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Strengthening Uganda's Policy Environment for Investing in University Development

Thomas Owen Eisemon, John Sheehan, George Eyoku, Franklin Van Buer, Delane Welsch, Louisa Masutti, Nat Colletta, and Lee Roberts

In recent years, Makerere University has experienced increasing student and staff unrest. The academic community is demoralized by tight government controls on spending — especially by inaction on staff salary demands. Donor support will not be forthcoming without broad policy reform in higher education, rather than piecemeal reform.

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This paper — a product of the Education and Employment Division, Population and Human Resources Department — is part of the background preparation for the Bank's Higher Education Policy Paper. Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington DC 20433. Please contact Cynthia Cristobal, room S6-214, extension 33640 (January 1993, 70 pages).

Eisemon, Sheehan, and colleagues examine the policy environment for investment in university development in Uganda, with special attention to the needs of Makerere University. They present data on the structure and financing of higher education, which gets a high priority in government educational spending.

A second public university and new private universities have been established since 1986, but Makerere accounts for most university enrollment and government spending on higher education and it trains most of the country's high-level professional and technical manpower. Its revitalization after many years of neglect is central to government and donor plans for investment in human resource development.

The authors emphasize how continuing austerity affects staff retention and staff engagement in academic work, as well as the quality of programs Makerere offers. They present a strategy for university development that involves establishing policy structures to:

- Guide and coordinate investments in higher education as a whole.
- Facilitate the expansion of higher education and the development of diploma-granting institutions to accommodate increasing social demand.

• Promote cost-saving and revenue-generating activities in the public universities — which would require giving them more autonomy in matters affecting their cost structure and budgeting.

Among specific actions they recommend:

- Making better use of public university assets by developing night courses, part-time degree and non-degree programs, and contract training and other income-generating activities.
- Investigating possibilities for better use of university farms and other properties.
- Making more using of existing capacity in public institutions and increasing the capacity of the newly established private universities.
- Strengthening secondary education in science subjects and encouraging more women to study science and technology.
- Coordinating future donor investments so they address the broad needs of Makerere and other universities.
- Raising incomes of academic and nonacademic university staff members.

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Strengthening Uganda's Policy Environment for Investment in University Development

Thomas Owen Eisemon, John Sheehan, George Eyoku, Franklin Van Buer, Delane Welsch, Louisa Masutti, Nat Colletta and Lee Roberts

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INTRODUCTION

- 1. Despite the scope and seriousness of the many problems confronting Ugandan universities, three circumstances provide grounds for optimism. First, Uganda's premier higher educational institution, Makerere University, possesses a reputation for offering high quality undergraduate instruction which it has managed to maintain through many years of political and economic turmoil. Second, university enrollments are still manageable despite the recent founding of a second public university and an embryonic network of private universities. Third, a great deal of attention has been given to reform of university education by Ugandan policy makers and the academic community during the past five years. Some radical and innovative measures to revitalize the universities have been debated and a few important steps have been taken such as the abolition of some student allowances.
- 2. Understandably, the short-term needs of the universities, particularly Makerere University, have preoccupied policy makers and donors. Makerere was seriously affected by the degradation suffered by Uganda and its educational system during the Amin and Obote periods. Many staff left the University. A large number of the University's classroom and office buildings, student and staff residences, its library and other facilities were allowed to fall into a state of disrepair or were destroyed. Instruction continued under some of the most adverse political and economic circumstances to be found anywhere, the legacies of which are still very much in evidence.
- 3. Many new degree and diploma granting institutions have been established since 1970 when Makerere, the country's oldest higher educational institution, became a university. These institutions have been created to absorb the increasing demand for post-secondary education and supply trained teachers, technologists, extension agents and other graduates to the public sector. The most recent innovation is the establishment of private universities. This is a radical departure from the previous tradition of state control and recognition of the fact that it is no longer possible for the Government to continue to finance all expansion of higher education as well as provide employment to graduates.
- 4. Nevertheless, diversification has occurred in the absence of any strategy for development of the higher education sector. The recent proliferation of public and private

universities, occurring in the context of continuing austerity, presents a strong rationale for urgent reform of the higher education sector as a whole. What that might imply is examined in this report.

5. The higher education sector is described in the first chapter which also considers Government support for higher and university education, specifically. The second focuses on Makerere University, its governance, management, unit costs, internal efficiency and the quality of programs. Lack of resources to support the public universities, the poor employment opportunities of graduates, equity concerns, relations between the universities and Government and other matters affecting higher education policy reform are discussed in the third chapter. A strategy for revitalizing university education is presented in the fourth chapter where reforms are proposed to promote coordinated development of public and private higher educational institutions, and generate new resources to support them. The summary identifies immediate and medium term measures necessary for sustainable national and donor investment in university rehabilitation.

I. STRUCTURE AND FINANCING OF UNIVERSITY EDUCATION

A. Structure of the Higher Education Sector

- 6. The higher education sector in Uganda is stratified into two tiers, degree granting public and private universities and various kinds of management and technical institutions that award diplomas and certificates. In 1991, there were two public universities, Makerere University and Mbarara University of Science and Technology, the Institute of Teacher Education, Kyambogo, a public university college associated with Makerere University offering both degree and post-secondary diploma level course-work, as well as one private university, the Islamic University in Uganda at Mbale. A second private Catholic university, Uganda Martyrs University at Nkozi, will begin instruction in 1992. A university serving the Protestant community is being planned. In addition, the Government has recently transformed the Institute of Public Administration into the autonomous Ugandan Management Institute, which plans to offer its own degree programs.
- 7. The higher education system also comprises a large number of public tertiary institutions; they include the Uganda Polytechnic, Kyambogo, and various technical colleges (4), the National College of Business Studies, Nakawa, and other colleges of commerce (5), and the national teachers colleges (10). Besides these institutions, there are nine Government departmental training institutions such as the three agricultural colleges and the Forestry College, Nyabyeya, which admit secondary school graduates, and others like the Ugandan Management Institute and Uganda Law Development Center that offer postgraduate equivalent training to university graduates. There are, as well, six private seminaries and business schools including the Nkumba College of Commerce and Advanced Studies, Entebbe, providing post-secondary vocational training.
- 8. Despite the fact that students attending most post-secondary institutions must satisfy minimum university entrance requirements, little mobility is possible between the different tertiary institutions and their various programs. University courses are usually not articulated with those of the other tertiary institutions with the following exceptions: the Ugandan Management Institute and the Law Development Center that award diplomas of Makerere University; and the Institute of Teacher Education, Kyambogo which admits students to a B.Ed. program supervised by Makerere.

- 9. There is little collaboration between different institutions even among those offering training at the same level and in the same fields of study. For example, the Institute of Teacher Education's degree program has entirely different requirements and configurations of course-work than the undergraduate program at Makerere. Although its campus is adjacent to the Uganda Polytechnic and the Institute offers diploma level training in business and technical education, there is no connection to the programs offered by that Agricultural Development's institution either. Manpower for The Uganda College/University Articulation Task Force has issued a report (1990) recommending that Makerere University's Faculty of Agriculture and Forestry admit at least five graduates of the Uganda Cooperative College at Kigumba and the Bukalasa Agricultural College into its undergraduate program, and that some practical training of students in degree programs be carried out at the colleges as part of national strategy for improving the training of agricultural scientists and extension agents. Those admitted to Makerere will not receive any credit for their studies at Bukalasa or Kigumba, however. Thus, the length of their degree programs will not be reduced.
- 10. The higher education sector is an articulated system in the limited sense that most institutions admit secondary school graduates who have obtained passes in two principal subjects in the University Advanced Certificate of Education Examination, A levels. The system is rigidly stratified. The best students are admitted to Makerere or Mbarara University of Science and Technology. Other students are placed in one of the many public tertiary institutions or may go to a private institution, usually to acquire professional training. In 1990/91, 5,997 students obtained two principle passes at A levels. There were 6,351 students admitted to public colleges and universities, some being students who qualified the previous year but declined the place offered to them. In other words, any student who qualifies will be offered a place in some post-secondary institution, depending on the students' performance and the different requirements of the various institutions and their faculties.
- 11. Makerere, including the Institute of Teacher Education, Kyambogo, the Institute of Public Administration and the Law Development Center, admitted slightly more than two thousand students (2,102) in 1990/91, or about one third (34%) of the students eligible for public post-secondary education. In the previous year, Makerere admitted a higher proportion (37%) of the eligible students but 431 fewer students. A description of the enrollment, staffing and programs of the public and private universities follows.

Makerere University

- 12. Makerere and its affiliated institutions account for almost all university enrollment (93% in 1990/91). The University's present enrollment is 5,886 at the undergraduate and 678 postgraduate level (Table 1.1). About 5 per cent of the annual student intake consists of mature students. These are students who are at least twenty five years old, have left secondary school for five years and sit for entrance examinations set by the various faculties of the University.
- 13. The overall ratio of students to academic staff is about 8:1 which compares favorably to many African universities, and reflects the mix of professional programs. The University has significant undergraduate enrollments in medicine, veterinary medicine and related professional fields that are very selective at entry and have low student/staff ratios. For example, student/staff ratios in medicine and veterinary medicine are 4:1 and 5:1, respectively, while in arts and social science the ratio is much higher, 20:1 in some heavily subscribed programs like economics. Nearly half (46%) of the students are enrolled in professional programs that traditionally lead to public sector employment. Enrollment in postgraduate degree programs is very small; 6 per cent of university students, more than a third (35%) of whom are doing advanced degrees in education.
- 14. Undergraduate degree programs are of varying length; three, four or five years, depending on the field of study. Medicine, dentistry, and veterinary medicine require five years. Engineering as well as agriculture and forestry have a four year program while most other programs can be completed in three years. The structure of undergraduate courses generally follows the 3+2+2 or 3+1+1 pattern, the latter being roughly equivalent to an honors course with specialization in one subject for the final two years of study. Students are examined at the end of each year of study as well as at the end of the course of study. External examiners review the papers administered to students and monitor correction of the scripts. Some academic units like the Faculty of Agriculture and Forestry are trying to reorganize their programs along the American credit model with a mixture of compulsory and elective coursework, and more emphasis on continuous assessment. Postgraduate programs like those in education and the social sciences tend to have substantial course requirements notwithstanding early specialization at the undergraduate level.

Table 1.1
Undergraduate and Postgraduate Enrollment at Makerere, 1990/91

Level of Study	No. of Registered Students	% Total
Undergraduate		
Diploma and Certificate (Medicine and Library Science)	175	3
Degree:		
Medicine	383	6
Vet. Medicine	187	3
Dentistry	50	1
Pharmacy	28	•
Agriculture		
and Forestry	427	6
Engineering, Surveying		
and Architecture	218	3
Education	816	12
Law	169	3
Commerce	269	4
Library Science	69	1
Science (including statistics)	1,057	16
Arts and Social Science	2,038	31
<u>Postgraduate</u>		
Diploma	316	5
(Public Administration, Business	J. - -	-
Administration, Human Resources,		
Statistics and Applied		
Economics and Education)		
Degree:		
Medicine	68	1
Veterinary Medicine	4	•
Education	127	2
Science	81	2 1
Arts and Social Science	82	1
Total	6,564	100%

Source: Admissions Records Office, Makerere University, November 1991

Institute of Teacher Education, Kyambogo

- 15. The Institute was chartered in 1989 as a "center for training, research, curriculum development and innovation in teacher education." It offers three diploma programs---a diploma in education, a diploma in teacher education and a diploma in special education---as well as an undergraduate degree course and many seminars and workshops for educational practitioners.
- 16. The Diploma in Education is a two to three year program preparing secondary school teachers in subjects like business education, home economics, technical education and special education. The Diploma in Teacher Education is a two year program for experienced teachers who are trained for positions as tutors in the primary teacher training colleges. The Diploma in Special Education, also a two year program, is oriented to training teachers of students with physical or learning disabilities.
- 17. The B.Ed. degree is intended for experienced and qualified teachers who seek advanced training for senior administrative and teaching positions. The Institute's Diploma in Education is normally required for entry. The program is of two years duration and leads to a degree awarded by Makerere. About a thousand students (945) were registered for the diploma and B.Ed. programs offered by the Institute in 1991/92, 85 per cent of whom were living in campus residences. The Institute has 180 full and part-time staff.
- 18. Students must satisfy the University's entry requirements and the degree program is approved by the School of Education's Board of Studies under a special 1989 statute that made the Institute of Teacher Education, Kyambogo, a "connected" college of Makerere. This arrangement, a subject of continuing controversy, confers more autonomy than constituent college status which is provided for in the Makerere University Act of 1970. Like many other recent initiatives, steps to establish the Institute of Teacher Education, Kyambogo, were taken before its legal status, relationship to Makerere or role in the higher education subsector were precisely defined.
- 19. The Institute's future plans include offering a B.Ed. in nursing education as well as postgraduate degree courses in education at both the Master's and doctoral levels. External funding is being sought for expansion of the Institute's programs. These proposals

raise important concerns about its mandate, capacity and relationship to Makerere that will have to be addressed by Government and donors.

