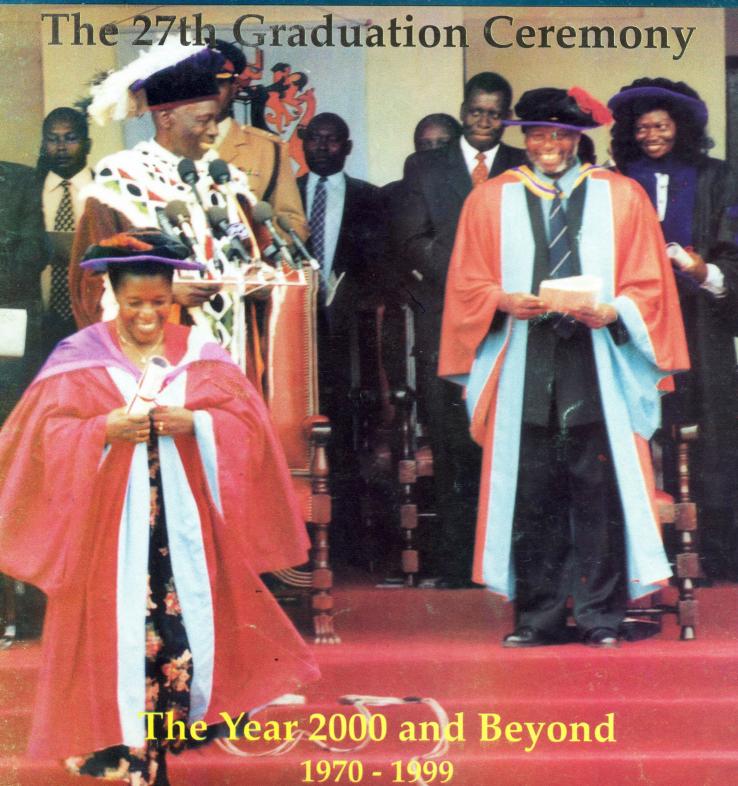
Varsity Focus

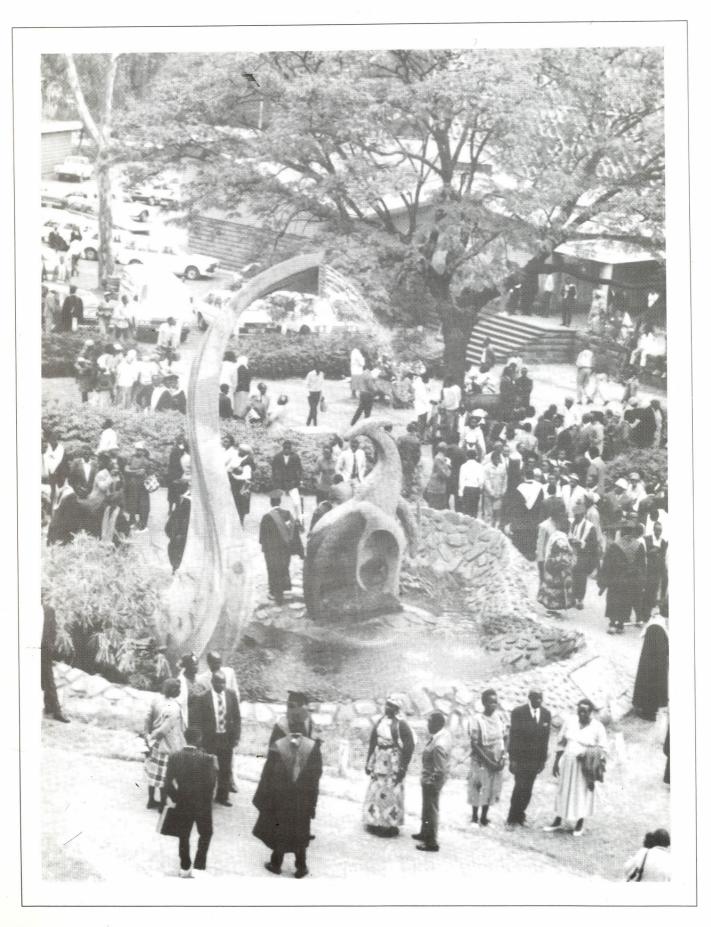
A Newsletter from the Office of the Vice-Chancellor

University of Nairobi

November 1999

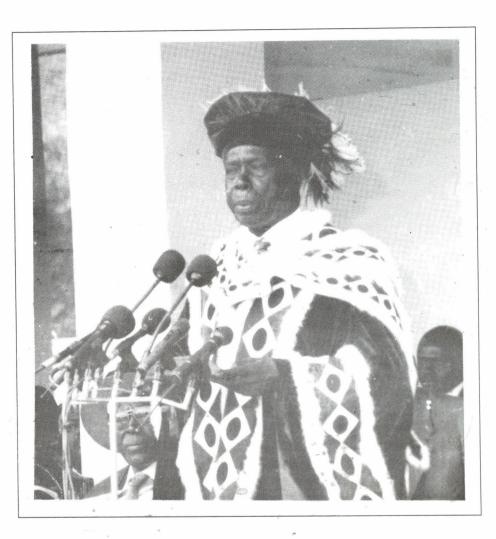


Fountain of Knowledge



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The Chancellor



President Daniel T. arap Moi, C.G.H., M.P.

Hon. LL.D. (Nairobi) D.Sc. (New Brunswick) D.Sc. (Moi) D.Ed. (Kenyatta) D.Sc. (Egerton) D.Sc. Eng. (JKUAT) Ph.D. (Soka)

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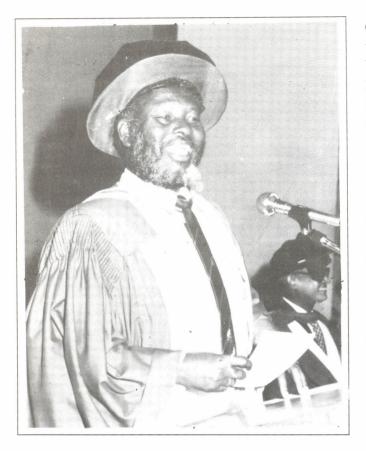
The Chairman of Council



Professor David Wasawo

M.A. (Oxon) Ph.D. (London) Hon. D.Sc. (Kenyatta)

The Vice-Chancellor



Professor Francis J. Gichaga, M.B.S., E.B.S. Professor of Civil Engineering B.Sc. (East Africa) M.Sc. (Nairobi) Ph.D. (Nairobi) FIEK, FICE, R.Eng., C.Eng.

From the Vice-Chancellor's Desk

On behalf of the University of Nairobi Community I wish to welcome all graduands, friends and relatives and all those stakeholders who enabled the graduands to complete their programmes for the awards of diplomas and degrees today.

The University of Nairobi has formulated a new vision to keep with today's charging realities: "to be a leading centre of excellence in the pursuit, development, dissemination and preservation of knowledge, inspired and guided by African values, and committed to the virtues of quality and relevance; and to contribute to the dynamic socio-economic and culture development of Kenya, Eastern Africa and the world at large." This vision is elaborated in the University's new mission statement: "to maintain a leadership role in the pursuit and development of knowledge through quality and relevant teaching, research, consultancy and community service

The institution will also develop and promote problem solving and leadership skills, and the values of commitment to quality, integrity and service to society. It will also serve the society through the transfer of intellectual products to meet the changing needs of Kenya, Eastern Africa and the world at large. To achieve these goals, collaboration with others in industry, academic and professional fields in the search for solutions and strategies for the betterment of society will be fundamental to this process.

The provision of higher education within Kenya is now subject to the dynamics of a fast changing society. All facets of life in the nation find they have to adjust to the new reality, demanding of society to recast its visions, missions and goals and reassess the critical issues underlying the social contract. This inevitably includes social institutions and the delivery systems for the goods and services that society needs. It also includes the systems of governance and the rights, duties and responsibilities of the citizen. This necessary reexamination of societal structures can trigger powerful momentum to propel the society to new levels of development. Higher education has a special place in these dynamics, and institutions of higher learning bear the burden of developing and nurturing the knowledge base upon which other sectors may chart a way forward.

Prof. J. J. Gichaga

The Deputy Vice-Chancellor (A & F)



Prof.essor C.M. Kiamba, MBS, B.A. Land Econ (Nairobi) M.Sc. (Reading) Ph.D. (Cantab) MISK, RV

From The Desk of the Deputy Vice-Chancellor (Administration & Finance)

The University of Nairobi's 27th graduation ceremony is a unique one since it is the last one this Century. We can look back with pride at our accomplishments; accomplishments that have enabled the University to maintain a distinct leadership in scholarship and research not only in Kenya, but also in the Eastern Africa region; accomplishments that must now form the firm basis for the response to opportunities and challenges that face the University over the next millennium.

Such historical strengths are now being faced with the urgent need for change. The change is, in turn, premised on the need for greater relevance, efficiency and effectiveness in the manner in which the University fulfills its vision, mission and objectives. As Charles Darwin foretold, "It is not the strongest species that survive, nor the most intelligent, but the ones most responsive to change". The future of the University of Nairobi depends largely on the extent to which it will change in order to take advantage of both the opportunities and tackle the challenges of the Century.

One of the main challenges in the new millennium for the University is the manner in which it will respond to the emerging trends of delivery and of the globalisation of university education. The rapid change in technology, especially information technology (IT), which is transforming the way in which people live and work, will provide the toughest challenge and opportunity. The effective use of new IT offers ways in which the quality, effectiveness, and, in particular, the flexibility of university education can be improved. It is imperative for the University to embrace IT in its academic and management structures. The on-going development of the internal computer network and information management system in the University and the recent launching of a comprehensive web site in the internet (see **www.uonbi.ac.ke**) of the University are part of the University's aggressive response to this challenge.

The rapid expansion of the University of Nairobi during the past three decades has given rise to several problems such as constrained financial resources, rapidly deteriorating physical facilities, and under-stocked libraries and laboratories. Vital aspects of the academic support system are wanting with such areas as transport, document processing, library acquisitions, etc., suffering considerably. These problems have to be addressed effectively in order to enable the University meet the society's needs for specific knowledge and skills. These challenges demand an application of new and innovative management techniques in order to maintain the quality of the University's services. They call for a major recasting of the University.

Fully cognisant of the above changing local and global trends and challenges in higher education, the University of Nairobi embarked in 1998 on a institutional restructuring or re-engineering process that has involved a review of its vision, mission, strategic objectives and institutional and academic structures. This process has dovetailed excellently into the recently instituted Universities Reform Programme of public universities in Kenya, which has as its main objective the rationalisation of functions and staff right sizing of the institutions.

Beyond these strategic planning efforts, however, the University has continued to aggressively search for more innovative ways of generating income in order to supplement support from the Government. Part of this process was the establishment of the University of Nairobi Enterprises and Services Limited (UNES) as the business-oriented institutional framework for the co-ordination of income generating activities. In addition, linkages with the alumni, friends and the industry, other universities, and international organisations are being strengthened in order to enhance support for research and other activities and to sustain competitiveness of the University's services and products. These are all part of the University's commitment to sustainable education into the next century.

Prof. C. M. Kiamba

The Deputy Vice-Chancellor (Academic Affairs)



Prof. F. A. Karani, O.G.W. Professor of Education B.A. (East Africa) P.G.D.E., M.A. (Nairobi) Ph.D. (Pittsburgh)

From the Desk of Deputy Vice-Chancellor (Academic Affairs)

The University of Nairobi celebrates the 27th graduation - the last this century - proud of its distinguished record and accomplishments in teaching, research, development and consultancy over the past 29 years; while strategizing for the future to continue to attain greater heights as a centre of academic research and professional excellence.

As the only institution of higher learning in Kenya for a long time, the University of Nairobi responded to the country's regional and Africa's high level manpower training needs and demand, by developing and evolving, over the years strong diversified academic programmes, and specializations in sciences, applied sciences, technology, humanities, social sciences and the arts. To date, these stand at over one hundred, housed in nearly one hundred different

departments, fourteen faculties, eight Institutes and one School, distributed in six colleges.

The University of Nairobi offers high level manpower training for Kenya and Africa in some highly specialised areas, not catered for by any other institution of higher learning in the country and the region.

An innovative development in the University of Nairobi's educational delivery and training approach, has been the introduction of continuing education/parallel degree, diploma and certificate programmes, which has opened invaluable opportunity for the hundreds of Kenyans and non Kenyans who meet the University admission requirements, but do not secure admission due to the restricted intake into the regular programmes determined by the limited Government funding. These programmes are governed by the same statutory rules and regulations as the regular programmes. The scheduling of the teaching of most of these programmes in the evenings between 5.30 p.m. and 9.00 p.m. during weekdays, and between 9.00 and 5.30 p.m. on weekends and public holidays, make it possible for working people to pursue university education while continuing to undertake their regular responsibilities. A second advantage is the maximum utilization of teaching facilities in most colleges, as the programmes use the idle hours when not in use by the regular students. In these programmes the student meets the full cost of tuition and related expenses; hence they are a source of the badly needed money for teaching materials and upkeep. Approximately a collosal KShs.15b. annually is spent by Kenyans on University education abroad, the parallel programmes are already netting some of this money from students who would have gone abroad but have registered locally. The trend points towards a steadily increasing enrollment and with it more money that would have gone out, being netted, thus saving the country valuable foreign exchange.

