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ABSTRACT

The first annual report of the National Council for Higher Education in the Republic of Ghana covers the period July 1974 to June 30, 1975. The historical background of the council is reviewed along with its membership, committees, and institutions which it is responsible. Its role in financing the universities is discussed in terms of government grants to the institutions. Data provided on annual development estimates, annual recurrent estimates, annual estimates for equipment, and unit cost and university financing. It is concluded that if the council is to be effective an intermediary between the government and the universities, it must be independent of both and must maintain its advisory role. This report also includes the study of the council by R. C. Griffiths, director of United Kingdom Inter-University Council for Higher Education Overseas. That study deals with: the council's role; cost analysis; planning student enrollment; capital planning; norms; capacity of academic buildings; control of individual buildings; government-universities-council relationships; council membership; role of chairman; delegation of powers; and non-university functions and committee structure of the council. (LBH)

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REPUBLIC OF CHINA

ANNUAL REPORT

FOR

THE NATIONAL COUNCIL FOR HIGHER EDUCATION

1974-75

DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

1974-75

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**NATIONAL COUNCIL FOR HIGHER EDUCATION
1974-75 ANNUAL REPORT**

CONTENTS

	<i>Page</i>
PART I	
Introduction	1-6
Historical Background	1
Appointment of Members of Council	2
Changes in the Membership of Council	4
Committees of Council	5
Institutions under the Council	6
PART II	
Business of Council from 1st July, 1974 to 30th June, 1974 ..	7
PART III	
Financing the Universities	12-15
Government Grants to the Institutions under the Council:	
Annual Development Estimates 1974-75	13
Annual Recurrent Estimates 1974-75	14
Annual Estimates (Equipment) 1974-75	15
Unit Cost and University Financing	15
PART IV	
Bodies on which the Council is represented	16
Conclulsion	16

APPENDICES

<i>Appendix</i>	<i>Page</i>
I The Griffiths Report	18
II Report on Chairman's Visit to the University Grants Committee Office, London .. .	46
III Statistical Information on the Universities and other Institutions under the Council .. .	56
IV Report on Secretary's Visit to U.G.C. Office, London	62
V Thomas Report .. .	80
VI Appiah Report .. .	86-96
<i>Appendix A</i> —University of Cape Coast: Revised Agriculture Course Budget—Recur- rent Expenditure .. .	90
<i>Appendix B</i> —University of Ghana: Faculty of Agri- culture—Revised Statistics to meet increase in student intake .. .	94
<i>Appendix C</i> —University of Science and Techno- logy, Kumasi: Faculty of Agricultu.e. .. .	96
VII Bacta Report .. .	97
VIII List of Secretariat Staff .. .	129

PART I
INTRODUCTION

THIS Report covers the period 1st July, 1974 to 30th June, 1975. Being the first report of its kind, it is appropriate that a short background history of the Council and its work should be given.

Historical Background

In 1960, the Government of Ghana appointed a Commission on University Education to advise it on the future development of university education in Ghana. In its Report published in May, 1961, the Commission recommended the establishment of a National Council for Higher Education and Research. In paragraph 5 of its White Paper on the Commission's Report (WP No. 5/61), the Government accepted the recommendation in the following words:—

“In accordance with the recommendations of the Commission, the Government will by legislative instrument establish a National Council for Higher Education and Research, which shall be concerned with the general direction and co-ordination of higher education and research, with the provision of funds therefor, and with the preparation and supervision of a national training programme to meet Ghana's needs of high-level manpower. The National Council will accordingly have oversight of the work of the two Universities, the University College of Cape Coast and the Ghana Academy of Learning, which will all be independent bodies. It will also take over the responsibilities and functions of the National Research Council and the Scholarships Secretariat.”

Eventually, however, a National Council for Higher Education was established in 1962 with the Minister of Education as the Chairman. The Council was entrusted with policy matters affecting the universities and thirteen other related bodies. With the change of Government in February, 1966, the Council ceased to exist and its Secretariat became the Higher Education Division of the Ministry of Education.

The new Government appointed an Education Review Committee which published its Report in 1967. This Committee's recommendation that a National Council for Higher Education should be re-established was endorsed by the Special Committee on the Delimitation of Functions of University Institutions. Consequently, the National Council for Higher Education was re-established in 1969 following the promulgation of the National Council for Higher Education Decree, 1969 (N.L.C.D. 401) and Mr. M. Dowuona, formerly Commissioner for Education, was appointed its Chairman with effect from 1st October, 1969.

The re-establishment of the National Council for Higher Education was generally along the lines recommended in the Report of the Ghana Universities Visitation Committee (1969) under the Chairmanship of Mr. A. R. Vick.

For over three years, it was not possible for the Council to be constituted and inaugurated mainly because of the objections raised by the universities to certain features and provisions of the decree establishing the Council. Therefore, until the Council's formal inauguration on 15th December, 1972, after the promulgation of the National Council for Higher Education (Amendment) Decree, 1972 (N.R.C.D. 34) and the Amendment No. 2 Decree (N.R.C.D. 92), one of the main functions discharged by the Chairman on behalf of the Council was to receive the annual estimates of the institutions of higher education and transmit them with appropriate recommendations to the Government.

Appointment of Members of Council

The membership of the Council at the time of its formal inauguration on 15th December, 1972, was as follows:—

- (a) *Chairman*
Mr. M. Dowuona
- (b) *Three Persons with extensive experience of University Work*
Mr. Justice K. Bentsi-Enchill
Mr. Joe Reindorf
Rev. Professor C. G. Baeta.
- (c) *Vice-Chancellors of the Three Universities*
Professor A. A. Kwabong (University of Ghana)
Dr. E. Evans-Anfom (University of Science and Technology)
Professor E. A. Boateng (University of Cape Coast).
- (d) *One Person representing the Council for Scientific and Industrial Research*
Dr. K. Sape.
- (e) *One Person representing the Ghana Academy of Arts and Sciences*
Dr. D. A. Akyeampong.
- (f) *Two Persons representing Industry and Commerce*
Mr. H. A. Dodoo
Dr. K. D. Fordwor.
- (g) *One Person with wide experience of Schools in Ghana*
Mr. J. J. Mensah-Kane.

(h) *Four other distinguished members of the Council*

Dr. J. J. Achiriga
Mr. Joe Appiah
Mr. K. B. Ayensu
Dr. J. L. Wosornu.

(i) *An Assessor representing the Commissioner for Education*

Mr. J. W. L. Mills, Chief Education Officer.

(ii) *An Assessor representing the Commissioner for Economic Affairs*

Mrs. Mary Chinery-Hesse, Principal Secretary,
Ministry of Economic Planning.

(iii) *An Assessor representing the Commissioner for Finance*

Mr. R. S. Aggrey, Principal Secretary, Ministry of
Finance.

Mr. M. Dowuona retired as Chairman in July, 1973 and Dr. E. Evans-Anfom, Vice-Chancellor of the University of Science and Technology, was appointed to succeed him. It was, however, not possible for Dr. Evans-Anfom to take up his new post until March, 1974. In the interregnum—July, 1973 to February, 1974—Mr. K. B. Ayensu, a member of the newly-constituted Council, acted as Chairman.

At the inaugural meeting of the re-established Council on 15th December, 1972, the Finance Committee of the Council was set up. This Committee, which is composed of the Chairman and six other members of the Council, also acted as the General Purposes Committee of the Council. Apart from examining the Annual Estimates from the various institutions and organisations under the Council, it transacted, on behalf of the Council, such other business as interviewing candidates for appointment to senior posts, inspecting development projects in the universities and advising on the conditions of service for staff of the university institutions.

In March, 1974, Mr. Griffiths, Director of United Kingdom Inter-University Council for Higher Education Overseas, was invited by the new Chairman to examine the structure of the Secretariat of the National Council for Higher Education and make recommendations for improving its work on organisational structure. Among other things, he recommended that the Council should strive to be an effective link between the Government and the universities but, while it should endeavour to command the confidence of both parties, its role should be seen to be independent of both. The Council should advise Government on the financial needs of the universities and on their development, thereby making

it unnecessary for the Government and the universities to have any direct communication with each other on these matters. He also recommended a re-organisation of the Secretariat so that the Council would appoint its own permanent staff instead of relying on civil servants posted to the Council's Secretariat from time to time. It should also be possible for the National Council for Higher Education to work out systems of cost analysis and be able to estimate in advance the financial requirements of each university so that the universities could plan over a period of three years at a time. A copy of the Griffiths' Report is attached to this Report as Appendix I.

Under the new Chairman, the Council also addressed itself to the question of its status and the ministerial responsibility for its affairs. As a result of the Council's recommendations, and having regard to the recommendations contained in the Griffiths Report, Government decided that the Vice-Chancellors should continue as members of the Council, but in a non-voting capacity.

Ministerial responsibility for the Council and its affairs also reverted to the Head of Government, viz. the Chairman of the N.R.C., as provided for in the decree setting up the Council. Government was, however, not able to accept the recommendations that the universities in Ghana should adopt a three-year planning and budgeting system.

Government also gave approval for the establishment, with effect from 1st July, 1974, of the Secretariat of the Council as an autonomous body outside the Civil Service with the staff having conditions of service similar to those obtaining in the Council for Scientific and Industrial Research.

The Chairman of Council, Dr. E. Evans-Anfom, paid a visit to United Kingdom from 15th to 23rd June, 1974. He met with the Chairman and staff of the Secretariat of the Universities Grants Committee to see the Committee's machinery in action.

On his return to Ghana he submitted a report to the National Council for Higher Education. A copy of his report is attached as Appendix II to this Report.

Changes in the Membership of the Council

The following changes in the Council's membership has taken place since the inauguration in 1972:

Professor E. Bamfo-Kwakye and Professor J. Yanney-Ewusie, two new Vice-Chancellors, replaced Dr. E. Evans-Anfom and Professor E. A. Boateng respectively. On the death of Mr. Justice Kwamena Bentsi-Enchill, Professor E. A. Boateng, President of the Ghana Academy of Arts and Sciences and Chairman of the Environmental Protection Council, was appointed to fill the vacancy.

Mr. A. Kwame Pianim, Marketing Director and Deputy Managing Director of Ghana Aluminium Products; has replaced Dr. K. D. Fordwor.

Committees of Council

Under the new Chairman, the Finance Committee has become a Finance and General Purposes Committee responsible also for appointments and promotions. Its members comprise the following:—

Dr. E. Evans-Anfom	Chairman
H.E. Mr. Joe Appiah	Member
Mr. K. B. Ayensu	Member
Mr. Joe Reindorf	Member
Rev. Prof. C. G. Bacta	Member
Mr. Harry A. Dodoo	Member
Mr. J. J. Mensah-Kane	Member
Mr. J. B. Lomotey	Secretary

Some of the major exercises which the Committee undertook during the year were:—

- (i) A scrutiny of the recurrent and development estimates (1975-76) of all institutions financed by Government and whose finances come under the purview of the National Council for Higher Education.
- (ii) Consideration of salary proposals made by the Joint Universities Councils.
- (iii) Appointment of the Secretariat staff and determination of their salaries and conditions of service.
- (iv) Meeting with the Chairman of the N.R.C. on the role of the Chairman of the National Council for Higher Education and ministerial responsibility for the Council.

Other Committees appointed during the year were:—

2. Committee to consider a proposal for the Establishment of a Medical School at the University of Science and Technology.

Rev. C. G. Bacta	Chairman
Dr. H. S. Bannerman	Member
Prof. E. A. Boateng	Member
Mr. E. P. Adofo (Assistant Secretary N.C.H.E.)	Secretary

3. Committee to Consider a Proposal for the Establishment of a Department of Agricultural Education at the University of Cape Coast

H.E. Mr. Joe Appiah	Chairman
Mr. Harry A. Dodoo	Member

4. *Committee on Strategic Policy on Higher Education*

Dr. E. Evans-Anfom	<i>Chairman</i>
Prof. Alex Kwapong	<i>Member</i>
Prof. A. N. Tackie	<i>Member</i>
Mr. J. W. L. Millis	<i>Member</i>
Mr. Joe Reindorf	<i>Member</i>
Mr. Harry A. Dodoo	<i>Member</i>
Mr. E. P. Adofo (Assistant Secretary N.C.H.E.)	<i>Secretary</i>

Institutions under the National Council for Higher Education

The Council acts as an advisory body to Government in respect of the following institutions:—

- (1) University of Ghana
- (2) University of Science and Technology
- (3) University of Cape Coast
- (4) School of Administration (University of Ghana)
- (5) Institute of African Studies (University of Ghana)
- (6) Institute of Statistical, Social and Economic Research
- (7) Institute of Adult Education (University of Ghana)
- (8) College of Art (University of Science and Technology)
- (9) Ghana Universities Press
- (10) Ghana Medical School (University of Ghana)
- (11) Ghana Museums and Monuments Board
- (12) Volta Basin Research Programme (University of Ghana)
- (13) Institute of Chartered Accountant (Ghana)
- (14) Ghana Science Association
- (15) Ghana Atomic Energy Commission
- (16) Ghana Academy of Arts and Sciences
- (17) Encyclopaedia Africana Secretariat
- (18) University Research Stations
- (19) Institute of Population Studies (University of Ghana)
- (20) Institute of Journalism and Communications (University of Ghana).

There is, however, an anomaly which presently exists. For budgetary purposes, the Ghana Museums and Monuments Board, like any of the above twenty (20) institutions, comes under the National Council but ministerial responsibility for all other affairs of the Board rests with the Commissioner for Education.

PART II

A RECORD OF BUSINESS AND ACTIVITIES DURING THE YEAR 1ST JULY, 1974 TO 30TH JUNE, 1975

A brief information on the universities and other institutions under the Council will be found as Appendix III to this Report.

Secretary's visit to the Universities Grants Committee Office

Following the Chairman's visit to the offices of the University Grants Committee, it was thought advisable for the Secretary to pay a similar visit to Britain and acquaint himself with the administrative set-up and operation of the U.G.C. Secretariat. His visit covered the period 31st August to 15th September, 1974. He submitted a report which is attached as Appendix IV.

Mr. Neville Thomas' Visit to Ghana

During his visit to the U.K., the Chairman obtained the approval of the Chairman of the U.K. Universities Grants Committee for Mr. Neville Thomas, Head of the Finance section of the Committee, to visit Ghana to advise on the working out of unit costs and their application to university estimates and budget control procedures. On the Chairman's invitation, therefore, Mr. Thomas arrived in Ghana in the third week of November and spent three weeks on this assignment.

Mr. Thomas' report submitted to the Chairman of the National Council, together with a summary of his recommendations, will be found as Appendix V to this report.

Council Business

During the year under review, the Council held eight (8) regular, two (2) emergency and one (1) special meetings. The Finance and General Purposes Committee met several times.

A University for Northern Ghana

A proposal to establish a university in Northern Ghana was first made to the government of the First Republic in the middle of the 1960's by a prominent citizen of the North. There is no record of any firm decision taken on the proposal at that time. This proposal, which was revived when the National Redemption Council came to power, was referred to the Council for comment.

Council advised that it was premature to establish a University College in Northern Ghana but recommended that the three universities should consider extending their research and some other activities, e.g. agricultural extension services to the North. It is expected that in this venture there would be close co-operation between the universities and the Council for Scientific and Industrial Research.

A Course in Agriculture at the University of Cape Coast

The University of Cape Coast submitted to Council a proposal for the establishment of a Department of Agricultural Education within that University. This proposal was discussed by Council members at several meetings and because of its controversial nature, a two-man Committee comprising H.E. Mr. Joe Appiah and Mr. Harry Dodoo, was appointed to examine the financial aspects of the request and submit a report. On the basis of that report, the Council recommended that a Department of Agricultural Education should be set up to train teachers of agriculture for the first and second cycles of education as from October, 1975. A copy of the Appiah Report is attached as Appendix VI.

A Medical School at the University of Science and Technology

In May, 1974, the Council of the University of Science and Technology informed the National Council for Higher Education in writing, of its intention to mount a course in Human Biology which would eventually develop into a medical school. The proposal was embodied in the Report of a Special Committee appointed by that University.

The Council in turn appointed a three-member Committee with Rev. Professor C. G. Baeta, a member of Council, as Chairman, to examine the proposals and report. This Committee sat for two months (17th December, 1974 to 18th February, 1975) and in its proceedings interviewed in all 41 members of the public who were closely connected with the Medical profession, Ministry of Health Officials, representatives of the Ghana Medical Association, Ghana Medical Students' Association, appropriate authorities of the University of Ghana and the University of Science and Technology. The members also visited the Korle Bu Teaching Hospital and Okomfo Anokye Hospital. The report of the Committee is attached as Appendix VII to this Report.

Before the National Council for Higher Education could advise on the proposal, the Government announced publicly, its decision to establish a second medical school at the University of Science and Technology. The Council, however, submitted copies of the Baeta Report to the Council of the University of Science and Technology and the Government. Council's chief concern was that the decision to establish a second medical school in Kumasi should by no means prejudice the future progress and development of the existing Ghana Medical School in Accra.

Discussion of reports of the non-Academic Areas of University Administration

In April, 1972, the Government appointed three separate committees to examine the financial aspects of the non-academic areas of university administration and to make recommendations aimed at reducing costs.

The National Council for Higher Education considered the Reports and endorsed some of the major recommendations made in them namely, that

- (i) the cafeteria system operating in some of the halls should be generalised and extended to cut out the simple jobs for which hired labour is employed;
- (ii) the universities should phase themselves out of the responsibility for accommodating their staff;
- (iii) future plans for building new halls of residence should be carefully weighed against a programme for the intake of more non-residential students. The universities should consider the admission of non-residential students as a normal feature of their organisations;
- (iv) the workers and students using university transport to and from town should pay fares;
- (v) the universities should continue to provide medical services to non-residents of the universities but such people should pay fees comparable to those charged at Government hospitals on condition that the Ministry of Health would provide adequate grants to support the university hospitals in their service to the public.

The National Service Scheme

After one year of operation, the National Service Scheme came under criticism by the National Union of Ghana Students. A memorandum submitted by them to Government was referred to the National Council for Higher Education.

The Council discussed the objectives and the machinery of the Scheme and submitted its views on certain aspects to Government.

Ministerial responsibility for the National Council for Higher Education

Although N.L.C. Decree 401 vested ministerial responsibility over the National Council for Higher Education in the Prime Minister, it came to light that in practice this responsibility was being exercised by the Commissioner for Education as decisions of the Council had to be channelled through the Ministry of Education.

The Council at one of its meetings, decided that a memorandum requesting the restoration of the previous practice under which the Council worked to the Head of Government, as provided for in the Decree, should be sent to the Chairman of the National Redemption Council and that a delegation comprising Dr. E. Evans-Anfom, the Chairman, H.E. Mr. Joe Appiah and Mr. K. B. Ayensu should seek audience with the Head of State to discuss the matter.

As a result of the meeting which followed, the Chairman of the National Redemption Council decided to assume Ministerial responsibility for the Council.

Restoration of Sabbatical Leave

Following representations from the Council, the Government lifted the ban on sabbatical leave for university teaching staff imposed during the 1972-73 academic year.

Medical Centre at Legon

Following representations made by the University of Ghana on the crowded conditions at the Medical School and Korle Bu Teaching Hospital, the Council agreed to make representations to Government for the implementation of the Medical School Centre, a project which had been shelved since 1962. The project provides for a complex consisting of a Medical School, a Dental School, a Nursing School, a School for Para-Medical personnel and a Teaching Hospital. The Government's decision on the representations is awaited.

Students' Loans Scheme

In October, 1974, i.e. at the beginning of the academic year, Government withdrew the grant of ₵100 paid annually to each university student for books and out-of-pocket expenses and replaced it with a University Students' Credit Scheme. Under the Scheme, Ghanaian university students are entitled to take loans of up to ₵300 per annum from the Ghana Commercial Bank.

The National Council for Higher Education was invited by the Government to express its views on the proposals under the scheme.

The Council's views have been submitted and a decree covering the scheme is awaited.

Salary Review Proposals by the Universities

The Councils of the three universities jointly submitted to the National Council for Higher Education a paper embodying new salary proposals for university staff.

The paper was discussed by members of the Council's Finance Committee. Later, the Committee held discussions with representatives of the three universities and subsequently submitted its recommendations to the Government.

Visitation to Universities in Ghana

The Chairman and members of Council paid official visits to the three universities. The programme followed was as follows:—

5th and 6th February, 1975 to Cape Coast

12th and 13th February, 1975 to Kumasi

26th and 27th February, 1975 to Legon.

The purpose of the visitation was to enable members of Council acquaint themselves with progress of development projects, to learn on-the-spot about general problems and to meet staff of various categories and students.

The Finance Committee and Annual Estimates of the Institutions and Organisations under the National Council

From the 18th to the end of February, 1975, the Finance Committee held meetings in succession to examine the annual estimates, both recurrent and development, of institutions under the Council and made appropriate recommendations to the Budget Division of the Ministry of Finance.

Relationship between Council and the Universities

At a few Council meetings it became obvious that the stand of the Universities' Councils on certain issues was quite different from that of the National Council for Higher Education. This was attributed to poor communication between the bodies concerned. A committee to work out conventions which would govern relations between the Council and the Universities was therefore set up.

Re-organisation of the Council's Secretariat

In accordance with one of the recommendations in the Griffiths' Report, the Council has re-organised the set-up of its Secretariat and approved a staff establishment for it. Under the re-organisation, the staff of the Secretariat will have terms and conditions of service similar to those of the Council for Scientific and Industrial Research and be independent of the Civil Service.

A list of the Secretariat staff appointed during the year is attached as Appendix VIII to this Report.

Neville Thomas' Report and Cost Analysis of University Education

Following the Thomas' Report, the Council Secretariat started to collect the necessary data to compute the academic, administrative and other general cost per student in each of the three universities.

Opening of a Bank Account in the Name of the National Council for Higher Education

The creation of a Secretariat for the National Council for Higher Education independent of the Civil Service made it no longer necessary for the Accountant-General to vet or control the finances of the Council and its Secretariat.

Upon the authorisation by Council, the Secretariat opened an account for the Council with the Ghana Commercial Bank.

Strategic Policy on Higher Education

On the recommendation of the Chairman, the Council appointed a committee to formulate a Strategic Policy on Higher Education covering the following:—

- (i) the concept of Higher Education
- (ii) its objectives
- (iii) areas of Higher Education
- (iv) the priorities and delimitation of functions of university institutions in the context of the manpower needs of Ghana
- (v) a reappraisal of the systems by which Government finances universities in Ghana.

The Report, when ready and considered by Council, is expected to become Council's blueprint on Higher Education Policy.

PART III

FINANCING THE UNIVERSITIES

EACH institution under the National Council submits to the Council's Secretariat its draft estimates for the ensuing year approximately four months before the beginning of the new financial year.

The estimates are prepared under the following headings:

- (1) Capital Development
- (2) General Recurrent Expenses
- (3) Equipment.

After the submission of the draft estimates, the Council's Secretariat arranges meetings between the representatives of each institution with the Finance Committee of Council. At such meetings, the Heads of institutions and their Finance Officers are called upon to justify the requests made in their estimates, particularly with regard to new developments.

When agreement on the draft estimates has been reached, the Chairman makes submissions to the Budget Division of the Ministry of Finance on behalf of all the institutions. He subsequently meets

with officials of the Ministry of Finance to discuss the Council's recommendations. Following this the estimates as approved by Government are published. The following tables show what the universities budgeted for the year 1974-75, what Council recommended and what subventions/grants were approved by Government.

ANNUAL DEVELOPMENT ESTIMATES 1974-75

Institution	Vote for	Request for	Recommendation of
	1974-75	1974-75	N.C.H.E. 1974-75
	₵	₵	₵
1. N.C.H.E. Secretariat	—	—	—
2. University of Ghana	445,820.00	3,526,000.00	1,182,000.00
3. Department of Housing and Planning Research, U.S.T., Kumasi	80,000.00	115,200.00	115,200.00
4. University of Science and Technology	805,000.00	3,474,610.00	2,097,000.00
5. University of Cape Coast	477,000.00	1,090,000.00	636,500.00
6. Institute of African Studies	—	150,000.00	50,000.00
7. Institute of Statistical, Social and Economic Research	100,000.00	394,000.00	394,000.00
8. Institute of Adult Education	107,000.00	127,000.00	127,000.00
9. Ghana Universities Press	—	20,000.00	20,000.00
10. Ghana Medical School	75,000.00	700,000.00	229,000.00
11. Ghana Museums and Monuments Board	260,000.00	1,879,000.00	70,000.00
12. Ghana Atomic Energy Commission	—	1,868,000.00	500,000.00
13. Ghana Academy of Arts and Sciences	—	—	5,000.00
14. University Research Stations	50,000.00	285,000.00	200,000.00
Total	2,499,820.00	14,010,430.00	5,725,700.00

NOTE:

- (i) % of total request recommended by N.C.H.E. = 40.9
- (ii) % of total request approved by Government = 17.8

ANNUAL RECURRENT ESTIMATES 1974-75

<i>Institution</i>	<i>Vote for 1974-75</i>	<i>Request for 1974-75</i>	<i>Recommendation of N.C.H.E. 1974-75</i>
	¢	¢	¢
1. N.C.H.E. Secretariat	196,780.00	232,413.00	232,413.00
2. University of Ghana	6,770,330.00	6,815,271.00	7,268,539.17
3. University of Science and Technology	7,047,000.00	7,554,804.00	7,403,304.00
4. University of Cape Coast	4,995,000.00	6,343,523.00	5,277,978.20
5. School of Administration	537,000.00	537,000.00	537,000.00
6. Institute of African Studies (University of Ghana)	441,000.00	465,428.00	441,000.00
7. Institute of Statistical, Social and Economic Research	275,000.00	308,952.00	275,000.00
8. Institute of Adult Education	550,000.00	850,000.00	550,000.00
9. College of Art (U.S.T.)	564,000.00	569,680.00	564,410.00
10. Ghana Universities Press	50,590.00	50,890.00	50,890.00
11. Ghana Medical School	1,980,000.00	2,394,800.00	1,980,000.00
12. Ghana Museums and Monuments Board	550,000.00	691,080.00	550,000.00
13. Volta Basin Research Programme	77,000.00	87,000.00	77,000.00
14. Institute of Chartered Accountants	35,000.00	53,868.00	35,000.00
15. Ghana Science Association	11,000.00	13,100.00	11,000.00
16. Ghana Atomic Energy Commission	450,000.00	791,610.00	600,000.00
17. Ghana Academy of Arts and Sciences	49,000.00	49,000.00	49,000.00
18. Encyclopaedia Africana Secretariat	80,000.00	80,000.00	80,000.00
19. University Research Stations	440,000.00	434,000.00	440,000.00
20. Institute of Population Studies	78,000.00	93,200.00	78,000.00
21. Institute of Journalism and Communications	79,000.00	79,282.72	79,282.72
Total	25,256,000.00	28,494,901.72	26,579,817.00

NOTE:

- (i) % of total request recommended by N.C.H.E. = 93.2
- (ii) % of total request approved by Government = 88.6

ANNUAL ESTIMATES (EQUIPMENT) 1974-75

<i>Institution</i>	<i>Vote for 1974-75</i>	<i>Request for 1974-75</i>	<i>Recommen- dation of N.C.H.E. 1974-75</i>
	₵	₵	₵
1. N.C.H.E. Secretariat	21,880.00	54,780.00	54,780.00
2. University of Ghana	150,000.00	315,870.00	315,870.00
3. University of Science and Tech- nology	350,000.00	1,255,963.00	500,000.00
4. University of Cape Coast	231,000.00	839,500.00	464,800.00
5. Institute of Adult Education	87,100.00	150,000.00	105,000.00
6. College of Art	82,700.00	22,715.00	22,700.00
7. Ghana Medical School	100,000.00	230,000.00	120,000.00
8. Ghana Museums and Manuments Board	91,000.00	136,000.00	66,000.00
9. Ghana Atomic Energy Commis- sion	67,000.00	154,805.00	107,000.00
10. University Research Stations	15,500.00	31,000.00	15,500.00
Total	1,196,180.00	3,265,000.00	1,831,650.00

- (i) % of total request recommended by N.C.H.E. = 56.1
- (ii) % of total request approved by Government = 36.5

Unit cost and University Financing

It is known, so far, that the preparation of estimates by the universities has not been done on any cost analysis basis. It is for this reason that the Thomas Report is so important as it makes recommendations on how best this may be done. Work on this is in progress and when valid unit costs for different categories of students as well as space standards have been worked out they could be applied more meaningfully to both development and recurrent estimates.

