

DEVELOPING AFRICAN HIGHER EDUCATION

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INTRODUCTION

Education has an extraordinary potential for generating development. Nonetheless, today's education, particularly university education is propagating 'maldevelopment'- the disintegration of the educational continuum and the absence of a social contract on education lies at the heart of this contradiction. Higher education has the responsibility of creating the capacity for sustainable development and the democratization of knowledge, the key to genuine democracy. The distribution of knowledge is even more distorted than is the distribution of income, wealth and power. The main determinant of poverty today is neither lack of natural resources nor geographical marginality, but rather the lack of appropriate human capital to produce added value, make use of technology and attract investments (Xabier Gorostiaga, 1999).

This statement powerfully underlines the challenges facing the African higher education sector in the task of creating the human capital for sustainable development.

The pre-eminent global tendency during the last few decades has been significant increase in enrollments in higher education. This rapid growth has created major challenges for higher education systems across the globe – in access, finance, quality of programmes, curriculum restructuring, relationship of teaching and research, governance and autonomy and in the organisational arrangement of complex systems.

The implications of globalization, driven by the knowledge explosion, science and technology for higher education are that managerialism gradually comes to dominate collegiate cooperation in the organisation of both teaching and research; research endeavours are increasingly applied to the requirements of government or industrial demands. The commercialisation of research, the commodification of knowledge and the internationalisation of higher education – selling education to overseas students at full cost, intellectual work for industry, outsourcing of many services to create leaner structures are all part of the impact of globalisation on higher education (Halsey, 1992, Slaughter, 1998)

Any assessment and proposals for the development of African higher education must take these global changes and realities into consideration.

PRINCIPAL PROBLEMS AND CHALLENGES

The tradition of higher education as exemplified by the universities at Al Azar in Cairo, Kairouine in Fez, Debre Damo of Axum and Sankore of Timbuktu is indeed a proud one in Africa. Whatever their shortcomings, African Universities during the period of the 1960s to the 1980s succeeded in providing high level personnel for the civil service, for the schools and in the applied sciences – medicine, agriculture and the social sciences. The number of universities increased from around 20 in 1960 to 160 by 1996 while the number of students increased from 12 000 to over 2 million during the same period (Beintema, Pardey and Roseboom, 1998).

The 1962 Tananarive Conference on the “Development of Higher Education in Africa” proposed an idealistic and ambitious mission in that universities were viewed as key instruments for national development. The workshop of the AAU in Accra in 1972 on “Creating the African University” recognised its two main purposes:

- Establishing identity and links with the past
- Addressing practical needs of high level manpower, the production of knowledge and skills to create wealth and modernise African societies

However the collapse of African economies, diminishing support from governments, corruption and mismanagement and government intrusion into the university matters eroding institutional autonomy led to the precipitous decline of African universities. Thus by the 1980s they were in a state of crisis. The decay of physical facilities with much of it in need of maintenance and refurbishment, the lack of modern electronic and technological infrastructure, poorly stocked and managed libraries are widespread features of current African higher education provision. Most of Africa’s universities are “indeed a mere shadow of their earlier glory drained of teaching staff, lacking in equipment and teaching materials, housed in degenerated infrastructure, surrounded by an air of demoralisation and incipient decay. They are at the same time besieged with a growing demand for high quality service and public accountability”(Sutherland-Addy, 1993)

Most devastating off all is the massive brain drain of well trained and skilled academic staff mainly to Western Europe and the USA. The World Bank estimates that some 23 000 qualified academic staff are emigrating from Africa each year in search of better working conditions (Blair and Jordan, 1994). Rising student enrollments, declining state funding, poor salaries, intrusion of politicians subverting academic freedom and institutional autonomy have collectively contributed to the loss of this intellectual talent.

As half of today's higher education students live in developing countries, their higher education systems are under great strain because they are under funded while facing escalating demand. Faculty is often under-qualified, lacks motivation and is poorly rewarded. Students are poorly taught and curricula underdeveloped. Many students with poor primary and secondary schooling are unprepared for higher education studies. Poor selection and the lack of remedial education exacerbate the problems. The problem facing higher education in developing countries *have their roots in the lack of resources*. Far less per student is spent in developing countries in comparison to those in developed countries. Tuition fees in contributing to income are either negligible or non-existent. Budgets are approved by government officials who have little understanding of the goals and capabilities of a particular university; over 80% of the funding is spent on personnel and student costs leaving little for building maintenance or for research. Thus deteriorating buildings, inadequate libraries, scientific equipment that cannot be used because of lack of supplies are a feature of higher education in developing countries.

