

CHAPTER 7UNIVERSITY EXPANSION
WITH REFERENCE TO EGYPT1. Introduction

This chapter aims at discussing the expansion of higher education in general and University expansion in particular.

As pointed out in chapter '5' the open-door policy of admission to the universities which is adopted by some countries e.g. Italy, France, Egypt etc. has resulted in an over expansion of university enrolments; in others that policy has resulted in mass university systems. In these countries financial provision is expanding to meet the increase in enrolments, and the share of national expenditures devoted to higher education in general is increasing everywhere particularly in developing countries.

By the beginning of the fifties, the world has witnessed large expansion. For example, in OECD member countries, enrolments increased from a total of 3.9 million in 1950, to nearly 9.8 million in 1965-66, this means an increase of approximately 150% in 15 years, an average annual rate of 6.3%¹. The expansion is clearly shown in UNESCO Report of Conference of Ministers of Education of European Member States as shown in the following table.

Table 7-1 Enrolments in higher education in 28 UNESCO member states from 1950-1965 in millions.

Year	No. of enrolments
1950	2,285,000
1955	3,095,000
1960	4,099,000
1965	6,365,000

Source: UNESCO. Conference of Ministers of Education. Member States of UNESCO on Access to Higher Education. Vienna 20-25 November 1967. Paris. UNESCO 1968, p.11.

Another evidence for expansion can be given from some European Countries, e.g. in Britain, the number of full time students in higher education grew from 193,000 in 1961-62, to 339,000 in 1966-67.² The system has almost trebled in size since 1960, it now caters for about 520,000 full time and sandwich students and about 230,000 part time students on a variety of courses at institutions. The present planning assumption is that full time and sandwich numbers will increase by 1981 to 560,000.³

In Sweden, the numbers of students increased from 35,000 in 1960 to 70,000 in 1965. In France between 1960-1965, students increased from 200,000 to over 400,000, with another doubling projected by the mid-seventies to constitute an enrolment of about 17% of the age group.⁴

In Denmark, the number of students increased from 19,000 in 1960 to 34,000 in 1965 to reach 70,000 by the mid-seventies, and about 13% of the age group.⁵ More evidence for the expansion, the total number of higher education (both university and non-university) in all OECD countries, Europe, USA, Japan and Canada was 4,700,000 in 1955-56, and

12,500,000 in 1968-69, adding the USSR, the totals were respectively 6,500,000 and 17,000,000.⁶

With regard to developing countries, the demand for higher education had gone up specially in those which became independent, some of these countries had suffered in the past from a lack of facilities.

Evidence can be also given to show the enormous growth of higher education in some African countries as shown in the following table.

Table 7-2 Enrolments in higher education in some African countries from 1965-1975.

Country	Enrolments in higher education			
	1965	1970	1974	1975
Egypt	174,518	233,304	408,205	455,079
Nigeria	3,378	15,560	30,279	32,971
Sudan	8,108	14,308	22,204	23,342
Malawi	92	980	1,153	1,148
Somalia	-	1,433	4,681	6,803
Tanzania	540	2,027	3,424	3,064

Source: UNESCO Statistical Year Book 1977. Paris. UNESCO 1978, pp.315-370.

Two more countries can be cited to show pattern of expansion i.e. Peru and Kenya. In Peru, the number of enrolments in higher education increased from 79,259 in 1965 to 190,635 in 1976. In Kenya, the number of enrolments increased from 2,336 in 1965 to 11,351 in 1974.⁷ This expansion has been inevitably accompanied by the demand for staff, teaching and research facilities and increased expenditure to cope with the needs of this expensive level of education. The question to

be asked here is, what are the reasons for that expansion?

2. Reasons for the expansion of university education (in general)

2.1 The explosion of knowledge

Since the last world war, there has been a noticeable increase in the amount of knowledge particularly in natural and ^{social} sciences, their effect is explained by Sharma, J C when he says:

"The blessing of the first has brought the transistor, the laser, maser, the micro-film and magnetic tapes in everyday life, whereas research in the social sciences has made clear the inter-relationship between hitherto isolated ignored fields of study."⁸

In the modern age, science has much more to offer than ever before. Moreover, the well-being of people, their social progress, national attainments and world peace, all are intimately connected with the steady development of science and technology. The 20th Century may be called the century of science and technology and they will affect the nature of life in the future. The importance of science and technology was stated by Wu-Shuing Chien when he says:-

"Together science and technology constitute the vital part of our Contemporary Civilization and will continue to exert their influence on the future development of our world."⁹

Furthermore, the amount of knowledge is not static. It will have been increased in the future, accordingly the responsibility of the universities will increase as well.

Here there are certain broad implications of importance to universities in the light of knowledge explosion.

(a) The growth in science and technology has led to the establishment of new departments specializing in new branches of knowledge.

Thus departments are established in the existing universities or are established as completely new faculties with special bias towards technical subjects.

(b) With the rapid growth of knowledge, there has been an increase in the number of specializations. This response to the growth of knowledge implies that "the field of each tends to widen so that the best way forward may actually be by pushing specialist studies to further depth than they have yet achieved".¹⁰ This depth of study will result in further progress of these new specializations.

(c) The need to strike a balance between pure and applied research. Both are required, pure research is needed for the furtherance of the existing amount of knowledge, applied research is needed for the progress of socio-economic system and the welfare of the people. So new discoveries and knowledge will be less important unless there is applicability for their results which should find their way to man's life.

(d) Technological and scientific progress has resulted in a positive demand that universities and higher institutions in general should provide societies with adequately skilled and highly trained manpower to cope with the needs of this progress.

2.2 The population explosion

"During the pre-war depression, the population of the world in general and of Western Europe and the USA in particular, was static or rather falling".¹¹ This decline in population happened because of the economic hardship during this period, so many people were forced to postpone marriage and child-bearing.

From the end of World War II, there has been a marked increase

in the world's population as shown in the following table.

Table 7-3 The increase of world's population from 1940-1971 in millions.

Year	No. of population
1940	2,295
1950	2,486
1960	2,982
1965	3,289
1970	3,632
1971	3,706

Source: A.R.E. Statistical Handbook. Central Agency for Public Mobilization and Statistics. Cairo. 1973, p.307.

The phenomenon of the increase of population is particularly marked in under-developed countries:

"the population of these areas is calculated as 66.5 per cent of the world's population, and it is also calculated that by the year 2000, it will have risen to 76.3 per cent".¹²

Edmund King refers to the population increase when he states:-

"In 1965, there were about 3,300 million people on earth. During the preceding 10 years the world's population had grown by about one-fifth, which was much faster than ever before in history. In a number of developing countries the rate of increase was about 50 per cent faster than just indicated."¹³

And he adds that:-

"by the end of the century, the total human population is likely to exceed 6,000 million."¹⁴

This marked increase in population was a result of attention which is given to health care as Gurth Archer states:-

"This marked growth in total world population is doubtless a result of improved medical services."¹⁵

This improved medical service has resulted in the reduction of death rates and infant mortality as stated by Holmes when he says:-

"infant mortality rates have everywhere been reduced, high birth rates and low death rates have resulted in rates of growth in population which are staggering reaching percentage per annum as high as 2.8 in some African countries."¹⁶

Doubtless, the population explosion has resulted in an enormous expansion of enrolments in educational systems at all levels. The opportunity has been expanded first at the primary level, then at the secondary level which in turn resulted in the expansion of higher education.