A valid cost analysis should aim at imposing economies rigorously on areas of expenditure which could do with less money.

As a result of the Griffiths' recommendation, and the mechanics of computing unit cost as suggested by Mr. Neville Thomas, the National Council Secretariat is developing a system of cost analysis which in future years will be applied in examining the estimates of the universities.

The current procedure by which draft estimates are submitted to Council and subsequently to the Budget Division for scrutiny and



justification is cumbersome. Worse still, amounts approved in the annual estimates are released monthly to the institutions. The financial strain resulting from this is really great and some of the institutions have resorted to overdraft from the banks. Even though the Government has ruled against this kind of borrowing, the conditions which have given rise to this undesirable practice are implicit in the system.

The best answer to the problem is the triennial system of financing which the Council strongly recommends for the consideration of Government.

PART IV

BOARDS OF INSTITUTIONS AND ORGANISATIONS ON WHICH THE NATIONAL COUNCIL FOR HIGHER EDUCATION IS REPRESENTED

THE National Council is represented on:

- (i) All the Councils of the three Universities and their Committees (Finance, Development, Tender Board, Superannuation).
- (ii) The Council for Scientific and Industrial Research
- (iii) The Museums and Monuments Board
- (iv) The Ghana Atomic Energy Commission
- (v) The National Manpower Board
- (vi) The Centre for Scientific Research into Plant Medicine
- (vii) The Ghana Medical School Council
- (viii) The Encyclopaedia Africana Secretariat
- (ix) The Scholarships Secretariat Selection Committees.

CONCLUSION

If the Council is to play effectively its role as an intermediary between Government and the universities then it is essential that it should be independent of both. It is only under such conditions that the Council can examine issues objectively and tender the necessary advice.

The Council's role, as specified in the relevant decree, is purely advisory, and it should remain so. It has no legal or executive powers and it is undesirable that it should be given any. As the Council acquires experience and builds up a body of knowledge and expertise it should be in a better position to give valuable advice on issues within its competence. In this exercise, it will expect patience and understanding from the universities in particular.

The experiences of the year have brought out certain important difficulties, which it is hoped, would be resolved in time. There appears to be a misunderstanding on the part of the universities, of the Council's independent role. When they have sought to assert their independence, the universities have sometimes interpreted this differently. The Council is the main channel of communication between the Government and the universities and vice versa; its role as such should be recognised, by all concerned. The Council should be free to comment and advise on issues that come before it; an appreciation, by both Government and the universities, of this fact would do much to help the Council in its work. Indeed, in matters regarded by the Council as being of great importance, the Council should feel free to tender advice to Government even when this has not been sought. In conclusion, it should be emphasised that since the Council has been set up to advise Government on Higher Education policy, as far as possible, the Government should act in close consultation with the Council on all matters relating to Higher Education.

**GHANA NATIONAL COUNCIL FOR HIGHER EDUCATION
AND ITS SECRETARIAT**

REPORT BY MR. R. C. GRIFFITHS

CONTENTS

	<i>Page</i>
Summary of Report and General Observations	19
Full Report	23-44
Introduction	23
The Council's Role	23
Cost Analysis	24
Planning Student Numbers and Forward Estimates	26
Capital Planning	30
Norms	31
Capacity of Academic Buildings	32
Control of Individual Buildings	33
Council's Relations with Government and Universities	33
Membership of Council	34
Role of Chairman	35
Delegation of Powers	35
Non-university Functions of Council	36
Committee Structure of Council	37
Secretariat	38
Work Specifications	38
Senior Staff	39
Staff Recruitment	39
Conclusion	40
Acknowledgements	41

APPENDICES

UNIVERSITY COST ANALYSIS

<i>Appendix</i>	
1 Suggested categorisation of non-capital expenditure	42
2 Specimen time-table for a three-year planning period covering academic years 1975-76 to 1977-78	44

APPENDIX I

THE GRIFFITHS REPORT

Summary and General Observations

My full report is attached. It might however be convenient if, in addition, I produced this covering document setting out some general observations and summarising the main points I have tried to make in the report itself.

2. The invitation to come to Ghana referred specifically to the work and structure of the Council's Secretariat. I have however ventured to comment also on the general role and method of operation of the Council, for on these the work of the Secretariat depend. I have been made aware of the many comments and proposals that have been made about the work of the Council and its relations with the Government and the three universities. I have however started from the position as it exists today and have based such suggestions as I have made for change on the present situation. Where I have made no such suggestions for change it can be taken that I have found no reason to be dissatisfied with the present situation. Many of its features are, in my experience, unique to Ghana but clearly fit in with local conditions and needs.

3. The Council has at present two separate areas of responsibility. On the one hand it has to assess the work and needs of the three distinguished universities of Ghana and their associated Institutes and Schools and co-ordinate their academic policies, and, on the other, to consider the activities and needs of certain other bodies outside the university field (though functionally related to them). I have concentrated my attention on the university sphere, to which special considerations and techniques of assessment and co-ordination can apply. Present methods of handling the affairs of the other bodies seem, as far as I can judge, to be inevitable. Their current work and future plans have to be considered every year primarily in the context of their financial submissions and against a very general background of national needs and resources.

4. In the university field the situation and the possibilities are however subtly different and the same somewhat unsatisfactory control procedures need not apply, although they do at present. The nature of universities is such that they operate on a long-term and continuous basis. They have a measurable and controllable intake, and hence output, of students which should reflect national needs—and which in the last resort must be a matter for Government, as is the provision of the necessary financial resources. But like the other bodies, their current activities and management practices, have to be scrutinised for efficiency and consistency.

In this connection I have read with interest the impressive and important report, commissioned by the Government, on the non-academic areas of university administration at Legon—although I do not agree with their bald statement that “no purpose can be served by computing cost of education at the University per head of student enrolled”.

5. The main defect of the present method of operation of the Council seems to me to be that what the universities are at present doing and how they propose to vary their activities in the future are dealt with, as it were, mainly as a by-product of their submission of annual estimates supplemented by intermittent interventions on particular issues by the Government. It is surely better for the Council, possibly after some discussion between the Council and the universities, to lay down in advance certain broad and practicable objectives, expressed in various ways and covering such matters as student numbers, levels of research support, the desired trends in levels and types of courses offered and dealing with general issues, such as staff housing, postgraduate awards and municipal services; and then let the universities submit proposals, expressed in educational or academic terms, in terms of management arrangements and of financial resources, for meeting these broad objectives. Such a forward planning process, once instituted, can save a great deal of the work now involved in preparing and scrutinising estimates every year in their present very detailed form and in dealing with *ad hoc* situations. Above all it enables the Council, once it has undertaken certain fairly straightforward cost analyses on a student unit basis and has laid down appropriate policies in the main academic and management areas itself to work out what future university expenditure ought to be in various areas and build up its proposals to the Government for future grants, both recurrent and capital, very much more independently of the detailed line-by-line expenditure proposals put forward by the universities themselves than can be done at present.

6. The adoption of this technique requires, for maximum benefit to all concerned, a few new decisions:

- (1) If possible, the forward planning period should be not one year but at least three. Otherwise neither the Council nor the Universities can perform their parts of the process effectively since academic, manpower and financial objectives have to be merged into a coherent forward pattern acceptable to the Government. This process cannot be properly done every year and it is better for it not to be.
- (2) The Council has to arrange with the universities to recast their present categorisation of expenditure and introduce a new method of counting students on the basis of the load they represent on the teaching staff in different faculties.

This is necessary to establish the present pattern of unit costs in each university—and the averages over the three universities. These costs, and approved future variations in them, form the basis of the work of translating academic objectives into grant terms and thus of the Council's submission to the Government.

7. I suggest that these decisions should be taken. If they are I venture to forecast that, once the transitional period is over and all concerned have comprehended their nature and purpose, many of the present—quite normal—irritations of the Government and the universities towards each other will become easier. A forward planning system has the additional advantage that the Government agencies concerned (Education, Economic Planning and Finance) need not themselves, in future, hold budget hearings with the universities but can consider the submission from the Council in educational and manpower policy terms, and in terms of overall financial recommendations largely derived from the various educational purposes being served. Any dialogue the Government needs to have can then more usefully be carried out with the Council.

8. Naturally the Government will have other interests in university affairs apart from forward planning and money allocation. But I have little doubt that all these can be dealt with it as they arise provided that the Council acquires and retains the confidence, in equal measure, of the Government and the universities. When this occurs the Council will be accepted by both the other parties—as it appears to be to some extent today—as, in practice, the arbiter on many matters which legitimately concern both Government and universities, although the Council has, rightly in my view, no formal executive powers (as opposed to advisory functions and great authority) of its own. It is better that these affairs should be considered in this way than that inflexible positions should be adopted and demands made for impossible declarations of the precise and distinct powers of all three parties involved. Some broad outlines of the respective responsibilities of the three parties have however been suggested in my report.

9. My report endeavours to describe, at the beginning, the techniques of recurrent cost analysis which I regard as so important for planning purposes. It also indicates the way in which the programme of capital and other works projects can be derived from the same broad academic guidance as is given by the Council to the universities, after discussion with the Government.

10. I have made some observations on the structure and composition of the Council but have suggested no significant change except for some strengthening of the representation of serving academics. I have also urged that care is necessary over the position of the three Vice-Chancellors as members of the Council.

11. Against this background the needs of the Secretariat become rather clearer, I have suggested a set of job descriptions for the Secretariat as a whole and have pointed out that the devising and implementing of the transitional arrangements, if cost analysis and forward planning are to be undertaken, represent a significant additional work-load on the Secretariat, and indeed upon the Chairman, which will ease if and when new and more generally acceptable arrangements become a regular routine. No special experience or expertise is essential for any of the Secretariat functions but a high level of intelligence and creative ability is needed for the most senior posts. For obvious reasons a high degree of continuity is desirable in these posts, and indeed in a proportion at least of the middle senior level posts. On balance I suggest that the Secretariat serving the Council should be employed by the Council. This would not preclude the Council from borrowing a proportion of their staff both from the Civil Service and from the universities—indeed I regard it as desirable that the Secretariat should always contain senior members familiar with the work and personnel in the main Civil Service departments concerned with the work of the Council and in the universities. I am not in a position to recommend precise gradings, in Ghana Civil Service and university terms, for all the various Secretariat posts, but believe that two senior posts below the Secretary and four middle level posts should suffice; and that one of these might not be needed after a transitional period of about two years. The Secretary needs to be equivalent in rank, status and salary to the university registrar. I see no obvious reason why the overall staff numbers in the Secretariat need be very different from the present complement of about 35, though some development on the capital side, including professional assistance, may be needed if the Council goes in for detailed control over all buildings under construction within a substantial building programme.

12. I would of course be happy to amplify my report as may be desired and would express my gratitude to all those who made my assignment such an interesting one.

(Sgd.) R. C. GRIFFITHS

*Director,
Inter-University Council for
Higher Education Overseas
London, W.1.*

STATE HOUSE
ACCRA
2ND APRIL, 1974.

27

22

**GHANA NATIONAL COUNCIL FOR HIGHER EDUCATION
AND ITS SECRETARIAT**

FULL REPORT

by MR. R. C. GRIFFITHS⁽¹⁾

To:—Dr. E. Evans-Anfom,
Chairman,
National Council for Higher Education,
Accra-Ghana.

Sir,

I have the honour to present my report on the work and organisational structure of the Secretariat of the National Council for Higher Education in Ghana (hereinafter referred to as the Council), following my visit to Ghana from 21st March to 3rd April, 1974 at your invitation and that of the Government of Ghana.

The Council's Role

2. Although my specific task related to the Secretariat of the Council, it was necessary for me first to study the present constitution and working arrangements of the Council as a whole. I felt that I should not only compare these with other similar University Grants Committee (U.G.C.) Systems I am familiar with in U.K., Hong Kong, India and elsewhere but also see how far they seemed to meet the legitimate requirements of both Government and the universities of Ghana. On the work of the Council depends both the work and the structure of its Secretariat.

3. The terms of reference of the Council and its composition, as laid down in the relevant Decrees of 1969 and 1972, follow closely those recommended by the Kwabong Education Review Committee of 1967 and the Vick Visiting Committee of 1969; and in general they correspond broadly with those applicable to other University Grants Committees. As Professor Kwabong rightly put it in his Anniversary Address to the Ghana Academy of Arts and Sciences, November 1973:

“ Its (the Council's) primary function is twofold: one, to advise Government on the financial needs of the higher education sector and secondly, and more important, since the first is based on the second, to formulate the strategic policy which should guide higher education ”

4. Professor Kwabong went on however to make two points:

(a) that the forward planning mechanism of the Council had not, so far, been effectively brought into use;

⁽¹⁾ Director, Inter-University Council for Higher Education Overseas, London; and formerly (1963-1970) Deputy Secretary of the University Grants Committee in Great Britain, Member of the Hong Kong UGC since 1967. H.M. Treasury (U.K.) 1946-1965.

(b) that the Council had not met since its inauguration.

5. From my discussion with you and the Commissioner for Education I learned that it was the desire and the intention, following your recent assumption of the Chairmanship, to take action on both these points; indeed the Council met in February 1974 and is due to meet again in April.

6. In these circumstances it might be appropriate and helpful if, in the following paragraphs, I made some observations on the present work of the Council as I see it, in the light of this planning objective and of the information provided to me.

Cost Analysis

7. One of the Council's main present day-to-day functions in relation to the three universities appears to be to receive annually from each university two sets of financial estimates for the following year, one covering recurrent expenditure estimates and (by deducting expected income) the resultant recurrent grant request, and the second covering estimated expenditure and grant request for capital items (including equipment), referred to as Development Estimates. The latter cover both the ongoing cost of capital projects already in hand and the initial year's expenditure on new projects.

8. The recurrent estimates are scrutinised by the Council's officers on a line-by-line basis and after consideration by the Finance Committee of the Council (which has been in existence for some time and meets fairly frequently) recommendations as to grants to be provided are forwarded from the Council to the Government (Ministry of Finance). The estimates themselves comprise a general explanatory memorandum and detailed expenditure and staffing proposals for the following year.

9. The estimates clearly throw up already a number of points of policy concerning current operations, e.g. staff housing, municipal services, postgraduate student support, which the Council will clearly need to consider (and sometimes take up with the Government) and issue appropriate guidance. They also throw up academic issues (e.g. agricultural education at Cape Coast) on which a Council position must be established and stated to those concerned in appropriate terms. But from the overall planning and financial control aspects, these estimates are deficient in two respects. They do not include any associated student numbers figures, without which unit costs (i.e. expenditure, grouped under various headings including each faculty's expenditure separately, divided by the relevant student numbers) cannot be worked out. Student numbers represent the only available measure of the work-load of a university and it is generally regarded as reasonable and necessary to regard student unit costs as the best available tool for comparison and control purposes, both as between different universities for the same year and for particular universities in successive years. In general unit

costs of all types (e.g. faculty unit costs, administrative, library unit costs or unit costs of municipal services) should either be similar in different universities or variations should be rationally justifiable. They are therefore an essential planning tool. Moreover in any university the unit cost of enrolling extra students in a faculty or department (unless it is a very new one just starting) should be substantially less (say 75 per cent to 85 per cent) than the unit cost of existing students in the same faculty or department. Indeed in some cases marginal costs of extra students are very small. Similarly, library, administrative and other central university costs per extra student (i.e. the marginal unit cost) should be less than existing unit costs. In Ghana, municipal services represent a special and substantial element of university costs. I would accept that these are perhaps not entirely suitable for comparison on a student unit basis but they clearly need special attention.

10. The initial task of establishing faculty unit costs is a little tedious in that for them to be realistic, students in a faculty must be counted on a load basis and not by their subject of study. (For example, a student may belong to the Faculty of Science but 20 per cent of his teaching may be given by the Faculty of Arts. He is thus counted as representing a load of 0.8 on the Science Faculty, and 0.2 on the Arts Faculty. The actual distribution of students between faculties for load purposes can safely be left to individual universities so long as the total student load is reconcilable with total student numbers as normally counted.) But once the whole range of key unit costs have been established on a consistent basis within and between universities they form a most valuable tool for the Council and the Government, in handling the financial aspects of forward planning, as well as for each university in the task of controlling its own internal affairs. The working out of student loads for each faculty also provides the best starting-point for the calculation of staff-student ratios, which represent the second major tool of management and planning in universities.

11. I might at this point digress a little to observe that the "line-by-line" scrutiny of expenditure estimates, such as that carried out at present by the Council, is traditional within Governments in the examination of Departmental Estimates. But the operations of Government Departments are not susceptible to cost analysis techniques (perhaps unfortunately) whereas universities, being institutions primarily dealing with a fairly straightforward output of students, are.

12. Faculty unit costs are not strictly unit costs of teaching alone since the cost to the university of the research and public service activities of staff is included in the faculty expenditure totals and thus also spread among the students for cost analysis purposes. This does not impair their value however since a judgement by the

Council, for example, that one faculty ought, by virtue of the academic distinction of its staff, can readily be allowed for by permitting the first Department a higher unit cost than the second.

13. The value of unit cost analysis as a tool of planning depends, for its credibility, on consistency of practice between the universities in regard to the categorisation of the multitude of elements of expenditure which exist and the consistency of conventions regarding various accounting methods (e.g. whether halls of residence expenditure is included as university expenditure or only included in the university's own budget on a net profit and loss basis).

14. Where different practices exist in these fields it is, I suggest, for the Council to lay down the practice they wish to be followed. If therefore the Council wishes to introduce cost analysis into its practices I would suggest the early establishment of a small working party consisting of the three university registrars or finance officers under Council chairmanship (either a suitable Council Member or the Principal Secretary) to agree on consistent practices and conventions in expenditure categorisation (see Appendix I), to work out various key unit costs for each university for a recent completed year for which firm information is available, and to devise a form of annual return to be presented to the Council in future showing its expenditure year by year under the agreed categories and its student load figures for each faculty. The same form could in fact be used also for presentation of forward recurrent expenditure estimates. The task of grouping expenditure into appropriate categories for unit cost analysis should not be difficult as the present expenditure breakdowns are already given in great detail and no new lines—only groupings of existing lines—appear to be required. Indeed, if cost analysis techniques are adopted in the scrutiny of university estimates and for costing forward plans, the estimates material on the recurrent side can be greatly simplified and condensed.

Planning Student Numbers and Forward Estimates

15. Since the total number of students and the broad mix of students (i.e. the proportions undergoing different types and levels of course) expected in any university in future years are the main—though not the only—fact determining its need for resources, both in financial and staff terms, and since these are only to a limited extent matters for determination by the individual institutions and are much more matters for Government decision on social, economic and political grounds, they are usually taken as the starting-point for university forward planning. Advice to the Government on these matters is clearly a key function of the National Council for Higher Education. With its contacts with the universities it will know broadly how much expansion—or how little—and how much change from their existing pattern of activities the universities can sustain.

With its contacts also with different Government agencies concerned with the supply of trained manpower and with its knowledge of secondary school output trends, it will be in a good position to help the Government to name a forward planning figure for overall student numbers (e.g. a growth by 10 per cent by three years ahead) and to agree with the Government the broad lines of any desired change in the student mix (e.g. more emphasis on science based subjects, on medicine or social studies or on diploma as opposed to degree level courses). The fact that there is very little growth in student numbers in Ghana at present, does not render forward planning any less important.

16. If such planning guidance, expressed in student numbers and type of output terms (rather than in money terms—this comes later) were issued by the Government after discussion with the Council in (say) mid-1974 the Council could then prepare guidance for each university specifying its share of the total student numbers and the expected mix in three years' time, and based on its day-to-day knowledge of the work of each university, encourage it to plan in some directions and discourage it from others (e.g. from creating specified new departments or courses already adequately covered for elsewhere). This guidance from the Council—which cannot of course be legally binding on universities—should not, of course, be so specific in its details as to leave the individual universities no room either for argument or for any internal choices of its own, but needs to be sufficient to provide a clear planning framework for each University. The latter could then proceed to prepare its own detailed expansion and development proposals for the period 1975-76 to 1977-78 expressed in academic terms; in terms of projected student numbers in each faculty in 1977-78 broken down as necessary by departments and types (postgraduate/undergraduate; degree/diploma; full-time/part-time); in terms of staff numbers and, finally, in terms of proposed recurrent expenditure in 1977-78 and of new capital expenditure needed, if the three-year period of the planning guidance given by the Council was to be followed.

17. These submissions from each university, if they reached the Council by the end of 1974 would enable it fairly rapidly to check the proposed academic expansion and development proposals against their own guidance and overall perspective and to prepare the necessary submission to the Government setting out their own views on the desired academic developments (within the Government's student numbers guidance already given) and financial needs of the universities for the three-year period (or for any shorter period if required) taking into account the submissions of the universities.

18. In formulating their proposals for recurrent grants in future years the Council need not, if it has already before it the unit cost picture for each university as described above, rely wholly on the

universities' own detailed financial estimates. It can build up its own estimates, based on such unit costs and its views on the desired upward or downward movement in them, of the total financial needs of the universities individually and collectively. It does this broadly by taking existing expenditure (adjusted if necessary, if the university is deemed to be unduly expensive or inadequately financed for what it is currently doing) and adding to it elements representing the extra cost of the planned number of extra students at given unit costs for each broad category of university expenditure and, for academic departments' expenditure, each faculty. This is usually found to be a more satisfactory method of determining grant proposals from a University Grants Committee than would result from a line-by-line scrutiny of each of a multitude of interrelated headings of proposed recurrent expenditure.

19. I might add that under a three-year planning system this process need not be carried out for each year of the triennium but only for the final year's projected expenditure. The first two years' total can be filled in by a simple line-graph process based on the growth of student numbers over the three-year period. It is of course still important that the base-line to which additional expenditure for additional students (and any other agreed additional expenditure) is added should not be just the actual expenditure in the completed year before that in which the forward calculations are being made (i.e. the year for which actual unit costs are available) but should be a figure provided by each university representing the estimated cost in three years' time of exactly the same commitments in every respect as existed in the base-year. This involves adjustments for salary increments, for retirements and replacements, for the maintenance of new buildings known to be coming into use within the three years and certain other readily identifiable items not related to new development. It should rigidly exclude any change in student or staff numbers or new activities of any sort. This is known as the "future or final year cost of existing commitments". Inflation is best left entirely out when building up future expenditure, which should be done at current costs and salary scales. Overall sums to cover inflation can be added at the end to the whole projected expenditure on a standard and agreed basis for all universities. This might apply whether forward estimates are presented on a one-year or a three-year basis.

20. Naturally the determination of the proposed recurrent grants would not be simply the result of a series of arithmetic calculations by the Council. It would however be based on such an exercise modified as necessary by reference to the universities' own submissions and academic proposals; by the need to give special financial support to desirable and approved new developments (e.g. special Institutes, new departments or new courses) to the extent

that these may be thought by the Council to be capable of being adequately covered by the extra money being proposed for extra students in the various faculties.

21. The submission from the Council to the Government which such a process makes possible, is one which can be expressed in terms of student output objectives, academic standards and other proper university developments, e.g. in the field of research, consultancy, student services, library and administration, and which can be fruitfully discussed with the Government as matters of higher education policy. It will also be supported by specific financial proposals which one would hope that the Government could accept.

22. A submission of this type should eliminate the need for the Government (Budget Secretariat) themselves to meet the universities, and repeat the line-by-line examination of the university's proposals which has already been carried out once by the Council. It seems to me to be important that the Government should deal, on a confidential basis, with the Council—and only the Council—in relation to future financial provision for the universities, whether on a one-year forward basis or longer.

23. If the Government after due consideration finds itself unable to find the required money (or to fault the Council's submission in financial terms) it can ask the Council to indicate what lower student numbers or other consequences would follow from any given reduction in the subventions sought by the Council. In this process it is important however that all concerned should bear in mind the direct relationship which exists between student numbers, available resources and academic standards. To try beyond a certain point (i.e. that of maximum efficiency in all its operations, and particularly in staff and plant utilisation) to deal with increased numbers of students at a university without any increase in resources can only, in the long run, result in a decline in academic standards.

24. When the future recurrent grants for the universities have been finally agreed by the Government—and preferably publicly announced by the latter in a statement giving also the student numbers targets which the approved grants are expected to achieve—the Council will be in a position to advise each university formally both of the general situation and of its own particular grants, student numbers, and expected mix as well as giving it further broad academic guidance in the form of encouragement of some and discouragement of other developments. It would be reasonable against this background for each university to be asked to submit for comment by the Council any academic proposals they might wish subsequently to carry out during the relevant period within the framework of numbers and finance given to them, but not specifically mentioned in the Council's former allocation letter.

At present I understand virtually all proposals for new academic developments including new courses have to be put to the Council for approval in advance either in annual estimates or by special approach. The forward planning system I have outlined would render many of these submissions unnecessary since the main pattern of future developments would have been laid down from the outset as part of a coherent development pattern for the university concerned.

25. Since the Medical School and certain other parts of the University of Ghana and the College of Art at Kumasi are separately financed, it would be a matter for decision whether, either forward planning or student unit cost analysis techniques should also be applied to them. A Research Institute cannot be dealt with in this way since it is not primarily concerned with students. If student unit costs are worked out for the Medical School it must be expected that they will be very much higher in the academic area than in other university faculties particularly in view of the clinical loads which medical school staff must undertake. But initially it would seem best to leave the Medical School out and continue to handle their forward estimates (perhaps on a three-year basis) broadly as at present.

26. I have included in Appendix II a possible operational timetable for a three-year planning system for the three universities.

Capital Planning

27. Under the planning system outlined above it is not difficult to gear the capital requirements of a university to the same student number objectives as largely govern the recurrent grant proposals put to the Government by the Council. The same preliminary guidance will do for both, and capital submissions can be called for as soon as the forward guidance is issued and if necessary in advance of the recurrent submissions. (Buildings have to be completed before they can be used to meet approved needs.) A forward building programme (including site works but excluding equipment) consists essentially of three elements:—

- (a) completion of buildings and works already approved and started;
- (b) the construction of new buildings, as necessary, to provide for new students or new subjects; and
- (c) the replacement or adaptation of existing buildings because of obsolescence or a change of use.