While the rate of scientific publications has grown phenomenally in the past two decades the ranking of publications per capita dose not include a single developing country among the top 15. Since 1996 industrial countries had about 20 times as many personal computers per capita as middle-income countries and more than 100 times as many internet hosts. The rapid and chaotic expansion of higher education, has led to the underfunding of the public sector while the private sector is having difficulty offering quality programmes that address other than short-term market needs. This makes it difficult for students to make choices.

The benefits of education are substantial (Inter-American Development Bank, Latin America, 1999) – 50% greater earning for a worker with six years of education rather than no education; 120% for those with 12 years of education; 200% for those with 17 years of education. Economists have calculated that higher education made a significant contribution to the faster growth in East Asia compared to Latin America during the period 1990-1995.

In many African countries, the governance of the universities has been assumed almost entirely by the state, often with political intervention with respect to student selection, faculty appointments and promotions, curriculum design, etc. In some cases, student activism and participation in political struggles has affected their academic progress.

The North / South scientific gap is large and growing. On a per capita basis, developed countries have 10 times as many research and development scientists and technicians as developing countries. They spend about 2% of their GDP compared to 0.5% for developing countries. Developed countries account for 84% of scientific articles published and 97% of patents registered. The need

for updating in books, computers, the Internet etc is urgent in developing countries.

The continent will have to take cognisance of emerging new realities as it sets about transforming its higher education systems to meet the challenges of the new millenium – the end of the East-West Conflict and the ensuing cold war; the collapse of communism and the disintegration of the former Soviet Union into many smaller states in Eastern Europe; ethnicity and national upheavels not least in Africa – the Rwandan crisis, the continuing conflicts in Algeria, in the Sudan, in Ethiopia/Eritrea, in the Congo Republic and in Angola; the powerful forces unleashed in favour of market economies and political pluralism; the emergence of global markets has created a competitive world economic system characterised by rapid knowledge generation and technological innovation; downsizing of the civil service, increased privitisation leading to under and unemployment of graduates; disjuncture of the types of graduates produced and that required by the information and knowledge economy especially in science, technology, engineering and computer skills; economic advantage is now based not on raw materials but on technology relevant management efficiency and on national human resource capacities to manage these increasingly complex systems

There is increasing recognition that the role of universities in Africa in research, evaluation, information transfer and technology development is critical to national social progress and economic growth. Poor national economic performance, inappropriate governing structures, political interference, weak internal management and campus instability have all contributed to this decline. In the light of these developments the Association of African Universities, the World Bank, African organisations with an interest in higher education and the Working Group on Higher Education, 1999 have proposed strategic guidelines for the revitalisation of universities in Africa:

- Strategic planning provides university leaders and stakeholders with the means to analyse conditions, express a vision and formulate goals thereby promoting the advancement of the institution in a systematic manner. Among critical issues discussed should be the budget allocation process, management, institutional autonomy, accountability to government and the public etc. The rejuvenation achieved at Makerere University has been attributed in no small measure to effective strategic planning.
- A state of the art management information system is a powerful instrument that enables accessible information on institutional performance, to assist managers to make informed decisions and to facilitate evaluation and monitoring. While continuing with an administrative approach to the management of learning, a second promising meaningful change is by redesigning instructional technology as both a strategic and a cognitive tool.
- The institution of comprehensive quality assurance mechanisms by improving teaching and research capacity to international standards in academic areas that are crucial for the country's social and economic development; devise

management training courses for university managers, administrative staff including deans, departmental heads will be priority considerations in the rejuvenation strategy of African universities.