2.3 Manpower demands on higher education

The expansion of higher education in general and of university education in particular is considered a natural response to the increased demand for highly trained and skilled manpower needed to contribute to the development of societies.

The accelerated growth in science and technology in the modern age has created an urgent need for highly-skilled trained manpower to cope with industrial developments and to ensure its progress.

This growing demand of highly qualified manpower is steadily being reinforced by such developments as the advance of science and technology; ambitious projects, like the exploitation to nuclear energy and the conquest of space; extension of social and welfare

services; response of developed nations to the educational and technical needs of developing countries, the rise of new professions and the upgrading of semi-professions. All these developments have led to the introduction of new departments and new disciplines in existing higher institutions and to the provision of in-service and upgrading of many courses. They also resulted in the foundation of new universities and the growth of new institutions of technical education.

This view is stressed by Sidney Hook when he states:-

"that changes in technology employed in production and changes in the type of products demanded, have steadily raised the demand for educated and skilled labor."¹⁷

This responsibility of higher education is strongly emphasized by all economic planners everywhere, that without producing highly qualified manpower in several specializations, national development would not be achieved because the level of training of manpower affects to a great extent the quantity of production. This fact is fully accepted by Lord Robbins when he says:-

"There is a broad connection between the size of stock of trained manpower in a community and its level of productivity per head."¹⁸

2.4 Universal declaration of human rights

This declaration issued by the United Nations states:-

"that everyone has the right to education. Education shall be free at least in the elementary and fundamental stages. Higher education shall be equally accessible to all on the basis of merit."¹⁹

This declaration provided the opportunity for a large number of children for education who were deprived in the past from this right because social status, race, sex or economic hardship.

As a result of this declaration, there has been an increase in enrolments in the primary level which has become free and compulsory. This in turn has created a heavy strain on the secondary level and finally on higher education which expanded to provide places for all students who seek for admission to higher education institutes if they have the qualifications required.

2.5 The expansion and progressive democratization of secondary education

Education beyond literacy before the twentieth century was generally a privilege and even when efforts were made to widen the opportunity to include those who were not members of a privileged élite, it is still true in most countries that the privileged minority only have greater opportunities. But:-

"towards the end of nineteenth century a number of forces worked to break down this exclusiveness of secondary education and then later of higher education."²⁰

So every country in the world is engaged in expanding secondary education and making it free and accessible to all children of the appropriate age if they meet the requirements of admission regardless of any restrictions e.g. social status of their parents, sex etc. This expansion of secondary education has resulted in increasing the number of secondary school leavers who wish to go on to higher education. This phenomenon is noticed in developing countries, and has led to establishment of completely new universities and to the increase of numbers admitted to the existing ones. A clear evidence for this, the case of Egypt where secondary education rapidly increased after the 1952 revolution and became accessible for wider range of classes. See the expansion of universities in Egypt later on in this chapter.

2.6 New routes to higher education

A growing number of states are opening up alternative routes to institutions of higher education for young adults who have not enjoyed regular academic secondary education which is required for admission to higher education. The aim of these new routes is to make higher education more widely accessible to large numbers who wish to attend it. The following are some examples of these new routes:-²¹

(a) External examinations i.e. examinations conducted outside the secondary school system, but considered equivalent to the regular secondary school leaving examinations, or special entrance examinations to universities, such examinations (available, for instance in Belgium, France and Israel) are designed to give access to higher education to young students who have missed the opportunity of attending academic secondary school.

(b) Evening classes for young workers, leading to university entrance qualifications e.g. in Czechoslovakia, the Federal Republic of Germany and Israel. In France the universities themselves prepare young workers for entrance qualifications in so called "Instituts de promotion superieur du travail" which have been established since 1950, besides part-time degree courses, a three-year preliminary course in the evenings for young people who have not obtained the Baccalaureat.

(c) An opportunity for admission to higher education institutions is given to students who have successfully completed a vocational or technical secondary school. Admission is usually restricted to faculties, ^{and} institutions that are directly ^{related} to students' vocational or technical education. This alternative route to higher education exists in countries such as Italy, Netherland, Poland and Egypt. (With regard to Egypt see chapter of Admission system in Egypt).

2.7 General economic prosperity and growth of social and political awareness

The rise of families' income especially in industrialized countries has enabled parents to assist their children to enrol in institutions of higher education. This applied particularly in countries where government aid to students was limited or could not cover all students, or in countries where tuition fees were very high and could not be afforded by the majority.

Frank Bowles explains the impact of the rise of families' income on the expansion of higher education when he says:-

"the increase in the family funds and living standards particularly for persons in the lower middle class and the working class, which have made it possible for parents to provide more education for their children than they had themselves."²²

Furthermore, the rise of the standard of living of the majority of people, especially in modern industrial society has influenced the attitude of many parents towards higher education as a desirable kind of life their children must enjoy after their school days.

Economic prosperity has enabled many countries to devote more resources to expand higher education institutions and establish new ones, which could not be established during periods of economic hardship.

Economic prosperity has enabled governments to provide grants to large numbers of students who can be deprived from completing their higher studies because of financial reasons, and bear the responsibility of providing the required human and material resources.

Greater opportunities have been given to young people from underprivileged social backgrounds. For example, between 1960 and

1970, their chances of access by comparison with young people from more privileged social backgrounds "rose from an average ratio of 1:58 to 1:12 in Germany, from 1:84 to 1:28 in France, from 1:8 to 1:5 in the United Kingdom, from 1:9 to 1:5 in Sweden."²³

2.8 Greater educational opportunities given to women in higher education

There has been a global movement towards giving women greater opportunity to go on to higher levels "the average figure for the world as a whole is as high as an annual increase of 5 per cent per year."²⁴

The steady increase in the number of women who have been given the opportunity to go on after schooling to higher education institutions since the second half of the twentieth century in different countries "can generally be related to the measure of social independence which women have succeeded in achieving."²⁵

This increase in women enrolments in higher education is shown by Frank Bowles in his book "Access to Higher Education" when he says:-

"increased educational opportunities for female students, is clearly evident in many areas, particularly in colonial territories which in the past have offered girls and young women only very limited access to education at any level."²⁶

Evidence can be given to show the increase of girls enrolled in higher education in Egypt. The number in 1952 was 3,003, in 1970 was 43,174, an increase of 1,100%²⁷ and reached 75,763 in 1973-1974.²⁸

2.9 Political independence of many countries

This is an important direct factor on higher education expansion.

In many countries in Africa and Asia and the third world in general, the trend is to expand their educational systems from primary to higher levels to compensate for the lag they suffered in the past. They need increased numbers of highly trained and skilled manpower to take over the responsibility to develop their countries after gaining their independence. They intend to be self-reliant instead of imparting the required manpower which is essentially needed to any country after independence. Many of these countries have established their own higher educational institutions.