28. In some countries building programmes are organised on a "starts" basis, i.e. once approval is given, money is guaranteed even though expenditure is spread over several years. The basic control of what goes on is therefore shifted from a control of annual expenditure to a control of building starts. The advantage is that

the latter can be much more closely related to the forward academic plan for given student numbers and types than can annual expenditure on buildings as a whole. If every university knows in advance that in (say) the following two years it will be able to complete the buildings already begun and be able to let a certain amount (expressed in money terms) of contracts for specified new buildings each year, it will at least know exactly where it stands, however short the amount of building they are permitted falls from what they would regard as desirable. And the Government knows too what its financial commitments are likely to be for each of the years covered by the starts programme and will be able to assess, in the light of advice from the Council, what extra starts it can afford for subsequent years in the light of the commitments already entered into.

29. A great deal can be done in universities by way of minor adaptations to existing buildings to improve them or convert them for new uses. And a lot of rather useless work at Council and Government level can be avoided if universities are allocated, possibly as part of their recurrent grant, specified sums which can be used, at their own discretion, for these "minor works" for which a suitable upper limit of expenditure would need to be laid down by the Council. Any project over that limit would, of course, fail to be dealt with under the main building programme.

30. Rather similarly it is often regarded as best to deal with all equipment requirements (excluding books, typewriters and other office machinery and consumable items, e.g. chemicals and test-tubes) by way of a separate annual allocation of funds outside the normal recurrent and capital grants. If this is done, it is worth considering in Ghana (in view of the time necessarily taken in securing equipment from overseas because of exchange control and delivery problems) whether unspent balances each year in the equipment fund might not be treated exceptionally and be retained by the university, subject to periodical review by the Council. The size of the annual equipment grant would be a matter for the Council to recommend after consulting the universities. It would of course vary with the number of students, the nature of the mix, and the extent of the research effort in each university. Science and Technology departments have very different equipment requirements from those of Arts departments.

Norms

31. It is no use, either in this or in other capital fields, to try to base "norms" on those applicable in other countries. These have to be worked out by the Council on the basis of an analysis of past expenditure and past standards and after consultation with universities and covering approval by the Government. This general observation applies to norms governing building costs (e.g. maximum

expenditure per square foot on different types of building, maximum sizes of rooms for different purposes, space allowances for circulation areas, laboratories, staff houses, student common rooms) which have to be built up from local practice and experience, and to other norms such as might be used to assess equipment grants or library book and periodical grants. Some norms will best be expressed on a cost per unit area basis (i.e. expenditure per square foot) and others on a student unit basis (so much expenditure per student). Others will be expressed in area terms per student (e.g. student residences might be based on 100-square feet of room space per student) or area terms alone (e.g. lecturers might be allowed (say) 75 square feet of space in their offices).

32. I fear therefore that this task is one which, if done at all, will have to be undertaken by the Council over a period of time—and it is pre-eminently one in which most of the analytic work will need to be carried out by the Secretariat. I suggest that the results, both from the Government and the university standpoint, might well repay the effort involved, especially if considerable expansion of universities is envisaged in the future.

Capacity of Academic Buildings

33. Before the Council will be able to assess with complete confidence the needs, as put forward by the Universities, for new academic buildings either to house additional students, to enable new academic departments to be created or to undertake other new activities such as new institutes or research projects, they must be in a position to satisfy themselves that existing buildings are fully utilised. A University might, with Council support, be starting a new department of Genetics, and it might wish to secure a new building (and equipment) for the new department. But if (say) an existing Physics building has spare capacity, then by some re-arrangement, it might be possible to house Genetics at least for some years without embarking on a new building. The Council may wish therefore to undertake in conjunction with the universities, a survey of the capacity of existing buildings, particularly in the academic area. Pressure of student demand can usually be assumed to ensure full utilisation of student hostels. Such a survey can be partially carried out by inspection by the Council or its officers but sooner or later some norms for existing buildings—which will of course closely correspond to the space norms for new buildings—will need to be established, if universities are going to accept that some buildings, although apparently fully used, do sometimes have spare capacity. This is often the case in science buildings. The use of multi-purpose laboratories and the pooling of lecture rooms throughout universities are also matters which, given suitable Council encouragement, can sometimes increase capacity without new buildings. I noted with interest the report on space utilisation and capacity produced by U.S.T., Kumasi in March 1972.

Control of Individual Buildings

34. Once a new building or other capital project has been included in an approved forward building programme for a university, a decision is required as to how its cost is to be controlled thereafter until completion. It is clearly desirable for the Council to lay down, based preferably on standards and norms when available, a cost limit for the project, to which the university should endeavour to ensure that its architects and contractors conform. Each cost limit will of course also relate to the size of building which should be achieved for the given sum of money. Thereafter the Council may be prepared to leave it to the university to proceed, reporting at every stage (particularly when tenders are in, but before acceptance) on the progress being achieved. Situations will inevitably arise however in which Council consideration will be required either because of the need to increase the cost limit or otherwise vary the specifications in the original approval. This process will require the presence on the Council's staff of an officer responsible for the control of capital works.

The Council's Relations with Government and Universities

35. I suggest that the guiding principles of the Council's operations should be to secure and retain at all times the confidence of both the Government and the universities—but to be, and be seen to be, independent of both. This is no easy task, for if Government and autonomous universities found it easy to establish and keep direct relationships of mutual confidence (which as a matter of historical fact, is not the case in any country) there would be no need for the National Council. When I talk of confidence, I do not mean to imply enthusiastic acclaim, for if the Government is too lavish in its praise of the Council's work, the universities might regard this an admission that the Council was simply a tool of Government—and vice versa. Either situation would be destructive of confidence and respect for a body trying to do a difficult job in the best long-term interests of the country as a whole. Its success will depend on its ability to act as an effective link in all matters between Government and universities, to interpret the universities' desires to the Government in terms which the latter can appreciate and support, and to interpret the Government's wishes to the universities in terms which the latter can appreciate and accept. Neither party would, I suggest, be wise to express itself publicly on controversial points at issue between them without first discussing the issues with the Council and trying to see if the intermediary role of the Council can effect reconciliation.

36. It is a corollary of this inter-relationship that I would regard it as undesirable for the Council to be given legal executive powers to direct universities (which would conflict with their own powers and lead to loss of confidence). They appear to have no such powers

at present except perhaps in relation to the residual item in their terms of reference under the 1969 Decree "... to do such other things as may be necessary...". The Council's function of advising the Government on university financial needs and developments gives them quite sufficient authority provided that the Government and the Universities are scrupulous in avoiding direct communication with each other on these matters (though they may well need to consult each other directly on other matters, e.g. student discipline or appointments of University Council members). The question of delegation by the Government to the Council is dealt with below (paragraph 41).

Membership of the Council

37. This brings me to the delicate question of the composition of the Council. Two inter-related issues arise here. One is the presence on the Council of the three Vice-Chancellors (which is subject to the proviso that they should not "vote on any business relating to any recommendation on recurrent or capital allocation to any university institution"). The other is the relative absence of serving academics (amongst whom I hope I may be forgiven for not including Vice-Chancellors).

38. Although the presence of Vice-Chancellors on such bodies, even with the stated proviso, is most unusual (and was specifically rejected by the Vick Committee in 1969). I suggest that the present position should continue at least for a number of years until the position and authority of the Council is firmly established. They are however the clients, in a real sense, of the Council and must advocate before it both their own university's case and any collective university view there may be on any matters before the Council. If they do this as members, it can result in damaging loss of confidence on the part of the Government in the Council's detachment for the universities. But with good sense and restraint on all sides I believe that at present there are advantages in keeping things as they are.

39. But if the Vice-Chancellors are, as it were, duly muzzled in their participation in the university planning and finance work of the Council, we are still left with the problem of academic representation. In a fully functioning Council, a substantive number of academic decisions on allocations and priorities will always need to be taken and the present academic staff of the universities will need to be confident that the Council is academically equipped to take these decisions. Elsewhere academic members normally form the majority of University Grants Committee members and in small countries are often drawn from overseas. I do not suggest that one need go as far as this. I understand moreover that the present "three persons with extensive experience of university work" are all

former academics but are not currently serving. There are however some serving academics nominated to the Council by other bodies. I suggest that academic confidence in the Council would be significantly improved if at this stage in its evolution, one or two more serving academics of recognised distinction were to be members of the Council, with or without new legislative cover. They should, to serve their purpose, be drawn from different subject areas, for they would in effect be the Council's professionals on matters within their own field. To ensure as far as possible their detachment from their own university's cause (as opposed to that of their academic area) they ought not to be Deans or Pro-Vice-Chancellors. And solely for reasons of tact, there should be at least one from each university. All should, like other members, be appointed by the Government, preferably on the recommendation of the Chairman of the Council. The fields of Arts, Science and Technology need, at least, to be covered by appropriate individuals. The important point is that they should be serving academics, respected by their colleagues and currently knowledgeable about the work going on in their subject area in Ghana and elsewhere.

The Role of the Chairman

40. If confidence is the key, the Chairman, more than anyone else, provides it. He has to work harmoniously, but not subserviently, with the universities and the Government, and he has to lead his own Council members and the Secretariat. He has a difficult task and deserves all the assistance he can get. He needs to be regarded by the Government as its paramount, if not its sole, adviser on university development and finance and on the handling of university affairs generally. If it is proper and possible to consult the universities on the latter type of issue, he should normally be the one to do so. If the Government wishes the universities to do anything, they ought to consult him first. Whatever it may be that any Government wants to say to its universities it tends to achieve more and generate less opposition if it consults the Chairman of its National Council first and listens to what he says in his efforts to be helpful to both sides.

Delegation of Powers

41. The independence of the Council is clear. Its executive powers are however negligible. In these circumstances it is only by the establishment of confidence that the necessary convention that most decisions on university affairs are left to the Council can be firmly established. The Government will almost certainly wish always to retain for itself the final decision on certain matters. These might be described as

- (a) the decision whether, as I think would be desirable in the interests of all concerned, the financial resources and the

student targets for the universities should be indicated on a triennial basis rather than year by year;

- (b) the final decision on what the student targets and financial resources made available should be;
- (c) whether any new universities or major new departments in existing universities (e.g. medical schools) should be created and whether any other existing institutions of higher education should be upgraded to universities;
- (d) the levels of academic salaries for the various grades of academic and equivalent staff in the universities.

42. Even in relation to these, the Government ought to receive advice from the Council before reaching its decision. Outside this field the Government will naturally wish to take an interest in university affairs generally and, always after consultation at least with the Chairman of the Council, seek information or initiate action on particular matters. But in general it would be desirable for the Government to leave the Council, through its Chairman and Secretary, free to advise the universities, on its own authority, on the vast majority of issues which arise. Similarly the Council will, I feel sure, wish to leave individual universities, through the legal autonomy which rests in their own governing bodies advised by their Vice-Chancellors, free to act within the minimum framework of guidance and constraint which the Council regards as necessary to lay down.

43. It might in this context be worth emphasising that the National Council for Higher Education ought not to regard itself, or allow itself to be used, as in any formal way a body representing the views of the universities—even though its views may well take into account those of the universities. Nor should it be necessary, since it will be in continuous contact with the universities, for any university matters coming before it to be referred more or less automatically—as seems to be the case at present—to the universities for comment before the Council reaches its own views. If a body representative of all the universities is called for it should be set up by the universities themselves as a Vice-Chancellors Committee or the like quite separate from the National Council.

Non-university Functions of Council

44. The bodies which seek their financial resources from the Government through the National Council include a number (e.g. National Archives, Academy of Arts and Sciences, Atomic Energy Commission) which are completely outside the universities, while others (e.g. School of Administration, Institute of Statistical, Social and Economic Research, Kumasi College of Art) are integral elements of the universities although receiving separate subventions.

45. As regards the non-university bodies I have no comments to offer, and see no obvious reason why present arrangements should not continue.

46. Integral parts of universities such as the Legon Medical School and School of Administration might be expected to secure their resources as part of the university's own budget, and be subject to the university's own internal budgetary allocations procedure. If however it suits everyone to handle matters by means of what are, in effect, earmarked grants to the universities for the bodies concerned, I see no reason for change.

47. The separation of the budgets for these institutions does however have implications for cost analysis. Separate cost analysis can only be made—and proper analyses of the university's control budget can only be arrived at—if all their expenditure, including central university expenditure on their behalf, is separated and attributed to them. This might be looked at by the Working Party on cost analysis that I have suggested earlier (paragraph 14).

Committee Structure of Council

48. At present the Council has a Finance Committee looking at the estimates of the various bodies which draw their resources through the Council. If the suggestions I have made earlier about forward planning are adopted, the scrutiny of forward estimates will become much more concerned with academic and management matters as far as the universities and associated institutions are concerned and less of a purely financial exercise. It occurs to me therefore that it might at some stage be appropriate to rename the Finance Committee as a Finance and General Purposes or Executive Committee of the Council. Alternatively, it would perhaps be abolished if the Council is to meet more frequently and the problem of the Vice-Chancellor's presence as members of the Council does not make it inappropriate to do so. For non-university bodies a Committee of Council, such as the present Finance Committee, might well be appropriate.

49. The Council may well also find it useful to set up from time to time *ad hoc* Committees to look into particular questions which have arisen. Unless for any reason the Council particularly wishes such Committees to be wholly independent, it would be desirable for the Chairman and several members of Committees set up by the Council to advise it, to be Council members, for the sake of consistency. But I would suggest that most of the business of the Council should be conducted by the full Council itself at any rate for an initial period to give the Council coherence. Only later should it be necessary to consider the creation of other Committees, including Subject Committees (e.g. a Social Sciences Committee) such as are sometimes found elsewhere. I also suggest that if forward

planning on a three-year basis is adopted, the Council or as many members of it as possible, should undertake visits (or "visitations" as they are sometimes called) to each university once every three years (preferably in the second year of the period) to discuss different aspects of the university's affairs with the Vice-Chancellor and University Council representatives as well as with Deans, non-professional staff and students. These visits should normally be more for the purposes of informing the Council and enabling it to effect communication with the universities at all levels than to give any specific guidance. This comes a little later, just before the three-year forward estimates have to be prepared, and again when the final triennial allocations are being made. And this guidance should be in written form, for permanent record, and not conveyed orally, a process always likely to lead to misunderstanding sooner or later.

Secretariat

Work Specifications

50. Against the above background it is possible to construct an overall set of job specifications for the Secretariat as a whole, assuming that full-time Chairman and a full-time Secretary will be supervising the whole field of work for which the Council is responsible. I also assume that, in the broadest sense, the whole Secretariat exists to serve the Council and the Chairman—and only them—and to undertake such duties as they may wish. I would suggest that the distinct functions of the Secretariat can be grouped as follows:

- (a) Preparation of planning guidance on academic and management matters to the universities and their associated bodies.
- (b) Recurrent cost analysis on a student unit cost basis of expenditure from the central budget of each university; and, if desired, of the Medical School, School of Administration and Institute of Adult Education of the University of Ghana and the College of Art at Kumasi.
- (c) Scrutiny and analysis of forward estimates presented by the universities and the building up of a model of university's student numbers, distribution and costs for the final year of the three-year planning period. If annual budgets continue the same techniques can still apply.
- (d) Preparation of submissions to the Government on these matters (triennially or annually as necessary).
- (e) University capital programmes and control of buildings under construction and other works projects in progress.
- (f) Furniture and equipment bids from the universities.
- (g) Servicing of the Council meetings and those of Committees or Working Parties set up by the Council.

- (h) Handling the affairs of all non-university bodies looking to the Council for their support.
- (i) Preparing Council papers on any current problems arising in the field of higher education and management as desired by the Council or its Chairman.
- (j) Handling day-to-day enquiries from the Government or universities on university affairs, whether relating to planning, finance or other matters (e.g. scholarships, admissions, student discipline).
- (k) Domestic housekeeping within the Council, i.e. staff recruitment, establishment matters and annual estimates.

Senior Staff

51. The Chairman and Secretary will themselves be involved in a great deal of the work under items (a) to (f), (h), (i) and (j), but two very senior and able officers and two good middle senior level officers will, I suggest, be required to help them with this work. Items (g) and (k) can, under the Secretary, probably be dealt with by one or two people of middle senior level. The precise division of the load between the four senior and middle senior officers handling the main university and non-university work will need to be worked out as progress is made. So will their precise grading and salary levels, which are not familiar to me. One new post might initially be given over to the restructuring of university expenditure categories, cost analysis and methodological work I have described earlier. The officer concerned can thereafter be used more generally in operating the forward planning system and one of the four posts might possibly then be given up. Something will however depend on the extent to which the Council wishes to introduce not only forward building programme but also detailed control over building work in progress. At this point, some professional assistance from an architect or quantity surveyor, might well be needed, if professional advice on these matters is not obtainable from the Public Works Department.

Staff Recruitment

52. The work of the senior staff of the Council is, especially if the sort of techniques I have described, are developed over the next few years, both unique and interesting. Although I do not believe myself that special qualifications or training are required for any of the posts, a high degree of ability, intelligence and a capacity for creative thought is essential. Moreover, a knowledge of universities and the way they work is necessary. This can readily be picked up on the job but, once acquired, should be employed, together with the special techniques used in the Council's work, for a substantial period of time—at least five years.

53. I cannot obviously be sure, but I think that it would probably be best for the Council to seek to detach its staff from the Civil Service and appoint its own rather in the same way as is done in the C.S.I.R. Career planning problems might arise but good staff should find ready outlets in university administration and elsewhere. Salary level ought not to be less than for comparable posts in university administration, and the Secretary of the Council will need to be of equivalent quality and salary level to a university Registrar.

54. I would however regard it as very desirable that

- (a) the Chairman should be in a position to borrow appropriately qualified Civil Servants to join the Council's staff for a period and to bring to the Council's service their knowledge of the Government machine with which the Council has to work harmoniously;
- (b) the Council should be encouraged to borrow senior staff from the Universities of Ghana for a period of years before returning to university service. For a good university administrator—or even academic—a period of service on the Council's staff would be most valuable experience for him in his later career.

Conclusion

55. This report has necessarily had to be written at considerable speed in view of the very wide amount of ground I have tried to cover. I apologise for any lack of clarity and can only offer subsequently to try to clear up any obscurities or correct any errors there may be.

56. The Council can, if it wishes, simply carry on as it does at present but with a greater number of Council meetings. If this is the wish; no significant changes in the Secretariat arrangements, except perhaps for the addition of a person to service these meetings and to prepare Council papers on various matters, and a better understanding with the Government about the duration of appointments to the Secretariat, is required. I doubt if, even now, the Government would greatly object if the Council proposed to borrow a staff member for a period from a University. The Council's real problem, as I see it, is firmly to establish the position of the Council itself and give it something worthwhile and useful to deliberate about. This is why I have devoted so much of this report to the question of constructive higher education planning and the techniques that are involved in them. I apologise again for having stepped outside my strict brief and I hope I shall be forgiven.

Acknowledgement

57. I would like finally to express my warmest thanks to the Government of Ghana who commissioned this report and will, I hope, benefit from it. In particular, H.E. the Commissioner for Education has been most generous in his encouragement, help and hospitality. To you, as Chairman of the Council and as the instigator of the proposal that I should come to Ghana, I also express my warm thanks. Finally, I would like to thank Mr. Lomotey, the Principal Secretary, the three Vice-Chancellors and the Dean of the Medical School and others who have all helped me greatly; not forgetting Mr. Agbeko, your Private Secretary, to whom my visit has meant a great extra burden, which he has carried out most efficiently.

STATE HOUSE

ACCRA.

2ND APRIL, 1974.

APPENDICES

UNIVERSITY COST ANALYSIS

Appendix 1

Suggested Categorisation of Non-Capital Expenditure

1. Academic Departments

- (i) Salaries and Wages
- (ii) Departmental and Laboratory Expenses (excluding major equipment)
- (iii) Research

This category of expenditure needs to be set out separately for each of the principal Faculty groups, e.g. Arts/Social Studies/Education (together or separately as desired), Science, Technology, Agriculture.

Notes:

- (a) These compare with about 17 subject groups used in U.K. but are sufficient for most purposes.
- (b) All academic departments and probably institutes (except perhaps for the three Agricultural Research Stations) financed from the central university budget should be fitted in to one of these categories. Departments operating in more than one Faculty (e.g. Mathematics) should be included in the group to which they have closest cost affinity (i.e. Mathematics might go with the Arts, etc. group).
- (c) Medicine is omitted since the Medical School is separately financed.
- (d) If preferred, departmental research allocations can be excluded from unit cost calculations and handled separately.
- (e) All self-balancing expenditure, e.g. research contracts, should be omitted.
- (f) Posts or other recurrent expenditure whose costs are met by external aid should be included as expenditure (and offsetting sums, notional if necessary, should be included as income when Government grant subventions needed are being calculated).
- (g) Faculty unit costs are the result of dividing Faculty expenditure by student load in any year.
- (h) The same conventions should be adopted in each University.

2. *Academic Services, e.g.*
 - (i) Libraries and books and periodicals; salaries and wages
 - (ii) Museums (if any)
 - (iii) Audio-Visual Centre
 - (iv) Central Computer Costs.
3. *Premises and Municipal Services, e.g.*
 - (i) Local taxes, rent, insurance of university buildings (not housing)
 - (ii) Light, water, power, telephone (net)
 - (iii) Repairs and maintenance
 - (iv) Gardening and security services
 - (v) Hospital, transport and school services (net) attributable to staff other than academic staff.
4. *Academic Staff and Student Services*
 - (i) University Health Service or Hospital (net of income) attributed to academic staff and students
 - (ii) Subsidies to student halls and refectories (net)
 - (iii) Payments to wardens of halls, etc.
 - (iv) Staff housing costs (net of rental and other income)
 - (v) Transport, school costs, etc. attributable to academic and equivalent staff and students.
5. *Central Administration*
Salaries and wages, office machinery and supplies.
6. *General Educational Expenditure*
 - (i) Examinations
 - (ii) Prizes, scholarships and awards paid by university
 - (iii) Extra-Mural Department and other associated costs.
7. *Capital Items met from General Income*
 - (i) Furniture and equipment (see Note)
 - (ii) Buildings and other minor works.
8. *Surplus of Deficit for the Year*

Note.—Equipment expenditure during the year on teaching and research—and perhaps Furniture—is best handled separately if expenditure is substantial, e.g. through a pooled Equipment Fund. But it can alternatively be treated as Departmental Expenditure under Category I.

APPENDIX 2

Specimen Time-table for a Three-year Planning period covering Academic Years 1975/6-1977/78

Mid-1974

(1) After preliminary discussion with the Government and Universities, the Council issues guidance letter to Universities (and other bodies as desired) on the basis on which they should prepare their academic and other plans and Estimates for period 1975-78.

Note:

- (a) To Universities, this guidance should cover such matters as student numbers and broad mix in 1977-78 and also academic matters (e.g. nature and extent of new departments or courses needed) and management objectives (e.g. reduction of deficits on halls, control of municipal services).
- (b) The form of submission of Estimates should include a description of academic plans for new development and commentary on management matters, proposed future staff numbers (of various categories), student load figures by Faculty groups and proposed future expenditure by categories (as in Appendix 1 somewhat amplified) for the year 1977-78—and perhaps 1975-76—only.

End 1974

(2) Estimates received by Council. Those should be accompanied by tables showing actual expenditure by categories (as in Appendix 1) for 1973-74 and expected actual expenditure for 1974-75. Also staff numbers and student load figures for these years. They should also include a table showing expected actual expenditure in 1977-78 assuming no change whatsoever (not even inflation) from the pattern of activities, student numbers, staff establishments and expenditure in 1974-75. This accompanying material can be sent ahead of the forward estimates if convenient so that Council can do their "existing unit cost" calculations.

End 1974—end February, 1975

(3) Council examines plans and estimates and produces a submission to Government covering university needs for 1977-78. This should be a confidential document and should include proposals for covering inflation and Government approved salary increases.

March/April, 1975

(4) Discussions between Council and Government.

May, 1975

(5) Government announcement of grants for 1975-76, 1976-77 and 1977-78 accompanied by statement of expected student numbers and growth between 1974-75 and 1977-78.

June, 1975

(6) Council writes to each University (and any other institutions concerned) notifying them of their grants for each year and providing firm guidance on the academic and other priorities which they hope the University Councils will observe. They will also indicate any points of special concern and define the matters on which the universities should consult the Council before incurring new commitments in the triennium.

APPENDIX II

REPORT BY DR. E. EVANS-ANFOM, CHAIRMAN, NATIONAL COUNCIL FOR HIGHER EDUCATION, ON HIS VISIT TO THE UNITED KINGDOM 15th-23rd JUNE, 1974

PART I

Introduction

The purpose of my trip to the United Kingdom was to visit the University Grants Committee offices in London to hold discussions with the Chairman of the Committee and staff of its Secretariat and, in general, to see the Committee's machinery in action,

2. The idea of the visit originated during the visit of Mr. R. C. Griffiths, Director of the Inter-University Council for Higher Education Overseas, to Ghana in March/April at the invitation of the National Council for Higher Education to advise on the reorganisation of the Council's Secretariat. Before leaving Ghana Mr. Griffiths submitted a Report, most of the recommendations of which have now been accepted by the Council for Higher Education and the Government. I felt that it would be a natural follow-up to the Report for me to visit the United Kingdom to see the U.G.C. in action at close quarters. The Chairman of the U.G.C. kindly agreed to receive me and to make every facility available to me during my visit, the highlight of which was my attendance at the June meeting of the Grants Committee. This, I understand, is a very rare privilege and for this I am deeply grateful.

3. Mr. R. C. Griffiths, Director of the I.U.C., personally undertook to arrange my programme for the week. This included visits to

- (1) the University College of Cardiff;
- (2) London University to meet the Principal and Registrar;
- (3) the Department of Education and Science to meet the Under-Secretary of State;
- (4) the I.U.C. offices;
- (5) the Overseas Development Administration;
- (6) the U.G.C. Offices to hold discussions with the Chairman and officers, and attendance at meetings.

4. I left for London on June 15. Accommodation had been arranged for me at the White House, Regents Park, by Mr. A. S. Odom, Assistant Registrar at the Universities of Ghana Office. After resting in London on Sunday, June 16, my programme started the following day.

Monday, 17th June

Visit to University College, Cardiff

5. My programme started with a trip to Cardiff. Mr. Griffiths who happened to be in Cardiff at that time met me at the railway station and took me to the University College where I was guest of honour at a luncheon given by Dr. C. W. L. Bevan, Principal of the College and currently Vice-Chancellor of the University of Wales. Present also were the Deans of Faculties. It was a working lunch during which the procedures within the University for preparing its quinquennial estimates were discussed, mainly through answers to questions asked by me. I was interested to learn that the procedures were very similar to what obtained in our universities. This is not surprising, however, since our system was largely inherited from the British. After lunch I visited the Sherwood Arts Theatre and the Department of Surgery of the Welsh National School of Medicine. Apart from the training of play producers and the stimulus it gives to the cultural life of the university, the former is an important way in which the university is involved in the life of the community. At the School of Medicine I was most impressed by the close proximity of the Medical School to the Teaching Hospital. Physically the two occupy opposite ends of the same building and the set-up is such that teaching, research and service are closely interrelated.