Mbarara University of Science and Technology

- Museveni in 1989 in the central western part of the country, is the country's second public university. The University occupies the premises of a former school for midwifery next to a district hospital in Mbarara. It has 21 senior permanent or consulting staff, a majority of whom are expatriates. In 1990/91, the University offered only one high cost undergraduate program---medicine---to 142 students. The undergraduate course is of six years duration, versus five years at Makerere, the final year being an internship. The program at Mbarara emphasizes the training of physicians who have a knowledge of "the economic, nutritional and domestic factors that endanger health." The University is attempting to create a distinct and unique mission based on commitment to improving health in rural areas. It plans to begin postgraduate programs in public health, a degree program for nurses, diploma programs for paramedics and to create three new faculties offering degree courses in applied sciences and technology, science education and development studies.
- 21. The University has established an Institute of Tropical Forest Management and Conservation in the Bwindi Impenetrable Forest "for the purpose of education and research in tropical forest biology and conservation." The Institute's activities will be closely linked to those of the new faculties the University is hoping to develop.
- 22. Although there would seem to be a national need for graduates to build up the health and educational infrastructure in rural areas as well as advantages to training such professionals outside Kampala, financing expansion of Mbarara University of Science and Technology is problematic. The University receives some support from the governments of Cuba and India for expatriate staff, from Australia for office equipment and is requesting funds from Unesco to prepare a master plan for construction of new instructional and residential facilities at Kihumuro Hill. However, future development of the University will require significant infusion of scarce public resources.

The Islamic University in Uganda

- 23. Located at Mbale in north central Uganda, the Islamic University in Uganda started operating in 1988. Its basic aim is to serve the educationally poorly served Muslim communities in English speaking African countries. The University received land, some staff members and buildings from the Government to begin instruction. It graduated the first cohort of about 70 students in 1991, including 19 women. They all received Bachelor of Arts (Education) degrees.
- 24. The University is one of two Islamic universities sponsored by the Organization of the Islamic Conference in Africa. The other, located in Niger, serves francophone countries. The University currently has 369 students enrolled in programs administered by three faculties; Education, Islamic Studies and Arabic Language as well as Business Studies and Public Administration, the largest being the Faculty of Education. A postgraduate diploma in Education course has been introduced this year (1991/1992). Approximately 15 per cent of its students are from other countries in the region. The University admits a small number of non-Muslim students. All students are in residence and receive scholarships to cover the costs of tuition, accommodation and boarding.
- 25. Students must meet the normal public university entrance requirements in Uganda. The University can not admit all the applicants who meet the minimum requirements. For example, about 10 per cent of the students who applied for admission in 1989/90 were awarded places. The University employs some teaching staff of Makerere University on a part time basis. Full time staff members are drawn from Uganda and overseas. There are ten full time Ugandan staff and about the same number of international staff. External examiners from within and outside Uganda are used to monitor the quality of programs. The University has made a strong start. Most graduates of the Education Program have been employed by the Uganda Government.

Table 1.2
Public and Private University Enrollments, 1990/91

University	Total Enrollment	%
Makerere	6,694	93
Mbarara	142	2
Islamic University	346	5
Total	7,182	100%

B. Public Expenditure for University and Higher Education

26. The proportion of education expenditures allocated for public higher education has increased somewhat in recent years though higher education's share of GDP has remained constant. Table 1.3 summarizes the position of higher education in the context of the overall recurrent education budget and other macroeconomic indicators. The interpretation of data on public expenditure in Uganda is problematic because of high inflation, changes in budgetary classifications and exchange rates which did not until 1990 reflect purchasing power.

Table 1.3

Total Government Recurrent Education Expenditure
(USh millions)

	1987-88	1988-89	1989-90	1991-2e
1. Primary	1,473	3,710	3,839	1,411
2. Secondary	1,561	2,112	2,801	2,264
3. Higher	788	1,527	2,774	8,033
4.(of which Makerere)	650	1,349	2,354	6,286
5. All other	1,181	2,766	6,827	23,796
6. TOTAL RECURRENT	5,003	10,115	16,241	35,505
7. % Higher	15.8	15.1	17.0	22.6
8. Recurrent/GDP %	1.5	1.4	1.4	1.5

Source: Government of Uganda, Budgetary Accounts.

Notes: e: 1991-2 figures are estimates.

27. Table 1.4 shows capital expenditure for the same period. The Ugandan budgetary sources for this table refer to Government expenditures only, and understates the totals, because of the large external donor financed element. Capital expenditure increased more rapidly than recurrent expenditure. But the share going to Makerere, which accounts for most such expenditure, has also risen.

Table 1.4
Total Government Capital Education Expenditure.
(USh millions)

(ODI minoro)				
	1987-88	1988-89	1989-90	1991-2e
1. Makerere	49	137	327	1,687
2. All other.	172	475	1,329	1,733
3. TOTAL	221	612	1,656	3,420
4. Makerere %	22.2	22.4	19.7	49.3

Source: as for Table 1.2

Note: c: 1991-92 figures are estimates

- 28. The Ministry of Planning and Economic Development has collected information on all development projects at Makerere which involve a Ugandan Government contribution 1/2. The total domestic contribution is 1,687 million USh. (as in Table 1.4), and the external donor contribution is 9,093 million USh. At the November 1991 official exchange rates, this is equivalent to a total program of \$16.09 million, of which 84 per cent or \$12.68 million is from external donors. While this is formally presented as estimated development expenditure for FY 1991-92, disbursements are likely to be less than the amounts mentioned, which are very large compared to the recurrent costs of the institution.
- 29. Government-financed resources available for the entire educational system are, at about 1.5 per cent of GDP, a much lower proportion of public expenditures than is general in Sub-Saharan Africa. It is now widely recognized that some proportion of educational costs must be met by non-state sources if education of an acceptable quality is to be provided in sufficient quantity. The fiscal capacity of most African governments dictates this, and nowhere is it more true than in Uganda.
- 30. Ideally, the proportion of costs recovered should increase with the level of education. In Uganda, the position has been reversed in that at primary level cost recovery may be as much as 90 per cent, at secondary up to 70 per cent, and at higher education significantly less, between 10 per cent and 50 per cent.2/

^{1/} Program University: Estimates of Revenue and Expenditure (Recurrent and Capital) 1991-92, Volume I (New Votes).

Government of Uganda, 1991.

^{2/} The reason for such a wide estimated range of cost recovery is because while in money terms very few costs are covered, in real, opportunity cost terms, cost recovery takes place on a large scale via staff earning a living from other jobs without which higher education would not be possible within present budget constraints. This is a form of cost recovery which reduces educational output.

II. MAKERERE UNIVERSITY

- 31. Makerere University which began instruction as a technical college after the First World War, is one of Sub-Saharan Africa's oldest, best known universities. It occupies the pre-eminent place in the higher education sector in Uganda. Makerere has a larger student enrollment and receives more funding than any other higher educational institution, trains most of the country's agricultural scientists, physicians, economists, secondary school teachers and other professionals, and is an important source of policy advice for Government and donors. For all of these reasons, its revitalization after many years of austerity is crucial to the success of any national strategy for human resource development in the country.
- 32. Like many universities in Africa, Makerere is experiencing serious difficulties. The University's residence halls are overcrowded. Many instructional facilities are still in a dilapidated condition. The University library has few books and university laboratories little equipment and insufficient supplies. The low salaries of academic, administrative and support staff encourage part-time employment. In recent years, instruction has been interrupted by student unrest prompted by reductions in the students' allowances. In late 1991, lecturers were agitating for better salaries, precipitating a crisis to direct attention of Government to the needs of the University.

A. Background

33. From 1924, the technical training school at Makerere was slowly transformed into a central training college for East Africa offering besides teacher training, studies in medicine, agriculture, veterinary science and surveying. The recommendations of the De La Warr Commission report of 1937 provided the foundation for the eventual evolution of degree level studies in these fields as well as for development of a broader liberal program of studies including instruction in indigenous languages, law, social anthropology and economics. The Asquith report (1945) advocated a residential college model in the Oxbridge tradition and proposed the mechanism which enabled Makerere to take the most important step toward becoming a university, special relationship with the University of London. This relationship continued until Makerere became a college of the University of East Africa in 1963, training physicians, veterinary scientists and secondary school teachers

for the entire region. The other university colleges in Kenya and Tanzania soon developed professional programs to reduce reliance on Makerere which became an autonomous university in 1970 at the breakup of the University of East Africa.

- 34. Two legacies of its evolution are important for understanding the contemporary plight of the University. First, Makerere has grown around some relatively high cost/low output professional programs, especially medicine and veterinary medicine, which it has augmented with other high cost programs in dentistry and pharmacy in recent years.
- 35. Second, like many other African universities that began as "Asquith colleges," Makerere is a costly residential institution whose enrollment has outgrown the accommodation available. A comparison of the capacity of the University residence halls, based on 1982 occupancy, with the number of students in residence in 1991 revealed that 29 per cent more students are being accommodated in the same facilities that were reportedly overcrowded nearly a decade earlier (Table 2.1). This increases maintenance costs, results in rapid deterioration of the residence halls and contributes to student unrest. Accommodating and boarding students accounts for about 30 per cent of Makerere's operating budget. Most post-secondary institutions, public and private, in Uganda provide accommodation and boarding to students as this has come to be considered an essential part of higher education.

Table 2.1
Capacity and Occupancy of Halls of Residence at Makerere, 1990/91

Tall	Capacity*	Occupancy
Africa	266	476
CCE-Complex	362	466
Lumumba	732	7 81
Livingstone	419	547
Mary Stuart	368	527
Mitchell	465	588
Nkrumah	415	522
Northcote	431	526
University	374	524
Total	3,832	4,958

Source: Admission Records Office, Makerere University, November 1991

^{*} Task Force on University Admissions, 1982

B. Mechanisms of Accountability, Planning and Budgeting

Governance and Planning

- 36. The Makerere University Act of 1970 and amendments of 1975 and 1988 circumscribed much of the autonomy which Makerere previously enjoyed as a constituent college of the University of East Africa, and subordinated the new university to the state. According to this legislation, the Chancellor of Makerere is the Head of State. The Head of State appoints the Vice Chancellor, Deputy Vice-Chancellor, and all members of the University's governing Council. He is also the Visitor of the University which empowers him to appoint commissions when circumstances warrant an outside investigation of the operation of the University as in 1990 in response to student unrest.
- 37. The Council is comprised of thirty-eight members, dominated by Government officials and Government appointees. The Makerere University Act specifies that the Ministries of Education, Finance, and Economic Planning and Development be represented on the Council. An additional nine members are appointed by the Government. Some members are elected by the faculty and other interest groups in the University. For example, three members of the University are elected by the Senate, two members elected by the academic staff and the senior administrative staff, and two members elected by the students' association.
- 38. The Council develops university policy and approves all budgetary requests and expenditures of the University. The Vice Chancellor and other university officers report to the Council. The functions and responsibilities of the Council are carried out through seven committees, the most important of which is the Finance Committee.
- 39. The University Senate is the principal academic policy and advisory body within the University and its membership is composed of all chief administrators, Faculty deans, department heads, the librarian, two members of the academic staff, one member from the wardens of the halls of residence, and five members appointed by the Minister of Education. The Vice Chancellor is the Chairman of the Senate while the Registrar is the Secretary, but is a nonvoting member. The Senate approves all program revisions and new academic program initiatives as well as sanctions the awarding of academic degrees, diplomas and certificates. There are twelve standing committees which focus on specific

responsibilities of the Senate. The Faculty Boards, one for each faculty, review departmental course proposals and suggest academic policies for deliberation and decision by the Senate.

- 40. The University is organized into ten faculties consisting of over 70 departments. In addition, there are six schools or institutes. Academic authority resides in the departments and the schools and institutes, while faculty administrators and consultative bodies have coordinating functions.
- 41. In 1970 when Makerere attained university status, there was a formal system of higher education planning in place. The University prepared plans that were coordinated with the national development plans. The plan was submitted to a University Grants Committee that had functions similar to the committee which carried out triennial planning for the constituent colleges of the University of East Africa. Until the late 1970s, the Committee analyzed and reviewed the University's plans and budget requests and made recommendations to Government based on the projected growth of the University and the capacity of the country to fund and absorb this growth. The members included the Vice-Chancellor of Makerere and representatives of the ministries of education and finance (Ministry of Education 1976). However, the Committee was never established in law and suspended activities in 1976 after presenting the Makerere University Quinquennial Development Plan for the period 1976/77 to 1980/81. Makerere University has carried out no long term academic and financial planning since that time.
- 42. The University Secretary now has responsibility for institutional planning, with the Planning and Development Committee as the overseer. The Planning and Development Committee, an advisory body to the University Council, has the responsibility for appraising proposals from faculties, schools, institutes and other departments as well as for preparation, implementation, monitoring and evaluation of plans and projects.