- Governments faced with enormous pressures for socio-economic development on a number of fronts are in a quandary as how to provide adequate funding for its universities. Diversification of the funding base of higher education institutions to supplement government funding should include the charging of tuition fees, the mobilisation of donor funding and establishing private-public partnerships in order to position the university at the centre of the information technology driven developmental pathway
- Given the necessity of institutions to be responsive to external interests, a balanced view of institutional autonomy and academic freedom to be exercised within an ambit of accountability should be developed with governments. Governments should respect management autonomy and initiative; university councils to oversee management of institution; any cost savings and funds generated by the institution should be regarded as supplemental funding; institutions should have their performance evaluated and their financial records audited.
- Private institutions are a reality in the developing world including Africa and could make a positive contribution in meeting the increasing demand for higher education. The challenge for public higher education and governments is to create an enabling environment for the establishment of private tertiary education institutions including measures to ensure sustainability, quality and relevance to the development goals of the country.
- Donor agencies have historically operated individually and not always with the priorities of African higher education in mind. They should recognise the importance of investment in higher education for social and economic development and support such activities as strategic planning, assistance for library development, a management information system and communication technologies; institutional linkages and management training.
- There should be careful planning of post-secondary educational systems in order that institutional diversity should be a priority in reconfiguring higher education systems for both educational and financial reasons. The requirement of a high degree of specific skills, people with practical rather than theoretical leanings, adult learners, working students, disabled students and parents with child-care responsibilities are all indicative of the need to establish different types of institutions at different cost levels.

VISION, PROGRAMMES AND PRIORITIES

VISION

If the legacy of colonialism, a history of injustice, inequality and oppression is to be overcome, social and economic transformations must underpin the rejuvenation of Africa. In a knowledge and technologically driven globalised

world, education in general and higher education in particular must lie at the heart of these transformations. Higher education will have the vital role of producing the knowledge, generating the socially committed graduates and providing the services for enabling the various countries to pursue the attainment of social equity, justice and adequate living standards for all its peoples.

Higher education contributes to the advancement of democracy by fostering open and critical debate, a vibrant civil society and increases the possibility of participating in decision making. Through its ability to deliver appropriate programmes of study it promotes a critical citizenry, creates the opportunity for social advancement, enhances equity and social justice.

Higher education can be at the forefront of developing social policy, monitoring and evaluating the implementation of such policies. It thus pursues the twin objectives of contributing to the development of social policies by engaging with the actual problems of a country as well as functioning as a social critic. Thus through its research, critical thinking and community service, higher education can contribute to the consolidation of democracy and the promotion of prosperity.

In the globalised world, the growth of knowledge complemented by the diffusion of information and communication technologies has been the catalyst for social and economic development. In the words of Castells (1993), a leading scholar in this field “if knowledge is the electricity of the new informational international economy, then institutions of higher education are the power sources on which a new development process must rely”.

Higher education can also contribute meaningfully to improving the quality of schooling, health care, welfare and other public services at national, provincial and local levels. This requires the active promotion of continuing education, the upgrading of professional knowledge and skills and creating flexible opportunities for life-long learning for practical education, health, social services and other public sector personnel. It also requires the appropriate applied and strategic research around key social policy issues and the problems of social reconstruction and development. Such research and the continuous upgrading of the knowledge, skills and competencies of public sector personnel will ensure effective delivery of services as well as innovation and new trajectories for development.

Higher education is crucial to the resolution of the complex problems and the development challenges that face the African continent. While the ability to access and apply knowledge and technologies will remain a central feature of Africa's renewal and rejuvenation, the “African renaissance will not be possible without higher education producing sensitive and committed intellectuals, scholars, writers, dramatists, artists, musicians and critics” (CHE, 2000).

No country has succeeded in generating sustainable socio-economic development without long term investment in human resource development, of which it has been argued that higher is central and crucial.

PRIORITIES AND PROGRAMMES

Government-University Relationships, Institutional Autonomy and Academic Freedom

A fresh approach may be required with respect to academic governance. In most democratic countries state steering appears to offer advantages and should be explored as the model of choice. In such a model traditional notions of academic freedom and institutional autonomy are entrenched but within a broader conception of accountability. Often a buffer body such as a Council or Commission on Higher Education with broad representation mediates relationships between the state and universities.

Traditionally academic freedom and university autonomy, protections against the arbitrary interference are conventionally underwritten by formal legislative enactment. In the globalising modern world, university autonomy i.e. the capacity for self-government has to be balanced with the obligation to be accountable to society, e.g. with respect to equity and efficiency in fulfilling the educational mission. Academic freedom and university autonomy implies the obligation to excellence, to innovation and to the advancement of knowledge, the former by academics and the latter by the institution. Current developments such as massification, globalisation, privatisation, decentralisation, quality assurance etc imply a more complex relationship to society. Thus academic freedom and university autonomy have to be increasingly tempered by notions of accountability and responsiveness to external interests (Neave, 1998). The challenge for African higher education institutions is how to negotiate this delicate balance.