The continuing education/parallel programmes already underway include:

Faculty of Science

- B.Sc. Actuarial Science
- B.Sc. General
- **B.Sc.** Mathematics
- B.Sc. Statistics
- B.Sc. Industrial Chemistry
- B.Sc. Biology

Faculty of Architecture, Design and Development

- B.A. Design
- B.A. Land Development
- B.A. Building Economics

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Faculty of Law Bachelor of Laws

Faculty of Engineering B.Sc. Agricultural Engineering B.Sc. Surveying B.Sc. Civil Engineering B.Sc. Electrical Engineering

Faculty of Medicine Bachellor of Medicine - Bachelor of Surgery (MBchB) B.Sc. Nursing Post-Graduate Diploma in Sexually Transmitted Diseases

Faculty of Pharmacy Bachelor of Pharmacy

Faculty of Dental Science Bachelor of Dental Surgery

Faculty of Arts BA

Diploma Bridging Courses

Institute of African Studies

MA Gender and Development Postgraduate Diploma in Gender and Development

Faculty of Commerce Bachelor of Commerce Masters in Business Administration

Faculty of Veterinary Medicine Bachelor in Veterinary Medicine

Faculty of Agriculture B.Sc. Food Science and Technology

Population Studies Research Institute (PSRI)

Master of Science in Population Studies

School of Journalism

Post Graduate Diploma in Mass Communication

Faculty of Social Sciences

Bachelor of Psychology (Counselling)

Faculty of Education

B.Ed (Arts) B.Ed (Science)

Faculty of External Studies

B.Ed. Arts (Through distance education) The total parallel undergraduate programmes student population at the moment stands at 3,339. The first graduands of the parallel programmes are expected in the academic year 2001/2. The total undergraduate student population in the regular programmes is approximately 12,000 (including the 1,000 external degree students), while the postgraduate student population is approximately 1700 (including approximately 140 Ph.D. students).

Each academic year the University of Nairobi admits and graduates approximately 3,000 graduands in the regular programme. The number of postgraduate awards is approximately 380 (including approximately 25 PhD's).

Apart from doing the regular academic work, many students have participated in seminars, student projects, clubs et cetera. University of Nairobi has some outstanding sportmen and women who compete locally and internationally and excel and bring home tropies.

The University of Nairobi has continued to promote and participate in international scholarly academic undertakings, as evidenced by the over 94 exchange links with overseas universities and similar number of visits to our University by distinguished scholars and researchers.

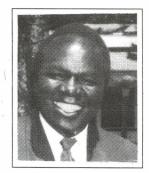
Research has continued to be a key activity, although it is hampered by lack of financial resources. The University is focusing more and more on action oriented research that can contribute directly to solving the country's educational, social, economic, cultural, industrial and development problems, to facilitate the evolution of a developed industrialised state.

All this growth has not gone without challenges; central to these challenges is the overstretched or lack of enough financial resources.

As we advance into the next millennium one factor is clear - that the challenges must be contained and the University must continue to move forward at the cutting edge, for the high level human resources development, and in the discovery and development of new and applied technologies, methodologies, processes and products that are critical in transforming Kenya to the developed industrialized status.

Prof. J. Karani

College Principals



Prof. D.M. Mukunya B.Sc. (California), M.Sc., Ph.D. (Cornell) Principal, Collège of Agriculture and Veterinary Sciences



Prof. L. Omondi, M.B.S.B.A. (E.A.) Dip. Appl. Ling. (Edin.), B.Phil., Ph.D. (London)Principal, College of Education and External Studies



Prof. S.K. Sinei M.B.Ch.B., M.Med (Nairobi) Principal, College of Health Sciences



Prof. F.N. Kibera Com (E.A.), M.B.A. (Alberta), Ph.D. (Toronto) Principal, College of Humanities and Social Sciences



Prof. F.W.O. Aduol B.Sc., M.Sc. (Nairobi), Dr.-Ing. (Stuttgart) Principal, College of Architecture & Engineering



Prof. A.G. Tumbo-Oeri B.Sc. (Nairobi), Ph.D. (Newcastle) Principal, College of Biological and Physical Sciences

University of Nairobi Council Members

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Members PS, Ministry of Education PS, Ministry of Finance P.S., DPM

Chairman, KBC Vice-Chancellor Deputy Vice-Chancellor (A) Deputy Vice-Chancellor (A&F) Principal, CAE Principal, CBPS. Principal, CHSS Principal, CHSS Principal, CAVS Principal, CEES

Representatives Colleges: CAE CHS CAVS CEES CBPS Staff Association Convocation

Studens Representative Chairman Secretary General Prof. David P.S. Wasawo Prof. Juma Lugogo Mr. Micah Cheserem

Mr. Wilfred Kimalat Mr. Martin Oduori-Otieno Mr. J. Kaguthi Mr. Stanley Murage Mrs. Tabitha M. Oduori Ahmed Yussufu Mr. Manu Chandaria Dr. Mohammed Isahakia Mr. Peter Anaminyi Dr. Mtana Lewa Dr. Cyrus G. Nderitu Dr. J.G. Kiano Prof. Francis J. Gichaga Prof. Florida A. Karani Prof Crispus M. Kiamba Prof. F.W.O. Aduol Prof. Alloys G. Tumbo-Oeri Prof. Francis N. Kibera Prof. Samuel K. Sinei Prof. Daniel M. Mukunya Prof. Lucia N. Omondi

Prof. Paul M. Syagga Prof. Julius M. Kyambi Prof. Margaret M. Wanyoike Prof. Clement M.P. Oniang'o Prof. Joseph B. Otieno-Malo Dr. Duke Orata Prof. Walter O. Oyugi Mr. S.J. Ashioya

G.N. Kariiri J. Kioko



A Brief History of the University of Nairobi

1956: Princess Margaret is welcomed to the dais to officially open the Royal Technical College, Nairobi

The roots of the University of Nairobi may be traced back to 1956, with the establishment of the Royal Technical College which admitted its first batch of 'A' level students for technical courses in April. Soon afterwards there arose an urgent need for expert advise on the pattern of higher education in East Africa. Consequently, a working party to look into this matter was appointed in July 1958. Among the key recommendations of the Working Party was that the Royal Technical College be transformed, through reconstruction and provision of additional facilities into the 2nd inter-territorial University College of East Africa. The Royal Technical College was therefore transformed into the second University College in East Africa on 25th June, 1961 under the name Royal College. The Institution was



admitted into a special relationship with the University of London, England whereupon it immediately began preparing students in the faculties of Arts, Science and Engineering for degrees of the University of London. Meanwhile students in the other faculties, especially the Faculty of Special Professional Studies (later renamed Faculty of Commerce) and the Faculty of Architecture continued to read for diplomas or for qualification of professional bodies or institutions. By 1963, the idea of an inter-territorial university was realised with the creations of the University of East Africa. This is the time the Royal college was renamed University College Nairobi. The University College Nairobi thus became a constituent College of the newly founded Federal University of East Africa, which was formally established on June 28, 1963. Consequently, the students who enrolled in September the same year, henceforth were to study for degrees of the University of East Africa and not London as was the case before.

In 1970 the University College Nairobi transformed into the first national university in Kenya and renamed University of Nairobi. The other countries of East Africa similarly instituted their national universities, namely:- Makerere University in Uganda and University of Dar-es-Salaam in Tanzania.

In 1983 the University underwent a major restructuring resulting in decentralization of the administration by creation of six (6) Campus Colleges headed by Principals. The six campus colleges are:-

- (i) *College of Agriculture and Veterinary Sciences* at Upper Kabete Campus.
- (ii) College of Architecture and Engineering at the Main Campus.
- (iii) College of Biological and Physical Sciences at Chiromo Campus.
- (iv) College of Education and External Studies at Kikuyu Campus.
- (v) College of Health Sciences at the Kenyatta National Hospital Campus.
- (vi) College of Humanities and Social Sciences at the Main Campus (Faculty of Arts), Parklands Campus (Faculty of Law) and Lower Kabete Campus (Faculty of Commerce).

From the small beginnings of the l960s the University has expanded dramatically, in terms of student numbers, staff and physical facilities. For example while there were about 2,580 undergraduate students and l84 postgraduate students in l970/71 academic year, 'in l999 there are about 15,000 students pursuing undergraduate studies and about 1,500 pursuing postgraduate studies. Similarly whereas there were about 430 teaching staff in l971/72 academic year, in l999 we have about 1,500 members of academic staff.

Postgraduate studies - a long history



Prof. P.N. Nyaga Director, BPS The University of Nairobi has always had a strong compo-nent of postgraduate training and research. There has always been postgraduate training in one way or the other in the institutions that preceeded the University of Nairobi. However, it is only in the early

1970's that a Higher Degree Committee was established to run the affairs of these studies. The Postgraduate Committee was headed by Chairman. Before this both the higher degree and postgraduate studies secretariats were sections in the Academic Division. The increase in number of programmes and student enrollment led to the establishment of the Board of Postgraduate Studies (BPS), in 1985 under statute XVIA to deal specifically with all postgraduate matters in the entire University. The BPS is a standing committee of Senate comprising of four Senate representatives and carries the status of a Faculty/Institute/School. It has a secretariat to manage routine daily matters and a Management Board comprising the Director, Senate and College representatives, the University librarian with the Academic Registrar as its secretary.

The vision of the BPS is to offer quality and efficient administrative and management services in regard to development of relevant programmes, enrollment, teaching and training of postgraduate students; Preservation and dissemination of knowledge through publications of research work; to run the course work and research programmes; and support recurrent BPS office expenditure.

There are over 80 Postgraduate Programmes in the entire University in the fields of Science, Agriculture, Medicine, Social Sciences, Education, Architecture and Engineering. There are also 10 Parttime Postgraduate Programmes in addition to the regular ones. As we enter the 3rd millennium the BPS intends to develop regulations and curriculum that will suit the needs of the people and the country at large.

The enrollment of both regular and parallel programmes and the completion rates are as shown in the attached three tables.

Completion Rate (1994-1998)

Year	Graduants		
1994	355		
1995	296		
1996	368		
1997	298		
1998	334		

Note:

- (i) The completion rate and the new student enrollment almost cancels out.
- (ii) The major factor controlling enrollment and completion rate is to do with funding in terms of scholarships and research grants.

Enrollment in the Parallel Programmes Todate 1998/99 Academic Year

Faculty	Number of Students		
Faculty of Arts	35		
Faculty of Commerce	450		
M.Ed.	26		
M.Sc. Cytology	8		
P.G.D. in STI	58		
P.G.G. Mass comm.	18		
P.G.G. Education	70		
M.Sc. Inform. Science	39		
P.G.G. Comp. Science	23		
Cert in Pop Studies	14		
M.A. Inter. Studies	12		
Total	753		

Note: These are programmes that have been run for only one academic year.

Enrollment of Postgraduate Students by Faculty 1994/95 - 1998/99

Faculty	1994/95	1995/96	1996/97	1997/98	1998/99
Agriculture	147	167	171	183	165
ADD	47	51	63	45	42
Arts	200	210	268	268	249
Commerce	30	29	58	56	48
Education	. 13	21	33	42	39
Engineering	60	56	49	42	46
Law	22	24	29	31	36
Medicine	197	256	320	351	302
Science	182	215	230	210	187
Vet. Medicine	61	68	74	72	75
Sch. of Journalism	24	33	17	18	21
External Studies	-	· · · · ·	55	62	65
Social Science	×	1	- 2	2	2
African Studies	20	- 25	34	43	48
Computer Science	23	22	17	18	19
PSRI	30	44	49	52	53
IDIS	17	20	36	35	37
IDS	-	-	-	-	
Nuclear Science	-	2	5	6	7
Pharmacy	-	1	1	3	3
Dental Science	5	-	÷ -		-
HABRI		- 2	-	-	-
TOTAL	1,073	1,245	1,511	1,539	1,454

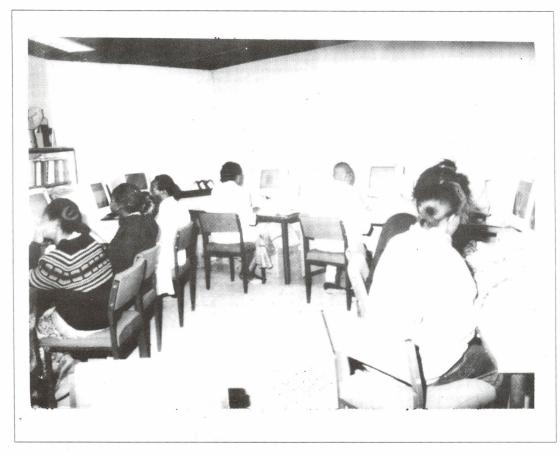
Note:

(i) The above figures include Diplomas, Masters, M.D.s and Ph.D.s and are of regular programmes.

(ii) The figures comprise both female and male students.

- (iii) In total the Board manages 80 postgraduate programmes. Each programme, in addition has a Ph.D. and higher doctorate component.
- (iv) The enrollment per year comprises the new and continuing students.

Information Technology at the University of Nairobi



Students in a computer lab. Computers have become an integral part of university teaching and research

The rapid and continuing growth and development of information and communication technologies is transforming the ways in which we live and work. In higher education, the effective use of these new technologies offers new ways in which the quality, effectiveness, and, in particular, the flexibility of higher education can be improved. In particular, telecommunications and computing technologies are, among other things, having the following impacts:

• offering new ways of delivering distance education;

• increasing the efficiency and effectiveness of university administrative processes;

• offering new ways in which universities can compete on a global basis (the concept of "virtual" universities);

• opening the way to digital libraries; and

• offering major improvements in institutional management and academic administration.

In the University of Nairobi, we believe that information and communication technologies and systems are critical resources, which we are committed to using to support the primary business of the University. For example, we plan to use these technologies and systems to support our academic programmes, to enhance the services that we provide to our students and staff, and to facilitate effective and efficient administrative systems.