Budgeting for Recurrent and Capital Expenditures

43. Before the 1990-1991 financial year, the Ministry of Finance did not provide an overall budget ceiling to the University which meant that the University developed its budget under a cloud of uncertainty which resulted in a budget request considerably beyond

the capability of the Government to fund. The University presented budgets that were funded at approximately one-third of its' requests.

- Beginning in 1990-1991 the Ministry of Finance provided a ceiling for the development of the University's budget. Consequently, the budgets of the last two years have been realistic within the framework of the Government's limited ability to fund the needs of the University.
- When the budget guidelines are received by the University Secretary, the Secretary requests the Bursar to begin the budget development process. The Bursar then prepares a set of instructions which are sent to the cost centers of the University for them to follow in making their budget submissions for the coming financial year. The cost centers submit only their non-personnel budget requests such as requests to purchase teaching materials, office equipment and transport. Staff lines are the responsibility of the central University administration. Only those positions which have been filled are included in the University budget---not those which have been sanctioned but remain vacant.
- Many cost centers do not submit their budget requests. In such cases, the Bursar enters the amounts allocated to these units the previous year. The development budget is prepared by the Development Office in close consultation with the University Secretary and the University Engineer. It is presented to the Planning and Development Committee of the Council for approval. A consolidated University budget is then submitted to Government.
- 47. Once the budget request for the University is received at the Ministry of Finance, it is studied by higher education specialists from Finance, the Ministry of Economic Planning and Development, and the Ministry of Education. After the budget request of the University has been negotiated with the university secretary, bursar and vice chancellor, it is included in the overall Education vote which the Minister of Education presents to the national legislature for approval.
- 48. The final budget is highly detailed and unused allocations can not be easily transferred from one category of expenditure to another. Although Makerere was made a "self-accounting" institution by an amendment to its statute adopted in 1988, all disbursements must be reviewed and approved by Government. One consequence is that

the University has been unable to fully expend the limited funds it receives (more than 5 per cent of its budget in 1990/91, mainly for construction or rehabilitation of necded facilities).

C. University Financing

Government Support for Makerere

- Levels of Government support for Makerere are difficult to estimate for recent years because Uganda has had a history of very high inflation, together with an exchange rate policy which produced a wide divergence between official and "parallel" rates of exchange between the Ugandan Shilling (USh) and the U.S. dollar. However, the official premium over the parallel rate has diminished considerably.³ Liberalization of exchange controls since July 1990 has meant that the parallel rate or, more accurately the Forex Bureau rate, is the effective market rate for most non-governmental purposes. It is, furthermore, a better indicator of domestic relative to foreign prices. This point is of some importance when the real level of Government support for Makerere is examined (Table 2.2).
- The data in this table indicate the problem of estimating the real level of resources available to Makerere, and to higher education since 1987. Generally, "real" (dollar) expenditures are higher at the official rate, but have diminished by about 40 per cent between 1987 and 1990 as this rate was adjusted progressively towards a more realistic level. As a public sector institution, Makerere has had access to foreign exchange, and has therefore imported supplies, at the favorable official rate. But the benefit of this has been eroded over time.

³ The following are the average of the monthly USh/\$ official and parallel for Ugandan fiscal years 1987-88 to 1991-92;

Year	Official (USh/\$)	Parallel (USh/\$)	Ratio
1987-88	60	277	4.62
1988-89	171	480	2.80
1989-90	319	666	2.09
1990-91	<i>55</i> 6	778	1.40
1991-92	850	1,100	1.29

Table 2.2
Indicators of Total Makerere Funding 1987-1992
(USh and U.S.\$)

Year	Million Ush	Million U.S.\$ (Official)	Million U.S.\$ (Parallel)
1987-88	(650)e	10.8	2.3
1988-89	1,349	7.9	2.8
1989-90	2,354	7.4	3.5
1990-91	3,571	6.4	4.6
1991-92	6,285	7.4	5.7

51. While expenditure evaluated at the parallel rate has risen, it is much lower in absolute level each year. The extremely low levels of 1987-88 and 1988-89 must reflect the aftermath of war and economic disruption on monetary conditions. The high levels of expenditure valued at the official rate are an indicator of the overvaluation of the Shilling in 1987 and 1988. The extremely low levels of expenditure on many non-traded items, notably wages and salaries, are reflected in the low parallel rate expenditures.

Unit Costs

- 52. For 1989-90, it is possible to identify expenditures by academic departments, and to allocate them to specific programs. The resulting unit-cost estimates are shown in Table 2.3. The availability of basic data and other information on cost allocation was limited, and the following points should be noted:
 - (i) Only 13.5 per cent of recurrent costs were allocated to departments. The rest had to be divided equally on a per student basis. The high proportion of these costs accounted for by student welfare and allowances is, however, best divided on such a basis.
 - (ii) Graduate students were counted on the same basis as undergraduates. There were very few postgraduate students, and most of these are in past graduate diploma courses in education, where unit costs are low. Thus, the overall errors from this source should be small.
 - (iii) No allowance was made for service teaching of courses in one faculty by staff from another faculty because there is no information on fulltime-equivalent

allocation of students between faculties and departments. Because faculties have their own admissions requirements and transfer of students between faculties is restricted, there are not likely to be large errors from this simplification.

- (iv) The number of graduates relates to the 1990 graduating class whose costs would have been incurred over the previous 3 to 5 years. As student numbers were fairly constant from 1987 to 1990, allocating one year's total costs to a graduating class gives a reasonable approximation.
- 53. Tables 2.3 (a) and (b) together show relatively small variation between courses, largely because only 13.5 per cent of total costs could be allocated to specific faculties and courses. The high component of student welfare and allowance costs in the total (approximately one third) means that the real position is one of relatively small variation in unit costs compared to other university systems. Cost per graduate relative to cost per student is consistent with a low repeat rate, and an apparently high level of efficiency. For example, cost per graduate is 3.25 times cost per student in Commerce, which is almost entirely a three-year undergraduate faculty; in the basically similar Arts Faculty, cost per graduate is 3.33 times the cost per student.

Table 2.3 (a)
Makerere University; 1989-90
Unit Costs in U.S.\$: Official Exchange Rates

FACULTY:	U.S.\$ per Student	U.S \$ per Graduate
Agriculture	1450	4701
Arts	1334	4450
Education	1281	4106
Commerce	1261	4113
Law	1318	4240
Medicine	1592	6279
Science	1381	4638
Social Science	1269	4090
Technology	1579	5149
Vet. Medicine	1718	5691
Institutes, etc.	1637	5682
Average, all courses	1401	4543

Table 2.3 (b)
Unit Costs in U.S.\$: Parallel Exchange Rates

FACULTY	U.S.\$ Per Student	U.S.\$ Per Graduate
Agriculture	695	2249
Arts	639	2129
Education	614	1964
Commerce	604	1968
Law	632	2029
Medicine	763	3005
Science	662	2219
Social Science	608	1956
Technology	<i>7</i> 57	2464
Vet. Medicine	823	2724
Institutes, etc.	784	2719
Average, all courses	671	2176

Source: Makerere University accounts.

54. For the current year (FY 1991-92), the cost information is available on a different basis, which does not allow allocation by faculty. It is given in U.S.\$ terms at the exchange rates of November 1991. The estimates are based on allocations in the Government budget, which on the basis of historical experience, are likely to be an overestimate of actual. The information is given in Table 2.4, together with the relevant total recurrent expenditures from which the calculations are derived.

Table 2.4

Makerere University, 1991-92

Total and Per Student Costs.

	Pay and Allowances	Other Current	Total Current
Total: Million Ush	2019	4267	6286
Million U.S.\$ (Official)	2.38	5.02	7.40
Million U.S.\$ (Parallel)	1.84	3.88	5.71
Cost per student (USh X 1000)	337	711	1048
Cost per student (\$ Official)	396	837	1233
Cost per student (\$ Parallel)	306	646	952

Source: Republic of Uganda, <u>Draft Estimates of Revenue and Expenditure</u>, 1991/92

Note: Pay and Allowances refers to university staff: student support is included in "other recurrent."

55. In 1991-92 (Table 2.4), 40 per cent of recurrent costs are for pay and allowances, compared to 32 per cent in 1989-90 (Table 2.3). The detailed classifications from which these figures were derived are not directly comparable as between 1989-90 and 1991-92. However, the overall share of pay for these years is very low by regional standards and reflects the exceptionally low remuneration of staff. Universities like all educational institutions are labor-intensive and in most countries staff pay costs are between 65 per cent and 75 per cent of the total.

Salaries

56. In late 1991, the average salaries of support and maintenance staff and those of professors ranged from \$4.70 to \$22.70 per month. A vice-chancellor earns only \$4 more (Table 2.5).

Table 2.5
University Salaries: September 1991

Position:	\$/mo.	Current Salary	
Vice-Chancellor	27.90	600	
Deputy Vice-Chancellor	23.40	550	
Professors	22.70	400	
Associate Professors	21.90	350	
Senior Lecturers	20.90	300	
Lecturers	18.90	250	
Assistant Lecturers	16.90	200	
Group Employees	4.70	50	

Source: Makerere University Bursar, September 1991.

- 57. Group employees are the largest and most poorly paid category of staff, numbering more than 2,000 (2,139) in 1990/91. The ratio of non-academic to academic staff has been increasing in recent years; it is now 4:1. The 1991 Makerere University Visitation Committee noting that "it is easier to fill administrative posts in the prevailing circumstances," has recommended a reduction to 3:1 (Makerere University Visitation Committee 1991, 19). However, salaries of secretaries, clerks and maintenance staff are so low that several persons are now needed to do the work for which one might have been employed previously.
- 58. Campus housing at Makerere, provided at nominal rents of between USh. 100-130 (about ten cents US), is worth many times what staff earn from working at the University. This is a strong inducement to remain at the University but since housing is an in-kind benefit, it does not alleviate the need for other sources of income.
- 59. Without donor supplementation of staff salaries and the availability of other part-time employment in Kampala and at the newly established private universities, Makerere would not be able to retain many of its academic staff. A survey carried out by the Academic Registrar in early 1990 indicated that 27 senior staff had resigned from the University since January 1989. Twenty five had taken long term leaves of absence in order

to accept employment elsewhere or were no longer available to the University for other reasons. Among those whose positions and whereabouts were known, only six had left Uganda. Most staff who leave the University are reported to remain in Uganda working for the Government, private sector, non-governmental organizations or for donor agencies. Many of those who remain eke out a livelihood from consultancy. Directly or indirectly, donor funds are very important in providing a livelihood to those who stay and those who leave.

- 60. Lecturers at Makerere have petitioned the Government for review of salaries and in late 1991 threatened to strike unless their incomes are raised significantly. The gap between present salaries and what university authorities have proposed as a reasonable salary structure is very large (Table 2.5). For instance, lecturers and senior academic administrators salaries would have to be increased by a multiple of between 13 and 21, and adjusted for inflation.
- 61. It is not likely that the Government's response will go very far toward bridging the gap between lecturers salary demands and what it is able to offer. The March 1991 White Paper on Education, not as yet approved by the Government, suggests an increase of professors' salaries to about \$94/mo. at the official exchange rate as of November 1991 (Republic of Uganda 1991, 12). That is less than a fourth of the salary sought by the University. Salaries currently offered to professors at the Islamic University in Uganda range from \$900 to \$1,100 per month!
- 62. The low salaries have transformed academic work into part-time employment for many staff. Most lecturers teach three classes a week, a relatively light teaching load for an institution with a very small postgraduate enrollment. This facilitates obtaining employment outside the University. An examination of course timetables and use of instructional facilities in many faculties reveals that lecturers schedule their teaching for the early morning to free most of the day for other work. In the arts and social science faculties at Makerere, students may have only one class period per day leaving them much time for distractions such as participation in campus political activities.

Tuition Versus Student Support and Welfare

63. A high proportion of the recurrent budget is allocated for student support. However, budget line items permit a rough estimate:

- (i) For 1989-90, allocating all expenditures on halls of residence, and 20 per cent of expenditures on administration, services, transport, fuel and power, building maintenance, and rent and rates, the estimated student allowance and other support costs were 34.5 per cent of all recurrent costs. (The 20 per cent allocation is conservative for some items.)
- (ii) For 1991-92, certain student monetary allowances have been abolished. Unfortunately, the budgetary line classifications do not reveal student support costs. Using the same 20 per cent rule and adding all of the line-item student support, the overall percentage is only 16 per cent. (This is certainly an underestimate, as there are large unspecified "transfer" items in the budget, and in 1990-91, approximately 1/3 of the recurrent costs are on student support of various kinds.)
- 64. The overall implication of these estimates is that when one strips away the student support item, average recurrent <u>tuition</u> costs are an estimated \$826 per student (official rate) and \$638 per student (parallel rate).
- Makerere's annual budget submission has for several years been two to three times the <u>nominal</u> amount which has subsequently been disbursed. The budget submission may be taken as the University's estimate of the resources it requires to fulfil its mission. Based on this, the Bursar has proposed a scheme of full-cost fees, to be funded by Government, which would have the advantages of: (i) revealing the true unit costs of education; and, (ii) ensuring that University resources increased with student enrollments. The sums involved would pose real budgetary problems for the Government, and they are mentioned here to underline the extent of the resource problem rather propose a specific government-financed solution to it.
- 66. The initial costings were based on the 1991-92 budget submission made in March-April, 1990, for a total of 12.2 billion USh, or \$3,213 per student at the then exchange rate; at the November 1991 official rate, this sum is equivalent to \$2,390 per student due to the depreciation of the Shilling. The actual allocation from the Government was 6.2 billion shillings, equivalent to \$1,500 per student (March-April 1991) or \$1,233 (November 1991). The proposed fees, in the range of \$2,700 to \$3,400 depending on course

type and residential status, and were in line with the initial budget-estimate average perstudent cost mentioned of \$3,213.