Tuesday, 18th June

(a) Attendance at a preview of U.G.C. meeting scheduled for 20th June

6. Prior to the meeting I called on the Chairman of the Committee, Sir Frederick Dainton, and had about an hour's discussion with him. He explained to me the set-up of the Committee, its terms of reference and the way in which the Committee carried on its work. It became quite clear to me that this was a most important institution in the higher education set-up in the United Kingdom. Later on in the Report, I shall try to give a picture of the Committee and its activities.

7. The pre-view meeting was a most interesting experience. Such a meeting takes place monthly, two days before the full U.G.C. meeting. At this meeting the Chairman discusses the agenda for the main U.G.C. meeting with staff of the Secretariat. It is, in fact, a briefing session at which the Chairman is fully briefed by officers in charge of schedules who have prepared supporting papers for various items on the agenda. I found the standard of the papers very high indeed and it was quite obvious that a great deal of work had been put into that. I was most impressed by the high calibre of staff of the Secretariat and came away convinced of the urgent need to re-organise our own Secretariat to ensure that staff of the highest

calibre work here. There is every justification for the recent moves to secure:—

- (a) an improvement in salaries and conditions of service of the staff and,
- (b) authority for the Council to appoint its own staff.

8. In the afternoon I met Mr. Moss, Deputy Secretary in charge of recurrent grants, and Mr. Cleary, Architect, both of the U.G.C., to discuss the administration and control of non-recurrent grants to the universities. The main points which emerged are recorded in the section of this Report under the heading "Non-Recurrent or Capital Grants".

Wednesday, 19th June

Visit to the Department of Education and Science

9. I was received by Mr. Tommey, under-Secretary of State. Mr. Tommey explained to me the relationship between the Department of Education and Science and the U.G.C. The Department indicates to the U.G.C. student targets over a quinquennium and the amount of money which Government would be prepared to give as grants-in-aid to the universities for both capital and recurrent expenditure, leaving the U.G.C. to ensure that the universities develop in response to national needs. The U.G.C. in its turn endeavours to do this without interfering with the academic autonomy of the universities. The D.E.S. has no direct contact with the universities. Communication from the D.E.S. passes through the U.G.C. to the universities and vice-versa. Mr. Tommey stressed the importance of mutual confidence between the D.E.S. and the U.G.C. and of frequent and informal consultations between the two bodies.

Visit to the Inter-University Council

10. In the afternoon I paid a brief visit to the Inter-University Council offices and met Mr. R. C. Griffiths, Director, and Mr. Donald Saville, Deputy Secretary. The Inter-University Council is the chief instrument by which the universities of the United Kingdom with financial support from Government assist overseas universities, particularly in the Commonwealth, in their development. The Council generally concerns itself with higher education matters overseas. I was no newcomer to the I.U.C. as the University of Science and Technology, of which I was recently Vice-Chancellor, has close ties with this organisation. Mr. R. C. Griffiths had also visited Ghana and written a report for the Council for Higher Education a couple of months prior to my visit. The discussion was mainly on the whole question of the I.U.C.'s assistance to the development of higher education in Ghana. The Director was anxious that the Council for Higher Education should always be in the picture when the I.U.C. considers requests from the universities in Ghana for the support of new programmes.

11. Concerning the help to the National Council for Higher Education itself, it was agreed in principle that the I.U.C. would, where appropriate, extend the scheme of short-term visits to and from the United Kingdom, under I.U.C. sponsorship, to this Council. Specifically, at my request, the Director agreed to the following:

- (1) that the I.U.C. would pay the passage of Mr. J. B. Lomotey, Secretary to the Council for Higher Education, to visit the U.G.C. offices for two weeks in September 1974; and
- (2) that the I.U.C. would pay the passage of a financial officer from the U.G.C. to visit Ghana at a time to be mutually agreed between myself and the Chairman of the U.G.C.

Thursday, 20th June

A.M.U.G.C. Meeting

12. This was the day of the meeting of the full Grants Committee. Prior to the meeting I had received the agenda papers for study and, of course, had sat in on the pre-view meeting a couple of days before. Before the meeting started I was introduced to the members by the Chairman and I responded briefly expressing my gratitude for being privileged to come behind the scenes. The meeting was conducted in a friendly but businesslike atmosphere. It was clear that all members—and there was a full attendance—had studied their papers carefully. The agenda dealt with a wide range of subjects on both capital and recurrent grants. On the capital grants a good deal of time was spent in discussing certain situations where the grants committed by the universities had exceeded grants approved. Under recurrent expenditure certain new departments proposed were discussed fully. The Committee also spent time discussing reports submitted by some of its Standing Committees. There was also the report of an *ad hoc* Committee which dealt with a specific matter.

13. Most of the members of the Committee are serving academics. They however serve in their personal capacity and do not represent their universities. They are chosen for their personal qualities from various disciplines. I was most impressed by their strict objectivity and by their non-partisan approach to matters under discussion, even when their universities were affected. Many things impressed me at the meeting but this fact impressed me most of all.

14. During the lunch interval I had the opportunity to meet the members of the Committee informally.

15. In the afternoon I had an hour's meeting with Mr. Neville Thomas, Deputy Secretary in charge of recurrent grants. Mr. Thomas explained to me in outline the cost analysis methods used by the Committee Secretariat in examining estimates from the

universities, and I came away convinced of both the urgent need to establish unit costs for our own purposes at the Council for Higher Education.

16. In the evening I was entertained to dinner at the Reform Club by Mr. R. C. Griffiths, Director, I.U.C. The other guests were Mr. Carswell, Secretary to the U.G.C. and Mr. Kirkness, under-Secretary with the O.D.E.

Friday, 21st June

17. I had a final meeting of about an hour with Sir Fred Dainton, Chairman of the U.G.C., at which supplementary questions arising from my visit were answered. We also discussed future relationship between the U.G.C. and my Council and what help could be given us in the immediate future. We agreed that, subject to the I.U.C. paying the fares,

- (1) Mr. J. B. Lomotey, Secretary to the National Council for Higher Education, should pay a visit to London during the first fortnight of September, 1974, to learn something of the organisational structure of the Secretariat, including the schedules of assignment of the staff and to familiarise himself with the structure and functions of the Council's sub-committees.
- (2) Following on (1) above, Mr. Neville Thomas, Deputy Secretary for Recurrent Grants, or some other officer to be designated by the Chairman of the U.G.C., should visit Ghana for a period of two to three weeks during the first term of the 1974-75 academic year (October to December) to assist the Working Party of finance officers of the three Universities, under the chairmanship of the Secretary to the National Council for Higher Education, in working out cost analysis and establishing norms to be applied in evaluating the estimates of our universities.

Visit to London University

18. Late that morning I visited London University where I met the Clerk of Court of the University, Mr. Stewart, together with his officers responsible for capital and recurrent expenditure. We discussed the procedure within the University for the preparation of the quinquennial estimates and for allocating to the various colleges and institutes of the University the final sum approved by the U.G.C. The University of London is a mammoth organisation and the Court of the University in a way functions as a mini-U.G.C. in relation to the component units of the University. I was graciously entertained to lunch by the Principal of the University, Sir Douglas Logan.

19. In the afternoon, in the company of Mr. R. C. Griffiths, I visited the offices of the Overseas Development Administration and met Mr. Kirkness, Deputy Secretary in charge of the Ghana department, whom I had the pleasure of meeting the previous evening at dinner, and Mr. Kitchin, Officer-in-charge of Research. We discussed the various forms of aid available both within and outside the Government Technical Assistance Scheme.

20. Though short, the visit has been worthwhile as it has given me a better insight into the way in which a University Grants Committee operates and also has placed me in a better position, as Chairman, to provide the required leadership for the National Council for Higher Education.

21. I am grateful to the Government for making the trip possible, to the Chairman of the U.G.C. for the courtesies accorded me during my visit, and to Mr. R. C. Griffiths, for kindly arranging my programme and accompanying me to some of my appointments.

PART II

Procedure for financing the universities in the U.K.

22. This section is largely descriptive and represents the picture, as I saw it, of the machinery for financing the university institutions. There are 43 universities in the United Kingdom. Each is an independent, self-governing institution, jealous of its academic freedom. All of them, with the possible exception of Oxford and Cambridge, receive the greater proportion of their funds from Government and this proportion has increased over the years. It is natural therefore that in spite of their independence there should be a degree of public accountability. Government had to find a way to ensure financial responsibility without infringing on the academic freedom of the universities. The University Grants Committee was therefore established in 1919 as a body, independent of both Government and the universities, to occupy an intermediary position between the two interpreting each to the other. The terms of reference of the Committee are:

“To enquire into the financial needs of university education in Great Britain; to advise the Government as to the application of any grants made by Parliament towards meeting them; to collect, examine and make available information relating to university education throughout the United Kingdom; and to assist, in consultation with the universities and other bodies concerned, the preparation and execution of such plans for the development of the universities as may from time to time be required in order to ensure that they are fully adequate to national needs”.

23. Members of the Committee are appointed by the Secretary of State for Education and Science. There are 21 members, including one full-time Chairman and a Deputy Chairman; 14 are drawn from the universities from various disciplines; two are from industry and three from the other sectors of education. Relevant Government departments and Research Councils have assessors who attend meetings but have no vote.

24. The Committee has a number of advisory sub-committees on a range of academic subjects and these are chaired by members of the main Committee; but the membership is drawn from experts both within and outside the Committee, especially from the universities. *Ad hoc* committees are set up from time to time to deal with specific matters.

25. The Committee has a strong Secretariat, headed by a Secretary who is also secretary to the Committee. Currently the staff of the Secretariat number over 100.

26. The universities are financed by a grants-in-aid system and the grants are made quinquennially. The grants are made under three major headings:

- (1) Recurrent grants
- (2) Non-recurrent grants, and
- (3) Equipment grants.

(1) *Recurrent Grants*

27. These are used for expenditure of a recurrent nature such as staff salaries, running costs and maintenance of buildings equipment, etc. The total amount approved over a five-year period is not increased except in certain inevitable situations, such as

- (i) approved increases in academic staff salaries
- (ii) inflation leading to rising costs; and
- (iii) major government policy changes resulting in an expansion of programme during the quinquennium.

(2) *Non-Recurrent or Capital Grants*

28. These are earmarked grants and they are given to support particular projects approved by the University Grants Committee. There are separate grants for major works and minor works. The minor works cover alterations or extensions to existing buildings

provided that where the cost of the project exceeds £20,000 the prior approval of the U.G.C. will be obtained. The major projects are examined by the officers of the U.G.C. at two stages (a) the stage where the universities give an outline specification of requirements indicating scales of accommodation, etc.; and again (b) at the sketch plan stage the officers of the Grants Committee place a limit on expenditure, using unit cost limits approved by the Government (the Department of Education and Science); the non-recurrent grants include expenditure on the purchase of sites, professional fees (subject to recognised professional scales) and furniture and equipment for new buildings.

(3) *Equipment Grants*

29. These are annual grants given to universities to support teaching and research and they are used at the discretion of the universities.

30. The universities submit their estimates and proposals for the ensuing quinquennium during the last year of the current quinquennium to the U.G.C. These proposals are in three sections: (a) recurrent (b) non-recurrent and (c) equipment, and are made on forms approved by the D.E.C. After examining these estimates and proposals the U.G.C. prepares a submission to Government on the overall financial needs of the universities. The U.G.C.'s role at this stage is advisory. The Government decides the total sum to be allocated to all the universities. When this is made known the U.G.C., acting now in an executive role, decides the allocation to be made between the individual universities. Each university is given a block grant to be used as it thinks fit, except that non-recurrent grants, being earmarked for physical development, may not be used for other purposes without the approval of the U.G.C.

31. In assessing the financial needs of the universities, the U.G.C. considers the university's own plans, the demand for university graduates, students' demand for university places and the resources available. To do this the U.G.C. is in constant communication with both the universities and Government. The Chairman and officers of the Secretariat keep in close touch with Government departments and other bodies such as the Research Council, the Committee of Vice-Chancellors and Principals. The universities too keep in touch with the Chairman and officers of the Committee about their problems.

32. The quinquennial visitations to the universities afford the members of the Committee an opportunity to see university development at first hand and to discuss with staff and students their

problems; and with university authorities their plans for future development. They provide an opportunity also for members of the Committee to let the universities know what the public think of them. These visitations are most useful and provide a suitable background for members of the Committee when they meet to consider the quinquennial proposals from the universities.

33. The Committee meets once a month, except in August, and usually has a full agenda containing important matters to deliberate about.

34. To summarise my impressions:

1. The U.G.C. is a most valuable institution in the higher education set-up of the U.K. By its terms of reference it is the body which formulates the central development strategy for higher education, and for university development in particular, for the universities as a whole and for each university within the system.
2. As a body independent of both Government and the universities and which over the years has established a position of trust and integrity, it enjoys the confidence of both institutions. The system of block allocation to the U.G.C., in the first instance, which in turn makes block allocation to the individual universities, illustrates the measure of confidence which both Government and the universities have in the U.G.C. It is hoped that in the not distant future Government will agree to the adoption of this system in Ghana.
3. Members of the Committee realise that they serve in their independent capacity and do not therefore display any partisan interests in matters under discussion.
4. The intermediary role of the U.G.C. prevents direct friction between Government and the universities. In a developing country such as Ghana this role is even more important for Governments tend to be impatient with the universities, expecting quick and spectacular results from them and do not always understand the universities' jealous guarding of their academic freedom. The universities on the other hand tend to be equally impatient with what they consider to be the slow and bureaucratic machinery of Government.
5. The most important feature of the financing of the universities in Britain and which has a profound influence on university development is the quinquennial system of budgeting. This has advantages as well as disadvantages, the former on the whole out-weighting the latter. The chief advantages are that it allows the universities to plan with

confidence their academic and other programmes and, in as much as the recurrent grants are block grants, it gives the universities a great measure of financial autonomy and responsibility. From the Government's standpoint, one advantage is that it obviates the need for constant review of the university budget, since the Government knows its obligation for sometime ahead.

On the other hand the system has the distinct disadvantage that rising prices may eat into the quinquennial allocation. Moreover, it is not always easy to forecast what major changes may occur during the quinquennium and which may distort the budget.

The recommendation for a triennial system for Ghana universities has been rejected for the time being by the Government. This is understandable having regard to the fluid nature of the present economy. It is hoped that in better times this system will be introduced to enable the universities to plan for the future with greater confidence.

(Sgd.) E. EVANS-ANFOM
Chairman

APPENDIX III

UNIVERSITY INSTITUTIONS, FACULTIES AND DEPARTMENTS

1. There are three universities in Ghana, namely:—

University of Ghana, Legon.

University of Science and Technology, Kumasi.

University of Cape Coast, Cape Coast.

2. Each University has several departments, each of which is headed by a professor, who directs the work of the teaching staff and research fellows. The departments are grouped into faculties as follows:—

(a) University of Ghana

Faculty of Agriculture

Departments of Agricultural Economy and Farm Management, Animal Science, Crops Science, Home Science. (There is also an Agricultural Extension Division.)

Faculty of Arts

Departments of Classics, English, Linguistics, Modern Languages, Philosophy, Study of Religions.

Faculty of Law

Law

Medical School

Anaesthetics, Anatomy, Biochemistry, Chemical Pathology, Child Health, Medicine and Therapeutics, Microbiology, Obstetrics and Gynaecology, Pathology, Pharmacology, Physiology, Community Health, Psychiatry, Surgery.

Faculty of Science

Biochemistry, Nutrition and Food Science, Botany, Chemistry, Geology, Mathematics, Physics, Zoology.

Faculty of Social Studies

Archaeology, Economics, Geography, History, Library Studies, Political Science, Nursing, Psychology, Sociology.

School of Administration

Accounting, Business Management and Public Administration.

(b) University of Science and Technology

Faculty of Agriculture

Departments of Agricultural Economics and Farm Management, Agricultural Engineering and Mechanisation, Animal Production, Crop Production and Horticulture.

Faculty of Architecture

Departments of Architecture, Building Technology, Planning, Housing and Planning Research.

Faculty of Art

Departments of Painting and Sculpture, Industrial Art, Design and General Art Studies.

Faculty of Engineering

Departments of Civil, Geotechnical, Electrical and Electronic, Geodetic, Mechanical and Agricultural Engineering.

Faculty of Pharmacy

Departments of Pharmaceutical Chemistry, Pharmaceutics, Pharmacognosy and Pharmacology.

Faculty of Science

Departments of Biochemistry, Biological Sciences, Chemistry and Chemical Technology, Mathematics and Physics.

Faculty of Social Science

Departments of Economics and Industrial Management, General and African Studies, Languages, Land Economy and Estate Management. Technology Consultancy Centre.

(c) University of Cape Coast

Faculty of Arts

Departments of Classics English and Ghanaian Languages, French, History, Music, Religious Studies.

Faculty of Economic and Social Studies

Centre for Development studies, Departments of Economics, Geography, Sociology.

Faculty of Science

Departments of Botany, Chemistry, Mathematics, Physics, Zoology.

Faculty of Education

Institute of Education, Departments of Curriculum and Teaching; Educational Foundations, Science Education.

ACADEMIC DEVELOPMENTS

University of Ghana

Statistics Unit

The teaching of statistics in various Departments was brought together to form a central unit in the Faculty of Science.

Geophysical Exploration Unit

A Geophysical Exploration unit was started in the Department of Geology.

Master Programme

The first written papers for the masters degree in Business Administration, Public Administration and Ghanaian Language Studies were taken in June, 1975.

University of Cape Coast

Ghanaian Languages

A new course in Ghanaian Languages was started during the year.

West African Historical Museum

A research library was opened in the West African Historical Museum in Cape Coast. The first students for the Masters Degree programme in History were also enrolled.

Computer Services

I.C.L. Computer was installed in the Physics Department to facilitate research and to increase the effectiveness of the teaching of some subjects as well as to serve the needs of the general University Administration.

MAJOR WORKS UNDER CONSTRUCTION IN 1974-75

University of Ghana

1. Extension to I.S.S.E.R. Building
2. Science Complex
3. Students Accommodation
4. Extension to Arts Faculty buildings
5. Volta Hall (Annex) Renovation

University of Ghana Medical School

6. Library
7. Danfa rural health project

School of Administration

8. Extension to School of Administration

Institute of Adult Education

9. Awudome Residential College

University of Science and Technology

10. Central Radioisotope and Chemical Laboratories
11. Faculty of Agriculture
12. Central Classroom block
13. Pharmacy block extensions
14. Africa Hall extensions
15. Department of Housing and Planning Research

University of Cape Coast

16. Halls of residence
17. Library
18. Faculty of Arts Building

Ghana Museums and Monuments Board

19. Museums of Science and Technology
20. National Museum Extension (*Phase 1*).

UNIVERSITY STUDENT ENROLMENT BY FACULTY, SEX, NATIONALITY AND LEVEL OF COURSE 1974-75

FACULTY/INSTITUTE/SCHOOL	UNDERGRADUATE CERTIFICATE AND DIPLOMA COURSES		FIRST DEGREE COURSES		POSTGRADUATE CERTIFICATE AND DIPLOMA COURSES		POSTGRADUATE DEGREE COURSES	
	Total	Female	Total	Female	Total	Female	Total	Female
Arts	57 (1)	5 (-)	1,868 (24)	321 (6)	1 (-)	- (-)	19 (3)	4 (1)
Social Studies	130 (7)	38 (-)	—	—	7 (2)	4 (1)	52 (10)	7 (3)
Art	79 (-)	7 (-)	145 (-)	12 (-)	8 (-)	- (-)	4 (2)	1 (1)
Education	—	—	71 (-)	7 (-)	40 (-)	10 (-)	2 (-)	—
Law	14 (-)	1 (-)	184 (2)*	31 (-)*	108 (-)	7 (-)	3 (-)	—
Administration	106 (-)	8 (-)	243 (-)	24 (-)	15 (-)	—	16 (-)	—
Engineering	203 (1)	—	279 (14)	2 (2)	1 (-)	—	—	—
Agriculture	123 (4)	8 (-)	328 (4)	26 (1)	1 (-)	—	13 (1)	—
Agriculture (Home Science)	18 (-)	18 (-)	11 (-)	11 (-)	—	—	—	—
Science	166 (1)	21 (-)	863 (16)	61 (1)	5 (-)	—	38 (4)	10 (1)
Pharmacy	—	—	129 (7)	37 (2)	—	—	4 (-)	—
Medical School	—	—	361 (12)	42 (2)	—	—	—	—
Architecture	57 (-)	5 (-)	222 (8)	13 (-)	30 (-)	1 (-)	6 (-)	2 (1)
Institute of African Studies	49 (1)	15 (-)	—	—	—	—	23 (11)	5 (3)
Institute of Adult Education	6 (-)	1 (-)	—	—	—	—	—	—
I.S.S.E.R.	51 (-)	2 (-)	—	—	6 (-)	—	2 (-)	—
Regional Institute for Population Studies	—	—	—	—	18 (13)	—	9 (9)	—
Institute of Journalism and Communication Studies	—	—	—	—	10 (3)	—	6 (-)	—
Inter Faculty (Wood Technology)	—	—	—	—	—	—	9 (-)	—
All Faculties	1,059 (15)	129 (-)	4,524 (95)	554 (21)	256 (18)	22 (1)	206 (41)	29 (10)

Note:—(i) In addition to the students recorded above there were 45 students including 22 female who were enrolled as postgraduate affiliate students, or on special admission or on short refresher courses.

(ii) Figures in brackets indicate non-Ghanaians.

(iii) *These are all students who offer Law either as one of their subjects or as their only subject. They have already been counted with the Arts and Social Sciences Students with the exception of four more students who are doing the final year LL.B. (Old Syllabus).

Grand Total 6,090: Male Students 5,133 (84.3%), Female Students 756 (12.4%), Non-Ghanaians 201 (3.3%).

UNIVERSITY NON-TEACHING STAFF: 1974-75

Name of University	Senior Administrative/Professional/Technical Staff		Junior Staff
	Total	Ghanaians	Total
University of Ghana	334	329	3245
University of Science and Technology	170	165	1887
University of Cape Coast.. .. .	92	92	2224
Total	596	495	7356

UNIVERSITY TEACHING STAFF: 1974-75

Name of University	PROFESSORS/ASSOCIATE PROFESSORS		SENIOR LECTURERS		LECTURERS		GRAND TOTAL	
	Total	Ghanaians	Total	Ghanaians	Total	Ghanaians	Total	Ghanaians
University of Ghana	60	42	96	74	333	255	489	371
University of Science and Technology	29	16	47	35	197	157	273	208
University of Cape Coast	26	10	25	20	123	73	174	103
Grand Total	115	68	168	129	653	485	936	682

APPENDIX IV

CONFIDENTIAL

REPORT BY THE SECRETARY, NATIONAL COUNCIL FOR HIGHER EDUCATION ON HIS VISIT TO LONDON FOR A BRIEF ATTACHMENT TO THE UNIVERSITY GRANTS COMMITTEE 31ST AUGUST TO 15TH SEPTEMBER, 1974

Introduction

During his visit to the United Kingdom 15th-23rd June, 1974 the Chairman of the National Council for Higher Education, Dr. E. Evans-Anfom arranged with both the Director of I.U.C. and the Chairman of the U.G.C. to extend the scheme of short-term visits to and from the United Kingdom under I.U.C. sponsorship to the National Council for Higher Education. It was agreed that I should pay a visit to London during the 1st fortnight of September, 1974 to learn something of the organisational structure of the University Grants Committee Secretariat, including the schedules of assignment by the staff and to familiarise myself with the structure and functions of the Committee's Sub-Committees and to come back with that experience to help re-organise the Council's Secretariat.

2. On Saturday, 31st August, 1974 I left for London to start my orientation. My learning experience began on Monday, 2nd September, when at 10 a.m. I called to see Mr. R. C. Griffiths, Director of the I.U.C. After about an hour of preliminary discussions with Mr. R. C. Griffiths, Director of the I.U.C., I proceeded to No. 14 Park Crescent, the offices of the U.G.C. I was very warmly received by Sir Fred Dainton, Chairman, U.G.C. He informed me of the plans made for me to meet his top Senior Officers. We had interesting discussions on the U.G.C. set-up for about half an hour and we were later joined by the Secretary, Mr. Carswell. A noon welcoming Sherry party soon followed, at which time I was introduced to all the Senior staff except one or two who had not yet returned from leave.

Structure, Organisation and Functions of the Secretariat

3. In the afternoon I had a meeting with Mr. Carswell. It lasted for about 1½ hours. We discussed the structure and functions of the Secretariat as a whole. The Secretary explained that the University Grants Committee is like a jury. They take discussions on what they consider to be right and just for the development of the 43 universities for which they have administrative responsibility.

4. We also touched briefly on the following:

Earmarked Grants.—These are grants set aside to do specific new things instead of leaving them to compete with well entrenched old things—new things like Dentistry, area studies in Latin America, etc., have been funded from *Earmarked Grants*. Holding back of a small proportion of Government grants in the hands of the Council gives strength and teeth to the Council.

5. *Compensation for inflation.*—Increases in costs and prices add to the increases in Academic salaries and other costs such as salaries of technicians and municipal workers, and equipment from recurrent grants. When this happens U.G.C. negotiates with Government on behalf of the Universities on cost increases other than Government approved academic salary increases for which academic compensating grants are given. They get such money beginning in the Financial year after that in which the increases have currently been placed.

6. *Increases in University Salaries*—are determined in two stages in U.G.C.:

Stage I . . . Representatives of Staff Association meet University Vice-Chancellors under an independent Chairman with U.G.C. present in advisory capacity.

Stage II . . . Representatives of Staff Association and University Vice-Chancellors meet Government representatives with U.G.C. in advisory capacity.

7. In their particular set-up the Vice-Chancellors do not serve on the Committee because they are recipients.

The Committee's Secretariat

8. The Secretariat has three main divisions:

1. The Secretariat and Services Division Functions
2. The Finance and Statistics Division Functions.
3. The Capital Division Functions.

Secretariat and Services Division Functions

9. This Division is responsible for providing secretariat services to the Committee and its sub-Committees, for policy advice concerning the overall operation and development of universities, and for relations on these matters with the Department of Education and Science and other Government Departments.

10. It is also responsible for:—

- (a) Committee reports and returns;
- (b) Intelligence on university matters, information and press relations within the ambit of the Committee's responsibilities;
- (c) Establishment matters, including office services.

Staff

- 1 Under-Secretary—Head of Division
- 1 Assistant Secretary:

Duties.—Servicing of main Committee—preparation of minutes, and responsibility for specialist sub-committees and general policy questions

1 Principal

Duties.—Secretary to Medical and Dental Sub-Committees
Handles matters from Medical Schools.