Political independence has resulted in rising of the expectations and hopes of people of these countries ^{who} have begun to believe that higher education will lead them to a better life. Moreover, young people are impelled to pursue their studies at the higher level in order to secure a degree as a guarantee of professional status, an attractive income, a secure career and the desire for raising their social scale and the acquisition of personal status. This happens in countries ⁱⁿ which price certificate and salaries are given according to the educational level. The effect of ^a pricing certificate is explained by Professor Peter Williams when he says:-

"The pricing system in education positively encourages young people to seek as much education as they can by making education privately cheap in relation to the high salary rewards offered to the successful."²⁹

Another important reason for the flow of young people in higher education that is "the absence of jobs for young secondary school leavers which forces them to continue their studies although the latter are not necessarily professional."³⁰ This driving force in many cases leads to ^a mass higher education system, Egypt is a clear example of this. Furthermore, many parents and their children feel

that higher education studies are good in themselves. Niblett supports this view when he says:-

"the growing feeling in the whole community that education is good in itself and universities in particular have a prestige of their own as the apex of an educational hierarchy conceived not only with vocational needs but with the good life."³¹

This factor of expansion mentioned by Niblett, plays a direct effect in most developing countries regardless of the labour market, which in turn led to ^a mass higher education system beyond the capacity of [^] the institutions.

have

All the above factors resulted in enormous expansion of higher [^] education in general and of university expansion in particular. This expansion increased the burden on governments to provide the universities with the required facilities. But in some countries the quantitative expansion has not been accompanied by increasing the required human and material resources, so the quality of university education has been sacrificed to quantity which in turn will affect the development of societies.

3. The expansion of university education in Egypt

3.1 The Origins: University education before the 1952 revolution

At the beginning of the 19th Century there were no higher education institutions except Al Azhar which was established in 969 a.d., which serves Islam as a world centre, as well as being a university with a network of institutions serving its various religious and educational objectives. At the beginning of the 19th Century, the authorities established a group of high schools to train persons for governmental affairs.

"The School of Engineering was established in 1820, that of Medicine and Veterinary Medicine in 1827, that of Agriculture in 1829, that of Law in 1868, that of Dar Al-Ulum (house of sciences) in 1871, which is specialized in Arabic and Muslem studies, that of Teachers in 1880 and that of Commerce in 1911."³²

At the beginning of this Century there was a growing demand for a national university which was officially inaugurated in 1908 in Cairo. It was private and free from the interference of the politicians and financed by endowment from the public.

In 1925, the government became responsible for higher education and established the Egyptian University.

"Its aim was concentrated only on the education of students in very limited fields."³³

The higher schools which were established in the 19th Century have become the basis for "Fuad I University" now Cairo University, which started with four faculties, the faculties of Law, Medicine, Arts and Science, and now consists of fourteen faculties in 1976-1977 with the total number of students 87,052³⁴ including the Faculty of Commerce in Bani-Suif and the Faculties of Education and Agriculture in Fayoum which are supervised by Cairo University, besides a branch in Khartoum consisting of three faculties, Law, Arts and Commerce.

When the pressure increased on Cairo University, three faculties were established in Alexandria as a start of Alexandria University; the Faculties of Arts and Law were established in 1939 and the Faculty of Engineering in 1940,³⁵ and in 1942, Alexandria University was inaugurated to include these three faculties in addition to the Faculty of Commerce, Science, Medicine and Agriculture, as well as the Faculty of Dentistry which was established in 1945-1946, and that of Pharmacy in 1949-1950.³⁶

In 1950, Ain Shams University was founded in Cairo including

the Faculties of Arts, Law, Commerce, Science, Medicine, Engineering, Agriculture, Education, Girls and later on the Faculty of Linguistics which was opened in 1973-1974.³⁷ The total number of students was 37,880 in 1968.³⁸

Thus one can conclude the following features of universities during that period.

1. There was no serious problem in the admission process as there were places available for all students who completed their secondary education.

2. These early universities were successful because:-

(a) They had properly equipped libraries and laboratories.

(b) They had enough staff with a reasonable staff/student ratio. For example the ratio in the Faculty of Arts in Cairo University in 1930 was 1:7.4, in 1962 1:107³⁹ and reached 1:125 in 1975.⁴⁰ Most of the staff were highly qualified, 80% of them were trained in Britain.⁴¹

(c) Accordingly, enough supervision was provided to students during their laboratory work and their group discussions, and links between staff and students were very close.

3. Distinguished members of staff from European universities were invited to come to Egypt "and in collaboration with their Egyptian colleagues set up courses in History, Arabic, Literature, Philosophy and Economics. Together they created the concept of university education in the modern sense."⁴²

3.2 University education after the 1952 revolution

A new society in Egypt is being built in accordance with the principles of the 1952 revolution concepts of democracy, co-operation,

and socialism. So the principle aims of the government after the revolution were:-

- (a) raising the standard of living
- (b) building the society on the basis of science and technology
- (c) affording equality of opportunity in four basic rights;
 - (i) the right to receive education which suits one's abilities and talents
 - (ii) the right to medical care, whether treatment or medicine
 - (iii) the right to secure the job which accords with one's abilities and interests and the type of education he has received
 - (iv) insurance against old age and sickness.

To achieve the above principles,

"it was necessary to wipe out first the remaining vestiges of the evil of the old regime with its deliberately backward social system."⁴³

The first step was the abolition of the old feudal system through the Law of Agrarian Reform. The revolutionary regime enacted this law on the 9th September 1952. The immediate purpose of that law was to diminish the power of big landowners. According to this law, the cultivated land was redistributed so as to achieve social justice by improving the standards of living and the social conditions of rural groups.

The following table shows the structure of landownership between 1952-1965.

Table 7-4 Distribution of cultivated land in Egypt in 1952 and 1965

	1952			1965		
	Owners (000s)	Areas (000s) Feddans	Ratio Feddans per owner	Owners (000s)	Areas (000s) Feddans	Ratio Feddans per owner
Less than 5 Feddans	2,642	2,122	0.8	3,033	3,693	1.2
5 and less than 10	79	326	6.6	78	614	7.9
10 and less than 20	47	638	13.6	41	527	12.8
20 and less than 50	22	654	29.7	29	815	28.1
50 and less than 100	6	340	71.7	6	302	63.3
100 and less than 200	3	437	145.7	4	421	100.0
200 and over	2	1,177	588.5	-	-	-
Total	2,801	5,084		3,191	6,462	

Source: Mabro, Robert: The Egyptian Economy 1952-1972. Economies of the World. Oxford. Oxford University Press. 1974, p.73.

The first limit on land holding was fixed at 200 feddans,

"and in 1961, it was fixed at 100 feddans it was also provided that in each village, the land should be distributed among farmers each of whom was entitled to have a small holding from 2-5 feddans".⁴⁴

Around one million people profited from the law and the wages of agricultural workers all over the country were increased and should be fixed each year by the government.

Land reform was necessary to meet the rapid increase in population which had been taking place in Egypt, recently averaging 2.5% a year and increasing now to 2.8%. The population was 21,437,000 in 1952, 27,579,000 in 1962 and 34,839,000 in 1972,⁴⁵ and reached 37 million in 1975.⁴⁶

Only very small areas are used in agriculture compared with the total land area of Egypt as shown in the following table.

Table 7.5 The distribution of land in Egypt in millions

Type of land	Nos. of Feddans	% of the total land area
Land used in agriculture	6.2	2.6
Cities, towns, roads, rivers	1.8	0.8
Sand and desert	230.0	96.4

Source: UNESCO. Reform and Development of Higher Education in the UAR. Paris. UNESCO. 1969, p.69.