In this brief report, we shall outline what the University achieved in IT, with respect to both IT implementation and capacity building, in the recent past and what we plan to do in the near future, starting by the year 2000.

In 1998/1999, the University of benefited Nairobi from implementation of a computer project funded under the Universities Investment Project (UIP), a World Bank funded project. In summary, these two sources of funds have facilitated the creation of a modern University of Nairobi information and computing infrastructure, or so-called Intranet the characterized by, amongst others:

• Extension of the backbone network to new users at Chiromo Campus.

• Creation of a backbone network at the Main Campus to serve both academic and administrative uses.

• Connection of the Main Campus Network to Chiromo Campus through 64 kilobit per second Telkom Kenya lines (Kenstream).

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Migrating from dumb terminals to over 200 personal computers (PCs) connected directly to the backbone as the primary means of access to the University wide area network.

Decentralization of computing facilities to University administrative central departments.

Modern applications software, e.g. computer-aided design tools, that support the primary business of the University of teaching and research.

Modern • tools for development of the University management information systems (MIS), e.g. ORACLE database management system and a host of software development platforms.

Training both technical and user staff to effectively use and sustain the installed information systems.

In 1998/99, the University also benefited from a second funding. This was from the

Flemish Government of Belgium under the Flemish Inter-University Council,

Inter-University Co-operation. With this funding, the University managed toachieve the following:

Network backbone. Implemented a high-speed private backbone network (FDDI) based at Chiromo Campus that extends to the Main Campus, initially terminating at the Jomo Kenyatta Memorial Library. It later extended the wide area network to over 80 new academic users in both Chiromo and Main Campuses.

Internet connection: Implemented a high-speed connection to the Internet, initially

at 64 kilobits per second and recently upgraded to 128 kilobits per second. Indeed, the University of Nairobi now has the largest bandwidth for any corporate organization in Kenya, other than Internet Service Providers. This connection has enabled electronic communication, information exchange among students and staff and access to the Internet.

Capacity building: Sponsored staff for M.Sc. and Ph.D. in Computer Science and Informatics.

Others: Installed specialized software and purchased books for computer science programmes and installed web site development tools.

Web site

University of Nairobi believes that we should not only have access to the Internet but we should also be active participants in the creation of content that can be accessed by ourselves (within the University) and wide-world. In addition, operating an enterprise as large as the University of Nairobi requires large amounts of information to be exchanged between thousands of administrators, staff, and students. It is against this background that we developed the University of Nairobi web site.

The University of Nairobi was the first University in Kenya to have a serious presence in the World Wide Web. The University launched its web site on 12th August, 1999. The web site, whose WWW address or URL http:// www.uonbi.ac.ke, currently the contains following information: •

Home page - giving a



Dr. T. Waema - Director, I.C.S.

welcoming message of the University.

About University of Nairobi- - containing a brief history of and key information about the University. A few photographs are included where possible.

Colleges - containing information on the faculties in these colleges.

Academic programmes with information on all academic programmes, from Diploma to Ph.D. In each programme, we have information about admission requirements, regulations and detailed course outlines as approved by Senate

Departments - with information on staff, their qualifications and institutions from which they obtained their qualifications.

Announcements containing announcements of important events in the University.

Useful speeches - with speeches of interest to the University community. For

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example, the Vice-Chancellor's speech when the web site was officially launched is included.

• University maps - that enable patrons to navigate the campuses of the University. The maps gives the physical campus locations and can be a useful guide to people who are not familiar with where campuses are located. The maps are used as a link to other information available about the campuses.

• Search utility - that enables one to search for any information in the web site using key words.

The University is updating the information on this web site on a continuous basis.

Project management services for the planning and implementation of the computer projects funded by both the UIP and Belgium Government were provided by our staff at the Institute of Computer Science. The project has also trained over 50 administrative staff on the use and exploitation of the Internet and developed and implemented a human resource management system that integrates payroll and personnel records within the University.

The future plans are to create a web site with the following:

• hosting the most current information (which implies continuous updating) about University services, faculties, departments, programmes, personnel, admission information and examinations;

• where faculties, institutes, departments, projects and individual University staff have and maintain their own specific web sites (e.g. containing syllabi, class assignments, papers, reports, etc.) to enhance information flow, encourage collaboration, and publicize their teaching, learning, and research efforts;

• where the University, as well as student organizations, make use of the web (via the site) to disseminate information, subject to content and privacy/ security considerations;

• where students apply for admission to degree programmes, pay and register on-line (an electronic commerce application);

• where access to all University information should be available from a single point of access (a single URL) from the user's point of view even though the actual content will be distributed across machines;

• where there are links to digital libraries;

• where evaluation of information services incorporating user access patterns and frequency of use of specific information is undertaken and the data gathered is used to improve interfaces and organize information in more user-centered ways; and

• where some of the University services and administrative procedures e.g., acquiring an e-mail and internet account, scheduling meetings, reserving classrooms, academic and institutional regulations, etc. are available on-line.

Educational Achievements

• The University of Nairobi was the first University in the Eastern and Southern Africa region (outside South Africa) to start the following programmes:

• **B.Sc.** in Computer Science: This was started in 1992 and we have so far graduated three sets of graduates totaling 63. These graduates are working in industry as software engineers, systems administrators, web masters, etc.

Masters in Information Systems: This programme started in 1998. The only other Masters programme that existed before this one is in the National University of Science and Technology (NUST) in Bulawayo, Zimbabwe, which was and is still funded by the Commonwealth Secretariat. The Informatics Masters Programme is an evening programme aimed at Informatics Managers working in industry. There is an enrollment of 33 and the next intake is in January 2000.

• Ph.D. programme in Computer Science and Informatics: We started the programme in 1998 and three students have already been registered and the actively pursuing their Ph.D. programme

Future Plans

(a) Communication Infrastructure

In general, the University plan's to continue developing the University information and computing infrastructure to envelop all academic and administrative departments. The overall aim will be to institutionalize information and computing systems as, if you like, "ordinary tools for our business" and, more specifically, to use these systems to support the vision, mission and strategies of the University. More specifically for the communication infrastructure, the University has started extending the FDDI backbone

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beyond the Jomo Kenyatta Memorial Library to all other buildings in Main Campus, including ADD and SWA. This extension involves creating network access points in computer laboratories and in as many offices as possible. In 2000 and subsequent years, these will extend the University backbone network to all the campuses in a phased implementation, limited only by availability of funding. One notable plan is to use the communication infrastructure to open up distance education as a primary business of the University.

In addition to creating the communication infrastructure, we plan to become an Internet Service Provider (ISP) with high bandwidth to the nearest point of presence (POP).

University MIS

The strategic thrust is to acquire and maintain integrated management information system applications that are on-line and real-time; where data is captured, verified and validated at source; and which increase the efficiency and effectiveness of University academic and administrative processes. In line with this, the University has started redeveloping а students management system that integrates all the existing students' management subsystems in a common database. Further, we plan to acquire a modern accounting system that has integration with the human resource and students management systems. Finally, we will continue decentralizing MIS to the end users. To this end, users will be in charge of all MIS operations, including data entry

and validation, while managers will be able to interact with the systems, using appropriate interfaces, to "mine' information and support decision-making.

Library Automation

The University of Nairobi Library, the biggest in the country and in the region, has for many years been grappling with the challenge posed by need to utilize the new development and advance in the area of IT. During the last few years, the Library has made some headway and acquired a number of PCs principally through the Universities Investment Project by the World Bank. However, this was a far cry given the level at which information centers and libraries all over the world are operating now through networked systems and the links that are made possible by these developments.

The breakthrough that will revolutionize the library service in the University of Nairobi has finally come. This has been made possible through the University communication network infrastructure project funded by the Kenya Belgium Project. The Library will also benefit from the proposed procurement and installation of integrated library software known as "VUBIS 4 Windows". VUBIS is used widely in Universities in Europe and is marketed by GEAC, a leading company in library systems.

The Library is thus set to computerize its services by the year 2000. The automation process will be done in phases, starting with JKML. Thereafter the sublibraries will also be automated. The proposed technological development in the library is set to revitalize the reading and research activities on Campus. The development will open doors to the global information village and expand the communication links for the University Community. The new system will enable:

• Students to have quick access to library catalogue and browse the information from personal computers installed in the Library.

• Staff to have quick accessto the library catalogue and request for books through their office PCs when hooked on the University network.

• Patrons to reserve books and other material faster and more efficiently.

• Patrons to borrow books faster and more effectively.

• Patrons to browse and search the internet for whatever information they require.

• Patrons to communicate by e-mail to the world at large.

The system will provide a gateway to other national, regional and international libraries and information centres as a backup to our own resources.

JKML and Chiromo libraries are linked to the main University network. The two libraries have very busy computer units that are offering electronic services that include:

- Internet
- E-mail
- CD-ROM databases
- Library databases

The future plans for the communication network include integrating other sub-libraries into the University wide area network, with JKML facilitating communication within the whole library system.

Rationalizing the functions and staff rightsizing of the University

The University system in Kenya is an indispensable part of the societal matrix. It provides the knowledge base through which the training of critical manpower needs and the search and pursuit of new knowledge is achieved. In these tasks, the University system assumes the custody of the values of the professional cadre within the country. As part of this task, the University must think and look ahead in time in order to ensure that changes in society do not render that knowledge base irrelevant or outdated. This inherent forward thinking is the critical role that a University plays within a society and which makes its contribution unique and indispensable.

The need for accelerated and increasing delivery presents universities with both challenges and opportunities. The achievement of the goals of universities and the aspirations of the community require an effective strategy for the further development of the institution. Such a policy must now focus on the shifting role of the universities within the economy and the need for greater efficiency in the fulfillment of that role. It is therefore evident that the University has no choice but to embark on a process of change. The need for strategic planning within the University is premised on the need for greater relevance, efficiency and effectiveness in the manner in which the University fulfills its fundamental vision, mission and objectives.

The globalisation of the economy and financial markets coupled with far-reaching trade liberalisation present certain challenges to Kenya. These challenges therefore require the country's education system to adjust to this dynamic global environment. In this respect, the development of technological capacity is important for economic development. Science and technology policy, research and development, and industrial policy must be accompanied by policies relating to human resource development through institutional and infrastructure provision for education. This implies a proactive role by the universities in development.

The rapid and continuing growth of technology, especially information technology (IT) is transforming the ways in which Kenyans live and work. This provides higher education institutions with great opportunities, as well as posing some new threats. The effective use of new information technology offers ways in which the quality, effectiveness, and, in particular, the flexibility of university education can be improved. Furthermore, to prepare its graduates for leadership challenges, the University needs to infuse problem-solving approaches to its academic programmes by introducing popular courses such as entrepreneurship and computer skills. It is therefore, imperative for the University to embrace IT in its academic and management structures.

In view of the above scenario, the University of Nairobi is currently engaged in the process of rethinking its administrative, academic, and financial structures so as to make them more complete, flexible and innovative in design and implementation. The cost of implementing these programmes has escalated leading to a need to pay attention to cost saving devices and innovations that offer value for money.

The vision for teaching in a restructured teaching environment will be to provide and maintain high quality and relevant teaching, research, consultancy and extension services. This will be achieved by among other things, planning and continuously revising academic programmes, guided by the need for quality and relevance. Moreover, there is need to explore and adopt suitable delivery methodologies such as programmed teaching and learning, resource based teaching and learning, teaching and learning through work study (internship) and computerassisted individualised instruction. In addition, training for academic staff and the need to enhance research in all disciplines in the University is vital for the generation of new relevant knowledge. The need to encourage publication of research findings, criticisms and creative works, and develop methods to monitor and assess the quality of examination, teaching and research are important facets of the University that must be reviewed periodically.

Research, development and utilisation is a significant aspect of the University's role to engage in fundamental and applied research for advancement of knowledge and to contribute in the general welfare of the society. There is therefore need

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to identify research projects, and to build and maintain research capacity in areas strategic to Kenya's socio-economic development. Collaborative research, innovative and creative thinking and development of ideas and encouraging the establishment of scholarly journals within the framework of the University for dissemination of research findings, will go a long way to enhance the University vision to maintain its lead in provision of excellent education in the country and the region.

To meet the above challenge, the University is developing an appropriate research and consultancy policy to help guide its leadership role in translating knowledge in planned and meaningful partnerships with other stakeholders, as well as, develop products and services that solve societal problems in Kenya, East Africa and the world at large.

A major challenge of this University is to produce a graduate who is innovative, well-rounded and multi-skilled, and capable of life-long learning and problem solving. Students should be able to develop talents of entrepreneurship, responsibility, leadership, moral integrity and service to the society. It is the responsibility of the University to create and maintain an environment where there is stimulating and gratifying intellectual life and where both students and staff can realise their full potential.

With regard to human resources in the University, the aim is to attract, motivate and retain quality staff committed to the vision and mission of the University. This will require the realignment of the remuneration structure to competitive market rates and to offer staff development opportunities.

The University also plans to provide a management structure and governance systems that will optimise the realisation of the vision and mission of the University. To this end, increased management autonomy and accountability, and the rationalisation of senior management and management levels will be redressed. In addition, Central Administration will be replaced with functional managers in key business areas that carry out planning and coordination.

Department at the Cutting Edge of Knowledge

In Kenya today, some 500 people die daily due to HIV/AIDS. In many of our hospitals, more than 50% of bed-space is occupied by patients, suffering from HIV/AIDS.

University of Nairobi commends the many serious efforts currently in place to fight the scourge of HIV/ AIDS, which threatens to decimate our past gains in several indices for development like child survival and life expectancy.

