Assessment of MacArthur Foundation Support to Nigerian Universities

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### **Executive Summary**

### 1. Background

In 2001, the Global Security and Sustainability Program of the MacArthur Foundation approved multi-year grants of between \$2 and \$3 million to each of four Nigerian universities: Ahmadu Bello University (ABU), Zaria; Bayero University Kano (BUK); the University of Port Harcourt (UPH); and the University of Ibadan (UI). The prima facie grounds for the initiative, in terms of the Program's aims, were compelling: Nigeria is Sub-Saharan Africa's most populous country; efforts to implant democracy will depend on reversing prolonged decline in the quality of government and living standards of ordinary Nigerians; and Nigeria's success in turn will positively contribute to development of the sub-continent. Support for higher education alongside Foundation initiatives supporting human resource development and good governance have been deemed equally important. Revival of a once vibrant academic community will help inform public debate and strengthen political accountability, both essential features of any democratic polity. Restructuring of the economy will depend to a considerable extent on skills and knowledge forthcoming from a renewed higher education system.

Notwithstanding this strategic rationale, the grants prompt queries on three different levels. The first relates to the grantees themselves. Have they been the right choices? Have the activities financed by Foundation support been wisely selected, in terms of creating a solid foundation for longer-term renewal, as well as redressing more immediate weaknesses? Are they being well executed? The second pertains to systemic shortcomings, as well as prospects for reform and innovation. Many constraints the grantees are attempting to address stem from systemic failures. To what extent have scarce resources provided through the Foundation's grants been used simply to patch up such shortcomings, as opposed to underwriting improvements in quality, and introducing innovations in learning and research? From the perspective of the national system of higher education, shortly to comprise 70 federal, state and privately financed universities, can we reasonably expect four strengthened institutions to generate significant momentum for major reform in others? Can activities and innovations financed by the Foundation inform higher education policy more broadly? Finally, with respect to our third level of inquiry, we note that benefits arising from the Foundation's grants could be compromised by unpredictable political and economic developments.

The report addresses these and other questions. It draws on information obtained from an in-depth "desk top" review of relevant documentation, a field visit undertaken between August 27 and September 20, 2005, and further exchanges, by telephone and email, with various informants.

Since an informed appreciation of Foundation financed activities depends on first understanding Nigerian higher education, we begin by reviewing its principal features and challenges. Our major findings and conclusions, as they pertain to all four grants are presented in Chapter 3. Part 2 of the report, comprising chapters four through seven provides more detailed information for each institutional grantee. In Part 3, Appendix A lists the principal documents and Appendix B individuals consulted during the assessment.

### 2. The Nigerian System of Higher Education

Within Nigeria, there is growing awareness, among the relevant stakeholders concerning the weak state of the country's system of higher education. However, there does not yet exist a widely held consensus concerning priorities for reform. The most pressing issue confronted by policy makers is the limited number of places available to secondary school graduates. Decline in "quality" is seen principally in terms of formal academic standards, as opposed to actual competencies and marketable skills of graduates. Although not articulated as official policy by federal government, the current intent is to expand the number of state and privately sponsored universities from the current seventy. More generally, as elsewhere in Sub-Saharan Africa, the federal government is prepared to grant universities progressively greater control in running their internal affairs, in returning for shifting a greater share of the financing burden to them.

Nigeria does deviate from this Africa wide trend is some important ways. One is the sheer size of the system. Associated with it is a potential differentiation in function among universities. A second is the pattern of public expenditure on education. Because of its direct responsibility for financing federal universities, the share of the federal budget spent on higher education is much higher than in other African countries. Given the decline in primary education enrolment, the federal government will be under considerable pressure to increase spending on primary education. This policy, along with the continuing need for fiscal restraint to maintain macroeconomic stability, points to only minor increases in public funding for higher education. A third distinctive feature is the role played by national unions for senior (non-academic) staff, academic staff, technical and junior support staff - and students, not only in pressing for increased salaries and benefits, but in successfully lobbying on other higher education issues. A fourth feature is the highly centralised control exercised over the higher education by the federal government through the National Universities Commission, a parastatal, viz. government corporation, within the Federal Ministry of Education, whose Board and Executive Secretary are selected by the Minister. The NUC exercises two important, but oftentimes conflicting functions. The first, a regulatory one, is the accreditation, not only of universities, but specific undergraduate programs. The detailed criteria used for this purpose are principally "input" oriented. In contrast, little weight is assigned to published research or to feedback from students concerning their learning experience. Not surprisingly, the principal preoccupation of the Academic Planning Unit in Nigerian universities, including the four grantees, focuses on the need to meet NUC criteria for the accreditation. The NUC's influence extends to the governance of federal universities. The other major function of the NUC is disbursement of funds in the federal budget earmarked for specific items, notably laboratory equipment and consumable supplies, equipment maintenance, and library acquisitions.