Investment and Costs in Higher Education

As pointed out earlier, the lack of adequate resources lies at the heart of the deterioration of African higher education. Governments faced with enormous pressures for socio-economic development on a number of fronts are in a quandary as how to provide adequate funding for its universities.

Given the critical role of universities in socio-economic development, no country can afford not to support at least some higher education institutions of high quality. Such institutions cannot function adequately without reasonable levels of state investment. At the same time, public funding which accounts to more than 90% of funding for African higher education institutions limits enrollments. As a general rule about 15-25% of a country's education budget should be spent on higher education; the education budget should aim at representing 7% of GDP.

Unit-costs are one indicator of quality and should this fall below \$1000 per student it becomes difficult to meet adequate educational quality. In general staff salaries should not consume more than 65-70% of the institution's expenditure allowing adequate expenditure on infra-structure such as on libraries, information technology and on research. About 70% of revenue should be provided by governments, 20% from private sources including tuition fees and 10% from other income generating activities – contract research, letting out university facilities etc.

Not only do student fees in general generate little or no income, over 80% of the funds are spent in personnel and students costs eg students expect to stay in residences at no cost. Reasonable student tuition fees should be one source of generating revenue. In some countries this constitutes some 20-25% of total costs of training. Clearly given Africa's levels of poverty and if equity of access is to be an underlying principle, tuition fees should be supplemented by a student financial aid scheme. Such a scheme might comprise a mix of loans, scholarships and bursaries. The recovered loans provide a valuable source of revenue for further student aid.

African universities have been dependent almost exclusively on the state for their funding. The current levels of reduced funding are unlikely to change given other basic priority needs such as primary education, job creation, water, sanitation etc. The high unit costs of education and training due to low staff/student ratios, the provision of free housing, inadequate use of space etc exacerbates the funding problems. Funds directed predominantly at the provision of core academic activities, levying of tuition fees, admission of private students, continuing education, contract services to business and industry, the hiring out of university facilities, donor funding are some of the options that have been advocated as methods to diversify funding.

Public / Private Partnerships

Increasingly in the globalised knowledge driven world, higher education institutions can no longer afford academic insularity. It is essential that they embark in cooperative endeavours and partnerships with a range of local, national and international players and organisations. To this extent new linkages and relations should be fostered with commercial enterprises (including SMMEs), farmers, parastatals, research bodies, local communities, and non-governmental organisations.

One particular avenue of interest to universities lies in the field of technology transfer. Universities which have become interested in commercialising their research have invested heavily in setting up science parks, technology transfer centres—both industrial and agricultural--and venture capital funds to assist academics in commercialising their work. The technology transfer centres are

aimed at bridging the gap between university research and the market place (Gibbons, 1998). Research here is shaped in the context of application, as Gibbons points out, and necessitates an ongoing dialogue between the interested parties including producers and users of knowledge. In Africa, this may include not just knowledge produced in academic settings and corporate laboratories, but also local (indigenous) knowledge and innovations which arise on the shop-floor. Thus there is need for universities to form appropriate partnerships with business, government and other socio-economic actors, as well as to invest their own resources in the process.

Use of Information Technology as Both a Strategic Management and Cognitive Tool

In order to access information in the knowledge society, be globally competitive and efficiently manage universities, it is imperative that adequate information technology systems be in place. In other words, information technology is increasingly important as both a cognitive and a management tool. The investigation by the National Commission on Higher in South Africa, 1996 found that disadvantaged institutions were hopelessly under resourced with respect to libraries and information technology eg there was only one desk top computer per ten staff members, it was non-existent for students and there was a severe shortage of skilled information technology personnel. A recent World Bank study (2000) confirmed these deficiencies in developing countries.

An effective management information system with performance indicators is a powerful aid to effective management of human resources, financial accounting, student services and records, examinations etc.

Questions such as what role would machines play in a strategically guided pedagogical revolution, what kinds of teachers were needed to maximise the academic value of students being able to retrieve information quickly, what kinds of learning environment management changes would have to be made to capitalise upon the value of the machines would bring to the classroom, what would be the pedagogical or cognitive benefits of giving students hyperspeed access to every book, video article – these are the crucial questions that have to be asked and answered in the context of a knowledge and technological driven change.