Todate, there is neither a cure nor vaccine for HIV/AIDS. It is everyone's prayer and hope that the medical community will soon come up with a cure or a vaccine so as toavert the unfolding crisis of HIV/ AIDS. The Department of Medical Microbiology in collaboration with the University of Manitoba and the University of Oxford have been involved in HIV research for the last 15 years in a segment of commercial sex workers in Nairobi.

This research has generated an enormous body of information on the virology and immunology of HIV infection. Some of the significant finding has been the phenomenon of HIV resistance and of long time survival following HIV infection. It is this body of information gathered over the past 15 years of research that has resulted in a unique and promising approach for realizing protection and prevention of HIV infection, hence the HIV vaccine development.

The HIV virus exists in various subtypes in different geographical locations. The vaccine that the University of Nairobi Department of Microbiology and the University of Oxford have developed takes into account the most common HIV subtype found in Kenya and East Africa.

The University of Nairobi and the University of Oxford are members of

an international alliance of scientists operating under the auspices of the International Aids Vaccine Initiative (IAVI). Under this Initiative, the Universities are working towards bringing the developed vaccine to phase one trial in Kenya in the new Millennium.

The University of Nairobi recognizes its responsibility not to make sensational statements with respect to ongoing research on HIV/AIDS. The problem of HIV/AIDS is too serious and we are aware of unfortunate claims, made in the past, which have given false hope to desperate patients, only to be crushed by the reality that there is no cure or vaccine to deal with the scourge.

The University continues to be at the forefront and to engage in research aimed at a solution to avert one of the worst health nightmares of our time.

University's Community Outreach

The University of Nairobi has always strived to translate it's research programmes and findings into basic community development components. This is epitomized by the numerous community outreach projects which the university has been involved in over the years. The latest of these is the Nutribusiness Project which was handed over to women groups and Co-operative in Ndanai, Bomet and Gatanga, Murang'a Districts respectively.

The Nutribusiness projects is the fruits of a linkage and co-operations between the Penn State University, Tuskegee University both of the U.S.A. and the University of Nairobi in pursuit of academic co-operation and international understanding. The funding was by USAID, the United States Ambassador in Kenya Self-Help Fund and the International Foundation for Education and Self-Help (IFESH).

Since October 1992 the University of Nairobi, in cooperation with the Penn. State University and Tuskegee University, has been involved with approximately 2,500 smallholder women farmers who are members of organized women's groups in Murang'a and Bomet Districts in an effort to increase the commercialization of the women's agricultural products. The aim of the project was to create an opportunity for the women to process some proportion of their commodities into supplemental weaning mixtures for older infants and young children which would be marketed in district centers and other peri-urban areas.

There were 88 women's groups associated with the Nutribusiness Projects which are independently involved in micro enterprises ranging from kiosks, carpentry shops and hotels to wine production, bee keeping, and poultry raising. These micro enterprises create local employment opportunities for both women and men. In Bomet and Murang'a, many of the women involved in the Nutribusiness Project are illiterate, and needy widows or unmarried mothers with young children who do not have sufficient land available to adequately feed their families or to pay their children's school fees.

The Nutribusiness Project is concerned with promoting local agricultural and food processing technologies that are environmentally friendly. The women chose to use in their weaning food formulas, ingredients that are able to grow successfully without the use of pesticides. The system employed for drying the bananas, vegetables and cooked beans rely largely, if not exclusively on solar energy. In addition, high energy-efficient jikos to heat the water for blanching and soaking the ingredients prior to drying, have been built.

The Nutribusiness Cooperatives will be producing and marketing culturally-appropriate local food products that have the potential to protect human health by improving child survival. Weaning-age children (particularly those between 9 to 24 months of age) are the most nutritionally vulnerable group in the population. The complications of weaning are increased when these children are parented by women who have migrated to the peri-urban areas in search of employment. The circumstances under which these women live often require them to resort to early weaning with nutritionally inadequate gruels. Under such conditions, they are not likely to supplement their young child's diet with vegetables, fruits and other food necessary to provide adequate amounts of calories, protein and the micro nutrients essential for health. For this reason, efforts to provide convenient, affordable supplemental weaning mixtures is implicitly linked to child survival.

Women who grow crops to be used in the supplemental weaning foods will be able to sell their crops to the Nutribusiness Cooperatives. Each Cooperative has a solar dryer, a machine to de-hull maize, a posho mill and a pick-up truck. The individual foods will be dried, milled and mixed into a single, nutritious, easy-to cook weaning food for young children. The food will be put into 1 Kg and 500 gram packages to be sold. The cooperative will sell the weaning food and profits will be distributed to individual cooperative members on the basis of the shares they hold in the Nutribusiness Cooperative.

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University staff and students tested the weaning foods to be sure they contain enough vitamins, minerals and protein to be healthful foods for young children. They designed the equipment that is needed to process the products. This was done in collaboration with the Kenya Industrial Research and Development Institute KIRDI.

The Nutribusiness Project also relates to the goal of building democracy by involving women from politically opposed tribal groups in a common activity. The Nutribusiness Project was launched during a period of tribal unrest (late 1992) with memorable exchange visits between women from Bomet and Murang'a. These visits established a bond of friendship and mutual respect between women whose common focus is the development of their communities and the health of their children, on non-tribal or party politics. Subsequently, the women have learnt many lessons about participation in a democratic society by electing their peers to positions of authority on sub-location Nutribusiness Councils. The Council officers, in turn, have elected the office bearers to their District's Nutribusiness Cooperative Board of Directors. These Directors will establish the policies that will be binding upon the members of all the participating women's groups. The concept of joint ownership of property and management of resources by women from different locations has taken time and effort to develop, but this is the sort of grassroot-level in involvement that women need to be able to internalise the goals of a civil society based on democratic principles.

World Population Report Launched at Varsity

The United Nations Fund for Population Activities (UNFPA) mounted two important events at the University of Nairobi last September and October. UNFPA launched the United Nations State of the World Population report on September 22 and exciting day-long cultural and artistic performances to mark, the United Nations Day of Six Billion October 12, celebrated on October 16. The launch of the State of the World Population report was conducted at the University Council Chamber. The event brought together key players from nongovernmental organisations, the government, the private sector and various departments and faculties in the University. UNFPA took advantage of the report launch ceremony to officially hand over an entire library to the University's Population Studies Research Institute (PSRI). The Institute received 5000 titles. Celebrations marking the Day of Six Billion, the symbolic day set by the United Nations to commemorate the time in the history of mankind when world population reached the six billion mark, brought together cultural, artistic and music performers from all parts of the country. The event, held at the Chancellor's Court, attracted thousands of spectators. About 30 performing groups staged performances in form of drama, poetry, music, puppetry and mimes. The groups came from the Coast, the Rift Valley, Central Province, Eastern Province, Nyanza Province and Nairobi Province. The issues dealt with in the various performances ranged from the problems of the girl child, HIV/ Aids, drug abuse and family life - to abortion, the female circumcision, teenage pregnancies and family

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planning. The festivities were graced by the attendance of the Minister for Planning, Hon Gideon Ndambuki, UNFPA's Country Representative in Kenya Dr Sidiki Coulibaly, and the Director of the National Council for Population and Development (NCPD), Amb. B.S.A. Bullut. The performing groups included Wazalendo Players, Entertainment Masters, La Mama, African Tumbas, Good Samaritans and Free Travelling Theatre from the University of Nairobi. From Central Province were Limuru Girls, Trikha Girls, Wanyina Entertainers and Drumbeats of Africa. Kivaa Primary School and Kairithu Players came from Eastern Province. From the Coast were the Mombasa Youth Group, Krystal Puppeteers and Kizingo Arts. Groups from the Rift Valley included St Joseph's Seminary, Christ the King, Catholic Diocese of Nakuru Peer Programme, Baragumu Players, Resurgent Theatre, Kingdom Players, Playmakers, Comedian Arts and KDEA. Kakamega High School represented Western Province while Nyabururu Girls, Floods Theatre, Imara Players and Street Performers came from Nyanza. The performances benefited immensely from the special appearances of Mercy Myra, Kalamashaka, Jah'key Malle and African Tumbas during interludes. Kachumbari had an opportunity to thrill crowds. Minister Ndambuki voiced government support for population issues and made presentation of a token Ksh 10,000 to Kenya's six billionth child. He also announced Kenya's oldest person who had earlier been identified through UNFPA efforts.

University to Take it's Role in Industrialisation

At the University of Nairobi, practical industrial training is provided for in a number of programmes, notably Law, Agriculture, Engineering, Education, and Medicine.

As Kenya has declared its intention to industrialise by the year 2020, the University of Nairobi recognises this as a challenge. If has become obvious that if the University has to train those who will be relied upon to provide the skills needed for the industrialisation of this country, then it will have to offer students more opportunities for practical industrial training, while they are still at University. In view of this country's effort to industrialise, the university is fully conscious of the fact that Universities in this country shall be expected to play a pivotal role in this endeavour. First they shall be expected to provide the high level manpower needed to provide leadership in the process of industrialisation. Secondly, they will be expected to provide the research base for industrialisation.

The challenges in industrialisation mean that universities in Kenya will have to train those with sound academic training backed by practical skills,

University to Take it's Role in Industrialisation

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and in the right quantities. For industrialisation to happen, Universities will need to understand clearly the skills relevant in the world of work. With an understanding of this, they will then need to align the curricula appropriately to cover adequately disciplines strategic for industrialisation.

Industrialisation is in the first instance about production of goods and services that can be sold, especially to those beyond our borders. This implies creation of employment opportunities with attendant improvement of the standards of living of the citizens. There will be need for those with the right skills, and also skills that can produce goods and services that can compete internationally. At the training level, the implication of this is that universities and polytechnics shall be expected to train at levels comparable with the best in the world.

In this country, there are numerous, fine research findings that have been reported about in publications, but have yet to be converted into real products. One reason for this is that this country does not have a sufficient pool of engineers and technologists that can turn theoretical ideas into products.

Today public universities, admit 600 students annually to study engineering and architecture out of the total admission of about 9000 students. Thus, of all the students in the public universities only about 7% are studying engineering and the technical sciences. This is too low for industrial take-off. If this country is to industrialise, besides imparting the right academic and practical skills to students in universities, it is necessary to increase on the number of engineers and technologists trained.

It is in this background that the University-Industry links symposium was held on 22nd and 23rd July, 1999 at Safari Park Hotel. The theme of the Symposium was "Partnership for Effective Industrialization". The Symposium was held within the framework of the Otto Essien Young Professionals Programme and was funded by UNDP.

The Otto Essien Young Professionals Programme was launched as a Pilot Programme in April 1997 at the University of Nairobi through the initiatives of UNDP. The Programme is a partnership between University of Nairobi, the Federation of Kenya Employers (FKE) and the Ministry of Planning and National Development with United Nations Development Programme (UNDP).

The objectives are:-

- To promote a sustainable link between academic training and the "Real World of Work."
- To build confidence, communication and research skills in students.
- To enhance student post graduate marketability.
- To contribute to national human capacity building through exposure of University students to broader development issues.
- To contribute to the improvement of human resources development through education that is adapted to real needs of Kenya in coming years.

The programme, in a bid to meet the above objectives, has for the last two years organized Industrial Attachments for final year students. So far more than 400 students have befitted through this programme. Various companies/organizations have been able to offer attachment places for the students.

The University-industry Links Symposium was held in order to:-

- 1. Bring closer understanding between University and Industry
- 2.. Look for various ways in which University and Industry could mutually benefit from each other.
- 3. To enhance support for various university projects in research whose final consumer is the Industry.
- 4.. To increase chances of students participation during the Industry attachment.
- 5. To look for ways of sustaining links between University and Industry.

The Symposium was attended by representatives from various Industries, Government Departments, and all sections of the university. It was officially opened by the Permanent Secretary in the Office of the President and Director of Personnel Management Mr. Joseph Kaguthi.

The Key-note address was delivered by Mr. Arun Divan, Managing Director, Synresis Ltd., and board member Kenya Association of Manufacturers (KAM).

Professorial Appointments

Prof. Samuel K. Sinei has been appointed on promotion to full professor in the Department of Obstetrics and Gynaecology. Prof. Sinei holds an MB.Ch.B., 1975 M. Med., 1981 both from the University of Nairobi. Prof. Sinei has 16 years of teaching experience at undergraduate and postgraduate levels. He has been an Associate Professor for the last nine He has vears. successfully supervised seven M.Med. Students. His area of specialisation infections in is reproductive health and impact on the health of women. He has seven publications in refereed journals since his last promotion.

Prof. Sinei is the Principal, College of Health Sciences, a post he has held since 1989. It is during his tenure that the College expanded into three Faculties, namely Medicine, Dental Sciences and Pharmacy from the original Faculty of Medicine. His vision research in the on College is that it should be focused to solve the problems that face society today. The research findings must be communicated to the society.

Prof. Shadrack B.O. Ojwang has been appointed on promotion to full professor in the Department of Obstetrics and Gynaecology. He holds a Dip. Gyn. Oncol 1977 from Umea University, Certificate in Cytology 1975, Bispebjerg Hospital, Denmark, M. Med. 1975, University of Nairobi and M.D., 1980, University of Bratislava, Czechoslovakia. His area of specialisation is gynaecological oncology. Prof. Ojwang has 24 teaching years experience at both undergraduate and postgraduate levels. He has served in the capacity of Associate professor for the last 13 years and has successfully supervised over 50 M. Med. students and has served as an external examiner to the Universities of Zimbabwe, Malawi and Makerere. He has 43 publications to his credit of which 22 are since his last promotion. Prof. Ojwang started the first cancer ward at Kenyatta National Hospital. It was the first such ward in black Africa. He served as the Chairman of the Department from 1983 to 89.