The current Administration's policy managing higher education has been set out in an Autonomy Bill presented to the legislature over a year ago. At present, the effort rests in legislative "limbo". With elections pending in 2007, it appears highly likely that the Administration will not take any further action. Over the longer term, however, the parameters within which the Foundation grantees currently operate are likely to change, especially with respect to the future role of the NUC and federal government financing of higher education.

# 3. Principal Findings

## 3.1 Grant Implementation

Two of the four grantees, the University of Ibadan and Bayero University Kano, have performed well, fully implementing both their initial planning and principal grants according to the agreed timetable and budget. Each has now embarked on a second principal grant, building on activities initiated in the first round, along with others mutually determined with Foundation staff.

To date, progress has been slower in the case of the other two grantees.

Implementation at ABU has been affected, in part because of the advent of a new Vice Chancellor and grant committee chair midway through the grant period. Also hampering implementation have been bureaucratic procedures impeding the approval of individual grant activities. The field visit provided an opportunity to review perceived problems and possible solutions informally with the Vice Chancellor. We conclude that whilst grant implementation has flagged, the current arrangement should work well, provided there is strong direction from the top, retention of the performing members of the committee, and improved performance on the part of the bursary department.

The situation at UPH, where grant implementation has been slow, is more complex. The outgoing Vice Chancellor's highly personalised style of leadership led to the creation of a separate unit, charged with both grant administration and resource mobilisation. The grant committee, formally responsible for implementation, appears to have met only intermittently. Some activities, in particular those relating to ICT, have been implemented, although its benefits will only be realised through additional investments, most notably completion of a comprehensive fibre optic backbone (LAN) linking facilities among three physically separate campuses. Other activities, including staff development, are well behind schedule. As in the case of ABU, the field visit provided an opportunity to review these and other issues with the incoming Vice Chancellor, who assumed office only very recently, and to discuss possible solutions. With his strong personal backing, and the appointment of competent committee members, implementation of the remaining grant-financed activities could be completed over the next 12 months. Approval of a follow-on grant, however, should be contingent upon adoption of a structure and processes similar to those at the other three grantees.

"Leadership" has clearly had a major bearing on grantee performance. At the UI, the oldest university in Nigeria, and BUK, a "second generation" federal university, the Vice

Chancellors used resources from the planning grant to develop a broadly shared vision of their institution's future. Both Vice Chancellors also consulted widely outside university walls. They then proceeded to select members of the committee carefully, drawing on individuals in whom they not only had confidence, but also considered highly competent, and fully committed to the university's future development.

Another factor in explaining performance has been the grantee's financial situation. The UI, with an established Endowment Fund, could complement investments financed by the grant with additional support. The Vice Chancellor of BUK inherited a small budget surplus, which was deployed, not only to complement grant funds and expedite implementation, but also to begin mobilising additional resources from the business committee and state governments. In the case of the UPH, the Foundation, through President Jonathan Fanton, has been highly successful in attracting funds from Total to underwrite a regional post-graduate Institute for Petroleum Studies, and from Shell to build and partially equip an IT centre. The Foundation agreed, at the behest of the former VC, although with considerable reluctance, to reallocate funds assigned to the ICT Centre toward a new "Senate Building", which in reality would be used to house the university's service units. Foundation support, it was believed, would draw in the additional capital investment needed to complete the building and equip it. At present, this follow-on support has yet to materialise.