Efficiency and Productivity

67. There is evidence that in some respects, the efficiency of the University is high. First, the ratio of graduates to the stock of students is quite high, and as a result cost per graduate is generally within 10 per cent of cost per student multiplied by the number of years in a degree course. Second, if one looks at repeat students as a percentage of enrollments, they appear to be low. Table 2.6 gives the details for undergraduate students by faculty for 1990/91.

Table 2.6
Makerere University
Repetition Rates by Faculty, 1989-90.

Faculty	Repeaters	Enrollments	Repeat Rate (%)
1. Agriculture	12	385	3.1
2. Arts	2	515	0.4
3. Commerce	14	241	5.8
4. Education	8	587	1.4
5. Law	2	169	1.2
6. Medicine	34	422	8.1
7. Science	18	750	2.4
8. Social Science	0	1125	0.0
9. Technology	9	218	0.9
10. Vet. Medicine	22	156	14.1
11. E.A.S.L.	0	30	0.0
12. I.S.A.E.	9	142	6.3
13. Fine Arts	7	78	9.0
All Undergraduates	137	4818	2.8

Source: Makerere University Examination Statistics. Note: E.A.S.L. = East African School of Librarianship

I.S.A.E. = Institute of Statistics and Applied Economics

- 68. These repetition rates are low by any standard. While 1989-90 may be slightly better than usual (the aggregate repetition rate was 2.1 per cent in 1987-88 and 4.9 per cent in 1988-89 compared to 2.8 per cent in 1989/90), the pattern across faculties is a good representation of the general picture. For some programs, notably Medicine and Veterinary Medicine, repeat rates are relatively high, and low rates are found in Arts, Law, Social Science, and E.A.S.L (East African School of Languages). Education's low repeat rate in 1990/91 appears to be exceptional.
- 69. There is a problem in interpreting such indicators which hinges on the distinction between efficiency and productivity. Efficiency refers to the proportion or percentage achieved relative to some potential (100% is the maximum, corresponding here to 0% repeat rate) and as such, is a purely relative measure. Productivity is, on the other hand, a more absolute criterion and in educational terms refers to the achievement of some effective standards. A high efficiency measure (low repeat rate) could be due to low standards.
- Nevertheless, it <u>may</u> be the case that where resources for education are under pressure, then in some programs (especially Medicine), the need to maintain standards is paramount with the result that failure and repeat rates rise. In others (e.g. Education), standards may fall instead, with failures and repeat rates remaining low, especially when repeat students are a direct drain on University funds, and pay no fees. This may explain the relatively high repeat rates in Medicine and Veterinary Medicine, despite the high entry requirements of these programs (Chapter 3).
- 71. Attrition rates among cohorts of entering students could be more symptomatic of the quality of instruction. They varied in 1989/90 from 34 per cent in Education to 9 per cent in Agriculture and Forestry. However, no students dropped out of the Faculty of Social Sciences that year. Many students transfer from fields like Education and Arts into social sciences because of better employment opportunities—and then do a postgraduate diploma in Education if they can not find employment.

Quality of Programs

72. There are few unambiguous indicators of the quality of instruction at Makerere. Only a very small proportion (between 1% and 2%) of the relevant age-cohort

goes on to higher education each year, and only the best students are admitted to Makerere. As previously noted, the University admits slightly more than a third of those eligible for higher education. The student staff ratio at Makerere (Chapter 2) is not large for an institution whose primary mission is undergraduate instruction. To reiterate, compared to many African universities, enrollment growth at Makerere has been moderate, admission is still highly selective and wastage and repetition rates are low, although none of these indicators are conclusive in terms of defining the quality of higher education.

- 73. However, recent external examiners reports for the largest professional faculties were reviewed for this study. The reports provide many insights into the relative strengths and weaknesses of undergraduate programs at Makerere. Most examiners were drawn from universities in neighboring East African countries, although some were from other parts of Africa, Europe and North America. Since scarce foreign exchange is used for external examination, the number of external examiners that can be brought to Makerere is limited and examiners frequently have to review students' scripts in disciplines outside their specialty. Nevertheless, the standards of performance expected of graduating students seems to be quite high. Marking is severe in most faculties especially for the equivalent of first and upper second class honors degrees. Examiners frequently recommended upward revision of marks in borderline cases. Scores seldom corresponded to a normal distribution even in those faculties with the highest entry requirements and, presumably, the most homogenous student bodies.
- 74. There is an acute shortage of instructional materials. Makerere University has established a book bank scheme to facilitate student access to textbooks. According to the 1991 Makerere University Visitation Committee, 14,000 titles have been distributed to 76 departments. "Consequently," the Committee observed, "a department may end up getting ten books for six hundred students or in some cases one book for fifty students" (Makerere University Visitation Committee 1991, 10). Lecture notes are the principal "text" used in many and perhaps most undergraduate courses.
- 75. Staff and postgraduate student research has virtually ceased in many fields. The time needed to produce a Master's graduate in 1989/90 in a thesis program was about six years for agriculture and the social sciences, the largest postgraduate programs with a thesis requirement. Ten years of study were needed to produce a doctorate in the social sciences.

- 76. Less than a third (27%) of Makerere's staff held doctorates in 1990/91, unchanged from 1987/88. In 1990, researchers at the University produced only twenty four scientific papers in mainstream scientific journals, half of them in bio-medical fields and the others in veterinary medicine and agriculture. Of the twenty two scientific authors, eight were expatriates (Institute for Scientific Information 1991, 8314 & 8315). This is still reasonably impressive by comparison to most African universities (Eisemon and Davis 1991), and an increase over the previous year when only nine mainstream scientific papers were published by Makerere staff (Institute for Scientific Information 1989, 7804).
- 77. A tradition of excellence, once established, takes a long time to wither. Many of the University's most distinguished staff have taken up appointments elsewhere and expressed no interest in returning. Staff who helped develop the institution during its formative years into Africa's premier university, and preserved its traditions during a long period of turmoil, are now reaching retirement age. Exceptionally low remuneration, as will be seen in the next chapter, is a critical issue in maintaining Makerere's quality.

D. Donor Support for Rehabilitation

- 78. Since 1986, Makerere University has received significant funding from various bilateral and multilateral donors mainly to rehabilitate its instructional facilities. The amount it has received can not be determined with any precision as external funding is neither closely monitored by Government or by the University. Among multilateral donors, the European Community has had the lead role in rehabilitating the University's physical plant and some core instructional facilities (the University's library, for example), with bilateral donors taking responsibility for various faculties. The Faculty of Agriculture and Forestry's facilities and those at its Kabanyolo farm have been rehabilitated by United States Agency for International Development, the new Faculty of Science lecture halls and laboratories has been constructed and equipped with support from the Japanese government, the Italian government has assisted the Faculty of Technology, and so on.
- 79. Funding for staff development and research has been directed to academic units, programs and activities of special interest to particular donors. The Institute of Statistics and Applied Economics with twenty full time staff, for instance, obtained \$510,000 in 1991 from six donors, including a grant of \$200,000 from the United Nations Fund for

Population Activities. Economics, public health and research on basic food crops have received much support from donors.

- 80. Since 1984, the Faculty of Agriculture and Forestry has received more donor assistance than any other unit of the University. Celebrating its 67th anniversary this year (1991), the Faculty is "the oldest institution of higher learning in agriculture in Africa (and) through its high-level manpower training programs, research activities and extension services has made a most significant contribution to the economic development of Uganda in particular and East Africa in general" (USAID 1991, 1). The Faculty is comprised of eight departments and undergraduate enrollment has grown from 150 students in 1970/71 to over 600 in the 1990/91 academic year. Postgraduate enrollment, which fell from 70 in 1974 to 15 in 1989, has now turned around with the reinstatement of a popular Master's program in Agricultural Economics which has more qualified applicants than it can admit.
- 81. When political stability returned to Uganda in the late 1980s, donors were deeply concerned about the scarcity of trained human resources in the Government agencies responsible for generating new agricultural production technologies and providing services to the farming population. The USAID Manpower for Agricultural Development project was conceived to expand Uganda's training, research and extension capacities. The first phase of the project focused primarily on rehabilitating the physical facilities of several agricultural experiment stations, the Faculty's classrooms, and laboratories and the famous Kabanyolo student training farm, as well as selecting and sending staff abroad for training. The objective of the current phase of the project is to strengthen undergraduate teaching programs, initiate staff research projects and re-establish first the Master's and then the Doctoral programs. A large group of contractor expatriates have been engaged to staff the Faculty's programs in the expectation that newly trained Ugandan Ph.D.s will replace them when they return to resume their academic positions. About \$17.5 million, and probably an equal or greater amount in local currency generated by sales in Uganda of PL-480 US surplus commodities, has been allocated to the project by the donor agency.
- 82. By many measures of project performance, this has been a very successful project thus far. The project experiment stations and the Kabanyolo farm are showcases in agricultural research facilities. The undergraduate curricula has been revised and a five year plan prepared for future development of the Faculty's programs. The academic staff selected for training returned from training with impressive professional capabilities.

However, the status of the Faculty remains very fragile. At a time when planned withdrawal of expatriates ought to be taking place, in some departments there are fewer Ugandan senior academic staff now than there were at the start of the project. In fact, expatriates are serving as department heads of two of the Faculty's eight departments due to the lack of senior Ugandan staff.

83. Highly targeted national and donor investment has produced uneven and unsustainable development of the University's infrastructure. Roads leading to the newly constructed or rehabilitated lecture halls are sometimes impassable. Student residences, refurbished after 1986, are in poor condition now. The residences and other campus buildings have been frequently looted for valuable fixtures and equipment. While some academic units have visibly benefitted by donor interest, others have been largely neglected including the many administrative and support units of the University whose dilapidated facilities and broken office equipment have not yet been rehabilitated or replaced. The United Nations Development Programme and the African Development Bank have independently recognized the need for more institutionally focused capacity building and are now providing support for improving university planning and management.

III. THE POLICY CONTEXT

84. Efforts to revitalize university education must take into account four key constraints and policy concerns: 1) limited Government resources to support the public universities and colleges as well as to employ the graduates of these institutions; 2) persistent gender, economic and especially regional inequalities in educational opportunity; 3) increasing tension between the university and the state; and 4) proliferation of new institutions and programs leading to unplanned development of the higher education sector.

A. Diminishing Opportunities for Graduates Employment and Limited Resources To Support Higher Education

- 85. Although Government's responsibility for absorbing graduates began to weaken in the mid-1970s and was finally extinguished during the subsequent political and economic turmoil, the public service continues to employ many products of institutions of higher education. In 1989, for instance, 49 per cent of the previous years' graduates in fields other than Education were employed in the public services, up from 37 per cent in 1987 (Table 3.1).
- According to the 1988/89 National Manpower Survey, the public sector accounted for nearly two thirds (65%) of total formal sector employment (National Manpower Survey 1989). But opportunities for employment in the public sector are diminishing as the Government tries to cut its payroll. It announced plans in late 1991 to begin reducing the number of civil servants by 35,500, 22 per cent of Government employees (New Vision, November 28, 1991).
- Many graduates are employed as teachers. The demand for secondary school teachers continues to grow with the expansion of secondary school enrollments. Throughout the 1980s, secondary enrollments grew at the astounding rate of 36 per cent per year (USAID 1990, 14 & 42). This is to a large extent responsible for significant enrollment in the postgraduate diploma program in education at Makerere which presents a "second chance" for many students in the arts, social sciences and science to acquire training that will lead to employment. In 1989, 76 per cent of the graduates of Makerere's School of Education found employment.

88. Government capacity to support expansion of higher education is severely limited. While higher education's share of education expenditures has increased slightly since 1987/88, as a proportion of gross development product, expenditures have been relatively constant in recent years. Allocations for Makerere University, adjusting for inflation and the resulting devaluation of the Ugandan Shilling, have declined over this period.

