Graduation Edition, 1985.

MESSAGE FROM THE CHAIRMAN OF COUNCIL

On behalf of the University Council, I wish to congratulate most warmly all the graduands for the hard work they have put towards their studies which have now become the fruits we are witnessing today.

We at the University Council are always delighted during these occasions, because your graduation fulfils the very existence of this Institution. I take this opportunity to thank the lecturers who have prepared you through the academic programmes of the University.



H.E. Prof. S.K. ONGERI Council Chairman

I am sure, just as you are that, the University has given you the power to read. Your receiving the certificate today should not be the end of the academic road that you began many years ago.

As we bid you farewell, I want you to remember that those who have preceded you have raised the name of this University high. We have been and still are the major contributors of manpower to this Nation.

MESSAGE FROM THE VICE-CHANCELLOR



PROF., F.J. GICHAGA Vice-chancellor

On behalf of the entire University community, I wish to welcome all our guests to this year's graduation ceremony, the 23rd since the inauguration of the University of Nairobi.

Today's graduation marks the apex of the long march for knowledge for the more than 2800 graduands whom we congratulate for their successes. This is, by any standards, not a mean achievement.

The University of Nairobi has continued to enjoy very good support from donors and other institutions of higher learning

world wide. On our part, we have responded to the challenges by doing more research and maintaining the standards belitting a National University. The many projects and research being conducted in the University at the moment are a clear indication of the scholarship that goes on in the University. To the graduands, you have now joined the over, 50,000 members of the Convocation. As you leave this University, we are confident that the knowledge you gained from here will be of great benefit to the Nation.

Varsity towns

SUMMARY OF GRADUANDS

1	First Degree/Dip.	y muly ad the gradmands to the source some Soft of the subdular winds that now excellent	2444
2.	Postgraduate Degree/Masters	or specific and the spe	275
3.	P.h.Ds	e unhe Chiveresty Collinsia menty as a subliquite	15
	TOTAL		2734

The University with a National Experience

The University of Nairobi has rendered its account to the nation and spelt out clearly what it has done for Kenya. The University has lived up to its mission and to the expectations and aspirations of the people of Kenya. It can now justify objectively conclusively the vast amount of human, financial and material resources that have

been invested over the years in its upkeep. In this regard, it is only fair



The Chancellor of the University of Nairobi
His Excellency, President Daniel arap Moi conferring power to read
(File picture)

to let the facts and figures speak for themselves.

As a social institution, the University has played a clearly defined and specific role in society. In this connection, it is no doubt worthwhile to restate clearly the purposes for which the University was founded and exists. For it is only against those parameters that the performance of the University should be measured and judged. There are contributions over and above those requirements and expectations that a bonus to the University of Nairobi in accomplishing the function of providing university education to Kenyans and to train high level professional and technical manpower. When you compare the number of people who have received university education and training at the University of Nairobi and who have graduated with first and advanced degrees and diplomas between 1970, when the University was established as a fully-fledged and autonomous University, and additing to the more than 6,000 graduates who received their degrees and diplomas from the University between 1964 and 1970 when the University was still a constituent college of the University of East Africa, you will no doubt appreciate its collosal contribution.

All in all, the University of Nairobi has taught, examined and awarded over 58,000 first and advanced degrees and diplomas since 1964, covering almost all known areas, fields and disciplines of study, research and training. It has provided the nation with a large pool of educated and highly professionals and technical experts in an extremely wide variety of disciplines and domains of human endeavour. These are the people who are today occupying vital positions and playing key roles in virtually all sectors of Kenya's social, economic and political life. They

constitute the vast majority of middle and senior officers and professionals in government ministries, parastatal organisations, private business and nongovernmental organisations.

In many areas of specialisation, University of Nairobi graduates constitute the bulk and in some cases almost the entire complement of the professionals and technical experts practicing in Kenya. In all probability, for example, it would be no exaggeration to say that 3 out of every 4 District Officers, Secretaries, District Assistant Commissioners, Senior Assistant Under Secretaries, Secretaries, Mechanical Engineers, Architects, Education Officers, Secondary School Heads and many others, are University of Nairobi graduates. For certain other key specialisations the proportion goes up to 9 out of every 10. They include such professions as Medical and Veterinary Doctors, Agricultural Officers, Advocates and Commissioners for Oaths, Magistrates, Physical Planning Officers, Community Development Officers, Newspaper and Magazine Editors, Valuers and Estates Managers.

