, research-related conference travel, staff research training and so forth. Targets for levels of internal funding will be set when the new
funding framework is in place. It will also be important to ensure that the necessary physical infrastructure and facilities for research (laboratories, research space, equipment, information technology etc) are in place and it is expected that the new research planning process will inform the University’s budget for capital expenditure. An internal Strategic Research Initiatives Fund will be established and a sub-committee of the Capital Equipment Committee will be set up for research equipment.

However, an important strategic research goal is to significantly increase the proportion of research funding that comes from external grants and contracts provided by public bodies or industry. The University Research Committee will set targets for external funding over the National Development Plan 10 period and targets will also be included in Faculty and Departmental Plans. The Office of Research and Development will give priority to its role in supporting staff to win external grants and research contracts. The obtaining of external funding will be recognized in promotion criteria and be a major institutional expectation of the professoriate. Efforts will be made to ensure the full transparency of grant and contract research costs to the institution and to make certain that these costs are recovered. A special initiative will be undertaken to establish Endowed Research Chairs in areas of strategic importance.

8 MEASUREMENT OF RESEARCH PERFORMANCE
The aim of this strategy is to increase the volume, quality and impact of research undertaken at the University of Botswana and to ensure the international recognition of this research. It is therefore essential that the University’s research performance is measured and that it reaches internationally accepted levels.

8.1 Research Performance Indicators
The University will use international benchmarks to assess its research performance and will gather and report data on an annual basis with respect to agreed research performance indicators (RPIs). The indicators of performance in respect of each of the strategic research goals will be identified and approved by the end of Academic Year 2007/8 and may include, amongst others, the following:

a) **Staff participation in research**
   - Proportion of staff holding external research grants
   - Proportion of staff receiving contract research income
   - Number of research chairs, full-time research staff and postdoctoral fellows
   - Vacancy rate at the professorial level
   - Training activities for junior researchers

b) **Student research training**
   - Number of M.Phil/PhD students
   - Completion rates and times for M.Phil/PhD students

c) **Research Funding**
   - Internal research funding allocation trends (capital and recurrent)
External research income trends (grants and contracts from public bodies and industry)

d) International Research Collaboration
- Number of active international collaborative research projects
- Quality of strategic international research partnerships

e) Research Outputs
- Bibliometric data on publications
- International peer esteem

f) Research Impact
- Number of patents, licenses and other commercial applications
- Documented changes in public policy
- Documented changes in professional practice
- Documented changes in community well-being
- Public displays and performances of creative works

Efforts will be undertaken to identify the distinctive characteristics of research in the African context that must be taken into account in the University’s RPIs.

The responsibility for the collection, publication and analysis of the RPI data lies with the Office of Research and Development, supported by the Department of Institutional Planning.

8.2 Baseline Data
The first year for the collection of RPIs will be Academic Year 2008/9 and the data for this year will constitute the baseline data against which trends over time will be measured.

8.3 External Research Assessment
The University will commission an External Research Assessment (ERA) to be conducted after the completion of Academic Year 2012/13 to provide an input into the University Strategic Plan for the NDP11 period, 2015 – 2021. The ERA will be an expert peer-review process undertaken by a team of international academics. The outcome is expected to provide a platform for the further intensification of the University’s research activity during NDP 11. It is envisaged that subsequently there will be an ERA undertaken every six years.