Table 3.1

Public Sector Employment of University Graduates, 1987-1989

<u>Year</u>	No. of Graduates	No. Employed	<u>%</u>
1987	1,289	474	37
1988	1,261	585	46
1989	1,218	594	49

Source: Public Service Commission, 1991

- 89. The Government is being advised by donors to increase spending on primary education while restraining growth of public expenditures, re-directing funding for higher education and other sectors. The 1989 report of the Educational Policy Review Commission suggests that the per unit costs of higher education are about two hundred times those for primary education (Educational Policy Review Commission 1989, 81). The fact that salaries of primary school teachers are supplemented by allowances paid by parents and local communities and not by Government, greatly magnifies the variation in per unit costs.
- 90. Education at all levels is underfunded. It is estimated that the 1988/89 education budget "was only 21% of the 1970/71 level, while real per capita expenditure had fallen to 13% reflecting increasing pupil numbers" (HEDCO 1991, 12). The volume of public expenditure on higher education is such, that even if it were <u>all</u> funding was diverted to primary education, there would only be enough to pay each primary teacher a monthly salary of USh. 8,000, or \$9.25, which is about 10 per cent of a basic full-time salary

requirement. In brief, the problems of primary and secondary education are incapable of being solved at the expense of higher education.

- 91. Although primary and most secondary education operates on a self-financing basis, the costs of higher education since Makerere's establishment in the colonial period have been borne by the state as has the responsibility for employing graduates. The Government has taken a modest step toward changing this tradition by abolishing some allowances given to students at Makerere, arguing that parents should begin to share the cost of their childrens' education. Acting on a recommendation of the Educational Policy Review Commission (1989), it abolished allowances for out-of-pocket expenses, transportation to the University from the students' home areas and for purchase of stationery and other supplies. These allowances amounted to only USh. 18,000 (\$56), less than 10% of what the Government estimates is spent on educating a student (Makerere University Visitation Committee 1991, 3).
- 92. The Government's action precipitated student strikes in 1989 and again in 1990 when two students were killed. The allowances were not restored. A visitation committee investigating the causes of the strike concluded that "Makerere students are generally insensitive to and unappreciative of the national economic problems facing Uganda as a country... They are ignorant of the underlying issues and interpret any austerity measures taken by Government in the national interest as punishment to them as a group" (Makerere University Visitation Committee 1991, 2).
- Onstrained by student unrest from further reducing students' allowances or imposing tuition and by the slow growth of the modern sector from introducing other cost-recovery measures, the Government has tried other ways of making the public universities and colleges more self-supporting. As it has frequently done to assist communities to establish secondary schools, the Government has allocated land to the public universities and to the Islamic University in Uganda. For example, Makerere University was recently given 1,280 hectares of land at Bululi, more than one hundred kilometers from Kampala, together with one hundred cattle, to assist it to generate income or reduce the costs of boarding students in residence. The land has not yet been surveyed, however. Mbarara University of Science and Technology's new campus will be situated on a large parcel of land, 280 hectares, where it will establish farming on a commercial basis with students providing much of the labor required. As well, the Government enacted legislation in 1988

making Makerere self-accounting, presumably in order to free it of constraints on self-financing. Subsequently, the University established several commercial units, including the estates and maintenance department, the bakery, and campus book shop. Whatever the Government's intentions, these measures have not had the desired effects for many reasons, among them the fact that increasing austerity has led the Government to retain tight controls on university expenditures and to offset any internal profits the institutions are able to generate.

B. Educational Inequalities

- 94. Pressures for expansion of higher education have their origins not only in expansion of lower levels of the educational system but also in persistent inequalities in educational opportunities among various regions of the country. Efforts to broaden access to education since independence have exacerbated this situation as higher education, particularly university enrollments, have grown more slowly than the number of secondary school graduates who are now qualified for further studies.
- 95. Until 1989, Uganda had only one university. However, it had large network of post-secondary teacher training and technical colleges located throughout the country. This temporarily satisfied political pressures for a better geographic distribution of higher education. Pressures to establish new institutions are not diminished by the fact that selection and allocation of students as well as recruitment of staff is done nationally. Decisions about where to locate an educational institution have a major impact on the local economy and are perceived to reflect the importance which the Government attaches to the development of particular areas.
- 96. The Government's decision to create a second public university, Mbarara University of Science and Technology, in the west-central part of the country soon prompted demands for establishment of two new public universities "one in the Northern region and the other in the Eastern region of Uganda when necessary resources become available" (Educational Policy Review Commission 1989, 76). Nevertheless, Mbarara University of Science and Technology is evidence that lack of the necessary resources is not necessarily a serious constraint to establishing new institutions. Pressures for institutional proliferation are difficult to ignore, politically, even under conditions of extreme austerity.

- 97. An unsatisfactory alternative to establishing new institutions of higher education is to change the composition of admissions to ensure a better geographic distribution of student intake. During the Amin and Obote periods, intake into Makerere was sometimes manipulated for this purpose, provoking much resentment especially in central Uganda. Students are now admitted on the basis of merit apart from the preference given to female applicants which is examined below.
- 98. Almost three quarters of the students admitted to Makerere, 71 per cent in 1989/90, are from the central and western districts (Table 3.2). The representation of students from these districts has not changed appreciably since 1987/88. But there has been some change in the representation of students from the within the group of central and western districts. The proportion of students from the seven most central districts has declined from 35 per cent in 1987/88 to 28 per cent in 1989/90. For example, Kampala district which sends the largest number of students to Makerere, accounted for only 7 per cent of the students in 1989/90 compared to 12 per cent two years earlier. Western districts have gained relatively as the proportion of students from the northern and eastern districts has remained about 30 per cent.

Table 3.2

Makerere University Intake 1987/88-1989/90

By Students' District of Origin

Northeast & East (7 districts) Central & West (19 districts)	18 72	17 72	19 71
•		•	
North (7 districts)	10	11	10
	%	%	%
Region	1987/88	1988/89	1989

Source: Admissions Records Office, Makerere University, November 1991

- 99. Without knowing the proportion of secondary school graduates from the northern and eastern districts who are qualified to enter university, it can not be determined whether these students are under-represented by the selection process, or the small numbers simply reflect the smaller cohort of students going on to and completing secondary school.
- 100. Since 1990, 1.5 points have been added to the A level examination scores of female applicants to Makerere University. The proportion of females admitted to the University increased from 23 per cent 1989/90 to 30 per cent in 1990/91 when the weighting of womens' examination scores took effect. Yet prior to the introduction of gender weighting, the proportion of female applicants with qualifications to enter Makerere who were actually admitted reached the level of male applicants (Table 3.3). Whereas in 1987/88 males were more likely to obtain admission, by 1989/90 the same proportion of males and females were awarded places; 36 per cent, respectively.

Table 3.3
Gender Distribution of University Applicants and Makerere Intake, 1987/88-1989/90

	Applications		Intake		% Selected		
Year	M	F	M	F	M	F	Al
1987/88	3,086	965	1,401	351	45	36	43
1988/89	3,428	1,133	1,295	411	38	36	37
1989/90	3,768	1,161	1,338		36	36	36

Source: Admissions Records Office, Makerere University, November 1991.

101. Females are less likely to enroll in faculties and professional programs requiring passes in science subjects at A levels (Table 3.4). Females accounted for 40 per cent of the total intake into arts programs compared to 18 per cent into science programs in 1990/91.

Table 3.4

Gender Distribution of Admissions to Arts and Science Based Programs*
at Makerere, 1989/90-1990/91

1990/91 Candidates/Intake	Arts	Science	Total	Arts	Science	1989/90 Total
 Candidates Intake 	3,030	1,450	4,480	5,103	1,062	6,185
Male	690	596	1,285	712	761	1,473
Female	268	98	386	466	163	639
3. % Female	29	14	23	40	18	30
4. % Admitted of Eligible Candidates	32	48	37	23	85	34

Source: Admissions Records Office, Makerere University, November 1991.

- A higher proportion of applicants gain entry to science programs, but they take more difficult subjects at A levels. While less than a fourth (24%) of students eligible to enter arts programs were admitted, 85 per cent of students who had the qualifications for science based degree courses obtained admission. Admissions are determined by a complex weighting of students' examination scores. Minimum points are established for each degree program. These ranged in 1990/91 from 9.8 points for admission to Education to study the teaching of biology to 45 points for Pharmacy and 44.6 points for Law. The minimum for the general arts degree was 13.6 points.
- 103. The poor representation of females in science based programs reflects the smaller proportion of females eligible for entry. Manipulation of the present weighting scheme to increase female representation in these programs would probably have little effect in light of the high proportion of qualified students already being admitted. The more serious problem is the low proportion of students who are taking advanced instruction in science subjects at the secondary level.
- 104. Unlike primary and secondary education, higher education is fully financed by the state on the curious grounds that this is necessary to ensure that students from disadvantaged families have the opportunity to continue their studies. No data are available on the social and economic composition of higher education enrollments. A survey of the

^{*} including professional programs requiring A level passes in arts and science subjects.

parental backgrounds of a small sample of students was carried out at the request of the 1990/91 visitation committee to Makerere University.

105. The findings tend to confirm conventional wisdom (Table 3.5). A high proportion of students, particularly those enrolled in the most selective faculties, were from professional families; 50 per cent in the case of Law. To obtain admission to Makerere, many students repeat the A level examination to boost their scores and/or have private tutoring. Few economically disadvantaged families can afford to make these provisions for their children.

Table 3.5
Parental Background of Sample of Students in Selected
Faculties at Makerere, 1990/91

	Faculty				
Parental Background	Medicine N=70	Technology N=40	Law N=48	Education N=36	
•	%	%	%	%	
1. Professional	40	45	52	36	
2. Commercial	13	10	27	8	
3. Agricultural	47	38	21	50	
4. Other		8	••	6	

Source: Makerere University Visitation Committee supplementary report, 22 March, 1991, 7.

In 1991, the Government announced the Needy Students Work Scheme in the aftermath of protests over abolition of student allowances. Initially, the intention was to provide "funds to needy students through the district(s) after they have done suitable community work like construction on roads and teaching in schools" (New Vision, November 11, 1991, 16). For various reasons relating to the late implementation of the scheme, the public universities and colleges were asked to administer it —and to determine which students should qualify for the scheme based on an assessment of their financial circumstances. That has generated many complaints from students and from educational authorities who have little information on which to make such assessments.

107. A supplementary report of the 1990/91 Visitation Committee contends that many students believe "that manual labor is menial and below the dignity of a University Student, even if it were for pay...(while other truly disadvantaged) students would do this only on condition that their fellow students' did not know about it" (Makerere University Visitation Committee, Supplementary report 22 March 1991, 1 & 2). The Committee's report draws attention to an incident at the University concerning a student who ironed clothes for other students but had to abandon this work because of the ridicule he received. Nevertheless, interviews with administrators at Makerere suggest that there are more students making requests to participate in the work/study scheme than funds to support them.

C. Relations Between the Public Universities and Government

- 108. Tensions between the public universities and Government focus on two issues:
 - 1) determination of student intake, financing of student welfare and budgeting; and
 - 2) the involvement of the Government in the internal affairs of the universities.

Determination of Student Intake

- 109. Intake levels are determined in consultation with Government. Makerere University annually specifies its "teaching capacity," i.e. how many students it is able to admit to each faculty based on its staffing, instructional facilities and other resources. These estimates are considered and approved by the University's Senate and Council for transmission to the Government where they are reviewed.
- 110. The Government and Makerere have sometimes disagreed on intake levels. For instance, in 1989/90, the University was persuaded to increase undergraduate first year intake in the Faculty of Medicine from 70 to 90 students but found that it could not adequately teach the much larger cohort. In 1990/91, the University favored reducing intake to the previous level. However, it was directed by Government to restore the increase.

111. Until recently, intake into Makerere was determined simply by "residential capacity." As the present overcrowding of student residences attests, this was an elastic constraint on expansion of enrollments:

Most of the halls of residence are accommodating students far in excess of their capacities, so that hall libraries and common rooms have been turned into sleeping places, and the resultant crowding everywhere seriously militates against serious academic endeavor. This overcrowding is extended to the toilets and washrooms, most of which ceased to function a long time ago and the unsanitary condition arising therefore, especially in Lumumba and Mary Stuart halls, where open sewage is a common sight, students have been compelled to sponge themselves in their room and to relieve themselves in places other than the toilets. The prevailing situation certainly is a very serious health hazard throughout the campus. (Makerere University Visitation Committee 1991, 9).

- 112. A reorganization of the academic year has been suggested by the 1987 and 1991 Makerere University visitation committees that were appointed by Government. The 1991 committee, constituted after the University's closure due to student unrest, recommended that when the institution was re-opened "a new and radical system be introduced...The academic year (should) be staggered so that the student population is divided into two groups" (Makerere University Visitation Committee 1991, 13). The first group would begin studies in July and the other in September, and then alternate instruction for the academic year.
- 113. This might appreciably reduce overcrowding of the halls of residence. And it would also enable an increase in student intake. A total annual intake of 8,000 students has been suggested, 4,000 in each shift, one thousand more than the intake level indicated by the visitation committee (Makerere University Visitation Committee 1991, 16). A committee established by the University Council is studying the implications of the Government's proposal which would require more staff unless vacation periods were eliminated.
- 114. Student complaints about housing and feeding are directed in the first instance to university authorities who often can not redress their grievances. The 1991 visitation committee noted in this connection that "as long as the University remains tied to Treasury

accounting procedures and bureaucracy as a Government department, with no independent account which makes cash readily available and payment fast, complaints of staff and students will persist" (Makerere University Visitation Committee 1991, 20).