Thus, although it cannot be judged by how many kilometres of road it has built, the University can be judged by the number of kilometres of roads the engineers it has produced, planned and supervised in their construction. In this connection, it can be said that there is probably no single major road that has been built in Kenya since independence that has not been without the involvement and participation of University of Nairobi graduate engineers in the planning, design and supervision of construction in one capacity or another.

Similarly, although the University

cannot be judged by the number of diseases it has eradicated or prevented, yet it can be judged by how much the over 3,000 doctors it has produced have contributed in tackling those problems and in enhancing the health of Kenyans. No single sector is without a University of Nairobi graduate.

There is no doubt whatsoever that Kenya would be far behind and in a sorry state in many aspects of social, economic and political life, without all those thousands of officers, professionals and technical experts who in many cases are almost the only ones we have. In todays Kenya, they constitute the backbone of our agriculture, industry, commerce, banking, public administration and education system.

In all cases, the qualification obtained at the University of Nairobi are of international repute and are acceptable and recognized by governments, private organizations and other universities all over the world. This is ample testimony to the high quality of standards of teaching, research and training offered and maintained at the University. As a consequence of this recognition, the University of Nairobi has established and maintains an extensive and dynamic network of programmes of exchange for students, academic staff, researchers and research findings with over 140 other universities and institutions around the globe.

Creating Knowledge

The University, is not just a teaching institution. Far from it. It has a much wider social role of which teaching is a component but by no means the only major one. Another very crucial role or function of the University is "to participate in the creation of knowledge"

and to disseminate the same to a variety of consumers through publications, reports, seminars, conferences and so on. It is to contribute to the total stock of knowledge, understanding technology of action available to Kenyans and the rest of the mankind by undertaking and carrying out research, gathering, analysing and interpreting data and information about our society, economy, government, politicians and the world around us. Through such activities the University is charged with the responsibility of providing new and deeper insights into all aspects of our national realities and nature, new and better explanations, descriptions and tools of prediction, foresight and action that will enable us make better decisions and manage our affairs more effectively and efficiently.

In this regard, the University of Nairobi constitutes without doubt the biggest, most diversified and dynamic research institution not only in Kenya but also in East and Central Africa. It is no doubt also one of the leading research institutions in Africa and the world. Among other things, this is testified by the number of published kshop and discussion papers and articles in specialized journals and magazines that are produced at the University of Nairobi each year as well as the extreme diversity of topics, fields and disciplines covered.

In effect, one of the primary duties of every member of the academic staff of the University is to be continually engaged in conducting research, publishing and otherwise disseminating findings in his or her sphere of specialization. This is a key criteria for promotions and career development at the University and provides a powerful incentive which ensures that lecturers

and professors remain constantly motivated and active in attending to this task. Research in laboratories or in the field within the Republic and beyond, and the publication and dissemination of findings is an activity that goes on continuously and without interruption at the University day-in day-out, year-in year-out

Storing and Preserving Knowledge

Yet another major function of the University is the storage and preservation of knowledge for reference and consultation by the present and future generations. The primary duty of performing this function within the University is the responsibility of the University Library System. discharging this responsibility the University Library system collects, catalogues, indexes and preserves in printed and bound form, micro-films, micro-fiches and computer discs,CD ROMS, all kinds of books, newspapers, journals, magazines, research reports, conference, seminar and workshop papers, special reports of commissions and committees of inquiry, almanacs, year books, university calendars, annual reports and other publications of national and foreign governments, nongovernmental organisations, business firms and private individuals. A computerized marking and identification system helps to ensure the security of the materials.

To-date, from scratch and humble beginnings, the University Library system boasts of over 352,000 books and over 240,000 volumes of periodicals and other types of materials. It is without doubt one of the largest such collections in Africa and probably the world. The collection is housed at the main Jomo Kenyatta Memorial Library at the Main

Campus of the University and in 12 branch libraries in different colleges, faculties and institutes.

In all respects, the University of Nairobi Library system is the Central Bank of Knowledge of Kenya. In any one week nearly 100,000 readers make use of its facilities and collection of materials including many professionals and researchers from outside the University and from many countries of the world.