Prof. T.C. Sharma has been appointed on promotion to a full professor in the Department of A g r i c u l t u r a l Engineering. He holds B.Sc. 1966, G.B.pant Agricultural University,

India, M. Tech, 1968, from India Institute of Technology, M.Sc. 1979 and Ph.D. 1977 both from the University of Guelph, Canada. Prof. Sharma has had 10 years teaching experience at both undergraduate and postgraduate levels. He successfully has supervised 10 M.Sc. students and currently has 5 M.Sc. and 3 Ph.D. students under his supervision.

Prof. Sharma has served as an Associate professor for the last five years. He has 51 publications to his credit of which 12 are since his last promotion. His area of specialisation is soil water hydrology. He has done extensive work in this areas especially in Zambia between 1981 to 1985 when he served as the Head of the Water Resources Research Unit.

Prof. Duncan Okoth-Okombo has been appointed on promotion to a full professor in the Department of Linguistics and African Languages. He holds BA, 1977, MA 1979 and Ph.D, 1987 all from the University of Nairobi. Prof. Okombo has 20 vears teaching experience at undergraduate and postgraduate levels. He has successfully supervised M.A. and Ph.D. students. He has served as external examiner to the Universities of Dar-es-Salaam, Moi, Iomo Kenyatta University of Agriculture & Technology, Salusi (Zimbabwe) and Egerton University.

Prof. Okombo has gained extensive administrative experience as Chairman of Department since 1988. He has also served as the Director, Kenya Sign Language Project since 1991. He has 11 publications in refereed journals since his last promotion. He has served as an Associate Professor for the last seven vears. Prof. Okombo has authored numerous books for use in the teaching of english language in primary schools.

Prof. Geoffrey Mariaso Ole Maloiy has been appointed on promotion as a full professor in the Department of Animal Physiology. He holds a B.Sc. 1964, University of British Columbiah Ph.D. 1968. Aberdeen University, Scotland D.Sc. (Hon.) 1982, Duke University, USA; D.Sc. 1985, Aberdeen University, Scotland.

Prof. Maloiy has 5 books to his credit and 5 publications in refereed journals. He has served

Professorial Appointments

as an external examiner in University of New England, Australia, Makerere, University of Zimbabwe, University of Zambia and University of Dar-es-Salaam.

Prof. Maloiy is the current Director of Science, Institute of Animal Physiology and Biotechnology Since 1992.

Mungai Mr. M. Gacuhi has been appointed on promotion the Registrar, as Academic Division. He holds a Bachelors of Arts degree (1974) from the University of Nairobi. Mr. Gacuhi has had a long working experience within the University, where he has risen through the ranks to his current position.

Prior to joining the University, he worked as an accountant with the Ministry of Work between 1965 and 1971. He also worked as an Assistant Secretary in the Ministry of Foreign Affairs.

Mr. Gacuhi joined the University in 1974 and worked as an Administrative Assistant/Senior Administrative Assistant in the Faculty of Veterinary Medicine at Kabete. In 1979 he was promoted to Assistant Registrar in the Planning, Public Relations and Information Division. In 1982 he moved to the Undergraduate

Admissions office as the Assistant Registrar incharge.

In 1986 he was promoted to the level of Senior Assistant Registrar in charge of the U n d e r g r a d u a t e Admissions Office. In 1990 he was promoted to Deputy Registrar in the same office.

Between 1990 and 1991 acted Academic he Registrar for a period of one year while the then substative Registrar Prof. Jesse Mugambi was away. In 1994, he was formally appointed to act in the same position which had fallen vacant, a position he has held till his substantive appointment in July, 1999 Varsity Focus wishes to congratulate him and wish him well in his new appointment.



Prof. Collette Suda has been appointed Director, Institute of African Studies. The appointment is for a period of three years. Prof. Suda takes over from Prof. Simiyu Wandibba.

She holds a B.A. (Nairobi), 1978, M.Sc. (1983) and Ph.D. (1986) both from University of Missouri - Columbia, U.S.A.

She joined the University of Nairobi as a Research Fellow, at the Institute of African She was Studies. promoted to Senior Research Fellow in 1990 in the same institute. She supervised has numerous postgraduate students. Prof. Suda has carried out research in the area gender and the family. She also has publications in refereed journals.

Prof. Francis W. Odhiambo Aduol has been appointed principal of the College of Architecture and Engineering. He holds a B.Sc. (1976), M.Sc. (1981) both from the University of Nairobi, and Ph.D. 1988, University of Stuttgart.

He joined the University in 1977 as a tutorial fellow in the Department of Surveying and Photogrammetry. In 1981 he was promoted to the position of lecturer which he served until 1988 when he was appointed Senior Lecturer. In 1994, he was promoted to Associate Professor. He served as a Chairman of the Department between 1991 to 1995, when he was elected Dean, Faculty of Engineering.

He has 14 publications in refereed journals and has supervised, numerous

postgraduate students.

Prof. Kenneth Muema Mavuti has been appointed as Acting Director of the office of I n t e r n a t i o n a l Programmes.

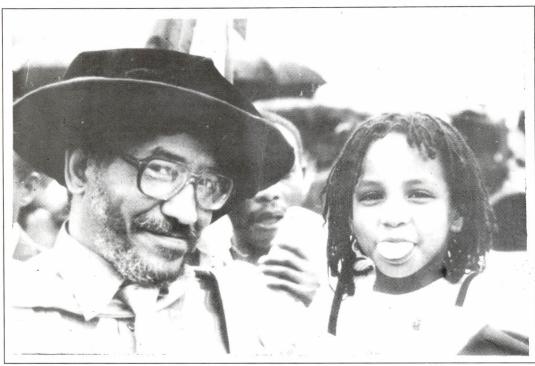
The office coordinates linkage and exchange programmes, and is expected to develop an international capacity to enable the University reap appropriate benefits these linkages and programmes.

He holds a B.Sc. 1973, University of Nairobi, postgraduate certificate in Limnology, 1976, University of Vienna, Austria, M.Sc., 1978, University of Nairobi, Ph.D, 1983, University of.

Prof. Mavuti began his working career as a game Warden in the Ministry of Tourism and Wildlife in 1973. In 1975 he became an assistant agriculture. He joined University service in 1977 as a tutorial fellow in the department of Zoology. He rose to the post of lecturer in 1981. In 1990 he became co-ordinator, Hidrobiology, studies group, Department of Zoology. In 1993, he was appointed Chairman Department of Zoology, a Post held until his current appointment.

Varsity Focus wishes to congratulate all on their new appointments.

A Special Jocus on the 26th Graduation Ceremony



Future graduand ... the Varsity Focus could not establish the relationship of the delighted young lady and the graduand ... but well ... the photo is worth a thousand words...

The University of Nairobi celebrated it's 26th Graduation in a colourful ceremony presided over by the Chancellor, His Excellency President Daniel T. arap Moi.

The Chancellor conferred and presented 2665 degrees and diplomas to graduands from 27 undergraduate degree and diploma programmes, 24 Masters and Post-graduate diploma programmes, and 9 doctorate programmes.

The highlight of the occasion was the conferment of the Honorary Doctor of Science (D.Sc.) to Prof. Joseph Maina Mungai former Vice-Chancellor, University of Nairobi and Prof. G.O.P. Obasi, Secretary-General, World Meteorological Organization and an Honorary Doctor of Letters to Mr. Hassanally Mohamedally Rattansi of Rattansi Educational Trust (See citations elsewhere in this issue).

The first degree and diploma awards numbered 2,331, masters degree and postgraduate diploma awards numbered 307 and Doctor of Philosophy degree awards numbered 27, bringing the total number to 2665.

In his official speech the Chancellor challenged the universities and academia to address the issues of health, environment, industrialisation, urbanisation and sustainable development.

"In the case of industrialisation, you are no doubt aware of this Nation's vision to industrialize by the year 2020. Universities must be actively involved in this national crusade so that our vision can be realized," the Chancellor said. (see excerpts of the speech).

In his speech, the Chairman of Council, Prof. David Wasawo thanked the Government of Kenya for continuing to shoulder the major responsibility for providing facilities for research and development. "We are confident that under your wise guidance, the Government will continue to assist us in this regard especially now that we have stated our vision to industrialize by the year 2020" the Chairman remarked.

The Vice-Chancellor, Prof. Francis Gichaga, announced a major break through in research on biological control for the water hyacinth which has invaded Lake Victoria and other water bodies in the country by the Department of Botany.

"Results from the field trials indicate that the biological techniques provide a relatively cost effective way of killing the water hyacinth. It is our hope that those responsible for dealing with the water hyacinth problem can consider trying this relatively cheap biological technique", Prof. Gichaga announced to the attentive congregation •

Excerpts from the Speech by the Chancellor, President Daniel T. arap Moi

The country has witnessed continued development in the various sectors of our economy because we have more dedicated and healthy Kenyans, but more so as a result of the peace and stability that we have continued to enjoy in this country since independence in 1963. We must therefore protect the peace we have managed to achieve because that way we stand to reap the attendant fruits of peace and stability, which in summary is prosperity for all Kenyans.

In the education sector for example, we have developed thousands of primary and secondary schools in all parts of the Republic and many of these have been developed by wananchi themselves through the harambee spirit and with government support. And due to the efforts put in by the Kenyans themselves these schools have increased the enrollment capacity in secondary schools tremendously with the result that we now have many secondary school graduates who qualify to enter university but cannot do so due to the limited spaces available in our public universities. The demand for university many more Kenyans can have access to university education.

In order to reduce the percentage of the budget that goes to university education, universities must face the reality and look for alternative sources of funding university education to supplement Government's capitation. Indeed, I have on a number of occasions advised public universities to work out mechanisms of raising additional income through income generating activities. In this respect, I am pleased to note that you have addressed this issue seriously and have formed a University Company to enable you enhance and coordinate income generation activities.

I am glad to learn that the University of Nairobi has introduced evening degree programmes so that many more Kenyans can have access to university education.

Having looked at the investment side of the University, we can now ask ourselves whether the benefits that accrue justify the heavy investment. Globally we recognize that those countries that have developed, have used their universities as a source

educationhas continued to grow to such a level that a large number of parents have been sending their children abroad to secure university education at exorbitant costs which are paid in scarce foreign exchange. This in itself would justify the need for expanding the local capacity to absorb more university students. In this respect I am glad to learn that the University of Nairobi has introduced evening degree programmes so that organ



The Chancellor confers a Ph.D. degree

Excerpts from the speech by the Chancellor

of skilled personnel and the driving force towards achieving sustainable development. As reservoirs of knowledge, universities have been seen as powerhouses of dynamics which excite intellectuals in a country in their search for truth and new knowledge. In this search of new knowledge intellectuals develop ideas which can be used for the benefit of society both now and in the future. In addition to producing the necessary human resources to man the various sectors of the country's economy, the universities are involved in research activities which help to develop technologies for improved productivity in the systems of the economy. Accordingly we expect the universities to keep addressing the various problems that face our nation. We would for example like to hear more about researchers addressing issues of food production and food security. We wish to hear our academics addressing issues of health, environment, industrialization, urbanization and sustainable development. In the case of industrialization, you are no doubt aware of this nation's vision to industrialize by the year 2020.

In order to reduce the percentage of the budget that goes to university education, universities must face the reality and look for alternative sources of funding university education to supplement Government's capitation.

Universities must be actively involved in this national crusade so that our vision can be realized. We also expect our universities to train top-class leaders who have vision for the future, integrity, compassion to their fellow citizens and those who are humble and patriotic. Our universities must be recognized by the world intellectual community as part of its leaders. In summary, in the African continent which is characterized by poverty, disease and ignorance, we need world class universities capable of producing world class leaders in scholarship and in other sectors.

Our universities must be recognized by the world intellectual community as part of its leaders.

As we formulate techniques of achieving sustainable development, let us acknowledge that, we have hard working and industrious people and we have highly skilled people being produced by our training institutions. We however need to look for ways of harnessing these two positive aspects to develop a bayonet economy that can create employment for the large number of graduates who are searching for jobs. This is an issue which our university dons must address and provide workable solutions. And turning to the graduates who have graduated today, it is important to understand and appreciate the limitations of our economy.

As we formulate techniques of achievingsustainable development,let us acknowledge that, we have hard working and industrious people and we have highly skilled people being produced by our training institutions.

We should not forget that some of the problems we are facing today are as a result of successes we have made in the education sector. For example while the graduates from our public universities have been growing at a fast rate, the economy has not kept pace in growth to enable graduates to be absorbed in the job market. Our hope is that as the economy picks up we shall be able to create more job opportunities and consequently we shall see many more of our graduates in gainful employment. The important thing to remember at this time is that you have been educated by the Kenyan society and the knowledge you have acquired will help you during your lifetime. The University has played its part by equipping you with basic knowledge to enable you to stand on your own by interacting with others. The kind of education you have received places you among the privileged few, who have benefited from the sacrifice of hundred of others. My advice to you is that you be prepared to repay for their sacrifice and investment for your education by serving the nation selflessly



Excerpts from the Speech by Chairman of Council Prof. David Wasawo



The Chairman of Council Prof. David Wasawo address the Congregation

May I start at the outset by thanking Your Excellency for appointing me Chairman of the Governing Council of this premier Institution. I say premier because this University has the potential to be a leader internationally.

Recently in interviewing staff for full professorships, I was impressed by the quality of research and scholarship that they presented despite the conditions under which they work. I am convinced that our University has the potential to produce that which can compare with the best. However, Your Excellency, for that potential to be fully. realized we need resources to enable them to carry out their research work efficiently and effectively. We are talking about research facilities such as properly equipped laboratories, library facilities capable of providing state of the art access to international publications especially journals; and individual research funding. It is in this respect that I wish to thank all those donors who **have** come to our aid to support research and other development activities. And since a needy person should never be bashful, **we** pray for continued and expanded assistance. We must however acknowledge that charity begins at home and we are most grateful to our Government which has been shouldering the major responsibility for providing facilities for research and development. We are confident that under your wise guidance, the government will continue to assist us in this regard; especially now that we have stated our vision to industrialize by the year 2020.