In his insightful paper Michael Privateer, 1999 expresses the view that higher education is at a crossroads – one path continuing an administrative approach to the management of learning, and a second promising meaningful change by redesigning instructional technology for use both as a strategic and a cognitive tool. If colleges and universities are to become contemporary and effective organisations, their strategic academic technology agenda should be focussed on the production of *intelligence rather than on the storage and recall of random and quickly moded information*. Universities are complex cultures that create,

order and manage information and are constituted as dense information networks held together by ideological and technological strands.

Much needed change in higher education will not be achieved by continuous organisational restructuring but instead by *re-engineering of what we do and a reinventing of what we produce*, suggests Privateer. The choice is clearly between a tradition of reproduction in contrast to invention and intelligence driven technologies. The former is conditioned by administrative technologies – lecturing and testing define academic value by examining students on their ability to reproduce information within a fixed time period.

Profound differences will exist between those who produce knowledge through new technologies and those who do not. In the globalised world lawyers, biotechnologists, engineers, economic editors, software designers, strategic planners are in demand because they contribute to a high 'value added' to their products, whatever that might be. These highly valued knowledge workers are no longer linked to a regional or a national economy but have become functioning and prosperous parts of a borderless world.

If this thesis is correct, universities must develop more thoughtful and defined strategic plans. Teaching has to become 'value-added intelligence producing' if they are to survive as knowledge producing organisations without losing the competitive edge to the fast developing corporate universities – Motorola, IBM, Intel, Microsoft etc. *".....what is clearly going to keep higher education competitive is a balanced strategy that uses technology to invent intelligence and encourage demonstrations of metacritical reasoning and effective use of symbolic languages and team based communication skills in solving a range of problems"* (Privateer, 1999).

Do instructional technologies produce better graduates? If so, how does it happen and how could it be measured. Does remote access to course information and memory based examinations meet the skill requirements of the future graduates such as: metacritical thinking; reasoning through abstract and symbolic codes; use of inferential and synthetic thought; effective group management; participation skills; inventive or constructivist design experience. These are the challenges of establishing effective information technology systems for African Higher Education.

Quality Assurance

In the changing agenda of higher education, notions of quality assurance and quality enhancement have become the focus of attention by governments. Traditional academic controls such as the system of external examiners is no longer considered adequate either as accountability mechanisms or of employers to assess their graduates. Governments now want to be assured that higher education programmes are relevant, responsive and institutions can provide

them as efficiently and cost-effectively as possible. In addition students and parents as they are called into making increasing investments in higher education want to be assured that institutions are offering quality education.

Massification with an increasing percentage of the age cohort of 18-24 year olds attending universities and the increasing diversity of institutions to respond to varying demands are also recent developments of higher education. What is the impact of these trends on the quality of higher education ?

Although policy debates continue about the nature and form of quality assurance systems, certain discernable trends have emerged (Van Vugt & Westerheijden, 1993) :

- a meta-level coordinating body
- a self-evaluation undertaken within institutions
- external peer review
- publication of reports
- an indirect link to funding

In general quality assurance agencies undertake three broad functions – institutional audit, programme accreditation and quality improvement. One approach is for agencies to make summative judgements about the quality of institutions or their programmes. Another is to adopt a developmental trajectory which proposes improvements and provides assistance as to how this might be achieved. This may be the preferred route for developing countries where resources are limited and where quality assurance approaches are of relatively recent origin. Whatever the approach and many aspects could be assessed in a quality assurance system, the heart of a functional and optimal quality assurance system must be the assessment of teaching and learning.

Qualification Frameworks

As the reform of higher education systems unfolds across the world, governments are rethinking the role of qualifications in the light of global economic changes and the related changes associated with skill and knowledge demands. There is growing interest on the part of governments for establishing a single qualification framework based on outcomes. These frameworks are designed to include all qualifications, school, work based, and general, vocational and professional; in addition it is meant to include qualifications at every level from basic-skills to postgraduate degrees. Such qualification frameworks have been established in New Zealand, Scotland, in a number of Eastern European and Latin American countries and more recently in South Africa. The National Council for Vocational Qualifications (NCVQ) pioneered such a system in the UK. The emphasis on qualification enables government policy to:

- increase control of education
- provide measurable criteria for funding education
- make local and regional bodies accountable

- provide quantitative measures of the success of their policies

On the other hand Germanic and the Nordic countries (which have their own strong traditions of apprenticeship and professional training) have resisted the institution of qualification frameworks of the type described above. Countries who have adopted qualification frameworks see it as the best way of responding to the changes in higher education necessitated by globalisation and the knowledge revolution. Other countries focus on improving links between institutions ie their institutional framework.