The role played by strategic planning, financed through a pilot grant to all four universities, closely parallels actual outcomes. The quality of strategic planning, as well as the application of planning resources to design of the principal grant, appear to have been a function of leadership, institutional culture and, to a lesser extent, the university's financial position.

Our overall conclusion is that although implementation of two of the four grants does prompt some serious concerns, these can be rectified through informed leadership and specific measures identified during the assessment. These "lessons learned" in grant management, covering administrative structures, processes, and skills, are spelled in detail in the report and can be used to inform future support by the Foundation.

## 3.2 Accomplishments

Outcomes of the Foundation's grants are assessed in terms of whether they have allowed the four universities to *cope* successfully with major constraints; begin *deepening* learning and research, through updated curricula, better instruction, and more staff research; and start, through *transforming* actions, to position themselves to handle major changes in higher education globally as well as national policies aimed at restructuring the country's system of higher education.

## a) Coping Activities

Chronic under financing of higher education, aggravated by continued growth in student enrolment and prolonged economic stagnation has clearly left its mark on Nigerian universities, including the four grantees. Under such conditions, it is truly astounding that Nigerians persist in their academic pursuits and, in some instances, still conduct world-class research. Nonetheless, a possible concern, at the outset of the assessment, was that the scarce resources provided by the Foundation might be frittered away in attempts to redress these very immediate problems.

The proportion of the total grant used for "coping" activities has been highest at UPH and ABU, lower at BUK, and lowest at the UI. In the latter two cases, the universities did have access to other sources of finance, and were therefore in a better position to deploy Foundation funds in other ways.

A substantial portion of the Foundation's grant to UPH and ABU has been used to refurbish and reequip science laboratories in order to improve undergraduate teaching. These activities have been largely completed at ABU and are clearly having a positive impact on undergraduate learning in the sciences. A smaller share of the grant to BUK has been used for similar types of coping activities. All four campuses have benefited substantially from the injection of textbooks, journals and learning materials, in hard and electronic formats, made possible through other Foundation grants. Related Foundation grants have helped strengthen administrative capacities at the UI and especially BUK.

### 1: Investing in Laboratory Facilities

At ABU a group of final year undergraduates are clustered in groups around newly delivered microscopes in a biochemistry laboratory, which has been refurbished and reequipped with Foundation grant funds. A young woman, intent on pursuing a career in virology, remarks that learning over the past year has been totally different to what she experienced during her first three years. Previously lab work was "cruel" with students circled around a lecturer conducting experiments using outmoded and often malfunctioning equipment. Those students at the back had to reply on word of mouth to jot down notes. There were no opportunities to acquire any hands-on experience. This situation is no longer confronting her or her more junior counterparts. Sound planning by a committed staff is ensuring that equipment in refurbished laboratories is accessible to all undergraduates in the University's Science Faculty.

## b) Deepening Activities

"Deepening" activities refer to those grant components aimed at improving the quality of learning and research, including the introduction of new areas of study. They feature prominently in all four grants, accounting for between 25 to 60 percent of the total. All four universities opted for a similar "core package", featuring investment in external (internet) and on campus (intranet) connectivity; electronic digitisation of library accessions; and staff development.

Both BUK and the UI have used Foundation funds to invest heavily in a fibre optic backbone, along with wireless connectivity to more remote locations. They have also purchased equipment, including V-SATS, greatly expanding access to the Internet. These efforts have been supplemented by other Foundation financed support. The follow-on grants provide for further investment along similar lines. At ABU, electronic digitisation of library holdings has proceeded well, in large measure due to the efforts of a highly committed Chief Librarian. A V-SAT has been installed. Unfortunately funds in the current grant will only suffice to finish part of the fibre optic backbone. Until it is fully completed, the investment will comprise a "half finished" bridge in terms of impact. At UPH, library digitisation has stalled, but staff, who have been trained through attachments in South Africa, could commence this work quickly following adoption of proposed changes in grant implementation. With respect to more general application of ICT, the current grant provides for a partial LAN only. As in the case of ABU, its completion should be a major objective of any follow-on grant to ensure maximum benefit from other investments in equipment, connectivity and training.