We are most grateful for the understanding and assistance which we regularly receive from the Ministries of Education and Finance and the Directorate of Personnel Management. As the Council is seized with addressing the short and long term financial and management problems of the Institution, that understanding and assistance will stand us in good stead.

Your Excellency, this Graduation ceremony is the 26th we are holding since the birth of the University of Nairobi as a national Institution in July, 1970 following the dissolution of the University of East Africa.

In the area of research, the University of Nairobi has continued to play its pivotal role in ensuring that academic staff carry out research which leads to publications in international

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Excerpts from the Speech by Chairman of Council

journals, presentation of learned papers in international conferences in addition to publishing books. We are also keen that research should lead to development in technology which is a prerequisite for accelerated industrialization of our Nation.

In the area of research the University of Nairobi has continued to play its pivotal role in ensuring that academic staff carry out research which leads to publications in international journals, presentation of learned papers in international conferences in addition to publishing books.

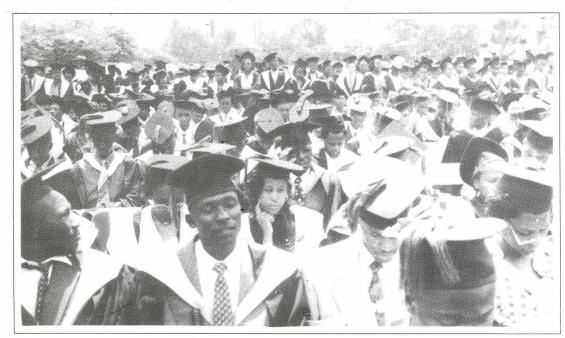
Your Excellency, as the University of Nairobi continues to discharge its responsibilities the Council recognizes the need for a stable learning and teaching environment which gives opportunity for students to excel in creativity and to develop their full potential. In this regard, I am happy to report to Your Excellency that the Council, in full consultation with the Senate and Students has authorized the re-establishment of the Student Organization of the University of Nairobi (SONU-98). Students representatives are now attending our Council meetings. A stable learning and teaching environment also enhances research productivity by professors and lecturers and by postgraduate students. We appreciate that the Government is committing a large proportion of its national budget towards university education, which investment we believe will pay good dividends for this country in the long term.

Today, we have 2665 graduands who are eagerly waiting to receive their degrees and I wish to take this opportunity to congratulate them, their parents, relatives and friends for a job well done.

I wish to remind the graduands that this is only the beginning. Learning is a life-long process; and the task of personal as well as nation building can only be effectively carried out through constant academic as well as technical renewal. Don't wait for things to happen. Make them happen.

... I am happy to report to Your Excellency that the Council in full consultation with the Senate and Students has authorized the re-establishment of the Student Organization of the University of Nairobi (SONU-98).

Your Excellency, Jamhuri Day which will mark the 35th anniversary of our beloved country's independence is to be celebrated on 12th December. I wish to send our good wishes to your Excellency during the occasion on behalf of the University Council. I also wish to take this opportunity to wish you a Merry Christmas and a Happy 1999, which ends the millennium. Once



again, I welcome you to your academic home.

And now Your Excellency, it is my pleasure to call upon the Vice-Chancellor to a d d r e s s t h e congregation.

Thank you

The graduation... the graduands' pinnacle of achievement

Excerpts from the Speech by the Vice-Chancellor, Prof. Francis J. Gichaga



has discovered, through research, a biological control for the notorious water hyacinth which has invaded Lake Victoria and other water bodies in our country. After successful laboratory trials, a pilot full scale trial run was carried out at Nairobi Dam. Results from the field trials indicate that the biological technique provides а relatively cost effective way of killing the water hyacinth. It is our hope that those responsible for dealing with the water hyacinth problem can consider trying this relatively cheap biological technique.

In addition, our scholars have developed links with universities world wide

... a hand of welcome from the Vice-Chancellor, Prof. F.J. Gichaga

I wish to welcome Your Excellency Sir, on behalf of the University of Nairobi Community, to this 26th Graduation Ceremony of the University of Nairobi.

I also wish to extend a hand of warm welcome to all those who have kindly agreed to come and join us during this 26th Graduation Ceremony. We recognize that during the last 25 graduation ceremonies we have produced over 55,000 graduates who have helped this country develop. We are indeed proud to be part of the driving force that has seen this country develop to the level where it is today.

Your Excellency, our academic staff have continued to record achievements on several research fronts. Many of our academic staff continue to be invited to international forums to present their research findings. Some of the discoveries from the research carried out by our scholars have had great impact on our society.

As a way of example, one of our professors in the Department of Botany

through which our lecturers can visit their colleagues in other universities while those from other universities come to the University of Nairobi as visiting scholars, visiting professors and research collaborators. The Office of International Programmes is co-ordinating over 100 links with universities in Africa, U.K., Europe, U.S.A., Canada and Japan.

Your Excellency Sir, on a number of occasions you have advised us to plan income generating activities to supplement the Government funding and be able to meet some of the costs of running the University operations. We have production units and service units which currently generate useful income. For example the Department of Human Anatomy has been providing mortuary facilities to the public by embalming dead bodies at a fee, the Department has been able to generate sufficient funds to meet its recurrent expenses. Similarly, in our most expensive Faculty of Dental Sciences a consultancy arrangement by the staff is generating income which is helping considerably in meeting the cost of buying teaching materials. The Agriculture and Veterinary farms at Upper Kabete together with an irrigation scheme being developed at our Dryland Field Station in Kibwezi are producing farm products for selling in order to generate income. The Bakery at Lower Kabete is producing bread for sale to our students and staff. In order to co-ordinate and expand income generating activities, the University Council registered "The University of Nairobi Enterprises and Services Limited" as a company. The company has been running as a commercial entity and is fully owned by the University of Nairobi.

Excerpts from the Speech by the Vice-Chancellor

... one of our professors in the Department of Botany has discovered, through research, a biological control for the notorious water hyacinth which has invaded Lake Victoria and other water bodies in our country.

We have acknowledged that in order to generate significant income for the University we need to market and sell those products for which we have comparative advantage. We have accordingly embarked on parallel degree programmes commonly referred to as private stream or Module 2 programmes. These under-graduate and postgraduate degree programmes are generally run from 5.30 p.m. to 8.30 p.m. on weekdays and 8.30 a.m. to 4.30 p.m. on Saturdays. However, in the case of the College of Health Sciences, students in the private stream are studying together with the government sponsored students. As of now we have registered 1014 students in the Parallel Degree-Programmes in the following faculties:-

Commerce: B.Com. 65 students MBA 260 students Education: B.Ed (Arts) 220 students M.Ed. 20 students Law: LLB 240 students Medicine: MBChB 70 students BSc. Nursing 10 students Dental Sciences: BDS 10 students Pharmacy:

B.Pharm 14 students

Engineering:

B.Sc. 30 students Population Studies & Research Institute: Postgraduate 30 students School of Journalism: 30 students

Institute of Computer Science: Masters 15 students

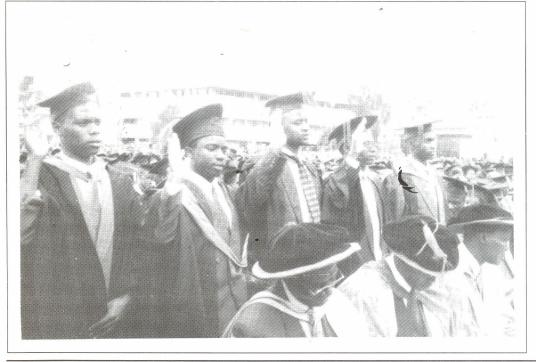
By introducing the Parallel Degree Programmes we have improved our income base and as a consequence we have been able to improve teaching facilities which have benefited the regular government sponsored students. The Parallel Degree Programmes have also provided opportunities to those Kenyans who would have otherwise gone to foreign universities at much higher costs.

We have accordingly embarked on parallel degree programmes commonly referred to as private stream or Module 2 programmes.

In the area of fund raising Your Excellency, we are trying to attract the big companies from our local industry, and we are making encouraging progress. We have, for example, attracted a few companies who have been interested in financing student prizes, awards and sponsoring games and sporting activities. We are grateful to those who have answered our call and we are appealing to others to come forward and support us not only in sports but also in financing endowment chairs as well as research and consultancy activities. We also have

prominent Kenyans who we believe have the capacity to offer their support and we are therefore appealing to such Kenyans, some of whom are our graduates, to come forward and assist the University. In this respect, I wish to record our deepest gratitude to Rattansi Educational Trust which awarded

College of Health Sciences graduands take the Hippocratic Oath



Excerpts from the Speech by the Vice-Chancellor

needy students from the University of Nairobi KShs.1 million for this academic year.

On our part, Your Excellency, our staff and students have continued to render outstanding service to the community. The one occasion when we were touched by our students sterling performance was during the aftermath of the unfortunate and devastating bomb blast of August 7th 1998. Our students joined other grieving Kenyans and played an active part in consoling those who suffered the loss of their loved ones.

The one occasion when we were touched by our students sterling performance was during the aftermath of the unfortunate and devastating bomb blast of August 7th 1998.

We are also aware of the vision of our country to industrialize by the year 2020. We have taken this challenge seriously and academic programmes are being refocused to reflect the needs for industrialization in the next century.

In respect of funding from outside the country, I am happy to report that many donor agencies and countries have come to our aid, among them include Sasakawa Foundation of Japan, DAAD and GTZ of Germany, SIDA of Sweden, IDRC and CIDA of Canada, USAID, IAEA, UNDP, UNESCO and the World Bank through the Universities Investment Project, which has assisted in terms of staff training and provision of books and equipment. In the way of example earlier this year we signed an agreement with the Government of Belgium through the Flemish Inter-University Council (VLIR) in Brussels in support of:

- (1) University-wide computer networking and Internet Linkages
- (2) Training methods in reproductive Health, HIV/AIDS
- (3) Marine Science and Coastal Management, to the tune of KShs.48 million.

Again the Government of Sweden through SIDA and SAREC has supported PINEP which is a programme for developing pastoral areas in the IGAD countries, for which we have already received KShs.180 million for use in supporting Masters programmes and research. I would also like to express our gratitude to the German Government who through DAAD has continued to support the University of Nairobi with masters scholarships, doctorate fellowships and postdoctoral fellowships. In October this year DAAD was marking twenty five years of existence in Kenya and we were proud to host the celebrations.

We have over the years enjoyed cordial relations with the UN bodies, significantly, the University of Nairobi hosted the United Nations Day Official Launching on 24th October, 1998 at Taifa Hall. We also organized joint public lectures addressing issues of poverty alleviation and good governance, human rights and ethics, violence against women, drug and other substance abuse. I am also happy to report that students have benefited through industrial attachment support by Otto Essien Young Professionals Programme through the United Nations Development Programme.

On 5th November this year the University of Nairobi was proud to host the Sasakawa SYLFF - Fellows workshop. The Sasakawa Endowment Fund of 1 million dollars has been a regular source of postgraduate scholarships in this university.

In the area of endowment chairs I am glad to report that UNESCO is financing an endowment chair for which Prof. M. Bahemuka has been appointed to the post. We therefore now have two such endowment chairs, the other one being the Vivekananda Chair for Vedic and Oriental Studies which is financed by the Hindu Council of Kenya and for which Prof. Sharma has been appointed for a two year term.

I am also happy to report that through the World Bank Universities Investment Project the University of Nairobi received 258 personal computers which have been installed in the University to help us in teaching, research and in managing the complex operations of the University. As a result of this project the various units of the University are networked and internet capacity has been highly enhanced to enable our scholars access information from the information highways internationally.

One of the indicators of the quality of output from a university is the number of postgraduates relative to undergraduates. In our case about ten per cent of the graduands are receiving Masters and Ph.Ds. Since postgraduate students are heavily involved in research activities, the number of Masters and Ph.D. students is indicative of the number of high level research projects being undertaken in the various departments and research institutes of the university.

Your Excellency, I would like to take this opportunity to congratulate all those who are about to be conferred with their degrees and diplomas from the hand of their Chancellor. I am sure this is the one occasion they have all along been looking forward to. As I congratulate them I would like to remind them that for them to survive in this competitive world they must continue to read in order to update their skills and knowledge. This is the first step in their long journey towards success and a lot will depend on how one charts the course of his or her future. The community has invested heavily in these graduands and the university has equipped them with the necessary academic foundation upon which they should develop their future. We also believe that over the years our education system has inculcated in them the virtues which will distinguish them as men and women of character. I wish all of them success in their future undertakings. I also hope that this occasion will not mark a final break between them and the University of Nairobi. I welcome them back as scholars, workers, and benefactors of the University

The University Confers Honorary Degrees

The University of Nairobi conferred honorary degrees to three outstanding individuals who have made a mark in their dedicated service to society and humanity in general.

Prof. Joseph Maina Mungai, EBS, MBChB (Makerere), Ph.D. (London); Prof. G.O.P. Obasi, B.Sc.(McGill), M.Sc., D.Sc.(MIT) and Mr. Hassanally Mohamedally Rattansi were conferred honorary degrees by the Chancellor at the 26th graduation congregation. The following are the citations by the respective awarding faculties and the responses from the conferrees.

Citation on Prof. Joseph Maina Mungai, EBS, MBChB (Makerere), Ph.D. (London).