In addition, each one of the over 70 departments, Institutes and Schools of the University have their own specialized libraries. They are also an important complement to the main University libraries. In all, few lecturers and researchers or learners can hope to do full justice to or comprehend fully any subject or topic of research in Kenya, without recourse to the materials possessed by the University Libraries and the private collection of individual members of staff.

From the above very broad tour d'horizon, it is clear that, all in all, the University of Nairobi has made and continues to make a crucially important, irreplaceable and indispensable contribution to the life and welfare of Kenyans and to the future social, economic and political development of the nation.

Training

To date the University has trained over 58,000 in almost all fields. This has provided the nation with a large pool of highly educated and trained professionals and technical experts in an extremely variety of disciplines and domains of human endeavour. These are the people who are at the helm of our National economy to day, they are

people who are occupying vital position and playing key roles in all sectors of Kenya's social, economic and political life.

National Service

University of Nairobi graduates constitute the bulk and in some cases almost the entire complement of the professionals and technical experts practising in Kenya to day. The University is charged with the responsibility of providing new and deeper insights into all aspects of our national realities. In this regard, the University of Nairobi constitutes without doubt the biggest, most diversified and dynamic research institution not only in Kenya but in the whole of the region South of Sahara excluding South Africa. In effect, one of the primary duties of every member of the academic staff of the University is to be continually engaged in conducting research, publishing and disseminating.

Position

With all the Nairobi city to experience, learning does not stop at the campus gates. This is an opportunity for students to socialize with the would be employers. This alone makes it the University of choice for those searching for the best. For students, the University of Nairobi can be a connection between where you are now and where you want to be in future. It is generally a meeting of minds.

The University of Nairobi has rendered a clean account in enhancing development in Kenya's socio-economic and political spheres and thereby justify objectively and conclusively account for the vast amount of human, financial and material resources that have been invested over the last 33 years.

Far-reaching

If all people the University of Nairobi has trained since 1963 were to stop working to day, Kenya would standstill. This is the magnitude, the diversity and the far-reaching impact of the contribution by the University of Nairobi alone in developing human resource both qualitative and quantitative much so that no other institution has done the same.

It is safe to proudly say to day that, in Kenya one cannot discuss higher education without mentioning the University of Nairobi.

University of Nairobi: a

steady march to the people

The introduction of the External degree programme at the University of Nairobi makes it the only University closest to the people.

The External B.Ed (Arts) programme was launched in 1986 following many recommendations dating back to 1960s when the need to build high level manpower was expressed following responsibilities created soon after independence. The first recommendation to establish correspondence education supported by radio was thus made in the Kenya

Education commission of 1964, popularly known as the Ominde Report. There after the idea of teaching and learning at a distnace featured, in several Kenya government development plans.

In 1983 a task force set up to study the possibility of launching external degree programmes came up with two key recommendations which culminated in the launching of the external degree. One, there were large numbers of candidates each year, who qualified for university education but could not be absorbed due to lack of residential and teaching space. Two, distance education as a new course would provide those aspiring and deserving Kenyants with a university education and as spin off provide the needed high level manpower.

The External Degree Programme started offering a B.Ed degree because the ministry of education felt that there were many SI (Secondary One) and Diploma teachers who were trained to teach in certain classes only but who sometimes found themselves teaching upto "A" level classes due to shortage of graduate teachers. Also in some harambee secondary schools, "A" level holders with professional training no shouldering heavily teaching responsibilities some of which they found overwhelming.

The External B.Ed. programme was therefore meant to give the categories of teachers training without removing them from the classroom using an innovative method of learning that they would access any time any where. These teachers have been learning at their own pace, unprogrammed as opposed to the conventional mode which ignores personal differences among learners.

Using distance education, study materials have been developed which are now used by the other local universities as study texts. Uganda, Zimbabwe and Tanzania have launched external B.Ed. programmes using materials developed for the Nairobi external B.Ed. programme.

The teaching system has mainly been through the printed correspondence texts

supported by audio cassette tapes and occasional face-to-face tutorial sessions conducted by notes of the study materials. The course was launched with only two study units that is History of Education and General Methods. All the other units have been developed as the students were in session much to the programme was big achievement in meeting the students requirements.