#### 2. Information and Communication Technology (ICT)

It is difficult to overstate the seminal impact of Foundation financed investments in ICT, which feature in all four grants. Other Nigerian universities are undoubtedly observing their far-reaching effects. *As long as there is light* viz. electricity, states a sign at the entrance to the ABU library, *the library can be a light to the* University. No longer is access to knowledge bounded by physical location. Whilst learning is being steadily strengthened by an increased supply of books and journals in "hard copy", staff and student horizons have expanded enormously through access to information and knowledge in electronic format, notably CD-ROMS and compiled documentation such as *e*-granary, electronic journals and materials downloaded from the Internet. Conversely, historical Nigerian records are becoming increasingly available to international as well as local scholars in electronic format. The challenges of fully tapping the promise of new technologies, software and electronic connectivity include further investment in Local Area Networks (LAN); raising "computer density" from its currently very low level; and adopting new modes of instruction and research.

Although all four grantees have used Foundation funds to invest in staff development, their approaches and the outcomes have been quite different. Most successful, in terms of implementation and likely benefit, have been UI and BUK. The UI applied a carefully designed selection procedure. Approximately 60 staff will have benefited from this program. BUK has utilised Foundation funds, also supplemented with additional financing, principally to permit around 20 junior staff to obtain advanced degrees in their respective fields. As in the case of the UI, all of the trainees have returned home. In both institutions, grant funds have been used effectively to develop junior staff, in anticipation of the need to replace retiring academics over the coming decade.

The objectives of investing in staff development were less sharply defined at ABU, as was the selection process. The activity has also experienced delays in implementation,

with the first cohort of awardees yet to return. Also problematical has been the experience at UPH. The Vice Chancellor and liaison officer decided to use links with South African universities for staff attachments. These have proven difficult to arrange, resulting in repeated delays and considerable frustration for the awardees.

Our principal conclusion is that the "deepening" impact of funds used for staff development is a function of clearly defined objectives. In this regard, both ABU and UPH can profit from the positive outcomes at the UI and BUK by focusing more directly on advanced education for junior staff; adjusting selection procedures accordingly; and drawing on their linkages to expedite the placement of trainees.

# c) Transforming Activities

"Transforming" activities, put simply, are those aimed at doing things differently. In terms of the four grantees, they are characterised by creative use of Foundation funds, not only to strengthen learning and research, but also to position the institution to cope with portending changes in higher education, both globally and nationally.

Our assessment did reveal some exciting transforming activities in at least five areas, with potentially significant benefits, not only for the grantees, but other Nigerian universities.

## 3. Entrepreneurship in Higher Education

One of many children from a very poor family, the current Head of the University of Ibadan's Department of Economics and Business Studies possesses an innate ability in mathematics that has allowed him to qualify professionally first as a primary and then as a secondary teacher. Later, given the opportunity, he excelled in his undergraduate university program. For his doctoral degree, he switched from mathematics to economics, where he has become one of Nigeria's leading researchers. Possibly because of his own very humble origins, he has used funding from the Foundation grant to explore "entrepreneurship" at leading business schools in Europe and the USA. One immediate outcome has been a series of university wide seminars on how best to equip graduating students for self-employment, because of the limited job openings offered by Nigeria's formal economy. Another is the decision by his Department and Faculty to focus on the needs of small and medium scale enterprise, a thrust likely to be reflected in plans to set up a business school. These efforts can draw on new established linkages with European based initiatives, as well as others in Africa, e.g. with the Graduate School of Business at the University of Cape Town, which has been addressing the particular needs of black South African owned enterprise.

One is the mobilisation of funds from non-government sources. A separate Foundation grant has led to the establishment of the NHEF, to mobilise funds from overseas alumni. Establishment of "Development" or "Advancement" Offices in all four universities has supplemented this shared effort. A second is attempts to forge partnerships with the private sector. A third is pilot efforts to provide credit for individual purchases of

computer hardware and software. BUK has used Foundation funds to set up a revolving loan scheme. A different, and potentially more promising approach has been pioneered by the UI, which has established a supplier credit scheme with a large, local supplier of computers.