1 H.E.O.

Secretariat—Committee Section

- 1 S.E.O. (Reports to Secretary on Establishment and Services)
Duties.—General Enquiries, Parliamentary Questions, Main Committee Agenda and visits, Publications, Library, University Charters.
- 1 H.E.O. (Reports to S.E.O.)
Duties.—Establishment matters including Registry and other office services.
- 1 E.O. Office Services
- 1 C.O. Travelling, subsistence and Establishment Check
- 1 C.A. Stationery Clerk, Leave Records Accommodation
- Typing Pool
- Messengers

Finance and Statistics Division Functions

Finance

Financial policy related to recurrent university expenditure and equipment grants.

Quinquennial/Triennial/Annual submission and the allocation to universities.

Academic salaries and superannuation

Analysis of universities' expenditure

Estimates and Accounts

69

64

Statistics

Collection, analysis and preparation for publication of university statistics.

Establishment of central individualised (I.D.) record for students and staff.

Staff

1 Assistant Secretary (Reports to Secretary), Head of Division.
Principal—General responsibility for questions of recurrent and equipment expenditure; quinquennial/Annual Estimates; Analysis of University costs.

1 Statistician—*Duties*—Collection, analysis and preparation for publication of university statistics, particularly from Form 1 (Staff) Form 2 (Students) and first destination of university graduates. Universities' Statistical Record (U.S.R.).

1 S.E.O.—Annual estimates and appropriation accounts; university salaries, wages and superannuation; all payments of grant—recurrent and non-recurrent.

1 H.E.O. for each schedule

1 E.O.—Recurrent grant;

Non-recurrent grant approvals and payments, rents from university properties.

1 C.O.—to assist.

Capital Division Functions

11. The Capital Division deals with all matters relating to Capital Development in universities. These include:

- (a) recording the sites owned by, or available to universities, establishing their potential capacity, commenting on outline growth plans and detailed development plans, and advising the Committee on grants for the purchase of new sites;
- (b) establishing and maintaining a capacity record for all university buildings;
- (c) giving advice to the Committee on the building programmes needed to meet student number targets laid down from time to time, taking into account the financial allocations made available by the Government;
- (d) scrutinizing proposals for building projects submitted by universities, discussing them in detail with the universities in relation to student number targets and other factors, and making recommendations on them as necessary to the Committee;
- (e) setting expenditure limits and controlling the progress of approved building projects in accordance with the standards and procedures laid down;

- (f) giving advice to the Committee on furniture grants for building projects, and on the distribution of the allocations approved for this purpose by the Government;
- (g) giving advice to the Committee as necessary on matters connected with professional fees for constructional work;
- (h) dealing with administrative casework on matters connected with fees, building contract procedures, and furniture grants within the lines of policy laid down by the Committee;
- (i) reviewing the existing standards and procedures as necessary.

The basic organisation of the division comprises three Territorial Teams as well as a Medical Team which are primarily responsible for all casework. All teams include administrators, architects and quantity surveyors. For territorial work however the allocation of architects and quantity surveyors does not correspond precisely with that of administrative staff.

The Staff of the Capital Division comes under the Under-Secretary (Deputy Secretary).

There are:

- 2 Assistant Secretaries, and
- 2 Professional Staff comprising:
 - 1 Chief Architect
 - 1 Chief Quantity Surveyor

with a number of supporting professional staff. The Medical Team reports direct to the Deputy Secretary.

12. The Committee meets regularly once a month throughout each year, except in August. Normally these are one-day meetings but a number of two-day meetings are held, especially in connection with the assessment and allocation of recurrent grant. In addition, the U.G.C. holds a private week-end conference each year, a practice begun in 1965, to discuss major policy issues at some length and away from the pressures of normal business meetings.

13. The U.G.C. has meetings from time to time with the Committee of Vice-Chancellors and Principals and with the Association of University Teachers. It keeps in close touch, through its Chairman and officers, with a wide range of Government Departments with the Research Councils and with other bodies and committees concerned with developments in higher education.

Visitations

14. Vice-Chancellors and other university officers are in constant contact with the Chairman and officers of the Committee about the day-to-day problems of individual universities. And the U.G.C., as a Committee, visits each university at least once in each quinquennium. On these visits the Committee has discussions with groups of

staff, students and university officials and with members of the governing bodies. No subjects of interest to the university are barred from discussion and the Committee usually leaves it to the group concerned to make the running, but for its part the Committee finds it most helpful to concentrate on such matters as plans for academic development, the balance between teaching and research, teaching methods, library services, inter-faculty and inter-departmental co-operation, channels of communication (e.g. between junior and senior staff and between staff and students), staff/student relations and student welfare.

15. The Committee is sometimes asked, on visits, to help secure more money for one particular purpose or another, or to endorse some proposal in which one of the groups is particularly interested. The Committee, however avoids intervention in matters which are for decision by the individual universities, though it may, in appropriate cases, draw them to the attention of the governing body.

16. The visits are not operational—no decisions are taken—nor are they in any sense “inspections”. They provide an opportunity for the Committee to acquaint itself, collectively and at first hand, with individual universities’ policies and problems, as seen on the ground by the various groups, and to exchange views in a fairly informal atmosphere. The general impression which is obtained of the state of affairs in each university is of real value to the U.G.C. in getting the feel of the university scene throughout the country.

17. Visits and conferences are also arranged by the U.G.C.’s advisory sub-committees in order to inform themselves of developments in their particular field and thus to fortify the advice they give to the U.G.C.

Preparation for Committee meetings

18. Generally dates for Committee meetings are fixed one year in advance. Committee members are informed of the Calendar.

Agenda.—Meetings are held by the Chairman with heads of the various Divisional/Sectional heads *three* weeks before date of meetings. Items for the agenda are submitted and discussed after which they are passed on to the S.E.O. responsible for the main Committee Agenda, who, after due preparation, circulates the draft agenda for vetting by the various heads concerned. Supporting papers are thereafter prepared by each party responsible for subject areas.

Black Thursday—is the day the Agenda papers go out to Committee members, e.i. one week before date of meetings.

Preview Meeting.—Two days before meeting day all the Heads meet the Committee Chairman and brief him fully on all items for discussion. They also discuss the handling of meeting and supporting papers.

Officers in attendance.—Officers who have prepared papers on particular subjects attend the Committee meetings and are often called upon to introduce the subject.

Council minutes.—Minutes are taken by the "Minutes man" in this case a lady Assistant Secretary and are vetted by the Secretary before they go out. All other major decisions going to the Universities are also cleared with the Secretary. The minutes are brief records of *decisions* taken and not of *discussions*.

The Sub-Committees of the Committee

19. There are 18 Sub-Committees set up on various subject areas ranging from Agriculture to University/Industry Collaboration. The Sub-Committees are:

- Agricultural Sub-Committee
- Arts Sub-Committee
- Biological Sciences Sub-Committee
- Building Standards and Procedures Sub-Committee
- Business and Management Studies Sub-Committee
- Dental Sub-Committee
- Education Sub-Committee
- Educational Development Sub-Committee
- Mathematical Sciences Sub-Committee
- Medical Sub-Committee
- Physical Sciences Sub-Committee
- Planning Architecture and Building Studies Sub-Committee
- Social Studies Sub-Committee
- Technology Sub-Committee
- Veterinary Sub-Committee
- Working Party on the Specialist Teaching of Computing Science
- Working Party on Building Services Engineering
- University/Industry Collaboration Sub-Committee.

Composition and functions

20. Most of the Sub-Committee members are co-opted as knowledgeable in their respective fields and are not members of the main committee. There are assessors from the Research Councils, Government Departments and Manpower Divisions. It would be impossible to provide the Sub-Committee structure in any other way. The Chairmen of the Sub-Committees are however members of the main Committee.

21. The Sub-Committees are purely in an advisory capacity. They do not take decisions. They bring in their expertise to bear on the Committee's work, and give a great deal of guidance as to which direction the Committee is to move.

22. They visit the universities frequently to see what their problems are—the main purpose of which is to enable members to inform themselves about the development in the universities and thus to fortify the advice they give to the Committee in their particular subject area. It is not always practicable to arrange for every Sub-Committee to visit all the universities which have activities falling within its field of interest. There are cases in which visits are arranged at the request of a University seeking advice on a particular problem or area of study.

23. Some sub-committees make few visits and decide instead to keep in touch with developments in their fields of interest mainly by means of conference of regional groups of universities. These conferences provide opportunities to discuss problems of mutual interest to communicate ideas and provoke rethinking and to acquaint the academic staffs in the fields concerned more fully with the policies and work of the U.G.C.

Secretariat

24. Each sub-committee has a Secretary assigned to it from the Secretariat. It so happens that one Secretary may be serving 3 or 4 sub-committees.

The Grant System

25. The U.G.C. grant list covers 43 universities (34 in England, one in Wales and eight in Scotland) and two business schools. The grant list includes the Universities of Oxford and Cambridge but their individual colleges are not supported by U.G.C. grant. The total population of full-time university students was 244,728 at the beginning of the academic year 1973-74.

26. The U.G.C. prepares the case to the Government periodically for the overall financial needs of the universities, after examining the universities' own estimates and proposals. The total sums to be made available are fixed by the Government; but the U.G.C. decides the allocation of these total sums between the individual universities. The financial assistance provided by the Government to the universities through the U.G.C. covers three broad categories of expenditure; recurrent, non-recurrent and equipment. The U.G.C. is not concerned with grants to individual students or with students' union subscriptions.

(i) Recurrent Grants

27. These are for expenditure on staff salaries, running costs of departments, laboratories, libraries, maintenance of premises and so on. The total amounts are determined by the Government for periods of five years at a time and these are allocated as between

individual universities by the U.G.C. as annual sums (covering the academic year 1st August to 31st July) for each year of the five-year period. The present five-year period runs from 1st August, 1972 to 31st July, 1977. The total recurrent grants announced in December 1972 rise from £295.5 million in 1972-73 to £367 million in 1976-77.

28. The total amount of grant is not normally increased during the period of the quinquennium, except to help meet: (a) costs reflecting major changes in Government policy, for example on the desired rate of expansion in students numbers; (b) the cost of such increases in academic salary scales as are approved by the Government; (c) such claims for rises in prices, on the basis of an index of university costs (at present prepared by Professor A. J. Brown, of Leeds University), as are accepted by the Government after considering representations submitted from time to time by the U.G.C.

29. Special earmarked grants are made by the Government (outside the recurrent grant settlement) to cover universities' liability for rates (about £13.5 million annually).

(ii) *Non-recurrent Grants*

30. These are for four specific purposes—for financing approved building work, for the purchase of sites and properties, for the payment of professional fees and for the furnishing of buildings not covered by the new furniture/equipment grant. The first of these is by far the greatest in terms of annual expenditure, and also largely determines the requirements of the other three. The Government fix the total value of grant-aided building work which may be started within a given financial year (beginning on 1st April). The distribution of university building programmes within the total is decided by the U.G.C. which is also responsible for controlling standards and costs. The annual programmes for commencement of building were £27.8 million for 1972-73 and £42.1 million for 1973-74. Later programmes are under review.

(iii) *Furniture/Equipment Grants*

31. A new system for awarding grants for the purchase of equipment for teaching and research came into operation on 1st April 1968. Before then grants had been available only for the initial equipping of new accommodation: universities had had to provide for the replacement and renewal of equipment from their recurrent income. Under the new system each university was provided with an annual sum of money fixed for a period of years in advance related in the main to the number of students in the university, to cover both initial equipping of new buildings and replacement of existing equipment. From the beginning of the academic year 1973-74, these grants were combined with a new system of furniture

grants which take the form of an indicated sum within a combined block grant for furniture and equipment. Each university is provided with an annual sum of money fixed for a period of years in advance and related to the building programmes and number of students in the university. Universities are free to accumulate the money in a furniture/equipment grants rise from £26 million in 1972-73 to £37 million in 1976-77.

32. Provision has been made in the Supply Estimates for the financial year ending 31st March, 1975 for total capital expenditure of just on £69 million (i.e. including building work, purchase of sites and properties, fees, furniture and equipment).

The Planning of University Development

33. In assessing the financial needs of the universities, the U.G.C. has to take account not only of the plans put forward by the individual universities themselves but of other factors such as the demand from students for university places, national needs for qualified graduates and the likely availability of resources.

34. The U.G.C. is therefore closely concerned with the pattern of the future size and balance of the universities, in terms both of student numbers and of resources. It is the U.G.C.'s responsibility to formulate a broad central strategy of development, for the universities as a whole and for each university within that whole. This involves the U.G.C. in a close and continuing dialogue, on the one hand, with the universities both collectively (through the Committee of Vice-Chancellors and Principals) and individually, and on the other hand, with the Government; in the collection and analysis of a wide range of statistics about university numbers and costs; and in giving universities as clear and positive guidance as possible about the pattern of development envisaged.

Statistics of University Staff and Students

35. At the beginning of the autumn term 1972, there were 240,913 full-time students attending universities in Great Britain, their numbers being distributed as follows—

Undergraduate level or below	196,073
Postgraduate level	44,240
Total	<u>240,913</u>

This represents an increase of 2.8 per cent over the comparable figures for 1971.

The numbers of full-time teaching and research staff who were paid wholly from university funds were as follows:

Professors	3,560
Readers and senior lecturers	6,323
Lecturers and assistant lecturers	19,147
Others	961
Total	29,991

Quinquennial Grant Allocation, 1970-77

36. The White Paper "Education: A Framework for Expansion" (CMnd 5174) announced the Government's decisions on the quinquennial recurrent and equipment grants as follows:

Academic Year	Recurrent grant £million	Equipment grant £million
1972-73	252.0	23.5
1973-74	263.0	24.5
1974-75	276.0	25.5
1975-76	292.0	27.0
1976-77	309.0	29.0
Total	1,392.0	129.5

These figures were based on pay and prices at the time of submission of the universities' quinquennial estimates, i.e. July 1971, and had to be adjusted for subsequent price and salary movements up to mid-1972-73. Furthermore, various administrative changes had been made; as recorded in the 1971-72 annual survey, it was agreed to transfer from universities' building allocations to recurrent grant an amount to cover minor works; to enable greater flexibility of resource allocation a part of announced equipment grant was transferred to recurrent grant to be spent on equipment or otherwise at university discretion; and new furniture grants contain an element deducted from recurrent grant representing what would have been spent on replacement of furniture.

	1972-73 £m	1973-74 £m	1974-75 £m	1975-76 £m	1976-77 £m
(a) Quinquennial settle- ment ..	252.000	263.000	276.000	292.000	309.000
(b) Supplementary grant, price and academic salary increases to January 1973 ..	50.900*	48.500	51.750	54.750	58.000
(c) Amounts for minor capital works ..	—	4.538	4.557	4.557	4.557
(d) Transferred from quinquennial settle- ment of equipment grant ..	—	0.675	0.700	0.738	0.800
(e) Less transfer from re- current grant to furniture and equip- ment grant ..	—	1.500	1.570	1.658	1.750

*Includes retrospective addition of £7.4 million to cover the effect on expenditure in that year of price increases which occurred during the academic year 1971-72.

Universities were notified of their recurrent and equipment grants in individual letters dated 15 January, 1973. The letters indicated the number of students in 1976-77 which the Committee had used as a basis in calculating the grant for the university concerned and other developments which had been taken into account and included a memorandum of general guidance applicable to all universities.

37. The sums of money made available to the Committee were related to the expectation that there would be 306,000 full-time students in universities in 1976-77. Of these the Government expected 17 per cent to be postgraduate students. This involved a rate of growth for postgraduate students of only about half that for undergraduates whilst in the past decade the numbers had increased far faster than those for undergraduates. The universities in their estimates had asked for a continuation of previous trends and the upshot was that the Committee were able to make financial provision for only about 40 per cent of the increase in postgraduate students desired by the universities. This meant that the Committee had to consider whether to allocate grants on the assumption that the reduction in postgraduate numbers in comparison with universities' estimates would be affected in equal measure over all disciplines and over all universities or whether some discrimination would be necessary. They concluded that the reductions below universities' estimates of growth rates should be smallest in medicine, social

studies and business studies and greatest in physical and biological sciences and in technology. Similarly, in making assumptions for individual universities, they have sought to make room for reasonable growth in those universities with relatively low proportions of postgraduate work. In order to make clear to universities the effect of this judgment on the relative growths of postgraduate work in different subjects, the postgraduate student numbers for 1976-77 on which growth was based were indicated subject by subject, whereas the numbers of undergraduate students were divided only between arts and science.

38. The Committee came to the conclusion that, having set some money aside for reserves and taking into account the changing proportions of undergraduate and postgraduate students and of arts and science students, the grants available would lead to a reduction of resources per student in real terms to 98 per cent of the level applying in 1971-72. Thus the settlement constituted a less generous one than in previous quinquennia. Hitherto there had been provision for what could be said to be an "improvement factor" but now the Committee had to make it clear to universities that they were facing a period in which an economy factor would make it necessary for them to concentrate their expansion as far as possible on the building up of existing departments with very little room for developments other than those strictly relating to the increase in the numbers of students. Within this general pattern of a fall in resources per student the Committee made their distribution in the expectation that there would be an increase in resources per student in medicine and in social and business studies and a decrease in science and technology. In the case of medicine it was necessary to make provision that would facilitate the adoption of those recommendations of the Royal Commission on Medical Education that affected the University of London. In social studies it was hoped to allow for an improvement in staff-student ratios; in science and technology, on the other hand, the Committee took the view that there should be some scope for economies of scale. Although the Committee expect to see these changes in the university system as a whole, they are not of course precisely applicable at any particular university.

39. After the allocation of grant in January 1973 the following supplementary grants were made to a few universities to enhance their block grants because of special problems occurring particularly

in the earlier years of the quinquennium which the Committee were persuaded were insufficiently allowed for in the original allocation:

£1,000's

	1973-74	1974-75	1975-76	1976-77
University of Bath	53	—	—	—
University of Dundee	90	90	45	—
Heriot-Watt University	306	42	18	—
University of Leicester	100	70	50	30
University of Manchester	700	200	100	—
University of Southampton	360	145	125	85
Strathclyde University	70	35	—	—
University of Surrey	70	—	—	—

39. In allocating recurrent grants for the 1972-77 quinquennium the U.G.C. gave each university:

- (i) a statement of the student numbers (distinguished between undergraduates and postgraduates, and between arts-based and science-based students) on which the grant for 1976-77 had been calculated;
- (ii) a memorandum of general guidance on the broad picture of university development in the five-year period;
- (iii) comments on proposals put forward by the individual university which the U.G.C. wished particularly to encourage or discourage.

University Budgetary Autonomy

40. Recurrent grants are given in the main as annual block grants, without strings. Each university determines the internal disposition of its grants as a matter of its own budgetary autonomy. This block principle is regarded as necessary to ensure a proper degree of freedom to universities in the conduct of their academic affairs and to avoid the 'management' of the universities by the U.G.C. No attempt therefore is made to lay down in detail from the centre how much of a university's grant should be spent on this or that department, on this or that activity, on teaching or research. (Earmarked grants are occasionally made in order to stimulate a particular development; but they are incorporated in the block grants as soon as possible.)

41. The freedom of discretion afforded to universities by the block grant principle is qualified in practice by convention. Universities accept that it is the U.G.C.'s business to set the general strategy and that, while they are free to plan their own development in

the light of their particular circumstances, they have a responsibility for exercising this freedom within the framework of national needs and priorities, and in the light of the guidance, general or particular, given to them by the U.G.C. This is a well-established convention and it is an essential part of the "U.G.C." system.

42. Non-recurrent grants are earmarked in the sense that they are given for specific capital projects and cannot be used for a different project except with the consent of the U.G.C.

43. Equipment grants are block grants and universities have full discretion to spend them as they wish.

Planning Norms for Budgeting

44. In my discussions with Mr. Neville Thomas, I gathered that Unit costs can be built up only on the basis of the experience of the unit and comparative analysis of the costs of different institutions. A necessary prerequisite therefore is for the accounts of the institutions involved to be prepared on a comparable basis. This means that types of expenditure should be closely and consistently defined and attributed to the standard heads of account. So far as possible heads of expenditure should be related to objectives, e.g. administration, maintenance of premises, academic departments. In so far as these are sub-divided they should still primarily be on an objective basis as distinct for example from too fine a division of staff costs. In respect of expenditure in academic departments similar departments should be grouped together in subject groups for the purpose of aggregating their expenditures. The way in which departments are grouped into "subject groups" would be for local judgment. One of the factors would be a realistic assessment of how accurate forecasts of future student numbers by types can be. So far as the Council is concerned it is little use having a unit cost of chemistry departments if one can only predict future numbers of Science students not further differentiated. One would have to watch whether this grouping cut across the established faculty structure of any institutions.

45. Similarly so far as student numbers are concerned they should be classified by subject group in a way that allows a direct comparison with the expenditure in the departments on their education and supervision. This may not be easy because some courses may require the deployment of staff and facilities in more than one academic department. This means that students may have to be classified not only according to the courses they are on but on the load they represent on the departments. It may be therefore necessary to arrive at consistent conventions agreed by all the institutions as to how this should be done.

46. For the purpose of relating student numbers to expenditure it may not only be necessary to consider their subjects but also the level of work. In Great Britain the U.G.C. I was told has not felt the need to do more than distinguish between undergraduate and postgraduate work but if it were thought in Ghana that there were significant differences between first year and final year work for example it might be necessary to distinguish the student load accordingly.

47. It would obviously facilitate the work to be done during the visit to Ghana by Mr. Thomas if some preliminary consideration could be given to these problems and the universities informed in advance.

Meetings with Schedule Heads

48. It was arranged for me to meet representatives of the major Divisions in the Secretariat and to discuss with them their schedules. I also had talks with some of the professionals in the Secretariat—the Chief Quantity Surveyor and the Chief Architect. The Committee has a full-time Chief Quantity Surveyor and a Chief Architect with their supporting staff. Together, they have worked out Planning norms for the universities based on unit Area and unit costs. They play the role of a "watch-dog" by setting limits, controlling and ensuring that money is not overspent, or spent within reasonable limits.

Conclusion and Recommendations

49. I must end up the way I started, by expressing my profound gratitude to the Chairman of the National Council for Higher Education for his initiative in arranging this "attachment" to the U.G.C. for me. Brief, though it was, I have learned immensely within the fortnight I was in London and I found the visit useful and rewarding. I am also most grateful to the I.U.C. for paying my return-fare, and to the U.G.C. goes my special thanks for the warm hospitality given to me and the opportunity of meeting the Chairman, the Secretary and other top officials of the Committee with whom I had fruitful discussions.

Staff

50. I am more than ever convinced of the need to have a strong cadre of staff both administrative and professional in the Council's Secretariat. And here I recommend for serious consideration the employment of an experienced Accounting Officer, a Statistician and a Quantity Surveyor. The argument that it is too early to have professionals attached to the Council should be dismissed, especially if it is considered that the Council will have to depend on the very universities who are also the clients to give professional advice.

Triennial System for Ghana

51. The Triennial system will surely help both the Government and the universities in planning and budgeting. A triennial plan has so many advantages including feeding back to the universities intake of students. On the other hand one year budgeting amounts to "fiddling about" year after year, and does not help forward planning of academic and other programmes.

52. Council should consider taking up the matter again soon with Government and to stress the advantages in having a triennial allocation for our three universities.

Council Representation

53. While in Britain, I observed that Vice-Chancellors are not represented at the U.G.C. thus vested interest on issues before the Council is avoided, and decisions are taken on non-partisan basis. I therefore recommend that at some future date the Council, may wish to review the situation by recommending to Government the appointment to the Council of serving academics in their personal capacity.

54. The views and aspirations of the Vice-Chancellors can be ascertained if Council institutes a meeting with the Committee of Vice-Chancellors and Principals from time to time.

Visitation

55. The system of visitation has its merits and it is recommended that visitations should be a regular feature in our set up for Council members (as many as can find the time) to visit all three universities at least once in two years.

Setting up of Sub-Committees

56. In addition to the Finance Committee, Council may wish to set up a sub-committee on Building Standards and Procedures, Agricultural Sub-Committee and may be University/Industry Collaboration Sub-Committee to consider Research development, Consultancy and Course development.

Planning Norms for Budgeting.—This will be gone into in some detail when Mr. Thomas arrives. An itinerary for Mr. Neville Thomas' visit will be prepared in consultation with the three Universities. Mr. Thomas' view on planning norms embodied in my report will have to be communicated to the universities in advance to facilitate his work when he arrives in November. The Secretariat itself needs an experienced Accounting Officer, and steps will be taken to recruit one as early as possible. This should be our priority No. 1.

Re-organisation of Council's Secretariat

57. I am working out separately a schedule of duties for the approved staff of the Secretariat. My next task is to find the men to fill the vacancies to carry out the work of the Council effectively and efficiently.

20th September, 1974.

(Sgd.) J. B. LOMOTÉY
Secretary.

84

79

APPENDIX V

GHANA NATIONAL COUNCIL FOR HIGHER EDUCATION
UNIVERSITY RECURRENT UNIT COSTS AND BUDGET
CONTROL REPORT

by MR. N. P. THOMAS

My terms of reference were to help the officers of the National Council for Higher Education and the three universities to work out procedures for establishing unit costs based on the U.G.C. pattern and to advise the Secretariat of the Council generally on budget control procedures.

2. Mr. R. C. Griffiths had already produced a report suggesting that line-by-line annual scrutiny of the universities' estimates should be abandoned and that overall assessment of universities' recurrent needs by reference to the growth in student numbers should be possible. He had indicated the desirability of having a three-year planning system if future financial requirements could be objectively assessed by reference to unit costs and projections of future student numbers. However, he pointed out that if an annual system of financing continued an assessment of needs by reference to growth in student numbers and related costs would still be desirable. He had suggested that as a preliminary measure a small working party consisting of the three university Registrars or Finance Officers under Council chairmanship should be set up to agree on consistent practices and conventions in expenditure categorisation.

3. Very little progress has been made on this suggestion, not because of any difficulty in principle, but, as I see it, partly because of the absence from the staff of the Secretariat of an officer who could discuss the problem on level terms with the university officers and partly because the press of day-to-day business has precluded the Finance Officers from giving more than preliminary consideration to the problem.

4. It does not need much effort to revise the estimates form. Nearly all the essential financial information is already embodied in the first sheet. What is required is—

- (1) a set of guidance notes which ensures that so far as possible universities classify similar expenditure consistently;
- (2) the abolition of the heading "Allocations for central fund earmarked for specific purposes" and agreement through the notes referred to at (1) above about the way the various expenditures hitherto put under this heading should be distributed to other headings;

- (3) consideration of whether the cost of municipal services should be brought out more clearly instead of being covered in part by both sub-heads (e) and (f) of Head A;
- (4) the substitution of the present voluminous and indigestible backing tables by simple ones so that the past and proposed total expenditure by each faculty could readily be seen.

It should not be overlooked that the estimates of the Medical School, the School of Administration, School of African Studies and College of Art, Kumasi, will have to be brought in line.

5. A meeting of Registrars and Finance Officers (including the Pro-Vice-Chancellors of U.S.T., Kumasi) was held at State House on 14th November. Agreement was reached to press on with the programme suggested in paragraph 4. This meeting also had before it draft tables to be added to the Estimates which would show past and proposed student numbers in terms of student load in relation to new entrants and populations and past and proposed numbers of academic staff. It was agreed that completion of these tables provided no real difficulty and in principle this would be done. Some further discussion might be needed on details. It was agreed that accompanying notes further explaining the concept of student load would have to be prepared.