As a result of such projects carried out by the government, 234,000 feddans were reclaimed from 1952-1957 and distributed among non holding farmers. The agriculture sector has received more attention from the government as it is considered as the first sector which constitutes the framework of production and brings Egypt an increase of LE 800 million annually, about 30% of the gross national product and employs nearly half of the total working force.⁴⁷ To achieve the agricultural expansion projects, the government has built the High Dam for the following benefits:

- (a) expanding the cultivated area by 2 million feddans and increasing the national income by LE 50 million
- (b) ensuring cultivation in the dry years and bringing irrigation waters at the prescribed times for the different products
- (c) increasing ^{by} 850,000 feddans in the cropped area through [^] conversion from basin to perennial irrigation in Upper Egypt
- (d) decreasing the level of subterranean water in the Delta and lower Egypt and facilitating means of irrigation.

But only 650,000 feddans out of the 805,000 reclaimed between 1960 and 1970 are related to the High Dam.⁴⁸ Undoubtedly, the increase of cultivated land would increase the national income and

the living standard of people.

The Revolutionary government has not only given the attention to the development of agriculture, but also due attention was given to the development of industry.

The first attempt towards achieving broad industrial development was made particularly after 1956 when a five year plan was drawn up at a total cost of LE 330 million.⁴⁹ This resulted in a continuous increase in industrial production that covered almost all the needs of consumption and allowed to dispense with many imports. The value of industrial production was LE 314 million in 1956, it rose to LE 656 in 1960, thereby making an increase of 290 per cent over 1952 figures.⁵⁰

In 1955, industry and heavy industry in particular, became the real source of hope for the achievement of the comprehensive advance of Egypt. So in January 1957, a National Planning Committee was set up whose purpose was to prepare a long-term plan for social and economic development. According to the industrial plan which was launched in 1958 by this committee, employment was increased over 70,000 and resulted in an output of LE 84 million.⁵¹

Attention has also been given to investment as an important means of increasing national income.

"according to the figures compiled by the National Planning Committee, government investment increased from an annual average of LE 28 million for 1950-1952 to LE 34 million for 1953, to LE 53 million for 1954, to LE 62 million in 1955, to LE 66 million in 1965."⁵²

Furthermore, investment is to be directed into more production outlets to increase growth rate from around 8% to over 10% by the end of the 1970s.⁵³

The government issued decrees of nationalizing and Egyptianizing

of certain companies. By Law 177 in 1952, all the banks and the insurance companies were nationalised and all heavy industry came under public ownership to achieve economic stability and to develop production. In 1956, ^{the} Suez Canal Company was nationalised earning LE 146 million in 1976 rising to LE 230 million in 1978 and is expected to be 304 million in 1980.⁵⁴ Furthermore:

"Cotton trade, shipping lines companies and 44 companies in the fields of manufacturing transport and power, were nationalised and all the banks were Egyptianized."⁵⁵

In 1961, other socialist decrees were issued to achieve social justice e.g. increasing the wages of the working class, devoting 25% of the net profit gained by the public sector to be distributed among employees and labourers, working hours in industrial establishments were fixed at 42 a week.

On the whole, the government was planning to develop all economic sectors so as to increase national income which in turn will increase the income of the individual. The following table shows the output by selected sectors of the economic system.

Table 7 - 6 The output by selected sectors LE million, 1975 prices

Sector	1976 Estimated	1978 Projections	1980	Average annual increase 1976/80
Agriculture	2,116	2,247	2,384	3
Industry	3,449	4,103	5,145	12
Oil	581	747	989	15
Power	100	145	200	17
Construction	416	589	780	15
Sues	146	230	304	15
Other	3,201	3,914	4,736	11
Total output	10,009	11,975	14,538	9

Source: African Business Group. Survey on Egypt. Prepared by African Business Group. London LC Magazine Ltd, 1977, p. 1.

Doubtless, the development and progress of Egyptian economic system and all changes resulting from this development have affected the socio-economic structure of Egyptian society.

Two results from the economic progress with regard to education, they are:

(a) The ability of the majority of people to afford education up to higher level.

(b) The government assuming the responsibility to provide for education the finance to cope with the increased numbers who have become able to benefit from education right up to the universities. Thus the revolutionary government paid more attention to higher education and declared in many occasions that science and technology were indispensable for the achievement of national goals.

The first university to be established after the 1952 Revolution was in Assiut in Upper Egypt in 1957, starting with Faculties of Science, Medicine and Engineering. In 1959-60 the Faculty of Agriculture was established, the Faculty of Veterinary Medicine was established in 1961-62, that of Commerce in 1963-64, that of Pharmacy in 1969-70 and of Education in 1966 which was under the name of Teacher Training and became under the administration of the University. The University of Assiut is characterised by a unique system of administration, being managed on a departmental basis. The total number of students increased from 10,000 in 1968⁵⁶ to 18,963 in 1972-73, 25,580 in 1973-74,⁵⁷ and reached 29,054 in 1976-77.⁵⁸ One of the changes that have taken place in the university education in Egypt after the 1952 Revolution, is the reform and modernisation of Al-Azhar University. In 1961, law 103 was issued concerning the development of Al-Azhar University to

eliminate the gap between it and other universities, so Al-Azhar graduates would enjoy equality of educational and employment opportunities with the products of other universities.

Before 1961, Al-Azhar University was originally only three faculties, that of Muslim Theology, that of Jurisprudence and that of Arabic Language.

In 1968 new faculties were established; these of Engineering, Medicine, Agriculture, Public Administration and Dealings (now the Faculty of Commerce), the Higher Institute of Islamic Studies and the Institute of Languages and Translation. It is now composed of 13 faculties by adding the Faculties of Science, Dental Medicine, Education and Girls University College, with total number of 43,063 students including its branches in the regions; Zagazing, Tanta, Asyot and Mansourah.⁵⁹

4. The dominant changes in university education since the 1952 Revolution

University education in Egypt after the 1952 Revolution is characterised by particular distinguishable features. Such features are discussed under the following headings.

4.1 Equality of opportunity

The Principle of democracy of education adopted by the revolutionary government has made university education a human right, and as a result of the principle raised by Taha Husien in 1950 (Education Minister) as education should be provided for all "as air and water"; University education has converted from elite to mass system as shown in the following table.

Table 7 - 7 Enrolments in universities in different years

Year	Enrolments in universities
1925-26	3,027
1935-36	7,021
1950-51	31,744
1952-53	42,494
1953-54	51,681
1955-56	59,550
1957-58	73,144
1960-61	86,980
1969-70	161,517
1975-76	336,385
1976-77	368,238

- Source: a) El-Said. The Egyptian Educational System in "Access to Higher Education, Vol.II, Paris, UNESCO, IAU, 1965, p. 448.
- b) Higher Council Universities, Statistical Administration Years 1973, 1975, 1976.

The year 1950-1951 shows a huge increase in enrolments as a result of the application of open policy, hence the then Minister of Education believed, that education ought to be provided as "air and water."

This increase has been a remarkable phenomenon of the revolutionary era.

Equal opportunity was ensured by drastically reducing university fees. Fees before the 1952 were too high to be afforded by the majority of the population because of maldistribution of income among families. However, after the economic reform in 1952, more families became able to pay the fees which were reduced in 1956.

The following table compares the fees required by different faculties.