Government Involvement in University Affairs

115. University authorities have become pawns in the frequent contests between students and the Government over matters that have little to do with education and, more recently, between lecturers and Government on salary issues. Their ability to resolve conflicts is not enhanced by the fact that they are appointees of the Government:

The office of the Vice-Chancellor is regarded by many as a mere conduit to receive and pass on messages from Government, students/staff and vice versa...Consequently, students have by-passed authorities on the campus and they have sought and received considerations from the President, which he could not grant as Chancellor." (Makerere University Visitation Committee 1991, 5 & 18).

- 116. The Chancellor not only appoints the chairman of the University Council and its members, but also the membership of the Staff Appointments Board that approves both new appointments and promotions. These provisions of the Makerere University Act have been replicated in the statutes of Mbarara University of Science and Technology and the Institute of Teacher Education, Kyambogo.
- 117. The political and financial subordination of the public universities to the state has been criticized in the reports of the 1987 and 1991 Makerere University visitation committees. The 1987 Visitation Committee drew attention to section 35 in the Makerere University Act "which empowers the Minister of Education to give binding directions on any matter to the University Authorities concerning the running of the University." It observed that "the Act legalizes political interference in the affairs of the University" and advised "that (it) be amended so that it provides for real autonomy" (Makerere University Visitation Committee 1987, 192). Both visitation committees have suggested fundamental changes in the governing structures of the public universities.

D. Proliferation of Institutions and Programs

- 118. The new public and private universities that have been created since 1989 will help to relieve pressures on Makerere to expand enrollments, address some regional inequalities and may in time lead to a more differentiated university system in which each institution has a special role in human resource development. However, the proliferation of institutions and programs that has taken place in recent years has occurred without any planning for the higher education sector as a whole.
- 119. At the breakup of the University of East Africa in 1970, it was envisaged that any future universities in Uganda would begin as constituent colleges of Makerere. The founding of private universities was not anticipated and so no provision was made for this in the Education Act of 1970 that governs private schools.
- 120. The establishment of Mbarara University of Science and Technology, the Islamic University in Uganda and the proposed Uganda Martyrs University have been spontaneous developments. Typically, the new institutions have begun operation and have been chartered afterward when it was realized that the degrees to be awarded required some legal sanction.
- 121. This was even the case with the Institute of Education, Kyambogo, which admitted students to a B.Ed. program before the nature of the institution's affiliation with Makerere had been finally determined---in fact, before it received a charter of its own. The difficulties Mbarara University of Science and Technology is now experiencing in developing from an experimental medical school into an institution commensurate with its name, provide dramatic illustration of the consequences of unplanned expansion.
- Duplication of courses and proliferation of new courses in the public and private universities is also a matter for concern. Mbarara University's difficulties are exacerbated by the decision to start an institution with an insecure financial base as a medical school and, subsequently, develop the low cost programs in other fields that are necessary to support the endeavor. At Makerere as well, expensive programs have been introduced recently despite the poor financial situation of the University. The new program in pharmacy is an example.

- 123. The private universities have been more cautious. The Islamic University offers courses only in low cost fields of high potential for employment in institutions serving the Muslim community or with Government and in the private sector. While Uganda Martyrs University plans to offer medicine and pharmacy in addition to education, theology and commerce, the fact that the institution will be raising funds from student fees will probably deter it from hasty establishment of any high cost programs.
- Notwithstanding the ongoing rehabilitation of instructional facilities, the large number of staff vacancies and expanding undergraduate enrollments at Makerere, there are pressures to develop postgraduate degree programs in fields of high student demand like agricultural economics and economics. The simple fact to be recognized insofar as new institutions and programs are concerned, is that there are scarce financial and staff resources to support expansion. The recent development of private universities and establishment of a second public university has exacerbated competition for staff, although it has undoubtedly permitted some staff to be engaged in academic work on a full-time basis through the practice of dual appointments.
- 125. The present legal and policy framework for expansion of universities and the higher education sector, generally, is a legacy of an earlier era when there was one public university that could be generously supported, little demand for post-secondary education, and an expanding public sector dominated labor market to absorb graduates. This is seriously out of date as the Educational Policy Review Commission recognized:

There has hardly been any systematic planning in higher education, which is evident from the haphazard manner in which institutions of higher learning have been set up in recent years. The negligence is further noticed from the poor state of the physical facilities and the deteriorating quality of tertiary education. (Educational Policy Review Commission 1989, 73).

126. The Commission's principal recommendation with respect to higher education, was the establishment of a National Council for Higher Education with coordinating and planning functions, including monitoring the development of new institutions and programs in public as well as private institutions. The Council would work closely with a proposed Manpower Secretariat in developing and coordinated educational response to skill requirements based on Uganda's national manpower development priorities.

IV. STRATEGIES FOR REFORMING HIGHER EDUCATION

- 127. University development has proceeded in an <u>ad hoc</u> manner, producing apparent redundancy in the programs and functions of institutions, and exacerbating competition for scarce public and private resources in Uganda and from abroad. Since 1986, donor investments have helped to rehabilitate university infrastructure and enabled expansion of enrollments. Although these investments have been significant, they are small in relation to the requirements expressed by university authorities and have had little impact on institutional strengthening in the absence of a policy framework or a development plan to guide investments.
- 128. This chapter identifies six issues that must be dealt with by Government and universities and donors in formulating an integrated strategy for revitalizing the higher education sector as a whole. It also proposes initiatives that might be taken and policy options for consideration involving: (1) new structures to plan future development of higher education; (2) measures to accommodate the future demand for higher education in ways that protect institutional quality; (3) increasing support for university education, controlling costs and diversifying sources of finance; (4) fostering university accountability through reforms of university governance and Government financing that confer more autonomy; and (5) creating conditions favorable to attracting and retaining staff. Success will depend on how comprehensively the needs of the higher education sector are addressed as well as on the articulation of a coherent vision of what it should become, and what will be required to bring this about.

A. Planning Future Development of the Higher Education Sector

129. Public and private higher education is the fragmented responsibility of several ministries whose activities in this sector were nominally coordinated by the Minister of State for Higher Education whose position was abolished in the 1991 ministerial re-organization. Funding of public higher educational institutions is done on an annual, institution by institution basis without reference to system wide needs or priorities, and in the context of much ambiguity not only about future but even about present budget allocations. One consequence is that public institutions lack adequate plans for their development.

- An appropriate legislative framework for the development of the higher education sector is also lacking. The Education Act of 1970 has been used to expand the number of post-secondary institutions, sometimes for purposes for which it was not intended such as the establishment of private universities. The Makerere University Act of the same year that has been amended only marginally since then, has provided the model for the governance and academic organization of the newly established institutions. Political and economic circumstances in Uganda have greatly changed since these statutes were adopted.
- 131. A mechanism to plan future development of higher education has been proposed by the 1989 Educational Policy Review Commission; a National Council for Higher Education. It is suggested that the Council be comprised of a Joint Admissions Board for universities and colleges, an Examinations Board for post-secondary institutions, a Bureau of Academic and Professional Standards and a Board for Human Resource Development. The Council would have planning, coordinating and accrediting functions for the entire higher education sector. The Educational Policy Review Commission offers no recommendations relating to the Council's membership, its relationship to Government, role in financing public institutions or concerning the legal framework for higher education.

Establish the National Council for Higher Education

- 132. Establishing a National Council for Higher Education should receive priority attention from policy makers. Nevertheless, careful thought must be given to designing such an important policy intervention.
- 133. While it is desirable that the Council's mandate involve co-ordination of all post-secondary institutions, its role vis-a-vis the universities should be different in light of the much broader missions of universities and their more complex relationships to Government and other institutions in society. It is proposed that the functions and activities of the National Council for Higher Education focus mainly on the university sub-sector for which it would have primary responsibility. The Council's mandate would involve:
 - a) long term planning including projection of enrollments, costs and requirements for new programs and facilities;
 - b) registering and accrediting public and private universities;

- c) reviewing legislation affecting the universities as well as proposing amendments and new statutes as required;
- d) approving proposals to establish new programs and carrying out periodic review of the programs offered by these institutions;
- e) coordinating admissions to degree and diploma granting institutions;
- f) assessing the financial requirements of the public universities and colleges, vetting budget requests and making recommendations to Government regarding their funding; and
- g) advising donors of university needs and articulating national and international investments in university development.
- h) liaising with the proposed Manpower Planning Council
- 134. The Council's membership and most standing committees should be created with broad representation from the public and private universities and colleges, relevant Government ministries and of parastatal and non-governmental organizations, and especially important, the private sector. However, its committees responsible for finance and allocating student intake should be <u>independent</u> of both Government and university administration. The Council should serve as a necessary "buffer" between Government and the universities in crucial matters affecting their budgeting, cost-structure and the quality of the training they provide.
- 135. The Council should foster more differentiation among the public universities and colleges as well as a sensible division of labor between public and private institutions. Investments in university development should give priority to improving undergraduate education in technological and professional fields of high labor market demand, as well as in cognate training in the natural and biological sciences and in the applied social sciences. This will have to be complimented by efforts to strengthen planning at the institutional level. Public and private institutions require better information about program costs and other parameters of their activities to support resource allocation decisions and planning future investments. They will need funding to computerize academic and financial records and for

establishment of management information systems as well as training of professional administrative staff.

B. Accommodating Future Social Demand for Higher Education and Increasing Access/Equity

- 136. What should be the response to future social demand for university education. Enrollment growth should not exceed expansion of teaching capacity. There can be no compromise on this principle if instructional quality is to be maintained and institutions strengthened.
- 137. Development of the second public university, Mbarara University of Science and Technology, and expansion of private universities, as well as the Uganda Management Institute, will facilitate enrollment of a greater proportion of the increasing numbers of qualified secondary school graduates, many of whom now repeat their final year of studies in order to obtain scores high enough to enter a degree granting institution. The private institutions may eventually account for a significant proportion of university enrollments.

Support Expansion of Private Higher Education

138. Some public financial assistance may be needed for private institutions in the initial stage of their development to enable them to construct residential and instructional facilities, and thereby make possible expansion from fees and other sources of income. Alternatively or additionally, their students might receive financial support through Government sponsored work/study programs administered by the universities and by local authorities as described below. Nevertheless, support for the development of private universities must be provided in ways that do not lead to Government interference in matters relating to the missions, programs and administration of these institutions.

Articulate University and Other Tertiary Education

139. Uganda's many diploma granting technical and teacher training institutions enroll most students who qualify for admission to the public universities but can not be given places. They are an important component of the higher education sector that is as yet unarticulated with university education. For example, the Institute of Teacher Education,

Kyambogo offers both degree and diploma courses in education and is "connected" to Makerere University in the sense that its students must satisfy the School of Education's admissions requirements and the Institute's degree program is approved by its Board of Studies. The Institute is autonomous in other respects. The Institute does not collaborate with the School of Education in offering common core coursework in educational foundations or in teaching subject domains like secondary science education as it has different degree requirements.

A long term strategy for the development of university education should define the role of such institutions and their relationship to the universities. Some diploma granting institutions might---with substantial investment in their instructional facilities and staff development---begin to offer introductory degree level studies in professional fields like agriculture, education and technology under Makerere's supervision, their best students being eligible for transfer to the national university to complete their undergraduate training. This would also help to reduce pressure for enrollment growth, promote collaboration among tiers of the higher education sector and may improve the theoretical and practical professional training provided in the different kinds of institutions.

Introduce the Credit System

- 141. The distribution of students is influenced by the extreme selectivity of admissions to many university faculties. Usually students can not transfer to another faculty. After the first year of studies, they specialize, clustering in fields of high perceived employment opportunity. These are often the fields that have the most difficulty in attracting and retaining staff.
- Enrollments and teaching loads are sometimes seriously distorted in consequence. For example, nearly three quarters of the second and third year students enrolled in the Faculty of Agriculture at Makerere in 1991 were taking agricultural economics which has only a tenth of its senior staff. A similar situation exists in the Faculty of Social Sciences with respect to the Department of Economics. Relatively small changes in labor market opportunities may produce large shifts in student enrollment, making it especially difficult for the universities to anticipate student demand and service their students.

143. The 3:2:2 and 3:1:1 general and honors configurations of studies exacerbate the problem of staff shortages in popular fields. More inter-disciplinary coursework may relieve some of these problems as well as give most students a broader and more useful training. Movement to a credit system as Makerere's Faculty of Agriculture is doing, would facilitate introducing changes in academic programs to balance student demand and share responsibilities for undergraduate instruction not only across departments and faculties but perhaps among degree and diploma granting institutions as well.