"If I have seen further, it is by standing on the shoulders of giants."

The above statement, which is sometimes attributed to Sir Isaac Newton and at other times to Claude Bernard, can be aptly used to describe one man that the University of Nairobi is pleased to honour today. A man through whom many scholars in this country can claim to have seen further because they stood on his shoulders. A man popularly known by his students as the "Posture of Man."

Professor Joseph Maina Mungai was born on 4th April 1932 in Nairobi. He grew up in Kiambu District where he attended several primary schools; dropping out from time to time to sell sugar cane in the market or run his father's kiosk. In 1942 he dropped out of school altogether to go and become a full time herdsboy for 2 years.

The Chancellor congratulates Prof. Mungai on receiving the Honorary D.Sc.

After the two years young Mungai resumed school and in 1949 he sat for the Kenya African Preliminary Examination which he passed and was admitted to Alliance High School Kikuyu. In his final year in that School he rose to be Head Boy and was the top student in the Cambridge School Certificate.

Joseph Maina Mungai proceeded to Makerere University College, Kampala in 1954, where he won the Swynnerton Prize for Biology through the inspiration of Professor David Wasawo (the current Chairman, University Council) and other lecturers. In the Medical School he won the British Medical Association Prize for Anatomy followed by BP Shell Exhibition Prizes for other subjects. He excelled in sports breaking the three (3) mile record which he kept for 10 years. He also started the *Makerere Medical Journal* which is still published today.

In 1963 he proceeded to the University College London where he enrolled for his Ph.D. on the cells of the brain. His study proved the theories advanced by

> his own supervisor as well as a Nobel Laureate in another country wrong. The results of his Ph.D. thesis were analyzed by a mathematical team in Europe and found to be a perfect model. They were also confirmed several years later by an American scientist working at the University of Berkely California using advanced technology. One of his students recalls a conversation with his external examiner several years later in which he is reported to have said "...... Oh I recall that brilliant young African scientist. It is a pity he got lost in administration..."

Prof. J.M. Mungai Citation

But it is the creative and long career that he derived out of the Ph.D. study that is of significance to us today. When Professor Mungai returned to Makerere in 1966 he formed a team to study the effects of kwashiorkor on the brain. But soon he was recalled back to Kenya to join the newly started Nairobi School of Medicine.

Professor Joseph Maina Mungai will be remembered as the man who shaped the destiny of medical education in this Country. Together with other founder members of the Faculty of Medicine, Professor Mungai has no doubt proved the colonial powers wrong as they used to say that it would take an independent African Government 50 years to produce one doctor or for that matter one engineer. Thirty five years later, the University of Nairobi Medical school (started by the Government of Kenya only four years after independence), has produced more than 3,500 doctors, dentists and pharmacists.

Professor Mungai single handedly started the Department of Human Anatomy in 1967 becoming its first Chairman and Full Professor. Back then there was no law to enable his Department to obtain human bodies for the study of anatomy. Yet there can be no firm foundation on which to base the study of medicine without the use of this most fundamental teaching specimen. Professor Mungai arranged with Makerere University to supply the requisite materials. But no driver would agree to drive the vehicle to fetch them. He had therefore to do it himself.

Before leaving Nairobi for Kampala, Professor Mungai obtained written authority from the Commissioner of Police and the necessary documents from the Ministry of Health. However, he was warned by the Attorney General that, from a legal point of view, he could be arrested and prosecuted. But for the sake of his professional calling, he decided to take the risk. This was the only way of starting human anatomy studies, and by extension, medical training in Kenya.

When he got to Tororo at 10.00 p.m. on his way to Kampala he was arrested on the Uganda side for driving a foreign registered vehicle without a logbook. He was miraculously released at mid-night when a new group of soldiers reported on duty and one of them recognised a passenger that he was carrying. On the way back and, now fully loaded, with cardavers he was arrested on the Kenyan side. He was released after several hours of serious questioning about the nature of his "cargo." Some of his questioners thought that they were dealing with a lunatic.

When he got to Chiromo he found that the people there were anticipating his arrival with fear. Word quickly went round that the moment of truth had eventually come: dead bodies on Campus. Within minutes there was not a single person on the Campus. They had all taken off towards the sports ground behind the Chancellor's Court.

Today, the Department of Human Anatomy has developed a strong tradition of research, teaching and service to the community in the form of the mortuary services, thanks to its founder Chairman Professor Joseph Maina Mungai.

Prof. Mungai became the first Kenyan Dean of the Nairobi Medical School in 1969. In 1973 he was appointed Deputy Vice-Chancellor of the University of Nairobi for 2 years. In 1975 he was appointed to represent Kenya on the Council of the United Nations University.

In 1976, he was appointed Vice-Chairman and Editor of the National Committee on Educational Objectives and Policies. In 1977 he became the first Chairman of the National Council for Science and Technology as well as the Council of the Kenya Institute of Education. In 1979 he was appointed the Vice-Chancellor of the University of Nairobi and in 1980 he became the first Chairman of the Kenya National Examinations Council. In 1982 he was elected one of the Nairobi delegates and Director of the Co-Operative Bank of Kenya where he was also appointed its Vice-Chairman until 1986.

In 1985 Professor Mungai was appointed to be the founding Secretary to the Commission for Higher Education. In 1994/ 1995 Professor Mungai was appointed to be Chairman of a Presidential Committee on University Education in Kenya. After 13 years of dedicated service as Secretary to the Commission for Higher Education, he has been appointed to serve as a Joint Secretary to the ongoing Commission of Inquiry into the Education System in Kenya.

Despite the above high profile, Professor Joseph Maina Mungai has never lost sight of the fact that "once a teacher always a teacher." He has continued to perform his functions as a Professor in the Department of Human Anatomy.

Professor Mungai has supervised several postgraduate students including PhDs. Additionally he has produced over 600 writings, comprising a hybrid of scholarly, consultative and popular writings. Most of his writings are aimed at educating the public on a wide range of topical issues, with special reference to AIDS. On this score, Professor Mungai has succeeded in demystifying and popularizing science including his subject of Anatomy which is often described as the "mother" or the "queen" of all medical sciences.

This is the humble scholar that the University of Nairobi wishes to honour at this 26th Graduation Ceremony with the Degree of Doctor of Science (*Honoris Causa*) in recognition of his immense contribution to Higher Education in Kenya and in application of advanced knowledge in dealing with educational and health problems in this country.

Response by Prof. J. M. Mungai, EBS

"In the image of God"

Your Excellency, Distinguished Guests, Ladies and Gentlemen. First of all I would like to thank the University of Nairobi for giving me an opportunity of kneeling before the Chancellor. After six years of helping other people to do so it was very nice to experience what it feels like.

Second, it is with humility that I receive this award of an Honorary Doctor of Science.

Your Excellency, Distinguished Guests, Ladies and Gentlemen, when the missionaries came to Kenya 100 years ago, they were reaching out to Africans who they believed were created in the image of God. In terms of education, the missionaries gave a value to Africans which the colonial authorities had denied them. The missionaries gave to Africans quality western education. The colonial authorities on the other hand racially and wrongly declared that the brain of the African adult was so immature that it was equivalent to that of a 7-8year-old old European boy and could not benefit from western education.

We Kenyans have disproved the above colonial statement. Our brains are human brains. That is why we are able to do research, teach and provide community service at university level. The results of our work have been comparable to those of the rest of the world. We can also say with pride that the upright posture of man which led to the rapid evolution of the human brain and also distinguishes all of humanity from other creatures, was achieved in East Africa some 4 million years ago with Kenya playing a very major role. Human beings world-wide are beneficiaries of that achievement of our ancestors. We must however do much more in utilising the advances of research knowledge to educate our people. Fortunately, Kenya has a strong tradition of research from which to draw.

Your Excellency, Distinguished Guests, Ladies and Gentlemen, about 35 years ago a avery prominent scientist advised me that, no matter how advanced I became as a scientist, if I could not explain advanced research knowledge to a small child then it was of no use to our people. I have followed this advice and come to the conclusion that one of the most fundamental ways of utilising research knowledge is therefore in educating the people of Kenya. This is what I have discovered through my weekly writings in the Daily Nation. The first 400 of these articles were on a wide range of topics under the title of "Spotlight on Knowledge". The current series of over 80 articles, under the title of "Our aids against AIDS", are focused on developing a structured AIDS education for the education of our people beyond AIDS awareness.

This has involved spending

Prof. J.M. Mungai ... response

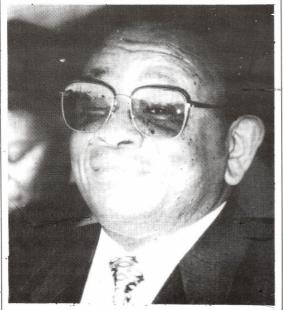
hours in the library collecting the research material and then sorting, analysing, synthesising, simplifying, organising and editing it to suit the needs of our people. Countries which have industrialised have given great prominence to these processes. We, the scholars have to realise that, in a developing country like Kenya, we are the ones who must go the extra mile of making research knowledge available to the people. The reason for this is that the country does not have enough science journalists such as those found in the industrialised countries. In contrast, the scholars constitute a highly specialised human resource of several thousand individuals. The scholars therefore need to learn how to work with science journalists in writing for the purpose of educating the people of Kenya. I know from personal experience that this is not only essential, it is achievable in Kenya.

Your Excellency, Distinguished Guests, Ladies and Gentlemen, now that the Government of Kenya has committed itself to the acceleration of industrialisation of the country, we need to remind ourselves that countries which have industrialised have done so through the utilisation of research specialisations which are found in universities and other research institutions. No country in the world has industrialised without using these specialisations. If Kenya is to industrialise it will therefore have to put in place effective mechanisms for utilisation of research. The scholars in the universities and other research institutions as well as the journalists form a very vital component of those mechanisms.

We scholars must make our contribution in breaking the vicious cycle of poverty, ignorance and disease. Ignorance is the easiest link to attack using the knowledge which we posses. Our people are the most important resource in the process of industrialization. Like the missionaries, we must reach out to our people instead of watching them perish in ignorance since they are all-all of them-still created in the image of God.

Thank you

Citation on Professor G.O.P. Obasi, BSc, MSc, DSc Secretary-General, World Meteorological Organization



Prof. Obasi

Professor Godwin Olu Patrick Obasi started his meteorological career in Nigeria Meteorological Department in 1956. He acquired his B.Sc. (Honours) in Mathematics and Physics from McGill University, Montreal (Canada) in 1959. In 1960, he obtained a Master's degree with distinction from Massachusetts Institute of Technology and was awarded a Doctor of Science in Meteorology from the same Institute in 1963. He won the Carl Rossby Award for the best doctoral thesis of the Institute.

On his return to Nigeria, Prof. Obasi joined the Meteorological Department and worked in various capacities including that of Adviser to the Federal Government of Nigeria in meteorological research and training. In 1967, he joined the Department of Meteorology of the University of Nairobi as a World Meteorological Organization (WMO) expert and senior lecturer. He was one of the first Africans to be recognised as an international expert in the science of meteorology.

Prof. Obasi served University of Nairobi in various capacities between 1967-1976. He was the Chairman of the Department of Meteorology and a member of the University Senate between 1972/1973 and 1974 to 1976. He was promoted to full professorship in 1974 and served as Dean, Faculty of Science between 1974

Varsity Focus

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Prof. Obasi ... Citation

and 1976. In addition, he was a visiting Research Associate at the Florida State University, Tallahassee, U.S.A., in 1973 and also carried out research at the National Centre for Atmospheric Research in Boulder, Colorado, U.S.A. At the time Prof. Obasi took over as Chairman of the Department of Meteorology at the University, the academic staff members consisted of only one Kenyan. Prof. Obasi immediately embarked on a very ambitious Staff Development Programme. In this regard, he was a mentor to this very unique and innovative Programme where the best undergraduate students were absorbed into the Department as Graduate Assistants or Tutorial Fellows. Through this innovative programme, the Department was able to smoothly replace most of the expatriates by the time he left the University of Nairobi. Furthermore, when Prof. Obasi became Chairman in 1972, the

Department of Meteorology was only running one major meteorological programme, namely, a Post Graduate Diploma in Meteorology. He took the initiative to introduce not only a B.Sc. Degree in Meteorology, but also postgraduate programmes leading to M.Sc. and Ph.D. degrees. He also introduced a service course in atmospheric sciences which was accepted by the Faculty of Science. These programmes have played a crucial role in providing the high calibre human resources required by the Kenya

Meteorological Department (KMD), and indeed contributed to the provision of professional meteorologists to most of the national meteorological services, especially in Eastern and Southern Africa. The Department has produced professors, heads of national meteorological services in Africa and beyond, and senior scientists in some of the best climate centres, even in the developed world. At the international level, Prof. Obasi has served in various including capacities Chairmanship of the WMO Working Group on Tropical meteorology and Vice-President of the WMO Commission for Atmospheric Sciences. Prof. Obasi was instrumental in the initial planning of Global Atmospheric Research Programme (GARP) Atlantic Tropical Experiment in 1974, whose work contributed the unique 15-year Global Atmospheric Research Programme (GARP) which ended in the early 80's. This programme led to the understanding of the atmospheric processes which have led to improved severe weather warning systems, as well as to the prediction of phenomena such as the El-Nino and in the assessments of the Intergovernmental Panel on Climate Change (IPCC). In 1978, Prof. Obasi joined WMO as Director of its Education and Training Department, a position he held until 1983. In 1983, he was elected Secretary-General of

Education and Training Department, and subsequently as Secretary-General of WMO, Prof. Obasi has elevated the status of meteorology and hydrology, not only in Kenya and Africa, but throughout the world and has maintained a very strong support for their development. Some of his other major contributions to the development of meteorology and hydrology to the University of Nairobi and Kenya as a whole include:

- Award of fellowships for postgraduate training and capacity-building in new areas of development in meteorological and hydrological sciences.
- Provision of meteorological equipment, both hardware and software, which are required for training and for day-to-day operations. Most of the books and training equipment at KMD and the Department of Meteorological of the University have been provided by WMO. The University Department has recently benefited from the donation of 10 desktop computers. The Department has also been provided with a Dobson specimen for measuring the ozone concentration in the atmosphere. It is the only equipment of its kind located close to the equator. WMO has also recently established a new global Atmosphere Watch Station on Mt. Kenya.
- Initiation and support for the regional Institute for Meteorological Training and Research (IMTR), which is

WMO. As the Director of WMO



A hug for a graduand conveys the emotions of the moment

located at KMD in Dagoretti Corner. IMTR is currently running some joint specialised Postgraduate Programmes with the Department of Meteorology. This includes an International Postgraduate Applied Course on Hydrology and Information Systems Water for Management.