Table 7 - 8 University tuition fees by faculty in 1939 and 1956

Faculty	1939 fees	1956 fees	Faculty	1939 Fees	1956 fees
	LE	LE		LE	LE
Arts	20	15	Dentistry	30	20
Law	30	15	Pharmacy	20	20
Economic & Political sciences	-	15	Engineering	40	20
Commerce	25	15	Agriculture	40	20
Science	30	15	Veterinary Medicine	25	20
Medicine	45	20	Dar-Al-Ulum	-	15
			Women's College	-	15

Source: El-Said, M. The Egyptian Educational system in I.A.U. Access to Higher Education Vol.II, Paris, UNESCO, I.A.U. 1965, p. 448.

There were certain exemptions from fees for:

- a) students whose total marks in the final secondary school certificate examination amount to at least 75%;
- b) needy students who are unable to pay on condition that they have obtained 60% in the GSCE and maintain an average of "good" in their university studies;
- c) students who win athletic championships;

d) students who suffer from misfortunes that make them unable to pay the fees;

e) students who get "very good" in their university studies.

In 1961-62, university education became free. Nevertheless a relatively small amount of additional fees are now paid by the students to cover medical, library, social and student union services. These fees are shown by Table 7 - 9.

Table 7 - 9 University tuition fees since 1961-62

Type of fees	L.E
Library services	0.050
Students Union	0.150
Medical services	0.100
Social services	0.050
Insurance	0.025
Total	0.375

Source: Boktor, A, The Development and Expansion of Education in U.A.R., Cairo, The American University, 1973, pp. 50 - 51.

However, students of scientific faculties pay additional three pounds as deposit for laboratory equipment.

Not only fees were reduced to such a nominal level, but also grants and loans are offered to students. The government offers loans for those students who may be prevented from accepting admission to universities for financial reasons. These loans are repaid after graduation and entering jobs. The project of students loans is widely carried out under the name of "Students' Bank". Another feature of equality of opportunity is that girls at present enjoy the right to university

education on an equal footing with boys. They can attend universities according to their option and their score in the GSCE. Thus the number of female students increased from 3,003 in 1952-1953 to 43,174 in 1970-1971, an increase of 1,100%.⁶⁰

A further prominent feature of university education in Egypt is that there has been an equal demographic distribution of faculties in the regions instead of concentrating on the capital and the big cities. At present there are 12 universities. Eight of them were established in the regions since 1952 and now enrolled 37.3% of ^{the} total enrolment of university education as shown in table 7 - 10.

Table 7 - 10 Enrolments in Egyptian Universities in 1976-77

	University	E N R O L M E N T S			
		Male	Female	Total	%
Cairo and Alexandria	Cairo	58,464	28,588	87,052	
	Alexandria	48,194	21,496	69,640	
	En Shams	52,720	31,756	84,476	
	Al Azhar	34,762	8,301	43,063	
	Total	194,140	90,141	284,281	62.7
Regional Universities	Asuit	21,528	7,526	29,054	
	Tanta	14,548	5,200	19,748	
	Mansourah	22,866	6,634	29,500	
	Zagazig	21,094	5,462	26,556	
	Monoufia	8,887	1,947	10,834	
	Suez Canal	5,924	1,388	7,312	
	Helwan	23,259	11,952	35,211	
	El-Menya	7,795	2,592	10,387	
Total	125,901	42,701	168,602	37.3	
Grand Total	320,041	132,842	452,883	100.0	

Source: Ministry of Education, Minister Office, Cairo 1977.

Although these percentages indicate the concentration of university education in Cairo and Alexandria, the regional expansion of universities is recognised as a distinguishable feature in the pro-revolutionary era.

4.2 Regional expansion of universities

One of the old features of the universities in Egypt was their centralisation in Cairo and Alexandria only; so much so "the number of University students in Cairo alone reached 92,000."⁶¹ Undoubtedly, the movement to Cairo or Alexandria of students who wished to attend universities is not compatible with the principle of equal opportunities considering the expenses borne by those students who shift to a new environment in addition to the other social problems involved.

The first move to establish regional universities after Asyot University took place in 1961-1962 by establishing two Faculties of Medicine in Tanta and Mansourah as a basis for two new regional universities. The 1969-1970 academic year is considered as being the start of a big wave of expansion in establishing new faculties all over the country.

The expansion of regional faculties can be shown in two periods: First from 1969-1970 to 1974-1975, second from 1975-1976 to 1977-1978 as shown in Tables 7 - 11 and 7 - 12. Also see Map in Figure (3).