The main goals of these qualification frameworks are improving flexibility, mobility and access to education and training. To this end education and training is seen as a life long process, improving opportunities for moving between different types of qualifications (especially between general & vocational) and promoting informal learning with links between formal and informal learning, thus providing opportunities for people to use their informal learning to obtain recognised qualifications.

An emerging body of research is showing that the qualification framework is not working as it was hoped and that it has some unintended consequences. In South Africa, an ambitious and elaborate National Qualifications Framework under the aegis of the South African Qualification Authority has recently been established. The authority not only regulates the framework but also the quality assurance system of the country. Some five years after its establishment, the Ministers of Education and Labour have asked a Task Team to review the framework. Its implementation has not proceeded as smoothly or unproblematically as it was hoped.

This brief review has important lessons for African countries and their higher education systems in that the establishing of any qualification frameworks should be preceded by a careful evaluation of the present systems in operation and the emerging research of them. (Young, 2001)

Multi-Country Collaboration

International experience has demonstrated enormous potential for multi-country (including regional) collaboration in the sharing of expertise, expensive equipment, exchange of staff and students, collaboration in research etc. Such consortia could be either intra-country or across countries. In particular the construction of expensive professional faculties such as medicine, engineering, architecture etc will not be feasible in the smaller countries. The Association of African Universities is an appropriate forum for a discussion of the establishment of multi-country professional schools as well as 'centers of excellence' in key academic areas. Potential opportunities in collaboration made possible by information and communication technology remain under-explored in Africa.

Challenges to Leadership and Management in the Age of Massification and Globalisation

Diversification of the African Higher Education Landscape

The comprehensive research university has been the 'gold standard' which every country in Africa aspires to establish. The key question is whether any country could afford a mass high quality research university system, let alone developing countries in Africa (Trow, 1987; Barr, 1998). The post-colonial model inherited from the French and British systems has underpinned the neglect of alternatives to the research university such as predominantly teaching institutions, colleges of higher education, polytechnics, and community/technical colleges. It has been predicted that by the year 2000, only one out of four workers would require a bachelors degree – mainly in the professional areas such as law, engineering, medicine and three out of four jobs would require some form of post-secondary education (Griffith & Connor, 1994). Furthermore, workers will have to be constantly retrained for the emerging changing and competitive global economy. It is estimated that many of the jobs in the US economy are created by small new businesses, estimated to be 18 million in 1994 and projected to grow to 25 million by the turn of the century.

The challenge for African higher education is how to entrench genuine diversity which would mean institutions operating at different levels of cost as well as of standard. A significant new development is 'reverse transfer' whereby students with a bachelor's degree will turn to a further education / community college in order to acquire a marketable skill. If such an approach to establish a genuine diverse system of higher education were to be adopted, it would release resources for a limited number of well funded public comprehensive research universities with a sound infra-structure, well qualified academic staff and focussed research activity.

Balancing Collegiality and the New Managerialism

The long held traditional ideal has been for universities to be publicly well funded with the state granting them autonomy so that they can govern themselves as 'collegial democracies' in a way that leaves professional academics free to teach and to undertake research of their choosing (Dearlove, 1997). However the changing context of higher education has deprofessionalised and proletarianised academic work and collegiality has given way to managerialism.

Given these constraints in the context of mass higher education, no university can escape the need for some kind of bureaucratic organisation, but how can the gap between collegiality and managerialism be transcended? In the view of Burton Clark, 1996, innovative change oriented universities are 'blending collegial authority with managerial authority, so that administrators are brought

closer to the faculty point of view; the faculty professionals become more administrative' in what he sees as 'an integrated administrative core'.

Among the challenges for vice-chancellors/presidents/rectors as leaders and managers are:

- creating the space for leadership from the middle who in the words of Clark, 1996 "innovating universities depend heavily on leadership at middle and lower levels of management that successfully reconciles the entrepreneurial drives of central leaders with the drives of disparate academic and professional groups"
- notwithstanding the importance of inter-disciplinary work, discipline based departments will remain the core of academic work
- avoiding both top-down and bottom up planning, a listening leadership whereby a shared sense of institutional direction is developed
- blend collegiality and managerialism; balance trust and control, teaching and research
- academic work is backed by appropriate institutional incentives
- engage with academics to develop a shared sense of institutional direction

Strategic Planning

Strategic planning will enable universities to establish priorities setting and allow the choice between alternative courses of action. It sends an important signal to both its internal constituents that it has embarked on a definite course of action and is simply not drifting along. This is not to say that such plans are cast in concrete but will be periodically reviewed and fine-tuned in the light of rapid changes in its environment which impact on the institution.