6. If these changes are pursued with vigour further work on unit costs and staff/student ratios (which are merely another means of trying to relate student numbers to an important part of the resources required) will be possible in time for the 1975-76 Estimates exercise. However, it must be realised that the use of unit costs in the submission to the government could be in more general terms than in the procedures for determining individual grants to the universities. I have attempted to bring this difference out by supplying in the Appendices a model of a new style submission to the Government on the one hand a discussion on the use of unit costs for purposes of comparing resources in the universities on the other. (This has been done on the basis of existing and rather inadequate data, and the figuring is illustrative not definitive.)

Model New Style Submission to the Government

7. This model is drafted in terms of one university as it was simpler for me to extract the figures from a single set of Estimates but if it is agreed now that the Ministry of Finance would accept a single submission for all university institutions it should be possible to prepare it in a similar style with aggregate figures. It is not very different from the general and particular memoranda already submitted but elaborates the analysis.

8. The most important lesson to be drawn from the model is that in practice the cost of student expansion (which is where unit costs might be relevant) is likely to be quite modest in relation to the cost of inflation plus the cost of non-inflationary pay increments.

9. The increasing cost of existing commitments is discussed in a letter of 16th April, 1974 from Mr. Banga on behalf of the three finance officers. As was recognised when it was passed on to the Ministry of Finance, this is an important letter. It should therefore be subject to critical scrutiny. It is necessary clearly to distinguish between the cost of salary increases. The former is not related to inflation and happens even if salary scales are not revised. The second is related to the general rate of inflation in the country. The cost of increments (known familiarly in Britain as "incremental creep") is put in Mr. Banga's letter at 5 per cent. I think this is an overestimate. The cost of an annual increment at the middle of the present lecturer's scale is about $3\frac{1}{2}$ per cent of the salary at that point. Some staff will not have increments because they are at maximum, others, like professors, do not have scales. I have no knowledge of pay rates for other staff but it is unlikely that increments as a percentage of average pay could be greater than for lecturers. Thus $3\frac{1}{2}$ per cent used in the new model submission itself might be in the high side and might be challenged by an alert Ministry of Finance. The cost of senior staff increments at the School of African Studies appears to be 2.7 per cent. Therefore there should be discussions with the universities to arrive at a better formula for measuring this effect. (It is also necessary to check that increments are 60 per cent of total expenditures; I could arrive at 48 per cent but may have missed something.)

10. It is not very satisfactory just to assert that the rate of inflation affecting university purchases is so much without supporting evidence. There should be discussions with the Ministry of Finance and the Central Bureau of Statistics to ascertain whether there is any index already in existence which could be regarded as measuring or could readily be adapted to measure the rate of inflation in university costs so that past experience could be projected. Such an index evidently existed (see Appendix VI of the 1970 Report on Salaries of academic and administrative staff) but it is understood from the Ministry of Finance that there are difficulties in keeping it up.

11. Thus it will be seen that there are three ingredients in the submission to the government.

- (1) the incremental effect on emoluments at constant salary scales;
- (2) cost of inflation;
- (3) academic development associated with student numbers expansion.

In the model submission I have related the £176,000 proposed by N.C.H.E. for development to student expansion although the amount was an act of judgement and not actually calculated that way. Mr. Griffiths has already pointed out (paragraph 9 of his report) that the unit cost of additional students may be less than that of the existing body of students. In Britain it is possible to quantify this difference because we have a large number of cases by which to compare the costs of departments of different sizes. In Ghana this is not possible. So instead of the marginal unit cost giving a clue to the provision necessary for student expansion it looks probable that the cost will continue to be an act of judgement, the marginal cost worked out as a percentage of the average cost and the difference brought out as a virtue, as in the model submission.

Allocation of Resources to Universities

12. Appendix 2 shows some calculations of unit costs derived from existing data. These are illustrative only; more satisfactory calculations will be possible when the improved data discussed in paragraphs 4 and 5 have been obtained. It is likely that when better figures are available there will still be difference in unit costs for apparently similar activities as illustrated in Appendix 2. These should not be taken at their face value but considered critically. Differences can arise for at least three reasons. For example:—

- (1) there might be sound academic grounds for different costs arising from differences in the course as between one university and another;
- (2) there may remain inconsistencies in the data, even under improved arrangements designed to secure consistency;
- (3) one university may be performing more efficiently than another.

Reasons (1) and (2) have to be considered before the truth of (3) is assured. The considerations under (1) can only be assessed by the academic members of the N.C.H.E. Differences under (2) may be illustrated by reference to library expenditure. These may arise because the expenditure on departmental libraries is classified at the university but not at others as departmental expenditure and not as library expenditure. This sort of problem will reveal itself from time to time as returns are analysed and there must be provision for revision of the notes for completion of the estimates from time to time.

13. Having established that the unit costs have some validity they are then available for two uses:

- (1) to see what the effect on past unit costs at a particular university would be of accepting any part of the development proposals put forward in their estimates;

- (2) to give guidance on whether the adding of additional expenditure to a baseline representing expenditure in the previous year represents an equitable distribution of resources between universities or would perpetuate past inequities. If the N.C.H.E. were satisfied that the fact of inequities had been established care would have to be taken about how this should be put right.

General

14. I have been conscious that much of my work has been done in the abstract, in the sense that I have not been able to study the economic and administrative context in which the N.C.H.E. will have to work. This report may therefore be peripheral to the immediate practical problems that will confront the N.C.H.E. I would strongly urge that any figuring in this report should be regarded as purely illustrative of what can be done to use quantitative methods to help solve resource distribution problems.

15. What is wanted is a comprehensive body of data. There is already much information available but it is not organised for easy reference nor are the parts related to each other. For example when the universities were asked in a special request for trends of intake into the various faculties U.S.T. merely sent back pages from their normal set of statistics that were already available with the Secretariat. (Incidentally some of the other information sought at the same time was not apparently sent but there has been no follow up). I therefore strongly urged that the existing staff of the Secretariat consider at once what would be involved in setting up a management information section so that all relevant figures—finance, students, academic staff, physical capacity, empty places, new residential places and new academic faculties under construction and when they will be completed, census information on future numbers of the age group relevant to university entrance, data from the Ministry of Education on the percentage of the relevant age group who have obtained "A" levels in the recent past, and so on. There is no need to try to set up from scratch an elaborate collection system. Existing sources should be used—universities' statistics, handbooks, calendars, replies to *ad hoc* enquiries on files, personal contact with other departments and official publications. Work priorities in the office must, of course, be settled by the Principal Secretary but I believe Mr. Adofo would be quite capable on getting this started in the remainder of his term with the Secretariat.

Summary of Recommendation

16. (1) the Working Party of Finance Officers and Secretariat of N.C.H.E. should conclude the work on improving the form of Estimates (para. 4);

- (2) attached to the Estimates should be tables showing student entries, student population as "load", and academic staff numbers (para. 5);
- (3) procedures for arriving at the cost of "incremental creep" more accurately should be investigated (para 9);
- (4) the rate of inflation should be properly indexed (para. 10);
- (5) the form of the Estimates and the notes for their completion should be kept under review (para. 12);
- (6) a start should be made on the setting up of a "management information" section (para. 15).

(Sgd.) N. P. THOMAS
Head, Finance Branch, U.G.C., London

APPENDIX VI

APPIAH REPORT

The Chairman,
National Council for Higher Education,
Accra.

Dear Sir,

PROPOSED COURSE IN AGRICULTURE AT CAPE COAST UNIVERSITY

IN accordance with the decision taken at the Council meeting held on the 4th October, 1974, we have examined the estimates submitted by Cape Coast in connection with the proposed course in Agriculture, in comparison with the estimates from Legon and Kumasi, and these we hereby submit.

We visited Legon on the 1st November and Kumasi on the 8th November and held discussions with the Vice-Chancellors and the Deans of the Faculty of Agriculture of the two Universities. We also interviewed the First, Third and Final year students of the B.Sc. Degree course in Agriculture, and inspected the facilities available for teaching Agriculture at the two Universities.

We visited Cape Coast on the 12th November and held discussions with the Vice-Chancellor and a number of the academic staff on the proposed course. We attach as Appendix A the revised estimates for the proposed degree course (both recurrent and capital, for the period 1975-76 to 1978-79 during which UNESCO will be participating and for 1979-80 when UNESCO will withdraw from the scheme and the full financial burden will fall on Cape Coast alone.

Legon

The Faculty of Agriculture at Legon offers a three-year General B.Sc. (Agric) Degree Course. This used to be a four-year course, but this was reduced to a three-year course after the *coup* in 1966. The Faculty comprises Four Departments, namely:

- (a) Department of Agricultural Economic and Farm Management sub-divided into:
 - (i) Division of Agricultural Economics
 - (ii) Agricultural Engineering
 - (iii) Agricultural Extension.

(b) Department of Animal Science

(c) Department of Crop Science:
Soils Division.

Crop Science Division.

(d) Home Science Department.

The Faculty has well equipped teaching and up-to-date laboratory facilities, which are already proving inadequate, and has access to the University's three farms at Nungua, Kpong and Kade, where research into various aspects of animal health, nutrition and production is undertaken. The present student intake is 55 and in order to increase this to 70, it will be necessary to incur capital expenditure to improve upon the existing facilities which were meant to cater for only 25 students when the University was built in 1948.

The Faculty also maintains a library which has a good collection of standard textbooks as well as journals.

The Faculty has the following Academic Staff:—

Professors	.. .. .	3
Senior Lecturers	.. .. .	12
Lecturers	.. .. .	25

Graduates in Agriculture from the University are under no obligation to enter the teaching profession after graduation, and in fact less than 1 per cent of the students interviewed by us expressed the desire to take to teaching as a career after obtaining their degree. Many of them wanted to enter the farming world and some to work as research officers on agricultural projects or join the Banks or financial institutions or the Ministry of Agriculture. The main reason given for this apparent lack of interest in teaching was financial.

We attach as Appendix B the revised Estimates for running the Faculty as well as the estimates for increasing the present intake to 70.

Kumasi

The Faculty of Agriculture offers a four-year Hons. B.Sc. (Agric.) degree course with facilities for specialisation in the fourth year in any one of eight subjects. For the field of specialisation two ancillary subjects are taken by the candidates and a project work is undertaken for the field of specialisation chosen.

The Faculty has adequate facilities for teaching and laboratory work. It also has a Farm covering an area of about 300 acres.

Professors	..	..	2
Senior Lecturers	..	..	8
Lecturers	..	..	25
Technical Instructors	..	..	5
			40

We attach as Appendix C estimates of the cost of running the faculty on the present student intake, and the estimated cost if the intake is to be increased to 80. Like Legon there would appear to be the need to incur capital expenditure to improve on existing facilities if the student intake is to be increased.

Graduates from the University are under no obligation to take to teaching as a career after qualifying, for the same financial reason given at Legon by the students.

Cape Coast

Cape Coast is a purely teaching University and its primary purpose is to produce graduate teachers in Arts and Science subjects for the country's Secondary Schools, Teacher Training Colleges, Polytechnics and Technical Institutes. Accordingly education plays an important part in its curriculum, and all students entering the University are under an obligation to teach, after obtaining their degree, at any of the Secondary Schools and Colleges in the country.

The proposal put forward by Cape Coast is to enable the University to set up a Faculty of Agriculture to produce graduate teachers who will teach Agriculture in secondary schools and colleges.

The cost of running the Faculty during the first four years will be borne jointly by Unesco and the University and from the fifth year onwards the cost will be borne entirely by Cape Coast.

Unlike Legon and Kumasi all entrants to the course will on qualifying be obliged to take to teaching as a career in the secondary schools and colleges and will teach Agriculture in these institutions.

Cape Coast has more than adequate facilities for teaching and laboratory work than it can fully utilise at present, and no capital expenditure will require to be incurred in the foreseeable future.

The special appeal which the Cape Coast proposal commands is that right from the beginning all those entering the course will be obliged to take to teaching on completion, and this will make for better planning of the manpower requirements of the country in this particular field of agriculture. On this score alone the proposal has much to commend itself.

Since Agriculture occupies a key place in the priority sector of the economy, and it is the intention of Government therefore to make a drive for the recruitment of graduate teachers in Agriculture in secondary schools and colleges, the Cape Coast scheme appears to be the only sure way of obtaining teachers in their numbers to teach in the secondary schools, colleges, etc., we would recommend seriously the Cape Coast scheme to Council for approval.

The estimates submitted for the scheme take the following into account:—

Intake of Students.—This will be 25 for 1975-76; 40 for 1976-77; 55 for 1977-78 and 70 for 1978-79. During the 4th year the total number of students on the course will be 190. We are satisfied that student intake will pose no problem.

Academic Staff.—During the four years the total number of staff will be eight on the establishment plus four provided by UNESCO and five part-time lecturers, giving a staff student ratio of 1:11. After the 4th year, the UNESCO Lecturers will be replaced by further appointment to the establishment.

Equipment.—Apart from the University's own resources, UNESCO will provide an equipment grant of C\$510,512 for heavy equipment, including two land-rovers.

Transport.—The University will provide one 60-seater bus at a cost of C\$70,000 in 1976-77 in addition to the two land-rovers mentioned above.

—Details of cost may be summarised as attached.

(Sgd.) JOE APPIAH
Council Member

(Sgd.) HARRY A. DODOO
Council Member

91

APPENDIX A

UNIVERSITY OF CAPE COAST

REVISED AGRICULTURE COURSE BUDGET—RECURRENT EXPENDITURE

	1975-76		1976-77		1977-78		1978-79					
	UNESCO U.C.C. Total		UNESCO U.C.C. Total		UNESCO U.C.C. Total		UNESCO U.C.C. Total					
	£	£	£	£	£	£	£	£				
1. General Expenses ..	—	3,500	—	—	6,000	—	—	12,000	—	—	14,000	—
2. Transport ..	—	500	500	—	1,000	1,000	—	2,000	2,000	—	4,000	4,000
3. Consumables ..	1,002	3,000	14,602	11,602	5,000	16,602	11,602	6,000	17,602	11,602	8,000	19,602
4. P. Emoluments ..	109,213*	16,076	16,076	109,213	47,417	47,417	109,213	70,889	70,889	109,213	94,957	94,957
Total ..	120,815	23,076	—	120,815	61,417	—	120,815	90,889	—	120,815	120,957	—

* UNESCO salaries not added in total.

5. Capital

(a) Transport ..	—	—	—	—	70,000	70,000	—	—	—	—	—	—
(b) Equipment ..	127,628	1,000	128,628	127,628	-2,000	129,628	127,628	4,000	131,628	127,628	5,000	132,628
(c) Furniture ..	—	2,500	2,500	—	3,000	3,000	—	4,000	4,000	—	5,000	5,000
(d) Building and Laboratory facilities ..	—	—	—	—	—	—	—	—	—	—	—	—
Total ..	127,628	3,500	131,128	127,628	75,000	202,628	127,628	8,000	135,628	127,628	10,000	137,628

* Laboratory and Teaching facilities are already available.

06

95

**COST OF COURSE AFTER 1978-79 TO THE GOVERNMENT
(FROM 1979 TO 1980 ONWARDS)**

	<i>General Expenses</i>	<i>Transport</i>	<i>Consumables</i>	<i>Equipment</i>	<i>Personal Emoluments</i>	<i>Total</i>
1979-80 onwards ..	£ 24,700	£ 19,400	£ 16,000	£ 50,000	£ 187,422	£ 288,522

TOTAL COST TO THE GOVERNMENT PER ANNUM AFTER 1978-79

<i>Intake of Students per Year</i>	<i>Institution</i>	<i>Cost per year</i>
35	U.S.T., Kumasi	184,875
35	U.C., Legon ..	459,054
<hr/>		
70	Total ..	<hr/> 643,929
70	U.C.C., Cape Coast	288,522*

* The cost is low here because Capital Equipment and other expenditure will have already been provided by UNESCO to the tune of £2556,920.

Details of costs may be summarised as follows:—

	RECURRENT		CAPITAL	
	UNESCO	U.C.C.	UNESCO	U.C.C.
	₪	₪	₪	₪
1975-76	120,815	23,076	127,628	3,500
1976-77	120,815	31,417	127,628	75,000
1977-78	120,815	90,889	127,628	8,000
1978-79	120,815	120,957	127,628	10,000
1979-80	—	238,522	—	50,000
	₪483,260	₪534,861	₪510,512	₪146,500

MAIN ITEMS OF RECURRENT VOTES OFFICE GENERAL EXPENSES

- (a) Postage
- (b) Stationery
- (c) Telephone

TRAVELLING EXPENSES

- (a) Mileage and Subsistence Allowance
- (b) Maintenance of Departmental Vehicles
- (c) Petrol Consumption
- (d) Entertainment Allowance

FLEET OF VEHICLES

Agricultural Economics	2
Crop Science	1
Animal Science	1
Home Science	1
General	2
	7

TEACHING AND RESEARCH

- (a) Chemicals
- (b) Research Materials
- (c) Maintenance of Department Equipments
- (d) Cleaning Materials

EQUIPMENT

- (a) Typewriters, Duplicating Machines, Furniture, Ca
- (b) Departmental Library Books
- (c) Laboratory Equipment.

ACADEMIC STAFF POSITION 1974-75

Department	Professor/ Associate Professor	Senior Lecturer	Lecturer	Assistant Lecturer	Total
Agricultural Economics	1	2	8	—	11
Animal Science ..	1	—	6	—	7
Crop Science	1	4	3	—	8
Home Science	—	1	2	—	3
	3	7	19	—	29

TOTALS: Associate Professors ..	3
Senior Lecturers ..	7
Lecturers ..	19
Total ..	29

Salary Scales

Professor/Associate Professor	£7,500 per annum
Senior Lecturers	£5,200 x £200-£6,400
Lecturer	£3,400 x £120-£4,540
	£4,720 x £180-£5,620.
Assistant Lecturer	£2,800, £2,900 per annum

Note.—All salary scales are under review.

APPENDIX B

**UNIVERSITY OF GHANA—FACULTY OF AGRICULTURE
REVISED ESTIMATES TO MEET INCREASE IN STUDENT INTAKE**

1. Projection of Student Intake

<i>Year</i>	<i>Present Quota</i>	<i>Proposed Intake</i>
1975-76	40	55
1976-77	40	60
1977-78	40	70
1978-79	40	75

2. Estimated Expenditure Based on an Annual Increase of 30 per cent

	<i>General Expenses</i>	<i>Transport</i>	<i>Consumables</i>	<i>Equipment</i>	<i>Total</i>
	¢	¢	¢	¢	¢
1973-74	6,020	16,700	19,000	15,500	57,220
1974-75	7,826	21,710	24,700	20,150	74,386
1975-76	10,175	28,223	32,110	26,195	96,703
1976-77	13,228	36,690	41,743	34,054	125,715
1977-78	17,196	47,697	54,266	44,270	163,429
1978-79	22,355	62,006	70,546	57,551	212,458
			Total		¢729,911
1978-79	29,062	80,608	91,710	74,816	¢276,196

3. Estimated Expenditure due to Increase in Student Intake

<i>Year</i>	<i>General Expenses</i>	<i>Transport</i>	<i>Consumables</i>	<i>Equip-ment</i>	<i>Senior Staff</i>	<i>Junior Staff</i>	<i>Total</i>
	¢	¢	¢	¢	¢	¢	¢
1975-76	13,991	38,807	4,415	36,019	—	—	132,968
1976-77	19,342	55,035	62,614	51,081	—	—	188,572
1977-78	30,093	83,469	94,895	77,473	33,200	9,000	328,930
1978-79	41,915	116,261	107,276	107,909	33,680	10,680	417,241
					Total		¢1,067,711
1979-80	72,655	201,520	229,275	187,040	34,160	10,600	= 735,250

4. Increase in Expenditure due to Student Intake

1975-79: ¢1,067,711 - ¢729,991 = ¢337,720
 1980: ¢735,250 - ¢276,196 = ¢459,054

Note:

- (1) The actual allocation for 1973-74 is used as a base.
- (2) Annual increase in the vote allocation is calculated on the basis of a yearly increase of 30% for all the Vote Heads. This percentage is taken as an average yearly increase in prices of stationery, fuel, spare parts, equipment, books, etc., some of which have gone up by over 50 per cent in recent years. Overseas orders and import duties have not been taken into account in the estimates.
- (3) From the 1976-77 session, expenditure will be increased by the addition of 4 lecturers and 8 Junior Staff (1 lecturer and 2 Junior Staff for each of 4 department) to cater for increased student numbers.
- (4) The increase in student numbers will necessitate the expansion of the student hostel at A.R.S. Nungua and the construction of one at the A.R.S. Kade. The hostel at Nungua presently takes only 25 students at a time and should be expanded to cater for about 100 students at a time. The expenditure on the hostels can however be provided for through capital expenditure as normally provided for by the University. Also additional laboratory space and lecture theatres will be catered for by general capital expenditure. These have been planned for under the normal University development programme.
- (5) The estimated increase in expenditure for 1979-80 by Legon will be C459,054. The estimated expenditure for 1980 is based on a student intake of 100. The total estimated expenditure for Legon and U.S.T. will indicate the recurrent expenditure as compared with that of Cape Coast University will have to continue to bear at the end of the UNESCO scheme.

APPENDIX C

UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI—
FACULTY OF AGRICULTURE

24th September, 1974

REF. NO. 38/EA/Vol. 2

(1) Projected Student Intake

Year	Present Quota	Proposed Intake
1975-76	45	50
1976-77	45	60
1977-78	45	70
1978-79	45	80

(2) Approximate Additional Cost (to cope with 35 more annually)

(a) Capital Cost

Additional Laboratory Space		230,000.00
Laboratory Furniture		11,000.00
Additional Equipment—		
2 Tractors	20,000.00	
Microscopes	6,000.00	
Audio visuals	3,000.00	
		29,000.00

(b) Recurrent Expenditure

	270,000.00
	320,000.00
	590,000.00

(3) Breakdown of Estimated Recurrent Expenditure

Year	General Expenditure	Transport	Consumables	Senior Staff	Junior Staff	Totals
	£	£	£	£	£	£
1975-76 ..	6,000	20,000	15,000	8,000	5,000	54,000
1976-77 ..	75,000	22,000	16,000	12,000	8,000	65,500
1977-78 ..	9,000	25,000	20,000	17,000	11,000	82,000
1978-79 ..	14,000	35,000	32,000	23,000	14,000	118,500
						£320,000

(SGD.) ? ? ?
Dean

APPENDIX VII

BAETA REPORT

SUMMARY OF THE REPORT OF THE COMMITTEE APPOINTED BY THE NATIONAL COUNCIL FOR HIGHER EDUCATION TO EXAMINE THE PROPOSAL FOR THE ESTABLISHMENT OF A MEDICAL SCHOOL AT THE UNIVERSITY OF SCIENCE AND TECHNOLOGY

GHANA is now committed to the welfare state where every individual has the right to the highest attainable standard of health. The trend therefore is toward the provision by the state of as complete a health service as possible and the inclusion within its scope of the largest possible proportion of the community, thus ensuring the distribution of medical benefits to as many as possible irrespective of economic or social circumstances.

2. The present provisional and *ad hoc* character of the teaching facilities at Korle Bu (Ghana Medical School) for the training of doctors has been a limiting factor in terms of student intake, although this has not hampered the quality of the products of the school who average about 50 a year. Were more places available in the school, a considerably larger number than is now the case would enrol for medicine. On the other hand, since the school authorities feel that it would be neither practicable nor advisable to stretch the teaching capacity of the school beyond 120 a year (a figure attainable in about 1981), and since at that rate the doctor/population ratio for Ghana in the year 2,000 would be 1:4,160, which would be far below expectation, the establishment of a second medical school in the country at the appropriate time would be necessary and, by general consensus, the natural choice for the location of this school is Kumasi.

3. The timing of the start of the school and its location are the prerogative of the Government, with its overview of the country's condition and affairs. Only the Government can decide whether the country can afford a second medical school now or at any future time. A decision on this should, however, not lose sight of the financial feasibility of the proposed schemes and the country's capacity for absorbing the doctors to be produced.

4. The Ministry of Health requires the services of many non-graduate para-medical personnel, for whose production the existing training facilities could conveniently be expanded. The establishment of a Department of Human Biology solely or mainly to train graduate para-medical personnel would be a waste of resources in

view of the small numbers of such personnel required. To justify its existence, therefore, such a Department could be established only if it were to serve as a foundation for the setting up of a medical school.

5. The University of Science and Technology has adequate physical facilities for the commencement of the course, but staffing may be a problem. It would be most regrettable, and not in the best interest of the country, however, if in setting up a new school the Ghana Medical School came to be depleted of its staff in favour of the new institution.

6. The Okomfo Anokye Hospital, despite its present congested state, has the necessary basic facilities for serving as a Teaching Hospital, and with some addition, the present staff of the hospital could handle the clinical part of a medical course. As soon as possible, however, a team of doctors, architects and others should be appointed to plan and carry out the overall modification and extension of the Hospital as a co-ordinated whole, with a view to making it a Teaching Hospital.

7. Whilst the decision to start a second medical school should be taken as soon as possible and not later than 1976, the timing of the implementation should not be rushed. Ample time should be allowed not only for careful planning but also for the present medical school to be given adequate support to get on its feet properly. 1980 would appear to be a reasonable year for implementation. Meanwhile, the emphasis should be on the expansion of the facilities and activities of the present medical school to enable it to reach its optimum output of doctors which should be 120 per annum as stated above. The decision about the medical centre at Legon should therefore be no longer delayed. The Ghana Medical School should be encouraged and enabled to accelerate its programme for the training of medical specialists, some of whom would be potential staff for the two medical schools.

8. Active steps should be taken from now on to interest the Regional and District Administrations, as well as the Local Authorities, in creating places for, and employing, their own doctors within the framework of the dispositions of the Ministry of Health.

9. After the coming into being of the second medical school, a joint permanent committee of the Authorities of the two Universities concerned, and other competent persons, should be formed, under the guidance of the National Council for Higher Education, to take in hand the planning of the academic aspects of the work of both schools, as well as any other matters of common interest relating to them.

10. The University of Science and Technology should be urged to provide more detailed and more realistic estimates of the cost of its proposal as put forward, than that contained in its present Report.