FIGURE 3
UNIVERSITY EXPANSION IN EGYPT

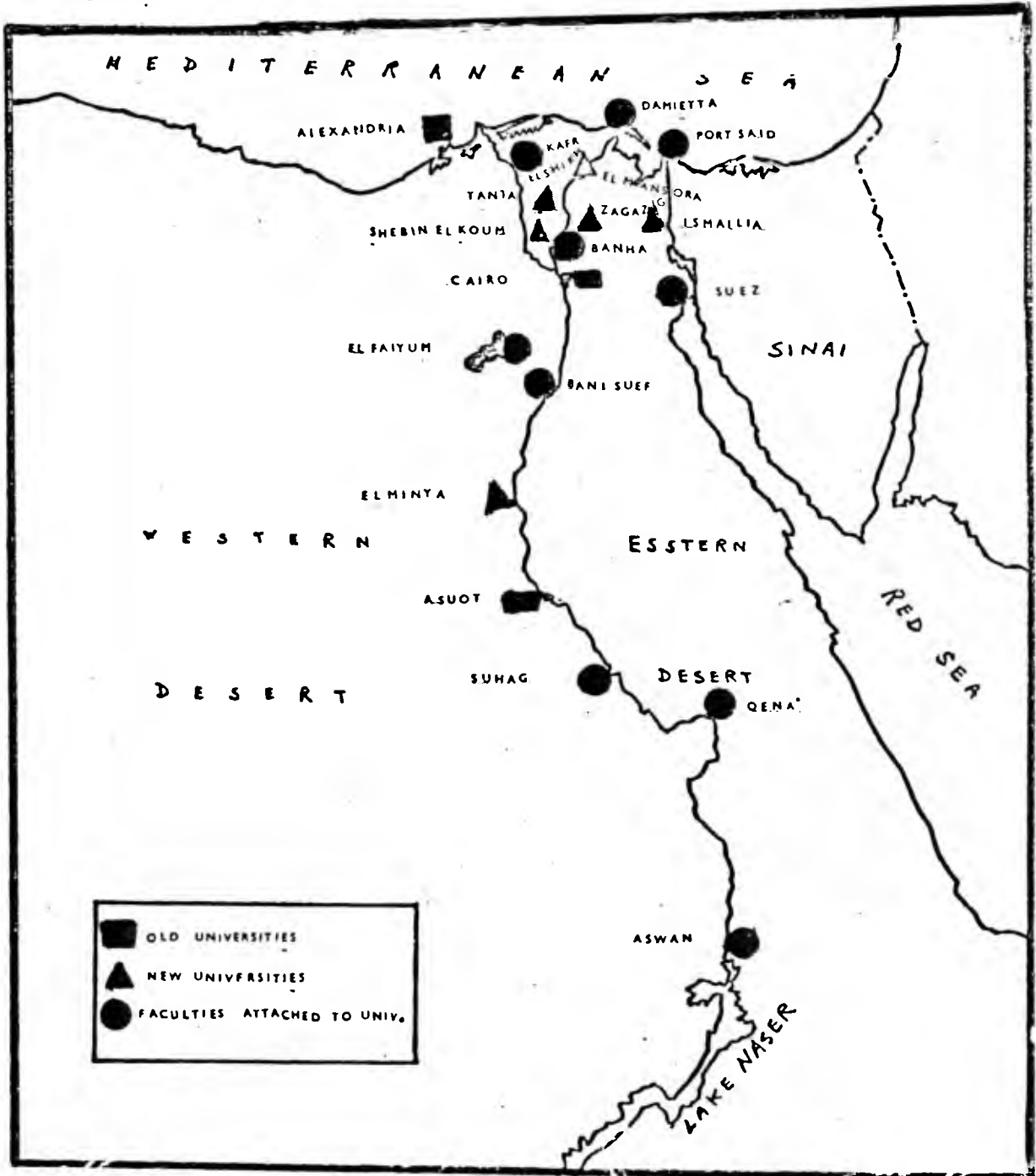


Table 7 - 11 The expansion of regional universities from
1969-1970 to 1974-1975

Town	Faculty	Opening date	Administered by
Mansourah	Medicine	1962-63	Cairo University
	Education	1969-70	" "
	Science	1969-70	" "
	Pharmacy	1970-71	" "
	Law	1973-74	Mansourah University
	Commerce	1973-74	" "
	Agriculture	1973-74	" "
	Engineering	1973-74	" "
Tanta	Medicine	1962-63	Alexandria University
	Education	1969-70	" "
	Science	1969-70	" "
	Pharmacy	1973-74	Tanta University
	Dentistry	1973-74	" "
	Commerce	1973-74	" "
	Arts	1975-76	" "
Kafr El Sheikh Shebin El-Koum	Agriculture	1973-74	" "
	Education	1971-72	Ain Shams University
	Agriculture	1969-70	" "
Zagazig	Education	1971-72	" "
	Commerce	1969-70	" "
	Medicine	1970-71	" "
	Science	1974-75	" "
	Dentistry	1973-74	Zagazig University
El-Menya	Agriculture	1969-70	Assyot University
	Arts	1970-71	" "
	Education	1973-74	" "
	Science	1973-74	" "
Sohag	Education	1971-72	" "
Kena	Education	1970-71	" "
	Science	1973-74	" "
Aswan	Education	1973-74	" "

Source: A.R.E. Ministry of Education. Expansion of "Universities in Egypt". The Higher Council of Universities, Cairo 1977.

- N.B. (a) The Faculties of Mansourah were administered by Cairo University until 1973-1974. Then in 1973, by Law 54, it has become an independent University including all the faculties shown in the table.
- (b) The Faculties of Agriculture, Commerce and Engineering were higher institutes established in 1957-1958.
- (c) Tanta University has become an independent university in 1973-1974.
- (d) Zagazig has become an independent university by Law 181 in 1974.

(e) El-Menya has become an independent university by Law 93 in 1976.

(f) The Faculties of Commerce in Tanta, Agriculture and Engineering in Shebin-El-Koum and Agriculture in Menya, were higher institutes then transformed to be university faculties in dates shown beside each in the above table.

Table 7 - 12 The expansion of regional faculties in the period 1975-1976 - 1977-1978

Town	Faculty	Opening date	Administered by
Domietta	Education	1976-77	Mansourah University
Shebin-El-Koum	Engineering & Electronics	1975-76	Monfia "
	Engineering & Technology	1975-76	" "
Kafr-El-Sheikh	Education	1977-78	Tanta "
El-Fayoum	Education	1975-76	Cairo "
	Agriculture	1976-77	" "
Bani-Suif	Commerce	1975-76	" "
El-Menya	Engineering & Technology	1975-76	Menya "
Shebin El-Koum	Science	1977-78	Monafia "
Sohag	Arts	1976-77	Asyot "
	Science	1975-76	" "
Kena	Arts	1977-78	" "
Asswan	Science	1975-76	" "
Tanta	Arts	1975-76	Tanta "
Shubra	Commerce	1976-77	Zagazig "
(Cairo)	Engineering	1976-77	" "
Zagazig	Arts	1975-76	" "
	Law	1975-76	" "
	Pharmacy	1975-76	" "
Banha	Education	1977-78	" "
Ismailia	Education	1977-78	Sues Canal "
	Agriculture	1977-78	" " "
	Science	1977-78	" " "
Alexandria	Veterinary	1975-76	Alexandria "
	Medicine		

Source: Higher Council of Universities. Statistical Administration, Cairo 1977.

The expansion of regional universities can be attributed to several reasons.

The most salient of these are:

- 1) Universities in Cairo or Alexandria could not admit all the secondary school leavers who increase annually, and the rising demand among them to attend university education.
- 2) Regional universities could relieve parents financially by decreasing the living costs of students studying outside the capital.
- 3) The difficulty of providing accommodation for students in both Cairo and Alexandria, so it was noticed that large numbers of students were commuting every day from their homes to both cities which, doubtless, affects their performance by wasting their time.
- 4) The new regional universities could play their role in the social, economic and cultural development of the areas in which they are situated.
- 5) To achieve the principle of democracy of education which was adopted by the revolutionary government, it was necessary to increase equality in the distribution of educational services all over the country instead of concentrating on the capital or the big towns.

It is clear that the rapid expansion in university education has taken place in the late sixties and during the 1970s either by increasing the number of students admitted to the existing universities or by establishing new regional faculties as basis for new complete universities.

According to the UNESCO Criterion, the ratio of students enrolled in universities to the total population is considered an indication of progress in society. Egypt has made such progress compared with other countries as shown in the following table.

Table 7 - 13 Comparative statistics of enrolment in universities in different countries 1950-1966

Country	No. of students enrolled in universities per 100,000 of population			
	Year	1950	1960	1966
A.R.E.		165	413	594
Dem. Germany		162	428	457
France		334	599	1,076
Iraq		93	177	347
Italy		310	396	659
Switzerland		353	398	560
U.K.		242	382	649
U.S.S.R.		693	1,117	1,769
Yugoslavia		369	767	990

Source: UNESCO, Year Book of Education 1968. As quoted in El-Nashar, M. op.cit. 1973, p. 261.

4.3 Response of University Education to Technical Progress

To keep abreast with the rapid progress of science and technology, new departments and faculties were established, to provide the country with several kinds of technicians to cope with the needs of the socio-economic programmes.

New specialisations divisions were created within the universities, for instance, in the Faculties of Engineering, such specialisations as architecture, irrigation, hydraulics and public work, electric power engineering and ship building engineering were created in order to contribute to the rebuilding of the new state.

Also in the faculties of agriculture, specialisation of farm mechanisation was created to develop the agricultural production.

Furthermore, newly completed faculties were established covering

specialisations such as mechanical engineering, automotive engineering, electrical power engineering, ship building, petroleum engineering and mining engineering.