The notes of the study materials injected a great inspiration to the programme. These notes belonged to other faculties and different universities and consultation with Vice-Chancellors, our residential sessions went on without the slightest hitch.

Last year,185 external B.Ed. (Arts) pioneer students were among the 3578 who graduated. The message of joy they gave Kenyans when they put on their caps, hoods and gowns of honour to mark the culmination of an arduors but very successful journey was that -The only unfished journey is that which is not yet started. This year; about 1586 external students have enrolled for this increasingly popular programme.

The fact that external students acquired simmilar qualifications as internal students is a big eye openener in this country. At a time when university budgets are competing against rising numbers seeking university places, this programme should be expanded to call for a larger number of students in a variety of courses. Degree programmes taught for example in faculties of Law. Commerce, Building Economics and Land Economics can benefit heavily from distance education methods as these courses require little or no laboratory or workshop facility.

This would call for the establish-

ment of a college or university of distance education which would concentrate on teaching through distance education just like the Open University of Tanzania which was established with the assistance from the external degree programme experiences is doing.

What do the students feel about the programme? They are excited. Without it they would not be calling themselves graduates now. They are proud to be graduates of the University of Nairobi. Although they say they found it challenging to combine work, studies and family commitments, they recommend the programme for other aspirants saying it is more flexible socially than internal programmes.

University - hub of reasearch

Research so far undertaken at the University of Nairobi includes:

- ➤ Tackling the question of food production:
 At the Department of Soil Science Faculty of
 Agriculture, scientists completed a project on
 the use of nitrogen fixing organisms as an
 alternative to artificial fertilizer of the nitrate
 type.
- Tackling the question of rising costs in house construction by introducing low cost housing technology.
- The development of an anti-weed 'dawa' by researchers at the Department of Botany.
- The breakthrough by scientists at Faculty of Dental Sciences in their big to control excessive flouride in household drinking water.
- After nearly five years of planning, experimentation and intensive research, a team of researchers led by the University of Nairobi helped to pioneer Kenya into the high technology field.

- Scientists from the Department of Crop Science have released 3 varieties of pigeon pea with early maturing lines as well as hardiness and resistance to disease.
- In another development researchers at Crop Science Department have developed a new maize variety for the medium potential and the semi-arid areas of the country.
- Scientists continue studies in food bean improvement, developing crosses resistant to disease like rust, leafspot, common & holo blight, anthracrose and the bean common mosaic virus.
- Onions have been the subject of a collaborative research project between Kenya, West Germany, Israel and Thailand.
- ➤ The study on the genetic system of garden peas and determination of traits that could be economically exploited led to very good results. Cross matches produced hybrids that were an improved quality in terms of sweetness, popularity, high yield and early maturity.
- ➤ The development of a formula for long lasting uji was another breakthrough in the arena of food sufficiency.
- A big breakthrough in the area of population control was achieved with the discovery of a natural product that forms the base for a male contraceptive pill.
- Research on a vaccine to cure the fowl typhoid reached on advanced stage as the scientists also sought a patent for the formula.
- Discovery and research into active agents in traditional herbs that can fight with significant action against bacteria, fungi, viruses, pests and parasites.
- Appropriate technology in farm machinery such as oxploughs and low powered tractors for use in small farms.

- Development of steepland conservation techniques.
- Research on alternative sources of energy
- Completion of low cost windmills
- Research to determine the value of maize cobs as a fuel
- Development of numerical weather prediction model.
- Research on lightening arresters
- ➤ Mala Research
- The efforts made in development of legume inoculants which have increased farm yields substantially
- Development of maize sheller
- Research on the pattern, behaviour and treatment of Leukaemia in Africa.
- Research on the pattern and epidemiology of Haemophilia and allied disorders in the African.
- Studies in Aplastic Anaemia in children and adults
- > Research on STD' and AIDS
- ➤ HIV Research
- Research on Chancroid

- Investigation on the natural products of plants origin as possible Insecticides.
- Salmonella Infection
- Investigations into the morphology of the placenta, ovary and testes.
- Investigation into the morphology of the Urinary system,
- Patent of an Invention: A U.K. patent was invented by Dr K.V.O. Rabah, Department of Physics, University of Nairobi (Kenya), and Dr M.J. Lazarus, Department of Physics, University of Lancaster (UK).
- Radiation survey of the high nature of radioactivity of Mrima Hill.
- ➤ Formulation of Insecticide and Acaricides from plant products
- Control strategies of Parasitic infections
- > Reproduction control in animals
- Research on agricultural land use and ecological impact.