BEATA REPORT—*contd.*

Paper 27/75

REPORT OF THE COMMITTEE APPOINTED BY THE NATIONAL COUNCIL FOR HIGHER EDUCATION TO EXAMINE THE PROPOSAL FOR THE ESTABLISHMENT OF A MEDICAL SCHOOL AT THE UNIVERSITY OF SCIENCE AND TECHNOLOGY

CONTENTS

<i>Section</i>	<i>Title</i>	<i>Para- graphs</i>	<i>Pages</i>
I	Terms of Reference	1	100
II	Historical Background	2-5	100-101
III	Procedure followed by the Committee in the Conduct of its Investigations	6-8	101-102
IV	Present Position of Medical Education in Ghana	9-18	102-105
V	Plans and Targets of the Ghana Medical School	19-25	105-107
VI	Adequacy of Medical School output in relation to Ghana's Present and Future Needs	26-38	107-110
VII	Question of Para-Medical and Other Supporting Personnel	39-43	110-111
VIII	The Case for the Establishment of a Second Medical School	44-49	112-113
IX	Proposed Structure of the Medical School in Kumasi	50-56	113-115
X	The Pre-Clinical Courses	57-64	115-117
XI	Adequacy of Facilities and Staff for the proposed Medical School at the University of Science and Technology	65-68	117-118
XII	Adequacy of Facilities and Staff for the Training of Doctors at Okomfo Anokye Hospital	69-75	118-120
XIII	Financial Implications of the University of Science and Technology proposal to establish a Medical School	76-80	120-122
XIV	The Role of the National Council for Higher Education in the Rationalisation, Co-ordination and Integration of the Activities of our Universities	81-83	122
XV	Conclusions and Recommendations	84-94	122-124
XVI	Acknowledgements	95-99	125

APPENDICES

<i>Appendix</i>	<i>Title</i>	<i>Page</i>
1	List of Persons and Bodies interviewed	126
2	Present Needs and Financial Requirements of the Ghana Medical School	128

**REPORT OF THE COMMITTEE APPOINTED BY THE
NATIONAL COUNCIL FOR HIGHER EDUCATION
TO EXAMINE THE PROPOSAL FOR THE
ESTABLISHMENT OF A MEDICAL SCHOOL
AT THE UNIVERSITY OF SCIENCE AND
TECHNOLOGY**

SECTION I

Terms of reference

1. We were appointed by the National Council for Higher Education on 10th December, 1974 "to examine a proposal from the University of Science and Technology for the establishment of a Department of Human Biology as a nucleus to the establishment of a Medical School at the University and the Okomfo Anokye Hospital in Kumasi and to make recommendations."

SECTION II

Historical Background

2. In order to give us the necessary background to the proposal, the Council for Higher Education furnished us with copies of the Report of a Committee set up in May, 1974 by the University of Science and Technology on the establishment of the proposed Medical School. The first eight paragraphs of this Report set out the sequence of events leading up to the appointment of the above-mentioned Committee by the University of Science and Technology.

3. It appears that as far back as 1961-67 the Authorities of the University had contemplated the establishment of a teaching hospital at the University but were unable to implement their plans before the 1966 *coup*.

4. In 1971, however, the University Authorities appear to have entered into discussion with the Authorities of the University of Salford regarding the possibility of a Medical School being established in Kumasi. In 1972 the proposal moved a step further, following the visit of Mr. John Chadwick, Secretary-General of the Commonwealth Foundation, who in the course of a brief visit to the University gave the indication that in order to meet Ghana's requirements for doctors, it would be necessary in the near future to establish another Medical School in Kumasi in addition to the one at Korle Bu and that help in supplying the necessary staff for the School could be provided by various British Medical Schools.

It was further agreed that the most suitable structure for the proposed school would be to have a basic human biology course lasting three years and catering for both medical and science students to be followed by a further three years of clinical training for those students proceeding to medicine. It was agreed that the science students produced by the human biology course would be available after undergoing various postgraduate courses for supplying some of the nation's essential para-medical personnel.

5. It was suggested that the immediate need was to establish the basic course and that the medical course would be introduced later "when the resources of the country improve". Nothing much appears to have been done about the matter until February, 1974 when, following a statement made by the Head of State and Chairman of the N.R.C. in a speech he delivered at Tamale regarding the need for another Medical School and the possibility of siting it in Kumasi under the joint auspices of the University of Science and Technology and Okomfo Anokye Hospital, the matter was taken up again by the University and firm proposals were subsequently communicated to the National Council for Higher Education in the form of the Report to which reference has already been made.

SECTION III

Procedure followed by the Committee in the Conduct of its Investigations

6. We were informed at the time of our appointment that the matter referred to us was a very urgent one and that the Council wanted to receive our report by the end of January so that it could consider and submit its recommendations to Government early in February.

7. It was plain from this that time was of the essence and that our deliberations and investigations would have to be considerably abbreviated. We decided, therefore, that in the circumstances, it would not be possible for us to follow the usual method of issuing a general invitation to the public to appear before us or to submit memoranda. However, in order to obtain the most representative range of views in the short time available to us, we decided to interview those persons and bodies who seemed to us to have an obvious interest in the proposal, namely, the Korle Bu Medical School Authorities, the Ghana Medical Association, the Ministry of Health, the Medical Students' Association, the Authorities of the University of Ghana, Legon, one of the signatories to the University of Science and Technology Report who is not a member of the U.S.T. staff,

the University of Science and Technology Authorities, the Authorities of the Okomfo Anokye Hospital and a few other individuals known for their knowledge of medical education and medical problems generally and who we felt, moreover, could speak freely and independently on the matters before us. Lastly, we felt it necessary to interview the Director of Planning, in the Ministry of Economic Planning, in order to establish the priority which the development intended to accord to medical education during the forthcoming five-year plan period and the chances which a new medical school would have for obtaining the necessary financial support from the Government. The full list of persons and bodies interviewed will be found in Appendix I to this Report.

8. Our meetings were held in the office of the Council for Higher Education and (on one occasion) in the office of the Environmental Protection Council at Parliament House, as well as in the administrative offices of the Ghana Medical School, the Vice-Chancellor's Office, Legon, the Vice-Chancellor's Office, University of Science and Technology, Kumasi, the Office of the Hospital Administrator, Okomfo Anokye Hospital, Kumasi, and the Office of the Medical Administrator, Korle Bu Teaching Hospital. We felt that we could best arrive at a correct assessment of the current situation in medical education and of the full implications of the Kumasi proposal by meeting all those concerned with medical education and seeing the existing facilities in the Korle Bu Teaching Hospital as well as in the University of Science and Technology and the Okomfo Anokye Hospital. In addition to the various meetings we held with individuals and groups, therefore, we toured the teaching facilities at the Ghana Medical School as well as the facilities for the teaching of the basic science subjects at the University of Science and Technology. We also made an extensive tour of the Okomfo Anokye Hospital. Finally, we made a tour of Korle Bu Hospital in order to see how the facilities there compared with those at Okomfo Anokye Hospital.

SECTION IV

Present Position of Medical Education in Ghana

9. Ghana at present has one Medical School based in the University of Ghana, Legon, and in Korle Bu Hospital, which serves as a Teaching Hospital. The course as now operated covers a period of 5½ years and is made up of an initial year at Legon followed by 4½ years of professional training at Medical School at Korle Bu, after which the successful students are awarded the degrees of M.B., Ch.B.

10. In the first year, students study Animal Biology (including histology and parasitology), Chemistry (physical and organic), Physics (including biophysics), Statistics and Mathematics, Social Anthropology, and African Studies. After taking the first year examination, students proceed to the professional courses, which are divided into three stages and involve the study of the following subjects:—

- Stage I . . . Anatomy, Biochemistry, Physiology, Community Health.
- Stage II . . . Pharmacology, Microbiology (including parasitology), Chemical Pathology, Pathology (including haematology), Community Health, Medical Psychology.
- Stage III . . .
 - (a) Integrated and Clinical Courses (including Clerkships).
 - Introductory Clinical Course
 - Medicine
 - Surgery
 - Child Health
 - Obstetrics and Gynaecology
 - Forensic Medicine
 - Community Health
 - Psychiatry
 - Medical and Surgical Specialists.
 - (b) Full-time rotation clerkships:
 - (i) Sub-internship clinical attachments and
 - (ii) Community Health.

11. The first year course at Legon is given by the staff of the relevant science and social studies departments, while the professional courses at the Korle Bu Teaching Hospital are given mainly by medically qualified staff who are full-time members of the Medical School, with the assistance of a few part-time staff drawn from the Hospital itself and from other branches of the Ghana Medical Service based in Accra.

12. All non-clinical courses are completed by the end of the 3rd year of study. We understand that the reason why this 3-year course in the basic medical sciences has so far not been organised to end with a first degree in biological sciences is partly administrative, since this would make all clinical students postgraduates, and partly arises from the preference of the present staff of the school for the

first medical qualification to be a bachelor's degree, leaving post-graduate degrees in medicine to result from further study and/or research and experience, with the presentation of theses. However, the award of a degree at this stage would provide a means of salvaging the occasional candidate who, for any reasons, is unable or unwilling to proceed to the clinical course.

13. In order to prepare them for teaching appointments after completion of their medical training, some students of outstanding ability in the basic medical sciences are admitted to Honours B.Sc. degree courses in these subjects. After spending at least one year in the appropriate department of the Medical School they are sponsored for further training abroad. Four candidates are at present pursuing courses in physiology, anatomy and pharmacology on this programme.

14. In co-operation with the Korle Bu Teaching Hospital and the Ministry of Health, the Medical School likewise now runs post-graduate specialist training Residency programmes in Internal Medicine, Surgery (including Ophthalmology and Ear, Nose and Throat), Obstetrics and Gynaecology, Child Health and Pathology. It is hoped to start similar courses in Community Health, Anaesthesia and Psychiatry as soon as practicable. These programmes are of five years' duration, during which period the Residents are given graded responsibility to ensure that they are capable of independent practice as specialists at the end of their training.

15. Ghana is one of the English-speaking West African Countries supporting the establishment of the West African Postgraduate Medical College at present in process of formation. The two sections of this professional institution, the College of Surgeons and the College of Physicians, are scheduled to be inaugurated respectively in January and in November of 1975. These Colleges will prescribe training programmes for the institutions in West Africa accredited for this purpose, and conduct the examinations for the award of Fellowships equivalent to those of the British Royal Colleges. The aim is to obtain uniform standards of specialist qualification throughout anglophone West Africa. It is expected that the specialisation trainees referred to above will be certified by the West African Postgraduate Medical College.

16. Since its inception in October, 1962, the Ghana Medical School has produced some 244 doctors, and despite the obvious physical deficiencies of the School the quality of its products has been of a very high standard comparable to the best in any part of the world. It is generally agreed that one of the chief factors responsible for the outstanding success of the School is the high quality of the students who gain admission to the course. These are drawn from secondary school students obtaining the best results in science at the "A" Level examinations, most of whom place medicine

first in their choice of University subjects. As a rule, it is those students who fail to gain admission to medicine that elect to study other science and science-based subjects. Were more places available in the School, a considerably larger number than is now the case would enrol for medicine.

17. Up to the present, the annual output of doctors in the Medical School has been an average of 50. In 1974, after discussions with the Ministry of Health, the School admitted 87 new students (including 10 dental students), and it is envisaged that the annual enrolment will be gradually raised until ultimately the figure of 120 is reached. The view of the School authorities is that it would be neither practicable nor advisable to stretch the teaching capacity of the School beyond this point.

18. The Ghana Medical School has maintained close links with the Medical Education Section of the WHO Division of Health Manpower Development. It participated in its Medical Education Methodology seminar held at Kampala in 1970, and in the Medical Education workshop held at Accra in 1972 when ten key persons of the School's staff underwent concentrated course in methodology. The School was also represented at a consultation on the development of medical schools in Africa recently held under WHO auspices in Geneva, Switzerland.

SECTION V

Plans and Targets of the Ghana Medical School

19. Korle Bu is not run exclusively as a Teaching Hospital; it is a general purpose hospital under the control of the Ministry of Health and combines its normal functions with those of a teaching hospital. Apart from the hospital buildings proper there are a few buildings which have been added or modified to provide facilities for teaching and for the administrative work of the school. There are also hostels under the control of the Medical School where students taking the professional courses are accommodated. Offices and teaching space within the hospital proper are provided on an *ad hoc* basis. In addition to their normal teaching duties, the staff of the School share in the clinical work of the hospital.

20. When the school was first started the idea was to use Korle Bu as a temporary base for the professional courses until a proper Teaching Hospital could be built on a site close to Légon, but so far this plan has not materialised, although it is still under active consideration.

21. The facilities at present available at Korle Bu for the training of doctors are provisional and *ad hoc* in character and fall considerably below the physical standards obtaining in the places where most of the teaching staff received their own training. From our inspection of the facilities we were convinced that they were woefully inadequate even though, as the results of the past twelve years clearly show, they have so far provided a reasonable basis for the training of doctors.

22. The authorities of the Medical School and the University of Ghana have several plans for expansion and improvement, but these turn principally on whether or not the proposed Medical Centre at Legon, intended to incorporate a proper Teaching Hospital with fully adequate facilities for instruction in the basic medical sciences, as well as for fulfilling the other necessary purposes of a Medical School, will be built. The paucity of lecture rooms and the inadequacy of equipment are major limiting factors to the expansion of student numbers at the Korle Bu Teaching Hospital. In respect of hospital beds we understand that, since the ratio normally regarded as standard is 10 beds to each clinical student, Korle Bu's 1,500 beds and cots are fully sufficient to cater for the student numbers envisaged at present.

23. It is not proposed to confine the training of students to the Teaching Hospital alone. Regional and even district hospitals, as well as rural health posts will be utilised to provide additional training and variety of experience. To make this possible it is intended to appoint honorary or associate teaching staff based outside the Teaching Hospital.

24. With a definitive decision regarding the Medical Centre project at Legon still outstanding, it is proving extremely difficult to plan ahead effectively for the School. We have been informed that the considerable investments already made at Korle Bu in buildings and equipment, many of which cannot be transferred physically, can always be put to purposeful use by the School itself or by the Ministry of Health. The point has however now been reached where no significant further development can be undertaken without a clear knowledge of Government policy regarding the proposed Medical Centre. But at least part of the Medical School is in any case at Korle Bu to stay, and whatever the decision about the Medical Centre, steps must be taken immediately to carry out the improvements necessary to make the Hospital a viable venue for discharging the functions it has already assumed in the training of doctors.

25. If Korle Bu is to retain the Medical School in its entirety, the following additional facilities will have to be provided without delay:—

(a) *Common Services*

Administrative Offices
Library
Electronics Workshop
Transport Yard
Control Stores
New Maintenance Workshops.

(b) *Requirements for Academic Departments*

Offices for the Department of Surgery
Research Laboratories and Equipment for the Clinical and Para-Clinical Departments
Medical Education Technology Unit
Immunology Unit
Vehicles.

(c) *Housing*

50 new bungalows for staff to be phased over the next 5 years.

(d) *Requirements for Upgrading the Present Teaching Hospital into an Appropriate Referral Centre for Tertiary Health Care*

Central Pathology Building
Provision of New Facilities, e.g. Plastic Surgery Unit, Cardiothoracic Unit, and Radiotherapy Unit.
Provision of an appropriate range of Diagnostic Equipment and Drugs.

The approximate total cost of the above is estimated at C6.525 million.

SECTION VI

Adequacy of Medical School Output in relation to Ghana's Present and Future Needs

26. Doctor/population ratios have been likened to a mirage: "They seem attractive and useful when seen from a distance, but on closer inspection the substance fades away". While those ratios provide perhaps the only available basis for comparing the health services offered in different countries, their usefulness in planning health-care development or the production of doctors in any specific country is limited. In the last resort such planning must proceed

from, and be based upon, the particular circumstances of the country concerned, having regard to the entire range of its historical, social, economic, cultural and political heritage and present condition, and it must turn principally on the financial feasibility of the schemes proposed as well as the country's capacity for absorbing the doctors to be produced.

27. The first of these two key factors can only be determined by the Government in the light of its priorities in its total development plan. After all, although doctors are very important, they form only a part of the high-level personnel required for national purposes. The Government alone can decide not only the portion of the national resources that will be allocated to health care needs but also the proportion of this allocation that must go to the production of doctors.

28. With regard to the absorption capacity factor, only experience over a reasonable period of time will show whether the output of doctors is about right, or excessive, or inadequate, since the measuring rod is not the country's putative health needs but the numbers of doctors that its economy in general, and the people's attitudes, can actually maintain.

29. In a country like Ghana, for example, it is a very moot point whether the resources becoming available should be applied primarily to the expansion of health and sanitation facilities in the rural areas, through the provision of appropriate equipment and drugs, and such other necessities as suitable drinking water (to name only one), as well as the training of para-medical staff at the sub-physician level; or whether they should go primarily to the production of more hospital-based doctors.

30. Again, the mere fact that doctors have become available in the country in larger numbers than previously, does not necessarily remove the chronic problem of their acute shortage or near-total absence in the rural areas, which is rightly a matter of widespread concern, since at least 70 per cent of the entire population live in these areas. This problem will begin to be tackled only when the Ministry of Health has created a reasonably sufficient number of doctors' posts in the rural areas and keeps them filled, and/or when the communities concerned become sufficiently prosperous to sustain private practitioners at adequate levels of income.

31. It is estimated that between one-third and one-half the total supply of doctors in the country altogether live and work in the Greater Accra area alone, whilst many Ghanaian doctors practise abroad, and a significant number of even those trained in the only recently-established Ghana Medical School itself have already likewise left the country.

32. The whole question of how many doctors can responsibly be trained annually, far from being resolved by any rule-of-thumb principle such as the doctor/population ratio, is so heavily fraught with, and influenced by, complicated interrelated issues of many kinds, and facts and factors well outside medical or health considerations, that the line of wisdom in coping with it would appear to be by a gradual though continuous, carefully planned and balanced, and perhaps somewhat cautious, rather than by a precipitous approach.

33. The W.H.O. in its "Afro-Technical Papers No. 6" published at Brazzaville in 1973 set the target of doctor/population (African) ratio for the African region as a whole at 1: 10,000 by 1980. This is doubtless a useful guide indicating, as it does, the level of attainment considered by these authorities as reasonably feasible. But they go on to stipulate that, in order to achieve this target, it would be necessary to have one Medical School for every 3 million people, although nothing is said about the expected output of each school. Ten years or so ago, Ghana had set itself the target of a ratio of 1: 10,000 by 1970. According to available figures, the ratio in fact achieved in 1973, with only one Medical School established, was 1: 9,000, a noticeable improvement on both the W.H.O.'s target for 1980 and Ghana's own for 1970. Obviously this favourable position cannot be sustained unless the output of doctors keeps pace with the country's current population growth rate of 2.7 per cent per annum, bearing in mind that in the future most of our doctors will have to be trained locally in our own Medical Schools.

34. In the Report prepared by the University of Science and Technology the current doctor/population ratios in a number of countries, including eight from the highly-developed group of nations and also Mexico, which is cited as an example of a developing country, are given. These ratios range from 1: 600 in the United States to 1: 1,100 in Czechoslovakia, and Australia, while that of Mexico is given as 1: 2,500. In the view of the University of Science and Technology, the ratio which Ghana should set as its target is that of Mexico, and the University goes on to argue on this basis that there is a case for a vastly increased output of doctors in Ghana so that we should achieve the ratio of one doctor to 2,500 persons by the year A.D. 2000. But apart from both being classified as developing countries, no other features common to Mexico and Ghana were named either in the Report or in our discussions with the University's representatives, neither was reference made to such significant disparities as 150 years of medical education history in Mexico as compared with 13 years in Ghana, or Mexico's physical proximity to the U.S.A., which indeed makes it anything but a typical developing country. We do not consider that a valid reason has been given why we should emulate Mexico's doctor/population ratio.

35. So far as we are aware, no new official pronouncements have been made by Government or the Ministry of Health on the desirable ratio for Ghana now or in the foreseeable future, although the recently-published Guidelines for Ghana's 5-year Development Plan clearly point to the need for an improved ratio and for the general upgrading of the country's health services in both quantitative and qualitative terms.

36. If the Ghana Medical School is able to produce doctors at its intended rate of 120 per year, say, from 1981 onwards, the doctor/population ratio will be as follows:—

<i>Year</i>	<i>Expected Ratio</i>
1981	1: 6,208
1985	1: 5,200
1990	1: 4,640
1995	1: 4,320
2000	1: 4,160

(Compare with the U.S.T. Report Table 6, page 7, the figures in which were worked out on the basis of an output of 100 doctors per year.)

37. In the nature of the case these can only be very rough figures, and no account is taken of wastage through death and other causes, since it is assumed that such loss will be compensated by inflows of doctors trained abroad.

38. It must remain the prerogative of Government, with its overview of the country's condition and affairs, and within the generally accepted understanding that we should always aim for the best, to determine the rate of progress that we can afford.

SECTION VII

Question of para-medical and other supporting personnel

39. It is universally recognized that doctors, however, well-qualified and efficient, cannot be fully effective in any country without an adequate cadre of para-medical and other supporting personnel. This is especially the case in a country like Ghana with a large rural population most of whose health needs turn on the demand for improved sanitation and the control of environmental diseases. In other words, the emphasis needs to be placed on preventive and promotional medicine and health education rather than on curative medicine and the highly sophisticated clinical services which are offered in conventional hospitals.

40. All those who appeared before us were unanimous in the view that Ghana is at present grossly deficient in para-medical and supporting personnel that are needed to complement the work of doctors and take health services to the people. A consequence of this deficiency is that our doctors are unable to be as effective as they should be and many of them are obliged to discharge functions that are well below the level of their professional expertise.

41. It is plain from this that there is an immediate need for stepping up the training of para-medical staff and also that any increase in the output of doctors either now or in the future will not make the desired impact on the country's health services unless it is accompanied by an increased output of para-medical and other supporting personnel. While we are not in a position to give firm figures for the numbers required within each category as far as Ghana is concerned, we think it is pertinent to quote the following statistics relating to the health objectives proposed by W.H.O. for the African region during the Second United Nations Development decade for the period 1971-1980:—

- 1 Physician per 10,000 population
- 1 Nurse per 5,000 population
- 1 Midwife per 5,000 population
- 1 Technician (laboratory, radiology, etc.) per 5,000 population
- 1 Health auxiliary per 1,000 population
- 1 Sanitarian (or health inspector) per 15,000 population.

42. From these figures, it is possible to estimate the number of para-medical personnel required to support every doctor and the total number of persons within each category required to give Ghana an effective medical service. In the absence of other reliable guides, we cannot but accept these targets as the minimum for our own requirements in Ghana.

43. It must be pointed out, however, that facilities for training all the above-mentioned para-medical personnel already exist within the Ministry of Health. Staff within these grades do not require university degrees, and the proposed Human Biology course in Kumasi is therefore not really relevant for their production. A much more practical, effective and economical means of raising the numbers of such personnel is to expand the existing training facilities within the hospitals and other special training institutions currently under the control of the Ministry of Health.

SECTION VIII

The case for the Establishment of a Second Medical School

44. The need for a second Medical School is implicit in the decision of the Ghana Medical School that it could not increase its annual output of doctors beyond the figure of 120. In a constantly growing population it is inconceivable that the matter should simply rest there. Without exception all those whom we interviewed were in fullest agreement that a second Medical School would sooner or later be needed. Likewise unanimous was the view that the natural choice for the location of this school was Kumasi.

45. If Korle Bu has served as the central referral hospital for the whole country, there is need to relieve this burden by giving Central and Northern Ghana their own referral hospital. If the country's largest population concentrations, which are in and around the capital have benefited greatly in many ways by having a Teaching Hospital near at hand, it is now clearly the turn of the next largest concentrations to enjoy the same privilege. Besides, Kumasi has a University fully equipped and ready almost immediately to offer the first year courses for medical students that Legon gives to the students of the Ghana Medical School.

46. Opinion was, however, just as clearly divided on the question of the timing of the start. The University of Science and Technology authorities and those supporting their proposal understandably felt that a beginning should be made immediately or in October 1976 at the latest. Those dissenting from them were of the view that, with the continuing expansion of the Ghana Medical School and until shortly before it reaches maximum output, that is, during the next 5-10 years, the matter was not urgent, and that a start made too early might irreparably damage the existing school at a number of sensitive and crucial points, notably financially and as to teaching personnel.

47. There were still others who favoured a compromise solution whereby, since in any case the need for para-medical staff must be met, a start should be made immediately with the proposed human biology course established initially as a complete degree course in its own right and not necessarily as a stepping-stone to a medical degree. The question on the addition of the medical part would thus be left open for determination later.

48. This third approach is actually very similar to the Kumasi proposal which is based on the assumption that the need for starting a medical course proper would arise not at the same time that the human biology course is started but 3 years later, when the first graduates of the course would be ready to start their medical

training. The only difference is that the Kumasi proposal implies a definite commitment to establish a medical school not later than three years after the human-biology course is started.

49. To avoid repeating ourselves we shall reserve our own views for the final chapter embodying our recommendations. Here we would only say that if, in the light of the considerations which we have presented, we have indicated the need for somewhat cautious advance, this should not be understood to mean that we favour unnecessary delays. Indeed what we shall proceed to set out is, in our own estimation, the quickest possible means for attaining the agreed objective.

SECTION IX

Proposed Structure of the Medical School in Kumasi

50. Reference has already been made to the structure proposed by the University of Science and Technology for the Medical School to be established in Kumasi. In welcoming it, an experienced Ghanaian doctor, who kindly wrote to us, hoped that the scientists and graduate technologists to be trained under it, would "raise the efficiency and enhance the role of our indifferent hospital laboratories which have lost their usefulness and credibility for most doctors", that doctors with "this more diversified and broad-based scientific training" would be more research-conscious than the conventionally trained ones, and would tackle the large material for meaningful research work in Ghana today.

51. In the course of our discussion with the Authorities of the University we were assured that the intention, as stated in their Report sent to the National Council for Higher Education, was to provide a basic course in human biology which would be suitable for the training of both doctors and para-medical personnel. It was suggested to us that the ratios envisaged as between the two courses would be 50 medical students to every 25 students doing science and para-medical course leading up to degrees.

52. In the course of our discussions with the various persons whom we saw, a number of misgivings were expressed about the suitability of the above structure, principally on the grounds that: with so many parallel courses running concurrently it would be difficult to organise and to manage; it would without advantage take longer than the present Ghana Medical School course, and involve the scientists and the physicians in much work that is strictly

outside their respective immediate concerns. It was also pointed out that few students would opt voluntarily for the non-medical courses except those who had failed to qualify for admission to the strictly medical part, and that such persons even after qualifying as technologists and scientists would find it difficult to work harmoniously in a hospital setting with former mates who succeeded in qualifying as doctors.

53. However, we were assured by the Authorities of the University of Science and Technology that under the scheme proposed by them students would be streamed into the various courses right from the start and therefore the question of the non-medical courses becoming a repository for failed medical students would not arise. While not inclined ourselves to be as optimistic as this, we nevertheless consider that the problem is not insoluble and that in the initial stages, certain calculated risks will have to be taken in the hope that in due course, changes in salary structure and social attitudes as between qualified medical personnel and qualified non-medicals working in the same hospital will help to remove these invidious distinctions.

54. Some of those who appeared before us in Accra felt that the details of the human biology curriculum would need to be further examined to ensure that they conform to the accepted requirements and standards in medical education. However, this is clearly a matter on which only people with special knowledge in this field can pronounce, and the final decision must rest with those who are eventually charged with planning and actually mounting the courses.

55. The point we would make here, however, is that a distinction should be recognised between the non-graduate para-medical staff, who are required in large numbers, and the graduate para-medical staff of the technologist grade, who are required in much smaller numbers for the discharge of highly specialised functions in hospitals and other comparable institutions. As we pointed out before, facilities already exist in the Ministry of Health for training the non-graduate type of para-medical personnel, and only those in the graduate category remain to be catered for. According to the plans indicated to us by the Ghana Medical School, such personnel could be trained quite conveniently at Korle Bu at relatively small additional cost, especially since the numbers involved will not be very large in the foreseeable future. The Director of Medical Services stated in our interview with him that his Ministry could absorb only about two a year. Undoubtedly they could also be trained at Kumasi as a first step toward the establishment of a Medical School, but on purely practical grounds it would be a waste of resources to establish a whole Faculty, or even a Department of Human Biology solely or mainly for this purpose.