Balance Regional Development of Higher Education Through Affiliating Regional Colleges to National Universities

144. Proposals have been advanced by the Educational Policy Review Commission to eventually increase the number of public universities to four as well as to establish an open university, with the intent of broadening access to university education. The proliferation of public universities at this time has serious public expenditure implications and can not be afforded. Moreover, the instructional resources do not exist locally nor is sufficient donor assistance available to support such expansion. Future public universities in educationally disadvantaged regions should be identified from among the numerous diploma granting tertiary institutions, begin as university colleges and develop in affiliation with one of the existing public universities rather than be started from scratch. For the present, transfer of some students to university programs could be allowed as proposed above. Care must be taken, however, to ensure that the distinct roles of these institutions in the higher education system be preserved and that their primary mission remain the training of middle-level professionals and technicians rather than preparation of students for university degrees.

Improve Secondary Education for Women to Increase Equity

145. Efforts are being made to increase female representation among students admitted to public universities through some weighting of students' secondary school leaving examination scores. Female enrollments at Makerere have increased somewhat and women are now as likely as men to obtain admission to arts and science based faculties. Women are still seriously under-represented, however. The present weighting for gender would have to be significantly increased to greatly change the gender composition of university

enrollments especially in the most selective science based professional faculties; medicine, pharmacy, and veterinary medicine.

146. The problem is the small cohort of female students with qualifications to enter these fields. More women should be encouraged to study science in secondary schools and science education strengthened, generally.

C. Increasing Support for University Education, Controlling Costs and Diversifying Sources of Financing

- 147. Future growth of enrollments in public universities and revitalization of their programs of instruction will continue to be constrained by lack of Government funds. New sources of funding will have to be found for many of the requirements of these institutions, and Government allocations used more cost effectively.
- 148. Government could decide to subsidize studies in fields of critical importance to human resource development such as economics, science education or agricultural engineering. Government allocations to public universities (and perhaps loans or bursaries to students attending private institutions) would be provided on the basis of estimates of labor market requirements, the teaching capacity of academic units and the resources available. Students wishing to pursue studies in low priority fields would pay fees approaching the full cost of their education. Competition between the public and private institutions in relatively low cost, high demand fields like commerce and education would increase institutional specialization and provide incentives for efficiency.
- 149. If Government policy is to restrict enrollments to narrowly-defined manpower requirements, it can afford a relatively high level of subsidy per student. If, however, a social demand approach is adopted which would imply higher enrollments in much of the system, then Government subsidies will have to be spread thinly over more students, and non-governmental finance will be more important—whether from tuition fees, charges for accommodation and meals for students attending public universities and/or from expansion of private higher education. The political and social costs of resisting growth of university enrollments, and the high educational costs of declining per student expenditures, will direct the attention of policy makers to the introduction of various revenue generating and cost-saving measures.

Introduce Tuition Fees

- 150. Universities in many countries, including Uganda, were traditionally funded on the same basis as the rest of the public sector budgetary grants were made to cover the cost of the service so that access by consumers could be free. Where students pay fees and can choose between many institutions, the university ceases to have to depend on the state to provide it with its needs, and can defend itself against the decline in funding which Makerere has experienced. There are several aspects of any fee structure which should be taken into account prior to implementation:
 - (a) The relation of fees to unit costs.
 - (b) The relation between fee income, other revenues and Government subsidy.
 - (c) The relation of fees to Government employment and manpower policies.
 - (d) Equity: the relation between fees and students' ability to pay.
- Annual recurrent cost per student varies by a factor of between 3:1 and 4:1 in university systems where a full apportionment of all recurrent costs has been done. Where prices (fees) do not reflect costs, there will be an incentive to misallocate resources. The preliminary unit cost estimates for Makerere, however, show relatively small inter-faculty differences in unit costs because only 16 per cent of costs could be allocated to specific groups of students, and also because student welfare costs are a large constant per-student item.
- 152. The present block grant system gives universities a fixed budget, irrespective of the number of students. Fees as a source of revenue have the advantage that resources increase automatically as enrollments increase. In some systems, the budgetary process nullifies this by making the block grant in effect a residual support grant, i.e. equal to the difference between estimated fee and other income, and some target global budget

allocation. 4 Such a system creates inappropriate incentives, and any new funding formula should seek to avoid it.

- 153. Government priorities and market imperfections may affect the fee/subsidy mixture for different courses. For example, where graduates are destined largely for public sector (and relatively low-paid) employment, the ratio of fee to subsidy might be low; where the probability of private sector component is high, the fee element ought also to be high. In general terms, this is an argument for adjusting fees in the light of social return criteria.
- 154. Students admitted to public universities are the survivors of a primary and secondary system which has been strongly reliant on fee-paying and other local forms of revenue. They are also likely to be significantly above average in terms of expected future lifetime incomes.
- 155. Student financial need is very difficult to assess, particularly in Uganda as in many other Sub-Saharan African countries where resources for education are often raised by an extended kinship network. Students in objectively similar familial circumstances often have different capacities to raise funds for their education which can not be known to university or to national Government authorities.
- 156. Several private higher educational institutions in Eastern and Central Africa provide financial assistance to students in the form of fee reductions or wages for voluntary or compulsory work performed on campus. Government recently instituted a work/study scheme operated by Makerere, although with very limited funding, restricting eligibility for participation to students designated as needy by the University. Consideration should be given to expanding it so that any full time student in good standing experiencing financial hardship can obtain some support for his or her studies. Funding might also be made available to local governments in the students' home areas so that they can work during university vacation periods. Employment should be offered on a voluntary basis.

⁴ In practice, information lags mean that extra fee revenue in one year may be offset by a lower block grant the following year, so there may be a transient gain to the institution. The long-run effect is, however, the important one.

Reduce Student Welfare Costs

- 157. Accommodating and providing catering services to students accounts for a large part of university costs. Hardly anything is recovered by fees except from among the small number of foreign students who attend Makerere and pay the full cost of tuition as well as for accommodation and boarding (68 students in 1990/91).
- 158. Student welfare costs are subsidized by the state which allocates grants to the public universities, voting funds to operate student residences and catering facilities as well as to provide allowances for books and some instructional materials. Inflation and enrollment increases have eroded real expenditures for these purposes resulting in overcrowding of the halls of residence and poorer food services.
- 159. Providing accommodation and boarding has little to do with instruction or with the other missions of a public university, but is a deeply entrenched tradition. The 1987 and 1991 visitation committees suggested a semester system for Makerere which the Government is presently considering. It has been proposed that the academic year be divided into four semesters with students attending in alternating shifts to relieve pressures on accommodation and catering facilities. This will enable all students to be in residence and reduce tensions between students and university authorities. University facilities would be used more efficiently. Student welfare costs are unlikely to be reduced, and expenditures for staff salaries might increase.
- 160. The public universities could produce rather than procure inputs for their residential and boarding facilities. Makerere University, for instance, is now supplying its catering units with bakery products and cereals it is processing and could obtain additional benefit from its experimental farms. But these measures are not likely to produce significant cost-savings. Fees could be assessed or students provided with vouchers to purchase accommodation and boarding on or off campus in an effort to reduce or at least to control costs.

Generate Additional Income Through Part-time Studies, Sale of Services and Commercialization of Some University Assets

- 161. Some scope exists for expanding existing efforts aimed at generating additional resources through such devices as part-time studies, contract training, consultancy and sale of services to the public and private sectors. Where research depends in part on the facilities provided by an institution, the funding agency will usually cover part of that overhead as part of the grant. Thus faculty who depend on access to University services should include a charge for overheads in their research applications. Makerere University policies require collection of 2 per cent of staff consultancies and contract research. The National Research Council is entitled to 5 per cent of donor research funding. However, neither the University nor the Council have the ability to monitor staff activities, collect administrative overheads or to provide services to funded academics.
- 162. There is considerable demand for degree and non-degree evening courses in fields like education and commerce (as shown by recent initiatives by the Faculty of Commerce) which could be provided by Makerere University staff or by part-time staff engaged for this purpose. The scope is limited by the fact that the public universities will have to compete with their own academic staff and with more flexible and innovative private institutions for clients.
- 163. Each academic unit (whether a Faculty or department) should be treated as a cost and revenue center and thus be credited with an appropriate portion of the income it generates. But no unit can be expected to put real effort into developing income generating services unless they are able to retain and make use of a reasonable share of the income they generate. Thus, careful attention must be devoted, in developing this system, to identifying appropriate units as 'cost centers' and to dividing the resulting income equitably between all of the units which are required to make the university function as a totality.
- 164. Better utilization of the valuable physical assets of the public universities is likely to be a more substantial source of revenue. Their most valuable asset is the land they occupy. Makerere University, for instance, has been allocated or has claims to large tracts of land of much potential commercial or agricultural value.

- 165. These assets generate little income for the universities either directly in the form of rents or, indirectly, through providing surplus to reduce the costs of operating university catering services. In fact, university farms which have been established as commercial units represent burdens to university budgets rather than significant sources of savings or additional income. In addition, university printing services, book stores, staff and student housing, catering, transportation, health clinics, estate maintenance, construction and other services are not self-financing. Most of these services are operated at a loss to provide an important in-kind supplement to the meager incomes of members of the university community. Others which could become commercially profitable like Makerere's building unit do not have the capital to compete with the private sector for university construction contracts.
- 166. Contracting with private vendors to manage and/or operate some university services has been suggested by the 1991 Visitation Committee and merits further study. Making more economic use of university property should be studied as well, particularly at Makerere and Mbarara which have large land holdings on and off campus in areas with high potential for commercial and private residential development. These assets could become self-financing and revenue generating if management was improved and methods of financing the public universities were changed.
- 167. The administrative cadre of the public universities may not possess the expertise to assess commercial opportunities or the organizational flexibility to exploit them for the benefit of the institutions. Makerere, can draw upon the guidance of the Council's Committee on Commercial Units and the resources of its academic staff and alumni for some of the expertise required. Consideration should also be given to establishing a university corporation or non-profit foundation to oversee the management of its commercial units and physical assets.

Make the Public Universities Truly Self-Accounting, Liberalize Line-item Budgeting

168. Successful efforts to diversify sources of funding will require more autonomy in budgeting and accounting. A system of block grants to Makerere was replaced in 1988 by a more detailed line item budget coupled with external control of disbursements and a myriad of accounting requirements. Consequently, the University can not disburse funds without prior Government approval.

- 169. Prior to 1988-89 Makerere received a block grant from the Ministry of Education vote which was credited to the University's bank account together with other revenues, and the University made payments from its account in the usual way. Since the University's statute was amended in 1988, Makerere has had no bank account of its own for general purposes. Its Government grant is paid quarterly by the Treasury directly to an account at the Bank of Uganda, which issues checks in payment of expenses upon receipt of the appropriate documentation. Any revenue generated from, say, accommodation charges paid by visiting faculty to the University guest house accrue to the Treasury via the Bank of Uganda and, therefore, are effectively taxed away.
- 170. A particularly severe form of line-item budgeting also stifles financial initiatives by the University. The total budgetary provision is divided into seven major programs, which in turn are split into 26 sub-items. Limited virement is allowed between these. The lack of ability to re-allocate resources internally is incompatible with revenue generation.

Provide Matching Grants to Encourage Cost-Savings Revenue Generation

- 171. Budgetary support from Government will necessarily take into account the University's independent sources of revenue. The main requirement is that Government support does not fall by a dollar for each dollar of revenue generated. Revenue generation must be accompanied by revenue sharing, and the public universities must have the possibility of generating financial surplus as an incentive.
- 172. Matching grants from Government would seem to be the solution. Independent revenue from sources consultancy and research should not be automatically deducted from Government support grants: a possible formula is one which confines Government grants plus fees to (say) 95 per cent of estimated costs, leaving the balance to be made up from other forms of revenue generation, but with the public universities having the right to keep any excess over the 5 per cent.

D. Increasing University Accountability Through More Autonomy and Improving University Management and Planning

173. The statutes of the public universities give the state important powers in university governance which are strengthened by present funding and budgeting processes.

It will not be possible to reform financing of public higher education---or to carry out many other reforms---unless the public universities have more autonomy.

- 174. Following dissolution of the University of East Africa, Makerere became an autonomous degree granting university whose Chancellor is the head of state. The Chancellor appoints the vice-chancellors and the chairmen of the councils of the two public universities as well as the Principal of the Institute of Teacher Education, Kyambogo, and its Council. The chancellor also determines the membership of their powerful staff appointments boards.
- 175. These features of university-Government relations are given a great deal of attention in the reports of the 1987 and 1991 Makerere University visitation committees. The most recent was precipitated by student unrest. Abolition of students' transportation, stationary and pocket allowances led to rioting and suspension of instruction for which the University's Vice-Chancellor was held responsible by the students, although student fees are not a matter for determination by the University. Students have exploited the subservient role of university administrators for political advantage---unsuccessfully, on this occasion. The politicization of student welfare issues illustrates the broader governance problem and is a major part of it.