This growing awareness of the progress of science and technology has been reflected in the establishment of Helwan Technical University which came into existence in 1975-76 and now including 17 faculties with total enrolment of 42,390 students in 1976-77.⁶²

4.4 Expansion in post-graduate studies

A great deal of care was taken to introduce higher studies courses e.g. Diploma, Masters and Doctorate degrees to ensure profound studies in depth both theoretical and practical. In addition, more attention is being given to send students abroad for post-graduate studies to cope with the need of staff for the rapid expansion of university education. The clear example is the four years mission plan which was set up by the Ministry of Higher Education in 1973 in order to send 2,000 students abroad, 500 per annum to complete their post-graduate studies their numbers reached 3284 in 1977.⁶³

4.5 Increase in University Budget

The increase of university education budget so as to cope with the provision of such facilities. The increase in the budget of the universities is shown on the following table:

Table 7 - 14 Budget of the universities in Egypt in different years

Year	Budget of the universities
1952-53	3,540,500
1956-57	6,163,502
1960-61	13,214,000
1967-68	25,310,800
1970-71	26,696,000
1974-75	54,254,000
1976-77	103,122,300
1977-78	134,198,300

- Source: a) A.U.R. The Ministry of Finance 1970.
 b) Higher Council of Universities Report on Universities Budget.
 c) The Ministry of Education. Ministers Office, Cairo 1978.

5. Reasons for the expansion of university education

There are particular reasons behind the over-expansion of university education which has taken place since early sixties until now. These reasons are:

5.1 The increasing demand for highly qualified manpower required for the national development plans. e.g. because of the urgent need for engineers, the number of students in the faculties of engineering rose from 5,147 in 1952 to 20,142 in 1970, and increase of 399 per cent,⁶⁴ and reached to 44,207 in 1977.⁶⁵

There was also a dire need for physicians to meet the requirements of the health and welfare plan. Accordingly, the number of students in the faculties of medicine increased from 6,616 in 1952 to 20,607 in 1970, an increase by 310%,⁶⁶ and the total enrolments amounted to 30,252

in 1974, and 34,113 in 1977⁶⁷. There was also an increasing demand for teachers to cope with the need of the expansion of preparatory and secondary education and with the increasing demand of Arab and some African countries e.g. Saudi Arabia, Yemen, Qatar, Iraq, Kuwait, Libya, Sudan, Algeria and Somalia. These countries ask the Egyptian Government each year for an increasing number of teachers in different specialisations. To meet these requirements, the number of Teacher Training Faculties increased from four in 1966 to 17 in 1977, with a total number of enrolments of 32,956 excluding Al-Azhar Faculty of Education and Educational department of Girls College,⁶⁸ and according to the five-year plan, 51,733 students are supposed to be admitted to the Faculties of Education between 1975-1976 - 1978-1980.⁶⁹

5.2 The expansion of general secondary education. The government has made it accessible to all preparatory school leavers who get the required marks in the final examination.

Table 7 - 15 The expansion of secondary education in Egypt from 1963-1975

Year	No. of Schools	Intake	Total Enrolment	Graduates
1963-64	374	48,552	131,796	44,394
1964-65	441	61,557	172,229	37,207
1965-66	497	66,827	208,581	47,333
1966-67	526	68,260	234,619	69,246
1967-68	581	70,694	259,792	75,097
1968-69	591	74,084	276,075	86,937
1969-70	586	88,121	293,144	92,593
1970-71	593	86,678	290,117	78,861
1971-72	603	90,293	312,489	93,988
1972-73	597	91,073	321,603	107,657
1973-74	600	97,777	323,603	124,258
1974-75	615	108,661	340,326	

Source: A.R.E. Ministry of Education. Education and Training in Egypt. Cairo. 1976, p. 11.

Doubtless the expansion of general academic secondary education has resulted in a pressure on university education so the government has expanded by establishing new universities in the regions to absorb the annual increased secondary school leavers, in addition to increasing the numbers of students in the existing universities as shown in the following table.

Table 7 - 16 Numbers of students admitted annually and total enrolments in Egyptian Universities

Year	No. of students admitted annually	Total number of enrolments
1967-68	18,602	141,160
1968-69	21,818	142,975
1969-70	30,230	161,517
1970-71	33,896	177,955
1971-72	38,601	199,674
1972-73	47,667	216,807
1973-74	57,688	239,339
1974-75	67,263	279,822
1975-76	77,903	376,040
1976-77	87,659	410,023

Source: A.R.E. Ministry of Education. Higher Council of University Statistical Administration. Year 1972-1973 - 1976-1977.

The table reveals that the number of students admitted to the universities increases annually as a result of the increasing number of secondary school leavers who wish to attend university level. In response of that social demand, the government started in 1969-1970 to establish regional universities to relieve on the existing universities in Cairo and Alexandria. That year is called by University authorities as "The year of regionality of university education".

5.3 The country is looking to the universities to produce the leadership in the labour force required for the achievement of its objectives as well as to produce the solutions of problems during the implementation of its plans by carrying out applied and pure research. So more care is given to post-graduate studies, research facilities are provided to some departments whose studies are related to the country's problem e.g. in 1973, the Minister of Agriculture seminar has called scholars in the Faculties of Agriculture to conduct research on modern trends in cotton marketing and export and scientific solutions for related problems.

5.4 The population explosion which has occurred in Egypt especially during the sixties (see economic background on Egypt in this chapter), has resulted in the increase of numbers of children admitted to primary level which in turn led to the increase in enrolments at the preparatory level, then the secondary level and finally at the higher level as shown in the following table.

Table 7-17 Enrolments in Egyptian educational levels in %

<u>Level</u>	<u>1963-64 Enrolments</u>			<u>1973-74 Enrolments</u>			<u>Annual Growth Rate %</u>	
	<u>Total</u> <u>000s</u>	<u>%</u> <u>Female</u>	<u>%</u> <u>Private</u>	<u>Total</u> <u>000s</u>	<u>%</u> <u>Female</u>	<u>%</u> <u>Private</u>		<u>Graduates</u> <u>000s</u>
Primary	3,130	29	5	3,918	38	5	340	2.3
Preparatory	404	30	25	1,099	34	19	274	10.5
Secondary	255	-	-	679	36	17	221	10.3
Higher Ed.*	143	-	-	333	-	2	50	8.8

Source: A.R.E. Ministry of Education. op.cit. p.2

*N.B. Enrolments in higher education include those of higher institutes.

5.5 The application of universal declaration of Human Rights. As a result of the universal declaration of human rights issued by the United Nations, the government has provided the opportunity for all the classes to benefit from education at all its levels if they have the required abilities and aptitudes for each kind of education. So, the government has made such efforts towards the demoralisation of university education; fees have been gradually reduced and now it is free, so financial barriers no longer represent a serious obstacle to those who are seriously interested in university studies, providing grants for excellent students, loans are given to under-privileged students, and finally, establishing new universities in the regions. All these efforts have made university education accessible to a wider range of people who were deprived from this right in the past.

5.6 Increasing social demand for university education among students and their families. There are some reasons for the increasing demand:

(a) The majority of the people have begun to believe in recent years that university education is the only means to obtain a better life and high prestige in society.

(b) The rising aspiration of the working and farming classes who never saw the inside of the university and whose incomes have risen as a result of economic prosperity and social welfare after the following socialist decisions taken by the government to achieve social justice and to raise the living standards.

(c) The social imitation by which families look to each other and young men and women want to be not less than their neighbours and relatives in holding university degrees.

(d) The government guarantees jobs for all the university graduates in many sectors. So the people look to the universities as giving an entry-ticket to future jobs, while secondary school leavers have very limited opportunities for jobs.

(e) Salary levels and promotions prospects are linked to educational qualifications, that the university graduates earn more and are promoted quicker than those without a university degree.

(f) Another indirect reason, the differential requirements for military service. University graduates are required to serve only one year while secondary school leavers are required to serve one year and a half, and all others are required to serve three years. Although this reason is not ^{as} important as others, but it is important to be considered in any educational reform.