The grants have also prompted new practices in learning, our fourth area of perceived innovation.

The UI has used part of its grant, in conjunction with a donation from the Endowment Fund, to relaunch its Distance Learning Centre. An unofficial aim is to expand it into an open university. Our principal concern is that its enthusiastic proponents may have seriously underestimated the requirements, in terms of financing and specialised skills. Another educational innovation was identified in the field of business studies. Virtually all seventy Nigerian universities have, or will shortly introduce management programs and schools. The quality of most will be poor. A signal exception is the Lagos Business School, a private institution, whose investment and operating income comes entirely from non-public sources and enjoys close ties with leading international and national enterprises in Nigeria. Informed by this effort, development of a new business school at the UI is focusing on a very different market, especially important to Nigeria's development, namely small and medium sized enterprise.

### 4. Financial Innovation in Higher Education

A major challenge confronting higher education in Nigeria as elsewhere in Africa is very limited *access to finance*, as opposed to the lack of funds, admittedly also a real problem. Few countries or institutions in the region operate an efficient loan scheme allowing students to borrow in order to finance their education. Likewise they – and their lecturers cannot obtain credit to purchase computers and – essential in the case of Nigeria – a UPS or small generator. Arising from a private company/University of Ibadan partnership for university purchase and maintenance of computers is a novel supplier credit scheme for staff. As in the case of BUK, which has used a Foundation grant to establish a revolving loan scheme, its impact extends well beyond the immediate purchaser to increased access by others within the borrower's family and the emergence of a secondary market where students and others in the local community can purchase second hand equipment. If successful, this scheme will likely be emulated in Nigeria and elsewhere in Africa, accelerating growth in computer literacy and utilisation of ICT. Indeed it could prove one of the more enduring legacies of Foundation support.

### 4. Looking Ahead

## 4.1 Institutionally Focused Recommendations

A principal longer-term goal should be positioning of the grantees so that they can respond positively to changes in future in higher education policy. A progressively smaller share of future grants should be devoted to "coping" activities. Conversely more should be allocated toward "deepening" and "transforming" ones. Falling under the deepening category is expanded utilisation of electronic connectivity for communication, administration, student services, forward planning, teaching and research. Relative to what existed prior to the Foundation's support, advances in this direction have been impressive. Compared to what is occurring in other African countries, e.g. in Ghana and Tanzania, Nigerian universities, including the four grantees, are still at least one generation behind (in ICT terms). Given the pace of innovation, this gap could widen further, unless there is follow-on investment in human as well as physical infrastructure. In addition, we recommend that complementary support, in the form of journal and book donations, electronic journal subscriptions, technical assistance for library development, and access to downloaded materials (e-granary) should be sustained.

Diffusion of experiential knowledge, viz. "lessons learned", has already commenced through a national ICT Forum, jointly sponsored with the Carnegie Corporation<sup>1</sup>. Consideration should be given to strengthening its activities, e.g. by financing short-term applied courses, and giving observer status to progressively more Nigerian universities.

Federal universities must become increasingly less dependent public sector support. The Foundation, in this regard, has been unusually perceptive in its support for development or advancement offices, establishment of the NHEF, and efforts to enlist multinational support for higher education at UPH. Nigerian universities will need to engage more professionally in forward financial planning, to deal with projected expenditure as well as revenues from different sources. The Foundation has greatly raised awareness of the need for financial planning of both revenue and expenditure. A logical next step, which could encompass the other two grantees of the Carnegie Corporation, is to assist them in setting up a Financial Planning Unit, headed by a suitably qualified Chief Financial Officer.

# 4.2 Country Specific Recommendations

A major longer-term aim of Foundation support is to strengthen higher education in Nigeria. Consequently, it should consider measures that can diffuse knowledge of successful activities to other universities and in the process, also help inform higher education policy. We have identified three possible interventions.

The first is support for the Committee of Vice Chancellors. Suitably strengthened, the CVC could comprise an important avenue for disseminating information concerning improved practices to both universities and policy makers.