Nairobi University Press

This publishing house of the University of Nairobi was founded in 1984 and has 28 titles to-date. One of the constraints experienced in implementing academic programmes in Kenya as well as in other third world countries is the deficiency of teaching materials at the tertiary level of education. Many books and other materials at this level is imported, eating into scarce foreign exchange. Besides, many of these imported materials are not relevant to the local needs.

The Nairobi University Press has fullfilled the need that arose to set up a local specialised publishing house to deal with scholarly works authored by University scholars to cover the education demand at the tertiary level which was expanding rapidly without corresponding production of teaching materials. This limitation was pinpointed by the Presidential Working Party on the Second University (Mackay Commission of 1981, and a recom-mendation put forward for their generation especially to facilitate the implementation of the new education system.

NUP was mandated to publish scholarly and academic publications in the context of local needs. The objectives were: to satisfy the demand for books in the University and other institutions of higher learning; to stimulate authors whose works were not commercially viable; to publish books relevant to the existing curricula and needs of the country; to maintain reputable imprint through quality publications.

ACADEMIC COLLABORATION IN SEARCH OF KNOWLEDGE

From its inception in 1963, the University of Nairobi has linked up with world research networks in the interests of academic and research excellence for the benefit of the Kenyan nation.

The oldest of such links is one that was established in 1960 between the University and Mcgill University, Geography department, to provide staff training. The University has also over the years established relations with universities and organisations outside the country in efforts to widen its research activity and to achieve its objectives of training high calibre manpower and providing adequate documentation and publications for use. Linkages formed have been in the areas of departmental links, general links, staff and student exchange and funding affiliations.

Research continues to form a central pillar of the University links with outside universities and organisation. Over the years, Rockefeller, Ford Foundation, Sarec, British Council, IDRC and WHO have funded research projects in various faculties. These researches have been carried out either solely by members of the faculties or in collaboration with scholars from other universities.

Another area is that of enhancing knowledge through exchange of staff and students. Through this form of exchange teaching staff and students make short visits gaining invaluable knowledge, experience in theory and methodology.

Staff/student links are characterised by research collaboration, equipment donation and cultural exchange. Such links exist between University of Nairobi and the Penn. State University, Nottingham University, the U.K., the University of Kent and the John Hopkins University. Another significant component of our exchange and association is in staff training and development. These links, organised on a departmental basis, have been most beneficial in as far as provision of equipment and staff training. Such organisations as the British Council, CIDA, NORAD, DANIDA & DAAD have facilitated the links by providing scholarships for staff to study in overseas universities

Another category of linkage assistance is that of organisations that provide staff and funds to help in establishing new departments. For instance NORAD and SAREC, were involved in the establishment of departments like Food Technology, Agricultural Engineering, Public Health, Pharmacology & Toxicology.

The Japanese Ship Building Industry Foundation granted the University one million US Dollars for the expansion of the Diplomacy Training Programme into an institute to train international relations personnel.

The question of linkages has often been termed propagation of racism and neo-colonialism. However, when the first linkage was established, it was clearly stated that one of the main objectives would be that of assisting in the Kenyanization of teaching at University of Nairobi.

It is due to the credit of beneficiaries of such programmes that a larger majority have strengthened the teaching capability of their respective departments with appropriate knowledge. Other scholars have continued to attain higher qualifications on receipt of such assistance.

Specialised Research Institutes/ Departments/Schools/ Programmes

The University of Nairobi has the single biggest concentration of specialised research institutes, departments and programmes some of which are the only ones in the region. An example of these are:-

Institute of African Studies

Started in 1970; the Institute has the responsibilities of promoting and conducting original research in the fields of African pre-history; ethnography and social anthropology; Musicology and dance; traditional and modern crafts; religion and other belief systems. Headed by a director the Institute is located at National Museums Complex.

Population Studies and Research Institute

This is a research based Institute for higher studies in the field of population.

It is based on the principal of a multidisciplinary programme in population studies. The Institute has a high reputation for qualify research of direct importance to Kenya's development efforts.