Revise University Statutes

- 176. The subordinate relationship of the public universities to the state has not strengthened their claims on scarce public resources in recent years nor has it encouraged responsiveness to the many demands which Government and society have placed upon the universities. It is time to consider fundamental reforms of structures of university governance providing for greater institutional autonomy, starting with the selection of a Chancellor who is appointed by but does not represent Government.
- 177. University councils should be restructured to be more broadly representative of Ugandan society, including members from agricultural societies, education, business and legal associations, labor unions, and private firms. Councils should be of manageable size, not the current size of thirty-eight at Makerere.
- 178. Professorial and administrative staff at the public universities are now appointed and promoted by appointments boards whose membership is determined by

Government. It is important that this provision in the university statutes be revised and a new structure with new procedures be developed. The public universities must have the major voice in the appointment and promotion of their professional and senior administrative staff. University officers, for example, should be appointed by the councils, but on the recommendations of university senates and staff.

Strengthen University Administration and Planning

- 179. At Makerere, the Vice-Chancellor and the University Secretary report independently to the Council and have separate responsibilities within the University. This dilutes the authority of the Vice-Chancellor as the chief executive officer. The position of University Secretary should be transformed into a full-time Council Secretary who would serve at the pleasure of the Council. The Secretary would then deal with strictly Council affairs and would not have any direct responsibilities regarding the internal operation of the University.
- In place of the University Secretary, the position of Deputy Vice Chancellor for Administration should be created. This individual would have the responsibility for the administrative and financial affairs of the University, while the Deputy Vice-Chancellor would be responsible for academic affairs. Both should be selected from a pool of candidates identified through a search and interview process and recommended to the Council by the Vice-Chancellor for appointment. They would serve at the pleasure of the Vice Chancellor. With this organization, the Bursar would report to the Deputy Vice-Chancellor for Administration while the Registrar would report to the Vice-Chancellor for Academic Affairs.
- 181. In addition, the budgeting and planning functions at Makerere should be consolidated into one unit headed by a director and reporting directly to the Vice Chancellor. As a result of this reorganization, the role of the Vice Chancellor as the chief executive officer of the University is clarified.
- 182. Before an effective planning process can be developed in the University, an institutional research capability is required whereby the data generated by the student information system and the financial and management information system are merged to produce reports on program intake and output, and unit costs by program and by level of instruction. This newly constituted unit should also play an integral part in the budget

process. The unit would develop a data base---historical and projected---for each program area and assist the program area in developing a framework of questions to be addressed in order to answer the concerns that are important to the program area itself, those of the University, and those of society at large.

- 183. A university must develop a means by which it evaluates itself internally. Each program should be reviewed at least once in either a three- or five-year cycle. An academic planning and policy committee of Senate should be established to monitor program review and evaluation, chaired by the Deputy Vice-Chancellor for academic affairs, and its recommendations should, of course, influence the allocation of any discretionary funds.
- 184. External examination can be a useful device for ascertaining program strengths and weaknesses and for fostering regional and international academic collaboration. Makerere University expends a relatively large proportion of its limited foreign exchange account on paying the costs of transportation and honoraria. This is an indicator of the importance of external examiners to the University in maintaining the quality of its academic programs. Increased investment in external examination should be viewed as a cost-effective strategy for supporting on-going evaluation of academic programs.

E. Creating Conditions Favorable to Attracting and Retaining Staff, and Making Academic Work Full Time Employment

- 185. The quality of university education can not be improved, and its contribution to national development strengthened, without significantly increasing investments in the staff of the public universities. Nor can donor initiatives in revitalizing university programs and facilities and in upgrading academic staff be sustained without radical changes in policies affecting professorial, administrative, technical and support staff.
- The wages, salaries and the benefits associated with employment in the public universities are simply too low to attract or retain many staff, or to enable those in university employment to devote their professional energies to their university work. Academic salaries are between ten and fifteen times lower than what many staff could obtain in the private sector or from the new private universities in Uganda. They are even lower than the salaries of senior public servants excluding inducements like the co-operative automobile ownership scheme which are not offered to academics, causing much resentment.

187. The results are high staff vacancy and attrition rates and in the pervasive parttime engagement of staff. The negative impact on the operation of public institutions, the morale of their staff and on the quality of the programs they offer is obvious. This requires immediate attention from Government and donors.

Introduce A Parallel System of Performance-based, Contract Appointments

- In order to accomplish any capacity building in the public universities, most donors have found it necessary to supplement the meager salaries of academic and non-academic staff in concealed ways and/or to provide other inducements. For example, United States Agency for International Development assistance for the Faculty of Agriculture at Makerere has involved not only support to top-off salaries through per diems. This has not prevented the Faculty from losing much property and many staff---seventeen academic staff in recent years, from a roster of less than seventy.
- 189. Such practices, while essential for project implementation, are a source of discord within the university community, between the public universities and Government and sometimes between donors. Nevertheless, at least some full-time academic and non-academic staff are needed to carry out the work of a university. They will have to be offered sufficient income and other benefits.
- 190. The rights and obligations of individual staff members must be clearly defined and measures introduced to ensure that everyone makes an adequate contribution to the joint effort. Fixed term, well remunerated employment, with renewal of contracts based on assessment of performance, might be offered to a small number of academic and non-academic staff in the public universities, similar in important respects to the present income supplement schemes. Such staff would continue to receive their regular salaries and benefits. The number and proportion of contracted staff ought to vary among academic units depending on programmatic needs as well as on the characteristics of particular fields. For instance, a higher proportion of full-time staff may be needed in mathematics than in commerce and law where employment or experience outside the university is integral to professional work.
- 191. This necessitates rethinking appointment and promotions policies. Most academic appointments are made with the expectation that staff will contribute to the undergraduate teaching and postgraduate programs of their departments, advise students,

participate in university committee and administrative work, provide services to clients outside the university, and carry out research. Criteria for promotion follow this assumption. A contract appointment scheme would change the scope of these responsibilities to reflect priorities for institutional strengthening. Some staff might be appointed primarily as teachers, some to do postgraduate instruction, supervision and research and others for some combination of these activities. A strict system of monitoring and evaluation is required. A "work point system" could be designed to differentially recognize professional activities while ensuring that overall workload is equitably shared and a fair division of labor is established. Staff receiving salary supplementation would be remunerated for work considered to be over and above normal workload.

192. These proposals should be carefully studied. Whatever is done should be designed to arrest the capacity eroding effects of low salaries. The associated costs would have to be externally financed while measures are being introduced to increase funding for the public universities through cost-recovery and income generating activities.

Increase Staff Housing

- 193. Staff housing is an important inducement to academic employment in Uganda; it is equivalent to a very large multiple of academic salaries. Traditionally, public universities have provided housing to their staff at nominal cost or given allowances to rent accommodation off campus. Today, there is a shortage of on campus staff housing and rental costs are out of line with housing allowances especially at Makerere University. The private housing market in Kampala is not yet able to offer affordable housing for rent or purchase to individuals with academic salaries.
- 194. Funding might be provided to the University to develop staff housing on some of the unoccupied property allocated to it and zoned for university expansion. Low interest mortgages could be made available to staff to purchase the units, the interest raised to commercial levels if they resign from the University, and transfer of ownership restricted to members of the university community. A revolving fund could be created from the sale of some university property to finance new construction of staff residences.

V. SUMMARY

- 195. There is a palpable malaise among Government, donors and the university community that must be overcome if higher education is to be revitalized.
- 196. Most of the recommendations of the 1987 and 1991 visitation committees to Makerere University and the 1991 Educational Policy Review Commission await decision and implementation. In recent years, Makerere has experienced increasing student and staff unrest. The academic community is de-moralized by Government expenditure controls and disbursement procedures, and especially by its inaction on staff salary demands.
- 197. Steps must now be taken by the Ugandan Government to correct the present drift of events. Donor support is critical to long-term strengthening of university education, and more investment will be needed. But such investment will not be forthcoming unless it occurs in the context of broad policy reform of the higher education sector---rather than through piecemeal corrective efforts.

A. Immediate Measures

- 198. Establishing a National Council for Higher Education to plan development of the university system is a matter of the highest priority. The Government has been presented with a proposal by the Educational Policy Review Commission. Further study of the Council's functions, composition and requirements for a secretariat is suggested in this report. That should not seriously delay action on this critical proposal, however.
- 199. Implementation will necessarily involve revision of university statutes and the Education Act of 1970. New legislation needs to be introduced with the threefold objective of: 1) making provision for lay structures of governance for the public universities and protecting their autonomy; 2) creating a suitable framework for the expansion of private higher education; and most important, 3) establishing a legal basis for the proposed National Council for Higher Education. Revision of university statutes should be guided by the reports of the 1987 and 1991 visitation committees as well as the recommendations of the Educational Policy Review Commission.

200. In addition, urgent measures must be taken to begin to bridge the large gap between university and private sector salaries in order to demonstrate Government's recognition of the important role of the public universities in national development.

B. Medium-Term Measures

- 201. Registration of new institutions and expansion of public university enrollments must await long-term measures to reform financing of higher education. Government allocations to the public universities to train students for public sector employment need to reflect the full costs of their training and the institutions able to set and collect tuition and fees for other students. This will make the universities more accountable to Government and responsive to student perceptions of employment opportunities.
- 202. The assets of the public universities should be better utilized through development of night courses, part-time degree and non-degree programs, contract training and other income generating activities. Likewise, better utilization of university farms and other properties should be investigated. Commercial/residential development of some off-campus university properties and areas zoned for university use should be explored as a means to finance construction of housing for purchase by staff on concessional terms. Housing is of crucial importance to attracting and retaining staff.
- 203. The proportion of university budgets allocated to student welfare should be gradually reduced. Consideration should be given to contracting with vendors to operate university halls of residence and catering services and/or providing students with vouchers to purchase accommodation and boarding from the private sector. Students would supplement any subsidies they receive. These measures should be taken in conjunction with expansion of work/study programs and presuppose significant university autonomy in matters of financing. Cost-saving and income generating activities should augment rather than reduce university base budgets.
- Plans should be developed to expand university enrollments by making more use of existing capacity in public institutions and increasing the capacity of the newly established private universities. Most future growth should be absorbed by Mbarara University of Science and Technology and by diploma granting public institutions whose programs should become more articulated with those of the public universities.

- 205. The development of private higher education should be guided by the National Council for Higher Education which should play a facilitative role. The possibility of assisting private higher education should be studied as a low cost means of further expanding access to university education.
- While women are still seriously under-represented in university enrollments particularly in scientific fields, compensatory efforts should focus on the very small number of secondary school graduates applying for admission to scientific and technological studies. Secondary education in science subjects needs to be strengthened and more women encouraged to study them.

C. The Role of Donors

- 207. Donors have provided significant support for Makerere University. Two donors meetings have been held to consider University's needs at the request of the Government and university authorities; the first in 1980 at the Rockefeller Foundation's conference center in Belagio, Italy and the most recent (1987) in Kampala. Both were organized to be "pledgings" on the model of the 1963 Lake Como conference also hosted by the Rockefeller Foundation, which launched the three constituent colleges of the University of East Africa.
- 208. Much has changed in donors' thinking about how university education in Uganda and elsewhere in Africa should be supported. The major change as administrators at Makerere University only recently discovered, is that universities are a low priority in assistance for the education sector. In contrast to thirty years ago when donors eagerly supported Government plans to establish universities to produce the graduates needed to indigenize civil services, governments are now criticized for over-investing in higher education. Uganda, for example, is being urged by multilateral donors to redirect funds from higher to primary education whose operating costs are almost entirely financed from parental and community contributions while the Government subsidizes higher education.
- 209. Donor support for university education is no longer comprehensive but highly focused on building training capacities in fields like economics or community health or crop science. The problem is that high quality training often depends on instruction in cognate fields like mathematics that are less attractive to donors. Some university departments and

their staff benefit from fragmented project support. But Makerere is not strengthened as an institution. It is, in fact, often weakened as academics are drawn away from the University into employment as donor consultants and project staff, reinforcing donor pessimism about the sustainability of investments in the University. Future donor investments should be more coordinated address the broad needs of Makerere and the other universities are addressed.

- 210. In the short-term, donor support might focus on: (1) professional training and technical assistance for establishing the secretariat of the National Council for Science and Technology and strengthening university planning and administration; (2) preparing master plans for rehabilitating instructional and residential facilities; (3) launching a work/study program in collaboration with Government and the private sector to facilitate implementation of cost-recovery measures and expansion of private higher education; and (4) assessing possibilities for income generation from better use of university land, for making some university services self-financing, and contracting with the private sector to provide others. Major investments in staff development and in rehabilitating instructional and residential facilities are required for he long-term revitalization of university education.
- 211. Little progress will be made unless incomes of academic and non-academic staff are raised. To increase the number of staff who will devote most of their professional energies to academic work, external finance might be provided to the Government of Uganda to create a temporary facility to employ some staff on short term contracts, renewable on the basis of performance, much like the present salary supplement arrangements of many donors. The number of positions supported in this way would vary across academic units, depending on institutional development priorities. There are important implications for staff regulations that have to be considered. Key non-academic administrative and support staff should be involved in this scheme as well. It must be carefully designed in consultation with donors to university education as well as with university and Government authorities, linked to long-term institutional planning, and implemented in conjunction with the introduction of cost-recovery and other reforms in the financing of public higher education.

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