- Establishment of a Drought Monitoring Centre (DMC) in Nairobi for the sub-region.
- Establishment of a new WMO Sub-regional Office in Nairobi. The Office, hosted by the Government of Kenya at KMD, is expected to play a crucial role in the promotion, development and co-ordination of the meteorological and hydrological activities in the region.

As a distinguished scientist, Prof. Obasi has published over 100 scientific and technical papers in various fields of meteorology, hydrometeorology and their applications to socio-economic development of nations. He has continued to prepare and deliver scientific and policy-related lectures to highlevel international meetings and global conferences. He is a consulting editor to many international journals in meteorology. Some universities seek his expertise as external examiner for Ph.D. Theses.

In recognition of his outstanding achievements in the field of meteorology, hydrology, environmental matters, as well as in the policy aspects related to these fields, Professor Obasi has been honoured by several governments, universities, academic institutions, academy of sciences and meteorological societies world-wide. A few of the many distinguished awards and honours include:

• Doctor of Physics (*Honoris Causa*) from the University of Bucharest, Romania; Doctor of Law (*Honoris Causa*) from the University of the Philippines, and Doctor of Science (*Honoris Causa*) from the Federal University of Technology,

Prof. Obasi ... Citation

Akure, Nigeria, and from The Alpine Geophysical Research Institute, Nal-Chik, Russian Federation; and the Gold Plaque Merit Award for Science and Art of the Czechoslovakian Academy of Sciences.

- Fellow of the Third World Academy of Sciences; and The African Academy of Sciences;
- Honorary Member of the Academy of Agricultural and Forestry Sciences, Romania; and Full Member Academician of the International Academy of Sciences of Nature and Society (Armenian Branch).

Prof. Obasi has also received highest national honours from a number of Governments including those of Benin, Burkina Faso, Cote D'Ivoire, Lithuania, Niger, Federal Republic of Nigeria, Paraguay, Poland, Senegal, Venezuela and Viet Nam.

He is a Fellow or Honorary member of ten meteorological societies from Asia, Europe, North, Central and South America, and from Africa. In particular, he is an Honorary Member of the Kenya Meteorological Society and a Fellow of the African Meteorological Society.

In addition, Prof. Obasi is the Chairman of the New Sun Foundation which supports environment-related programmes world-wide.

This is the man the University of Nairobi is proud to award the degree of Doctor of Science (*Honoris Causa*) It is with a deep sense of honour and privilege, as well as with humility, that I accept this degree of Doctor of Science (honoris causa), which the University of Nairobi has conferred on me. I am personally touched by this distinct honour and I can assure you that it is a source of immense pride for me and my entire family. I consider that this honour is also a recognition for the World **Meteorological Organization (WMO)** and indeed for the entire meteorological and hydrological communities. The success of WMO and my own in contributing to the development of meteorology, hydrology and related geophysical sciences in Africa and the rest of the world, is largely due to the excellent relationship and cooperation which exist between Member Governments and WMO, and between WMO and national institutions such as the Kenyan Meteorological Department and the University of Nairobi.

Your Excellency, I feel particularly honoured today in a very special way because of my personal involvement with this University. I spent most of the early part of my professional career here in the University. I saw its Department of Meteorology, and indeed the entire University, grow to the very large institution it is today. When I joined the University in 1967, there were less than ten students in the Department of Meteorology. All were pursuing a postgraduate diploma course at that time. Today, the Department provides training to hundreds of undergraduate and postgraduate students pursuing various programmes in meteorology, hydrology and their applications.

I am indeed very proud that what we began as a small Department to serve meteorological interests for the African region has, within the last two decades, produced many meteorologists for this continent and beyond, including senior scientists and professors. This growth reflects the priorities and enormous resources that the Republic of Kenya has invested on capacity building, which is the milestone to any sustainable socio-economic development. The rapid growth of university education in general over the years is a further reflection of the progress that the Republic of Kenya has enjoyed since independence.

Your Excellency, Distinguished Guests.

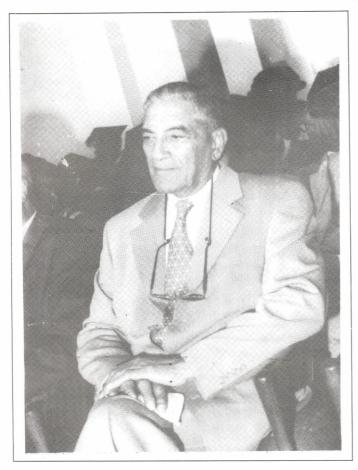
Meteorology has a very important role to play in sustainable development. The investment that Kenya has put into meteorology is reflected in the services that the Kenya Meteorological Department is providing to all sectors of national social and economic life. This includes the monitoring of drought conditions and the provision of early warnings of natural disasters, such as those caused by *El Nino*-related floods, the effects of which are still lingering in Kenya and some neighbouring countries. WMO gives high priority to assisting its member countries in addressing these issues in the best possible way.

In this regard, WMO is particularly grateful to the Government of Kenya for its collaboration in regional cooperation in meteorology and hydrology. For example, Kenya is host to a number of WMO Centres, including the Drought Monitoring Centre, a WMO Regional/Specialized Meteorological Centre, operated jointly by the Kenya Meteorological Department and the University of Nairobi, and a WMO Regional Telecommunications Hub, all of which serve the wider African and Global meteorological and hydrological communities. The close collaboration that exists between these Centres, the Kenyan Meteorological Department and the University of Nairobi is an example of how the results of regional activities can be integrated directly into national development efforts. This shining example should continue to be enhanced since it is very rare in many parts of the world. To further improve its assistance to Kenya and the neighbouring countries, WMO established a sub-regional office here in Nairobi earlier this year. I hope that the countries of this sub region will benefit fully from its operation.

In conclusion, let me extend my warmest congratulations to all recipients of degrees and diplomas today and to wish them well in their future careers. One Secretary-General of WMO has taught at this University, and I would certainly love to see a graduate of this fine institution also become a Secretary-General of WMO one day in the future. The honour I am privileged to receive today will strengthen my resolve to work for the further advancement of the atmospheric sciences for the benefit of future generations of Kenyans, Africans and the entire world community.

Thank you very much, Asante Sana

Citation on Mr. Hassanally Mohamedally Rattansi



Dr. Hassanally M. Rattansi

Mr. Mohamedally Rattansi was born in Nyeri on 14th March, 1921. His father, Mohamedally, had settled in the newly-established boma of Nyeri after walking all the way from Nairobi at the turn of the Century. The father bartered beads, salt, sugar, *amerikani*, and blankets with the Dorobo and Kikuyu. Several years later, his bride, Maniben, joined him. He had married her when he was only twelve years old and she was ten. It was a typical Indian child-marriage.

Young Hassanally started his early education in a makeshift school in Nyeri. In those days, the Government made no provision for Asian schools in rural areas. In small towns, such as Nyeri, Asians clubbed together to hire a teacher or two from India and set up their own school. More often than not, a leading merchant would make rooms available in his house for classes.

In 1931, Hassanally completed whatever schooling Nyeri could offer. He then enrolled in the Government Indian Senior Secondary School, now Jamhuri High School, in Nairobi. He passed his London Matriculation Examination in 1936 and hoped to study medicine or pharmacy in the United Kingdom. But his parents moved to Nairobi and left him and his elder brother to look after their Nyeri business. This abruptly cut short his ambitions for further education.

From these humble beginnings, he has had an illustrious career as a sportsman, businessman, civic official and philanthropist. Over the years, he has played a leading role in the development of sports in Kenya as a sportsman or sports administrator. He has held various elected positions in sports organizations dealing with cricket, lawn tennis and badminton. For example, he was Chairman of the Asian Sports Association in 1958-59, Kenya Table Tennis Association in 1962, and Kenya Lawn Tennis in 1965. He also served as Treasurer of Kenya Cricket Association in 1965 and the Kenya National Sports Council between 1966 and 1984. And between 1994 and 1997, he served as a member of the Central Executive Committee of the Kenya National Sports Council.

Equally, he has represented Kenya in the international arena. For instance, he was playermanager of the First East Africa Cricket Tour of South Africa in 1957, and team manager of the Kenya table tennis team to Cairo in 1962 and lawn tennis team to the first African Games in Brazzaville in 1965.

His love of sports is exemplary. It is this life-long commitment to sports that has led the Rattansi Educational Trust, of which he is a long-standing Chairman, to offer financial support to a variety of sporting bodies as well as purchasing sporting equipment for many educational institutions.

His civic duties have been multi-faceted. They include serving as a Councillor in the Nairobi City Council (1960-65) and being a member of the Board of Governors of Highway Secondary School, Kenya High School, and St. Theresa's Secondary School. He has also served as a member of His Highness The Aga Khan Nairobi Provincial Council and Nairobi Hospital Board.

But it is in the field of education where his contribution has been most significant. His parents established the Rattansi Educational Trust in 1956. Hassanally became the Chairman of the Trust in May 1962. Over the years, he has developed it into one of, if not, the leading charitable organizations

Mr. Hassanally Rattansi ... Citation

supporting post-secondary education and youth programmes in Kenya. In order to effectively do this, he sold his own business in 1987 in order to devote his energies and talents to the Trust. He has done this free of charge and on a daily basis for the last eleven years.

Like his father, he strongly believes in social justice and that education is vital for the advancement of individuals and Kenya as a whole. For this reason and since its inception, the Trust awards bursaries to deserving Kenvans drawn from polytechnics, teacher training colleges and local and overseas universities. For example, in 1998 alone, it has awarded bursaries of over sixteen million Kenya shillings. In this regard, University of Nairobi received one million shillings. Indeed, University of Nairobi has benefited from the Trust since the inception of cost-sharing policy in 1990-91 academic year.

The Trust has contributed to the education of many prominent Kenyans. To mention only a few, these include: Raju Batavia (Batavia Enterprises Ltd., Mombasa), the late Justice J.M. Gachuhi (Court of Appeal), Mohamed Hyder (Former Professor of Zoology and Principal, College of Biological-Physical Sciences, and University of Nairobi), J.B. Karugu (former Attorney General), B.E. Kipkorir (former academic and Kenya's Ambassador to the United States) and Sadru Ramji (Wyco Paints, Nairobi).

Mr. Rattansi passionately believes in the value of sports. He has also an abiding faith in the youth of this country. For this reason, he fully participates in the administration of youth organizations, such as the President's Award Scheme of which he has been a member since 1966. Indeed, he has made the resources of the Trust available to other youth programmes, particularly the Outward-Bound School, Boy Scouts and Girl Guides. This is a clear demonstration of his patriotism and commitment to the welfare of Kenya.

Finally, Mr. Rattansi is a scholar in his own right. Deeply religious, he avidly reads books on religion, world affairs and Kenya. In particular, he takes a keen interest in the history of Kenya. To this end, he has sponsored studies on the history and culture of Asians in Kenya and East Africa.

To date, this venture has yielded three books all written by Cynthia Salvadori. These are: *Through Open Doors: A View of Asian Cultures in Kenya*, published in 1983, *Two Indian Travellers*, published in 1997 and *We Came in Dhows*, 3 volumes, published in 1997.

Taking into account Mr. Rattansi's outstanding personal contribution to social justice, development of sports and philanthropic support to education in Kenya, the University of Nairobi is proud to award him the degree of Doctor of Letters (Honoris Causa)

Response by Hassanally Rattansi

Your Excellency, the Chancellor of the University of Nairobi, the Chairman of Council, the Vice-Chancellor, Distinguished guests, Ladies & Gentlemen.

Today, to receive such a distinguished honour from your great University is the fulfillment of my life's work. At this moment in time, I feel very humble as despite what the Rattansi Educational Trust and I have been able to achieve in the past in the service of our fellow young Kenyans, so much still remains to be done.

I do realize that this honour is, in a great measure, an appreciation of the legacy that my late parents left for the people of Kenya in the form of the Rattansi Educational Trust which was founded in the year 1956, and which is a perpetual trust.

It is my strong belief that besides academic education, our young people must develop physically, morally and spiritually with a strong sense of community service and social responsibility. It is towards that end, that the Trust supports sport organisations, the President's Award Scheme and similar bodies.

During the past 42 years of its existince the trust has assisted hundreds and hundreds of our young people complete their education in various fields and uplift their lives directly or indirectly.

Your Excellency, today as you awarded me this doctorate, my parents must have been looking at me from wherever they are with profound happiness and spiritual satisfaction.

I assure you that the directors of the trust and myself will spare no efforts to continue to assist our students fraternity today, tomorrow and in the years to come.

Thank you once again