These plans could be elaborate, complex, little understood in the institution except by its authors and would of course make little headway. In contrast, strategic plans that are derived through consultative processes, have the support of the major players in the institution, are well understood and implemented in a systematic way with the support of the vice-chancellor/president/rector have a much better chance of successful outcomes.

The core content of an optimal strategic plan was best described in the Hoare Report, Australia, 1995:

- establishing a medium to long term horizon including three year financial projections
- analysis of the operating environment
- clearly defined objectives and strategies to achieve these objectives including the availability of resources
- quantitative and qualitative performance indicators and targets
- review against past plans and targets
- an outline of accounting and reporting procedures

The vision, mission and goals of the institution underpin such a plan.

A good strategic plan will not be overwhelmed by attention to detail, nor will it evolve in an organisation characterised by a lack of trust. Collegial interactions which are essential to the development of a good strategic plan provide an excellent means of building that interpersonal trust. In practice the plans cover the core and non-core business of the university and as result members of general staff play an important role in the development and implementation of the strategic plan.

IMPLEMENTABLE PROJECTS

1. The Funding of Higher Education

A Task Team should be established in order to develop a strategy for sustainable funding of African Higher Education Institutions. Among the issues it should explore are:

- The State's contribution to higher education
- Tuition Fees & student financial aid schemes
- The contribution of donor funding
- Contributions from the private sector
- Other innovative funding initiatives
- Management of funding

2. Creating Public Private Partnerships

Burton Clark (1998) describes a number of case studies in his book 'Creating Entrepreneurial Universities' in which such partnerships with enterprises have been successfully forged. The peripheral activities include outreach administrative units that promote contract research, contract education and consultancy. They are generally but not always multi- or trans-disciplinary. These linkages move the university towards a dual structure in which traditional departments are supplemented by centres linked to the the contexts of knowledge application, both local and global. This structure becomes a mechanism for dealing with the growth of the service role of universities. Among other results, they promote environmental linkages and can effect reciprocal knowledge transfer. The structure also allows for temporary units thereby introducing flexibility into the system. New competencies for problem solving develop. They can generate income which contributes to diversification of funding. Though adding to the organised complexity of the university, the periphery becomes an essential element in balancing the environmental demands on the institution and its response capability.

The notion of thinking globally and acting regionally translates into regional development partnerships in which industrial clusters of higher education institutions, companies and agencies frequently interact to provide high level skills and competencies by mobilising the latest and best knowledge to produce goods and services (Porter, 1990 1995; Kanter 1995; Goddard, 1997). In addition, linking research with the needs of regional and the national economy will require greater local dialogue and co-ordination with financial support between universities and other organisations in the region (Court, 1997). Mulrone (1992) describes such a network in North Melbourne, Australia “encompassing combinations of universities, TAFE Colleges, local councils, support schools and industry for educational and training links, entry to post secondary study, technology transfer, credit transfer, sharing of laboratories and equipment.”

Using the thinking provided by the above examples a Joint Task Force of Universities, Business and Governments should explore on a regional basis the potential for mobilising university/private sector partnerships for a mutually beneficial and reinforcing relationship committed to the development of the continent.

3. Quality Assurance and Qualification Frameworks

Quality assurance is either non-existent or is at an early stage of development in most African higher education institutions. Resources both financial and professional will remain a severe constraint to the development of quality assurance across the African continent. Yet it could no longer be delayed or neglected. Therefore as African higher education systems proceed through their specific transformations it is critical that a beginning be made in the establishment of quality assurance mechanisms. Considerable experience and research has emerged during the last decade across many countries. This experience will be invaluable in the formulation of strategies and mechanisms for a viable and affordable quality assurance system that is appropriate for each country. Importantly, this is an area that will readily lend itself to sharing of expertise and cooperative initiatives such as establishing regional quality assurance agencies across the African continent.

4. Multi-Country Collaborative Initiatives

A list of priority multi-country cooperative projects might include the following:

- Joint training facilities for developing professional capacities in tertiary distance education.
- A multi-country technical assistance fund that would enable representatives of African universities that have produced good strategic plans to mentor or

assist other African universities interested in initiating strategic planning processes.