<sup>&</sup>lt;sup>1</sup> The Carnegie Corporation is providing institutional strengthening grants to Obafemi Owolowo University and the University of Jos, as well as ABU. Both foundations have worked closely to tap synergy among all six institutions, through exchanges of information and the establishment of an ICT Forum.

Our second possible area of intervention relates to the future role of the NUC. Regardless of how it is defined in future, Nigerian higher education would clearly benefit from an enlightened, highly professional regulator. The Foundation could, as in the case of financial planning, anticipate this need, by exposing senior NUC staff, in conjunction with senior university managers, to international trends and practices, with particular reference to the accreditation of institutions and programs.

Whilst the CVC offers one important avenue for facilitating policy dialogue, a broader forum, embodying a wider spectrum of stakeholders, including the private sector, parents, students, non-governmental organisations, international donors, and national legislators, state as well as federal, could play a major role in setting out aims for the country's higher education system and conducting informed deliberation of policy choices. Gatherings could be organised around particular themes, featuring invited guest speakers and the presentation of the results of commissioned research.

## 4.3 Region Wide Recommendations

The principal vehicle for enhancing impact in an African context is the Partnership for Higher Education in Africa.<sup>2</sup>. Amongst its recent activities that have proven very useful to the Nigerian grantees have been the bandwidth purchase agreement via the AVU (greatly lowering its cost); growing collaboration among librarians, drawing on continent wide activities of the Mortenson Center; coordinated efforts to supply learning materials in hard and electronic format; and closer ties with other universities outside Nigeria. In future, the impact of the Foundation's institutional grants could be enhanced by some of the signature areas currently being explored as possible joint initiatives for the Partnership's next five-year phase. These include continuing support for an existing area, namely cheaper bandwidth, and accelerated applications of ICT innovations to improve learning. Another possible intervention is an annual "frontiers of knowledge forum" that would expose university leaders to horizon trends in higher education with a view to identifying their impact on universities. Two more, also under consideration for the next phase, are support for higher education, initially in terms of research and subsequently as a field of graduate study, and secondly, for collaborative activities, viz. networks that can strengthen institutionally based teaching and research. Continuing Foundation membership would ensure that Nigerian higher education benefits from future Partnership supported innovations in knowledge creation and formation, e.g. the introduction of new areas of study; in new modes of instruction; and in new ways of financing higher education from public and private sources.

## 4.4 Planning for a Foundation Legacy

Looking beyond the next five years poses the question of a strategy for sustaining the momentum of a decade long program of support for Nigerian higher education, directed principally but not entirely toward strengthening four universities. We perceive a range of possible choices corresponding to our three progressively wider circles of recommendations.

<sup>&</sup>lt;sup>2</sup> In addition to the MacArthur Foundation, the other members are the Carnegie Corporation, the Ford Foundation, the Hewlett Foundation, the Mellon Foundation and the Rockefeller Foundation.

With respect to the innermost, namely the institutional grantees, the Foundation may be able to identify some attractive "deepening" and "transforming" activities warranting further development, but across a larger number of Nigerian universities. Amongst these would likely feature further applications of ICT, not only to enhance learning and promote research, but also to improve university services and strengthen institutional management. Another area would be financial planning, especially in the wake of greater institutional autonomy. Based on piloting efforts with the four grantees, the Foundation could also consider interventions mobilising resources from a broader range of public and private sources; promoting greater efficiency in their use; and ensuring financial robustness of the university in question.

Likewise, activities, aimed at informing higher education policy in Nigeria might warrant prolonged support. In this regard, modalities for informing public policy and meaningfully engaging stakeholders in its formulation could build on earlier interventions. Of particular note in this regard might be the proposed national forum on higher education policy. Also important, in terms of promoting quality and relevance, as well as differentiation among a growing number of universities will be a strengthened and refocused NUC.

Finally, there will be the continuing need for meaningful engagement by Nigerians in developments reshaping higher education elsewhere in Africa. In this regard, continued involvement in the Partnership by the Foundation could prove especially important in supporting innovations in creating and sharing of new knowledge; introducing new fields of study and forms of learning; and adopting new modes of financing and financial planning, all of which will serve to reshape and strengthen Nigeria's system of higher education in future.