School of Journalism

The School of Journalism trains Kenyans and citizens from other countries in East and Central Africa. The aim is to meet the manpower needs of the mass communication system in the region. The one year postgraduate diploma covers all aspects of mass communication and for special print and broadcast journalism.

PINEP

The Pastoral Information Network Programme is a research based regional programme aimed at establishing indigenous information systems of the pastoralist based in the IGGAD region. The programme is coordinated from the Department of Range Management.

Applied Human Nutrition Programme

This is the only postgraduate research based programme for the English-speaking African countries. The objectives of this programme are:-

- 1. To communicate research findings, abstracts, and technical reports from researchers and food nutrition workers in the region.
- 2. To provide technical information on food and nutrition issues;
- To provide a forum for communication of educational and professional events on food and nutrition such as seminars, conferences/workshops.
- The programme has contact with local communities through its products.

Institute of Diplomacy and International Studies (IDIS)

This is a postgraduate programme designed to meet manpower training requirements for African foreign ministries in training their diplomats.

INVENTORY OF INCOME GENERATING UNITS

As a result of this new model, the following have been identified as potential income generating units:-

- 1. Department of Mechanical Engineering
- 2. Department of Civil Engineering
- 3. Institute of Nuclear science
- 4. Department of building Economics
- 5. Department of electronic and Electrical Engineering
- 6. Housing and Building Research Institute (HABRI)
- 7. Department of Urban and Regional Planning (DURP)
- 8. Department of Land Development
- 9. Kibwezi Irrigation Project (KIP)
- 10. Vet. farm Kabete
- II. Coffee Farm Kabete
- 12. Horticulture farm Käbete
- 13. Department of Clinical Studies
- 14. Department of animal Production
- 15. Soil Science MIRCEN Project
- 16. Department of Food Technology and Nutrition
- 17. Kibwezi goat project
- 18. Livestock ranching Kibwezi
- 19. Vet. Pathology Laboratory
- 20. Department of Human Anatomy
- 21. Computer Science
- 22. Science Workshop
- 23. Dental Surgery
- 24. Department of Medicine; and many others.

Income Generating Activities

- 1.0 The University has recently embarked on the income generating activities. In this regard, the University Management Board last year appointed a sub-committee to examine and make recommendations on the various income generating activities at the University.
- 1.1 The Sub-committee compiled a report in which the said recommendations have been made. The report has since been accepted by UMB and Council.
- 1.2. In order to implement these recommendations, UMB has set up an implementation subcommittee with the following terms of reference:

- To work out the modalities of implementing the Income Generating activities Report and to make recommendations thereon to the Board.
- b. To take stock of the existing income generating units and also to look into the problems they are facing and make recommen-dations thereon to the Board
- c. To streamline the schedule for distribution of the net income generated taking into account the views submitted by colleges and the IGUS.
- d. To make any other appropriate recommendations to the Board.
- 1.3 The Implementation Sub-Committee on the IGA'S Report has already started its work. So far, it has held many meetings and visited two income generating units, e.g. mortuary and Bookshop.
- 1.4 During the visits, the sub-committee held discussions with the officials of the units on a range of issues including their general operations, the problems that are being experienced, the units proposed solutions to those problems and their future plans. Reports for submission to UMB have been compiled.
- 1.5 Other developments aimed at encouraging income generation include the following:
- (a) The creation of an office in the office of the DVC (A&F) headed by a co-ordinator to coordinate all matters pertaining to income generation. The office also acts as the secretariat to the UMB Implementation sub-committee on the IGA's Report.
- (b) The University has also revived the extra mural and French programmes for which participants pay a commercial fee.
- (c) The IGA's Report has been circulated to Deans/ Directors, Chairman of the teaching departments and Heads of key Income Generating Units. This is aimed at disseminating information on income generating activities at the University.
- (d) Financial management has been decentralized to the colleges, nearer to where the IGU's are. This will enable the colleges to make quick decisions on financial matters involving IGUs.
- (e) It has also been discussed and agreed that part of the funds generated by the IGUs should be ploughed back to the units for their future developments
- (f) A special mortgage scheme negotiated with HFCK has been established aimed at boosting staff morale within the spirit of improved income generating activities.
- (g) In SWA, Halls of residence are now hired out to generate revenue. Stella Awinja Hostel is being turned into a Guest House.