- Sub-regional training workshops that would enhance university representatives' ability to produce strategic development plans for Information and Communications Technologies (ICT) within their universities.
- A large multi-country "Innovation Fund" where African universities would apply on a competitive basis for funding to undertake particular innovations that they would propose and justify for their campuses.
- The establishment of a few multi-country training facilities or programs in professional higher education management, that would offer short courses on a range of university management topics (e.g. better utilization of space through improved scheduling) and also a Masters degree in higher education management. (Saint, 2001)

All such multi-country initiatives should take due cognizance of linguistic diversity and the opportunities for leveraging information technology (e.g., distance learning joint databases, etc.)

5. The Development of Leadership and Management

There has been in general good intellectual leadership at universities but not so with regard to organisational leadership – with getting structures right, effecting balances between trust and control and securing institutional changes. The problem is that *“little or no serious systematic attention is given to the development of leadership among staff in higher education”* (Middlehurst, 1995). Such training will enable academics to cope with the rigours and stresses of mass higher education rather than leaving professionals to manage themselves and develop their own careers.

The African Association of Universities is currently involved in two projects with Management & Leadership Training. Firstly in the Dutch/Swedish funded research programme on the development of leadership and management of African Universities. Second, the workshops it conducts for Senior Leaders of Management in African Universities. These projects provide the background as well as expertise to extend and deepen the training to a wider cadre of university professionals to include in particular middle management and to emphasise the importance of strategic planning

TOWARDS IMPLEMENTATION: POTENTIAL INSTITUTIONAL PARTNERS

The projects outlined above will need to be refined. Time tables and resource requirements must be added, and appropriate expertise and funding identified and mobilized.

AFRICAN ASSOCIATION OF UNIVERSITIES

The ideal vehicle to spearhead some of the projects proposed above would be the African Association of Universities. The organisation currently has its head quarters in Accra, Ghana and at its recent annual conference in Nairobi concluded with a far reaching mission statement of development and rejuvenation.

The work of the Association is handicapped by the fact though it has a large membership stretching across the African Continent, its resources are limited in that not all members pay their subscription fees. MAP would have to supplement the resources of the AAU considerably if these projects are to have the chance of being implementable

NATIONAL COMMISSIONS

Within African countries a number of Commissions and Council have been established to transform higher education systems. Among these are the Nigerian Higher Education Commission, the Kenyan Higher Education Council and the South African Higher Education Commission and Council on Higher Education. These bodies have developed resources and gained expertise in reforming higher education systems and mediating relations between state and institutions. They could play a valuable role in the implementation in some of the projects outlined above.

INTERNATIONAL EDUCATIONAL BODIES

Among these the Council on American Higher Education, CHEPS (Netherlands), the Association of Commonwealth Universities, UNESCO, and the International Association of Universities etc. are all potential sources of expertise.

FUNDING

- The Donor community has for long had an interest in supporting African Higher Education. The Ford, Kellogg and Rockefeller Foundations have funded African higher education projects
- The second group comprises government parastatal bodies – USAID, the British Council, the Australian Government, Nuffic from the Netherlands, SIDA from Sweden, IDRC from Canada, the NUFU programme from Norway, DANIDA from Denmark and the German Development Agencies.

THE WORLD BANK

Despite the problems of the past associated with its problematic structural adjustment policies, the World Bank has a long history of working on African Higher Education and has developed considerable expertise. Furthermore there

is a discernable change of attitude within the World Bank with the recognition of the importance of higher education as a critical instrument for economic and social development.

While the question of loans through the Bank remains contentious, nevertheless it remains a source of mobilising funds and expertise for African Development

CONCLUSION

This paper should be regarded as the first attempt to delineate the broad parameters of the principal problems, challenges, vision, programmes and priorities of African Higher Education Systems. A list of key initial projects has been identified and sources of expertise to implement them and funding to support them are suggested.

Compelling international evidence indicates that Africa cannot generate sustainable socio-economic development without investment in human development. At the heart of such development is the production of critical intellectual capabilities and well trained graduates with a range of competencies and skills. Douglas (2000) captures this necessity succinctly and aptly "As the global economy becomes more competitive, those states and nations that invest the most time and energy in expanding and nurturing their higher education systems, will likely be the big winners of tomorrow."

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