56. In other words, the need to train such personnel alone would not be sufficient to justify the establishment of the proposed Human Biology course at Kumasi. Thus, the only real justification for starting the proposed course there will be to use it as a foundation for the establishment of a Medical School in the full knowledge that the bulk of the students admitted to the course will be medical students. If for any reason a clear commitment to establish a second Medical School at Kumasi cannot be made, then there would seem to be little point in starting the Human Biology course at all either now or at any time in the foreseeable future. A more realistic approach to the problem, therefore, in our view, is to base the argument for mounting the Human Biology course proposed on the need to produce doctors rather than on the need to produce graduate para-medical personnel.

SECTION X

The pre-clinical courses

57. Obviously the 3-Year Human Biology Course proposed for Kumasi is intended to serve the same purpose as the 3-Year Course in the Basic Medical Sciences at the Ghana Medical School. While, of course, different approaches can be used to attain the same goals, and variety doubtless refreshes and enriches any situation, the question seriously arises whether, in the circumstances of a rather small developing nation with somewhat lean financial and high-level human resources, it is best to conceive the proposed new school as essentially a continuation and extension of what has already been endeavoured in the medical education field, or as a completely fresh and innovatory new departure.

58. We are not here concerned with theoretical arguments on the relative merits of sameness and otherness, tradition and change. We are only concerned with the practical effects of adopting either of the two alternative resulting attitudes. With the one, for example, the experience already gained would be closely studied with a view to benefiting from it; it would be possible for a lecturer from the one place at short notice to stand in for another at the other place in case of need, since practically the same teaching notes can be used; the position as regards textbooks, which have all to be imported, would be greatly simplified; staff and student exchanges, as well as the occasional transfer of some persons from the one institution to the other, would be facilitated, and so on. With the other attitude the two schools would, as far as possible, keep their distance from each other, and the new one would seek, with due

originality, to break its own fresh ground, making, and learning from its own mistakes, having its own teething troubles *ab-initio*, and generally enjoying, by itself, the proclaimed and acknowledged distinction of study independence and of being just different. The choice must be made.

59. Another and related question which arose in this connection should be noted for further discussion. We were unable ourselves to reach agreement on it mainly because the highly-experienced doctors whom we consulted held opposing views. This is the question whether it is necessary for each Medical School to be a completely self-contained unit in itself, with its own separate total equipment, or whether some of the facilities can at all be shared with another School. This question relates specifically to the pre-clinical course, with reference to which it has been suggested that it would be quite practicable to organise one and the same centre of these studies for both Medical Schools together. Since the problem of hospital beds does not arise at this stage, it is pointed out, the major constraint on student numbers can be regarded as inapplicable.

60. Under this concept the first year general science and social studies course would be taken at the respective Universities; after joint study for two years at the common Basic Medical Sciences Centre the candidates would proceed to their clinical studies at Korle Bu and Okomfo Anokye respectively, under the appropriate University.

61. Those who support giving the whole training uninterruptedly under the same auspices and in the same location, argue strongly that it is essential for the students to be guided throughout their entire course by the authorities of their own University; that during their clinical training they would need to be going back constantly to their pre-clinical school and its laboratories for revision and perfecting of their knowledge which, in view of the highly concentrated study methods currently in use, is even more important now than ever before.

62. Those accepting the other approach as credible, appear to look on the pre-clinical years rather as basic and mainly theoretical preparation for the substantive work, quite on a par with most other science studies consisting in lectures and "practicals". On this view, it is the clinical studies that represent the substantive work, which is done by the learning-on-the-job process, and involves both the theoretical principles and the practical aspects of the study material in hand, the emphasis being upon the immediate application of the theories being learned to the complexities and myriad exigencies of the actual living human body. In this context attention is focused directly on such matters as haematology, chemical pathology, morbid anatomy, micro-biology, etc., rather than on anatomy and physiology, and the hospitals' own laboratories provide ample visual aids.

63. Such a common centre would naturally present formidable problems of organisation and control, but these should not be insurmountable, and if even joint management by the two Universities concerned should prove difficult, the centre could always be placed under the National Council for Higher Education or other national auspices.

64. Again this is not a merely academic issue. In view of the acute world shortage of teachers at this level and of the prohibitive cost involved, every prospect of achieving our purpose without duplication of the major facilities is well worth the most painstaking scrutiny. We would strongly recommend that these two issues be given careful consideration by the authorities of the two schools and the National Council for Higher Education together, as soon as the first Dean of the new School has been named.

SECTION XI

Adequacy of Facilities and Staff for the proposed Medical School at the University of Science and Technology

65. In order to ascertain the adequacy or otherwise of the existing facilities at the University of Science and Technology for the proposed course in human biology and other medical-related courses such as are indicated by their proposal, we made a tour of the relevant science departments at the University and held discussions with their heads. We were impressed with what is already on the ground and the extensions and improvements currently in hand, especially in the Faculty of Pharmacy and we felt that on the basis of this and of the assurances given to us by the Heads of Departments that the Facilities now in existence together with those which the University is planning to add under its current development programmes would be adequate for meeting the physical requirements of the proposed Medical School (including the multi-purpose human biology course) with an annual intake of up to 100.

66. As regards staff, we could only go by what we were told by the University Authorities and the staff lists shown to us. Certainly, there seemed no lack of enthusiasm on the part of the Heads of Departments and other staff whom we met regarding the prospect of the University embarking on a medical course, and the impression we gained was that the staff would willingly undertake the additional teaching duties which such a development would necessarily entail.

67. Since so far the University has not operated any courses in Human Biology or Medicine, it cannot be expected as yet to have any staff or some of the crucial subjects, such as Anatomy and Physiology, which will be needed. Its adequacy to mount the courses in question will therefore depend upon its success in recruiting the necessary staff. According to what we were told by the doctors whom we met in Accra, this will by no means be an easy matter because of the acute shortage of such persons, not only in Ghana or West Africa, but in the world as a whole. The University staff in Kumasi were confident that they would be able to secure them, in the last resort on loan, from medical schools and universities outside Ghana, until such time as Kumasi itself has been able to train its own Ghanaian staff to fill these posts.

68. Our Committee wished the University every success in this effort but expressed its strongly held view that it would be deplorable indeed if, for reasons of the prospect of promotion, or because of personality conflicts, the existing school at Korle Bu came to be depleted of its staff in favour of the new institution.

SECTION XII

Adequacy of Facilities and Staff for the Training of Doctors at Okomfo Anokye Hospital

69. When Okomfo Anokye Hospital was commissioned in 1956, it was reckoned to be Ghana's finest and most modern regional hospital, second only to Korle Bu in Accra. Within a few years, however, it became apparent that the hospital's facilities were quite inadequate for the needs of the area it was built to serve. The Hospital has 620 beds and 80 cots as compared with 1,500 beds and 190 cots at Korle Bu, although owing to the very heavy demand on its facilities, several more beds have had to be added, not to mention the large number of floor patients. It also has all the main departments, namely medicine, paediatrics, surgery, ear, nose and throat, eye, anaesthesia, obstetrics and gynaecology, child welfare, oral surgery, pathology and radiology. An important department which it does not have and which is not available anywhere in the city of Kumasi itself is Psychiatry but we were informed by the hospital authorities that a psychiatric hospital is nearing completion at Nsuta, only a few miles from Kumasi.

70. At a meeting we held with the Superintendent of the hospital and the heads of the various departments, we were told that despite the hospital's present congested state it had the necessary basic

facilities for serving as a Teaching Hospital. We were also told that by the addition of a few more specialists and supporting medical officers, especially in some of the key departments like medicine and obstetrics and gynaecology, the present staff of the hospital would suffice to handle the clinical part of a medical course. Regarding the teaching of anatomy and physiology, the hospital staff were of the view that this could be done quite satisfactorily by surgeons, at least in the initial stages, and until properly qualified specialists become available.

71. On the question of physical accommodation, our initial impression was that the present site was much too tight to permit further expansion, but we learnt later that the Asantehene had given the hospital a large tract of land adjacent to the present site for use in expanding the buildings and facilities of the hospital. This land would be useful for the construction of lecture rooms, offices and students' hostels when the Medical School comes into being. Immediately, however, the only new facility said to be required urgently at the hospital itself is a museum for the teaching of Pathology, but we were told by the Specialist-in-Charge of this Department that as a temporary measure, the necessary accommodation could be provided at the University of Science and Technology, as indeed we had been told earlier by the University Authorities themselves.

72. We have no reason to doubt that the assurances given to us regarding the adequacy of facilities and staff at Okomfo Anokye Hospital are well founded, more especially since those who gave them are themselves the very people who may have to man or run the teaching Hospital when it comes into being. We are happy to say that all the other doctors we interviewed, including those at the Ghana Medical School, were of the view that the Okomfo Anokye Hospital could be upgraded at relatively little cost and within a relatively short period of time to serve as a teaching hospital, given the right calibre of consultants.

73. A more fundamental question—and this applies also to Korle Bu—is whether a general hospital built for providing general services to the public and managed by the Ministry of Health could adequately serve the functions of a teaching hospital. We found opinion generally divided on this question. Although practically, all the doctors we interviewed had themselves been trained in proper teaching hospitals as students and recognised their advantages, especially their convenience for teaching purposes, the majority seemed to favour the Korle Bu arrangement because of the very broad exposure to real-life situations and conditions which it gave the students. Indeed, one of the most prominent doctors in the country who is intimately familiar with the problems of medical education expressed a decided preference for the Korle Bu

arrangement if the choice had to be either the one system or the other and not a combination of the two. The only aspect about which serious misgivings were expressed was the mode of administering the hospital so that the medical school staff can have a reasonable say in the management and control of affairs.

74. We ourselves are inclined to agree with the majority view, at least as far as the training of doctors at the undergraduate level is concerned, which is what it is intended to do in Kumasi, but we are convinced that for the effective training of postgraduate students, a proper teaching hospital is much to be preferred.

75. We believe that it would be a good thing if, as soon as the appropriate definitive decision is taken, a team of doctors, architects and others would be appointed to plan and carry out the overhaul, modification and extension of Okomfo Anokye Hospital as a co-ordinated whole, bearing in mind specifically the intention to make it a Teaching Hospital. The grant to it of a wide stretch of additional land, to which we have already referred, is indeed a great boon, because it would seem to us that, apart from student accommodation and new staff quarters to be provided, a quite considerable construction, furnishing, and landscaping programme will be needed if the School there is not to be denied that general environment and atmosphere of spaciousness and grace, so suitable for this purpose, which can be enjoyed at Korle Bu.

SECTION XIII

Financial Implications of the University of Science and Technology proposal to establish a Medical School

76. It is universally recognised that medical schools are highly expensive institutions to establish and perhaps even more so to run and maintain. In Ghana the crude figure for the training of one doctor at the Ghana Medical School has been given as ₵50,000, which is at least three times as much as the cost of training an Arts graduate. We were somewhat surprised to find that while the U.S.T. Report recognised the high cost of medical education, it failed to make a more detailed analysis of the capital and recurrent expenditure which their proposal would involve but simply dismissed the matter by stating that the "capital expenditure for additional laboratories and equipment should not exceed half a million cedis", while "recurrent annual expenditure for additional staff

will be between C160,000 and C200,000". We find these figures, coming as they do under a section of the report headed, "Cost of establishing a Medical School", grossly inadequate and misleading. Even for the proposed human biology course at the University we doubt if the amounts indicated could suffice; and for the entire Medical School we are reliably informed that the initial cost is more likely to be in the region of C40 million.

77. Since cost will be much a major factor in determining the feasibility or otherwise of the Kumasi proposal, we consider it absolutely essential that the University Authorities should be required as a matter of urgency to provide the Council for Higher Education with more realistic and detailed figures relating to the various aspects and phases of the project. In the meantime we cannot accept that all that is required to establish the proposed medical school is about C700,000, which, at current prices, is hardly adequate to build and equip even a single classroom block.

78. We suspect, basing our figures on the current estimates of the Ghana Medical School (see Appendix 2) and multiplying them by a factor of two to take account of rising costs over the next two or three years, that the establishment of the human biology course is likely to cost not less than C2 million, the modification and expansion of Okomfo-Anokye so as to turn it into a teaching hospital with lecture rooms, laboratories, and a library, etc., another 15 to 20 million cedis which the recurrent expenditure after the School is established will come to about C2.5 million per annum.

79. This is the picture as it appears to us, but it will no doubt become clearer when the detailed figures to which we have already referred are received from the University of Science and Technology. Whatever the final figure, it will represent the bill that Ghana will have to pay in order to have another Medical School. This bill, it must be recognised, will be additional to the cost of developing and running the existing Medical School at Korle Bu, as well as that of creating the essential new para-medical and other supporting health staffs, which is the corollary of many more new doctors becoming available. Furthermore, since Government will necessarily be the chief employer of the forthcoming larger supplies of doctors, sight must not be lost of the swelling of its remunerations bill that is bound to result. In a memorandum addressed to us the Director of Medical Services has stated, *inter alia*, as follows: "I can say that the Ministry can absorb about 100-125 (doctors) a year for the next 5-10 years, considering that this will involve an increase in emoluments to the tune of 0.5 million cedis per annum, and in addition amenities such as housing, transport, equipment have to be supplied in order to make it possible for the doctors to perform their duties".

80. In the final analysis only the Government can decide whether the country can afford a second Medical School now or at any future time, having regard to our financial situation and our development goals. There can be little doubt that, in order to maintain, extend, and significantly improve upon the present level of medical service, available to the people of Ghana, it would be very desirable to establish at least one more Medical School between now and the year A.D. 2000, if indeed this is reasonably within our means. However, every care must be exercised to guard against any lowering of standards by over-stretching ourselves.

SECTION XIV

The Role of the National Council for Higher Education in the Rationalisation, Co-ordination and Integration of the Activities of our Universities

81. We were more than a little disappointed to discover that there had not been any official consultations between the University of Science and Technology and the University of Ghana regarding the proposal for a second Medical School.

82. We would be the last to suggest any curbing of the initiative or the style of our Universities, but from the national standpoint and in the national interest the need for co-operative efforts wherever practicable, and for a balanced and correlated total development cannot be over-emphasised.

83. We believe that the National Council for Higher Education must increasingly exercise its functions of rationalising, co-ordinating and integrating the activities of our Universities, in order to ensure, as far as possible, the exclusion of dissipatory tendencies and the maintenance of a continuous forward trend, fully and harmoniously consolidated at every stage of advance. Otherwise some of the country's major development efforts might degenerate into the futility of a sort of sisyphus movement, more popularly known in our country as "one step forwards and one step backwards".

SECTION XV

Conclusions and Recommendations

84. If, in the light of what we have said in the preceding sections and paragraphs, the Government judges that the necessary wherewithal is to hand and the time is ripe to embark upon the establishment of the second Medical School, we would like to suggest an immediate target of an annual total output of 200 doctors per annum by the year A.D. 2000, 120 from Korle Bu and 80 from Kumasi.

85. We have chosen A.D. 2000 for no other reason than that the turn of the century appears to be a suitable point for timing objectives, but the number suggested for Kumasi reflects the relative sizes in bed capacities of the two hospitals, given the fixed figure of 120 for Korle Bu.

86. Considering the rate of growth at which the Ghana Medical School has proceeded, it appears to us that the new School may require at least fifteen and possibly twenty years to attain the desired output of 80 doctors per year. On this basis the latest date for starting it would be about 1980, that is, in five years time. In any case, a period of planning and preparation is required, during which a Dean would be appointed and steps taken to identify a few of the key staff who would need to be sent overseas for further training, and to assemble the various physical facilities in the form of buildings and equipment for teaching purposes. Thus, if the School is to be able to start functioning by 1980 then a firm decision whether or not to establish it will need to be taken by 1976 or 1977 at the latest.

87. If the School is able to start in 1980 without fail with an initial intake of about 25 students and if it is able to increase its intake gradually so that by 1993 its first-year intake of students has grown to 85 or so, then it can be certain of producing the required figure of 80 qualified doctors by 1999, who after a year's internship would be ready by A.D. 2000 to join the ranks of fully qualified medical practitioners. We reckon that this is the optimum that can be realistically aimed for at present, and that it would yield the doubtless very respectable doctor/population ratio of approximately 1: 2,500.

88. We would suggest that, with the public announcement of the definitive decision (if it is positive), the team recommended in section 12 paragraph 74 above should be appointed and commissioned to prepare Okomfo Anokye for assuming the functions of a Teaching Hospital. Thus the expensive and unsatisfactory ad-hockery that had to be practised at Korle Bu will this time be avoided.

89. All this presupposes, of course, that the Ghana Medical School will receive the necessary provision for its maintenance, as well as both to repair its present deficiencies and to maintain the rate of growth which it has set itself.

90. We would urge that the decision about the Medical Centre at Legon be no longer delayed. This would settle once for all the question (among other still outstanding issues) as to whether the present *ad hoc* near-shambles that constitutes the pre-clinical school should be refurbished and brought up to standard, or whether it should be scrapped and replaced with a completely new and properly-planned establishment geared to present and future needs. In this connection we would wish the points which we have advanced for consideration in our section 10 above, to be borne in mind.

91. The Ghana Medical School should be encouraged and enabled to accelerate its programme for the training of medical specialists and teachers. Whatever our hopes of recruitment abroad may be, it is, as the common local saying has it, the money tied to our own cloth that we can untie and pay out, which is one of our indigenous ways of saying "self-reliance"! Likewise, the periodical courses in medical education methodology for those appointed as clinical teachers, as well as the occasional seminars conducted to prepare them for their other responsibilities towards students apart from teaching, must be vigorously pursued.

92. It will have been noticed that the total requirement for doctors by the Ministry of Health during the next 5-10 years, as forecast by the Director of Medical Services, is fully covered by the projected output of the Ghana Medical School alone. We strongly recommend that active steps be taken from now on to interest the Regional and District Administrations, as well as the Local Authorities, in creating places for, and employing, their own doctors within the framework of the dispositions of the Ministry of Health. A deliberate and firm policy should be devised and implemented toward ensuring that at long last, proper health and medical facilities do seep through to the rural populations. In other words, turning out more doctors should be accompanied by serious preparations to receive and effectively deploy them where they are most needed. Unless some such campaign is successful, it is to be feared that medical care will remain the privilege of the inhabitants of the larger towns, and in that case the threat of a surfeit of doctors, or of their large-scale emigration, cannot be completely ruled out.

93. As soon as practicable, after the coming into being of the second medical school, a joint permanent committee of the authorities of the two universities concerned, and other competent persons should be formed under the guidance of the National Council for Higher Education to take in hand the planning of the academic aspects of the work of both Schools, as well as any other matters of common interest relating to them.

94. Finally, we would recommend that the University of Science and Technology be urged to provide more detailed and more realistic estimates of the cost of its proposal as put forward, than the ones in its present report. If the Government has the heavy responsibility of deciding whether the plunge should be taken, or when, then it is the duty of those who submit proposals to see to it that the cost figures before the Government when it takes its decision are the true ones, as far as is humanly possible to ascertain. On no account should the Government be landed in the situation of the man in the Bible who launched into the building of his tower without first realising the full extent of what it would take to finish it.

SECTION XVI

Acknowledgements

95. We feel greatly indebted to a number of individuals and authorities of the various institutions we visited for the frank expression of their views on the matter before us and for the memoranda received from some of them. Chief among these are the Dean and staff of the Ghana Medical School, the Vice-Chancellor and the Registrar of the University of Ghana, the Vice-Chancellor of the University of Science and Technology and his staff, in particular the Deans of the Faculty of Science and the Faculty of Pharmacy, and the various Departmental heads who kindly met us; the Medical Superintendents of both the Korle Bu Teaching Hospital and the Okomfo Anokye Hospital and their staff, the Director of Medical Services and his officers, the Ghana Medical Association and the Ghana Medical Students' Association.

96. We gratefully place on record our appreciation of the generous and gracious hospitality extended to us at the University of Science and Technology, Kumasi.

97. Similarly, we wish to express our warm thanks to Prof. C. O. Easmon, former Dean of the Ghana Medical School, Dr. F. I. D. Konotey-Ahulu, Prof. W. W. Laing and Mr. R. A. Basoah, Director of Planning, Ministry of Economic Planning, for making personal appearances before the Committee and availing us to the benefit of their rich store of experiences in medical education in Ghana.

98. The Secretary of the Committee, Mr. E. P. Adofo, and his supporting staff were most co-operative and indefatigable in the performance of their duties. We are most grateful to them. We are also grateful to the National Council for Higher Education for offering us the use of their Conference Room for our meetings, and for the general support given us.

99. We feel honoured by our appointment to undertake this task and we hereby submit our report in the hope that it will serve as a useful, even though small, contribution towards the general effort to find solutions to some of the problems of Medical Education in Ghana.

Respectfully submitted.

REV. PROF. C. G. BAETA
(Chairman)

PROF. E. A. BOATENG
(Member)

DR. H. S. BANNERMAN
(Member)

February, 1975.

APPENDIX I

LIST OF PERSONS AND BODIES INTERVIEWED

Ghana Medical School—Korle Bu

1. Prof. S. R. A. Dodu (Dean)
2. Prof. H. H. Phillips (Vice-Dean)
3. Prof. E. A. Badoe (Professor of Surgery)
4. Mr. R. H. B. Graves (Executive Secretary)

University of Ghana, Legon

5. Prof. A. A. Kwapong (Vice-Chancellor)
6. Prof. E. A. Bekoe (Pro-Vice-Chancellor)
7. Mr. E. A. K. Edzji (Registrar)

Ministry of Health, Accra

8. Dr. M. A. Baddo (Director of Medical Services)
9. Dr. Docia A. N. Kisseih (Former Chief Nursing Officer)
10. Mrs. M. N. Hornsby-Odoi (Acting Chief Nursing Officer)

University of Science and Technology, Kumasi

11. Prof. E. Bamfo Kwakye (Vice-Chancellor)
12. Prof. F. A. Kufour (Head, Department of Chemistry and Chemical Technology).
13. Prof. M. Kutin-Sanwu (Head, Department of Biological Sciences).
14. Prof. E. A. Gyang (Head, Department of Pharmacology and Dean, Faculty of Pharmacy).
15. Dr. K. Boakye-Yiadom (Head, Department of Pharmaceutics).
16. Dr. D. Dwumah-Badu (Head, Department of Pharmaceutical Chemistry).
17. Dr. K. Sarpong (Representing Head, Department of Pharmacognosy).
18. Dr. K. E. Appiah (Resident Medical Officer)
19. Mr. A. S. Y. Andoh (Registrar)
20. Dr. F. A. Dziwornoo (Acting Head, Department of Physics).

Okomfo Anokye Hospital, Kumasi

21. Dr. G. O. Prempeh (Medical Superintendent)
22. Dr. J. W. Hiadzi (Head, Department of Surgery)
23. Dr. T. K. Agble (Specialist-in-Charge, Department of Obstetrics and Gynaecology).
24. Dr. A. P. Asafo-Agyei (Head, Department of Paediatrics)
25. Dr. I. K. Badu (Specialist, Dental/Oral Surgery)
26. Dr. S. P. Das Gupts (Department of Medicine)
27. Dr. E. Doe-Dorsey (Pathologist)
28. Dr. Kemevoh (Ear, Nose and Throat Specialist)
29. Mr. B. A. Amponsah (Senior Hospital Secretary)

Korle Bu Teaching Hospital

30. Prof. J. K. M. Quartey (Medical Superintendent)
31. Mr. J. A. Maafo (Principal Hospital Secretary)
32. Miss H. Aboagye (Senior Matron)

Ghana Medical Students' Association

33. Mr. S. Y. Ellis (President of G.M.S.A.)
34. Mr. K. Ofose-Barko (Student Representative, Education Committee).
35. Mr. K. E. Badoe (Editor-in-Chief of "Medic")
36. Mr. B. E. A. Tamakloe, Jr. (Student Representative, Education Committee).

Ghana Medical Association

37. Dr. L. K. A. Derban (Representing G.M.A.)

Individuals

38. Prof. C. O. Easmon (Former Dean, Ghana Medical School)
39. Dr. F. I. D. Konotey-Ahulu (Director, Ghana Institute of Clinical Genetics, Korle Bu).
40. Prof. W. N. Laing (Head, Department of Pathology, Ghana Medical School).
41. Mr. R. A. Basoah (Director of Planning, Ministry of Economic Planning).

APPENDIX 2

PRESENT NEEDS AND FINANCIAL REQUIREMENTS
OF THE GHANA MEDICAL SCHOOL

A. Budgetary Allocation

Last year the Medical School required a supplementary budget of C130,000 and received C100,000. This meant an unhealthy curtailment of Departmental expenditure.

The position this year is as follows:—

Recurrent Estimates

For the Financial Year 1974-75, the School estimated expenditure at C2,377,970. Government, however, approved only C1,980,000. There is, therefore a shortfall of C397,970. The Finance Committee has recommended expenditure under the following headings which it considers obligatory:

	C
Personal Emoluments (salaries, wages, allowances)	1,457,430
Running and Maintenance of Vehicles	55,000
Stores and Stationery	45,000
Rental of Hired Accommodation	80,000
Maintenance and Repair of Equipment	120,000
Overseas Passages	30,000
Uniform and Consumable Materials	30,000
Official Entertainment	4,000
External Examiners' Fees	25,000
Insurance and Licensing of Vehicles	16,000
Total	C1,862,430

The amount left after the above allocations, viz. C117,570 is grossly inadequate for the remaining items of expenditure. It has therefore been decided to approach Government for additional funds as in the previous years.

APPENDIX VIII

NATIONAL COUNCIL FOR HIGHER EDUCATION

STAFF LIST

<i>Name of Officer</i>	<i>Rank</i>
Mr. J. B. Lomotey	Secretary
Mr. J. W. L. Mills	Adviser
Mr. C. K. Gbeho	Deputy Secretary
Mrs. Victoria Owusu	Senior Assistant Secretary
Mrs. Eugenia T. Amarin	Assistant Secretary
Mr. Nikoi Kotey	Assistant Secretary
Mr. C. G. Degbato	Principal Accounting Assistant
Mr. E. S. N. Kotey	Senior Accounting Assistant
Mr. E. K. Agbeko	Senior Private Secretary
Mrs. Comfort Kuma	Senior Private Secretary
Mr. D. A. Appiah	Administrative Assistant
Miss Victoria Odinehu	Stenographer Secretary
Mr. J. C. Anku	Accounts Clerk Grade I
Mr. Fred Lokko	Clerk Grade II
Mr. Francis Tay	Clerk Grade II
Mr. E. M. Ador	Clerk Grade II
Miss Comfort Boye	Stenographer Grade II
Mr. R. Koufie	Typist Grade I
Miss Florence Hammond	Typist Grade I
Miss T. C. Samman	Typist Grade II
Mr. H. N. Akorse	Despatch Rider
Mr. A. K. Narh	Messenger
Mr. A. Arthur	Messenger
Mr. Alex Hammah	Messenger