As a result of these reasons behind the increasing social demand, it is noticed that:

(a) Some of the preparatory school leavers who are not admitted to general secondary school which will lead them to the university, try again by repeating the final year as regular or external students.

(b) Some of the technical secondary school holders attend evening classes or private secondary school in order to get the General Secondary School Certificate so as to attend the university, in some cases they do that during holding jobs.

(c) Some secondary school leavers who are admitted to intermediate institutes (2 years after secondary school) prepare themselves to try again the secondary school examination besides their studies. If they manage to attend the university, they withdraw their papers from these institutes.

(d) Secondary school leavers who are not admitted to the university or an intermediate institute, repeat the examination and try a second time and may be more than once, instead of staying at home as they are not qualified for any jobs.

Doubtless, these consequences resulting from the increasing social demand cause a heavy strain on the educational system.

5.7 Increasing opportunities given to female students to attend secondary education. The number of girls in general secondary education rose from 35,802 in 1963-1964 to 92,825 in 1969-1970 and reached 113,542 in 1973-1974.⁷⁰ This increase of female students in secondary education has resulted in an increase of female students in the universities as shown in the following table.

Table 7 - 18 Number of female students in the universities in Egypt in different years

Year	Number of females in the universities
1925-1926	-
1935-1936	165
1952-1953	3,322
1957-1958	9,333
1960-1961	13,781
1970-1971	43,174
1973-1974	75,763
1975-1976	103,716
1976-1977	132,842

- Source: (a) El-Said, M. op.cit. p. 448
 (b) A.R.E. Ministry of Education Higher Council of Universities. Statistical Administration 1977.
 (c) U.A.R. Report on Higher Education. op.cit. p. 8.

Undoubtedly, this steady increase in female students in the university level is a natural result of the change of families attitudes towards the education of their girls, so they have become convinced that their girls enjoy the right of education up to university level who were in the past allowed only to study up to primary level and in some cases up to secondary level.

All these reasons for expansion have resulted in ^a mass university system. It was described by Mark Blaug and others in the paper which was presented to the I.D.S. Conference - Sussex University as follows:

"by the mid 1970's, the enrolment ratio at the secondary level was among the highest in Africa and in higher education, it was five to ten times greater than that of any other country in the region.* The universities in Egypt enrol more students than all other universities in Africa combined."⁷¹

6. Conclusion

It is clear from what has been stated in this chapter that university education has rapidly increased after the 1952 revolution. Certain steps have been taken by the government to make education free and accessible for all the classes up to university level. By the end of the sixties and early seventies, the regional expansion of the universities has been taking place.

After explaining the reasons for university expansion in general and the regional one in particular, there are some questions which can be asked here. Is this expansion required to provide the country with

* As stated in the paper, the only exception and near-rival is Libys, where the enrolment ratio in higher education is about half of that attained in Egypt.

the required manpower for national development?

Is this expansion a natural response to the increasing social demand for university education? Does this expansion take into consideration the provision of human and material resources required for teaching and research and other university activities?

These questions will be examined in the next chapter.

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CHAPTER EIGHT

CRITICAL APPRAISAL OF THE POLICY

OF UNIVERSITY EXPANSION

IN EGYPT

CHAPTER EIGHTCRITICAL APPRAISAL OF THE POLICY OFUNIVERSITY EXPANSION IN EGYPT

It is clear from that has been stated in chapter seven that university education has rapidly expanded after the 1952' Revolution particularly in the late sixties and early seventies. This expansion was a natural result of certain steps which have been made by the government e.g. making university education free and accessible for all the students regardless of their social and economic status, giving loans to under-privileged students etc. The expansion has been taking place by increasing the number of students admitted to the existing universities and by opening completely new ones.

It would be necessary to make a critical appraisal for this policy of expansion in the light of the following:-

1. The availability of university facilities
2. The availability of financial resources
3. The manpower demand
4. Factors behind university over-expansion
5. Consequences of the over-expansion

1. University expansion and the availability of facilities

Among the important criteria by which university education can be judged is that to what extent there is a provision for certain facilities e.g. staff (academic and administrative), libraries, laboratories, enough rooms and lecture-theatres, halls of residences etc.

In the light of that criterion university expansion in Egypt which has taken place recently has not been accompanied by providing the required facilities which are essential for both teaching and research within the universities.

Evidence for that can be given; during the writer's field visits to some regional universities in 1975,. In Tanta University, it was clear that there was a severe shortage of such facilities, for instance, The Faculties of Medicine, Science, Dentistry, Pharmacy and Science Section of The Faculty of Education were using the single laboratory of The Faculty of Science.

It was also obvious that all faculties were suffering from a lack of well equipped libraries to serve both students and staff and in some faculties such as those of Pharmacy and Dentistry, the library seemed to be entirely ignored. Moreover, the number of students admitted to Tanta University faculties increased at the same time there was a very limited number of lecture-theatres, rooms for discussion groups and demonstration lessons and rooms for the staff. The situation was so difficult that four faculties were using one building.

It was also obvious from the data collected that the university was suffering from a severe shortage of staff as shown in the following table

Table 8 - 1 Number of undergraduate students and staff in Tanta University in 1975-76 academic year

Faculty	No. of students	No. of staff	Staff/student ratio
Medicine	2,919	51	1 : 57
Education	3,244	5*	1 : 649
Science	1,056	24	1 : 44
Pharmacy	372	2	1 : 186
Dentistry	300	Nil	Nil
Commerce	5,140	15	1 : 343
Arts	285	Nil	Nil
Education Shebeen El-Koum	1,323	2*	1 : 662

Source a) A.R.E. Ministry of Education. The Higher Council of Universities, Statistical Administration 1975, N.D. Tables

b) Calendar of Tanta University 1975-76

* N.B. The number of staff in these faculties is only for educational subjects e.g. psychology, curricula, principles of education etc. Other subjects are taught by staff delegated from the corresponding faculties. The faculties without staff members are covered by staff from Cairo and Alexandria Universities.

The above table reveals that staff/student ratio is very high and the faculties of Dentistry and Arts were opened without staff.

In spite of the shortage of staff which resulted in a high staff/student ratio, the number of students who were admitted to the University's faculties increased in the following year. However, at the same time the number of staff has not increased in some faculties, moreover it decreased in others.

The following table gives evidence for the imbalance between the number of staff and students enrolled.

Table 8 - 2 Number of students and staff in Tanta University in 1976-1977 Academic Year

Faculty	No. of students admitted	Total enrolments	No. of staff	Staff/student ratio
Medicine	579	2,997	97	1 : 31
Education	757	3,589	20*	1 : 179
Science	276	1,109	43	1 : 26
Pharmacy	102	474	8	1 : 59
Dentistry	99	356	Nil	Nil
Commerce	3,054	7,673	10	1 : 767
Arts	377	864	2	1 : 432

Source: A.R.E. Ministry of Education, op.cit. Table p. 6.

* Number of staff is for educational subjects. Other subjects are taught by staff from other universities

From the above table it is seen that :-

a) The number of students enrolled in the Faculty of Commerce has increased by 3,054 more than that of 1975/76 at the same time the number of staff decreased from 15 to 10!

b) The number of students in The Faculty of Arts has increased by four times approximately and it has only two staff members.

c) The number of students of The Faculty of Dentistry reached to 356, and it is still without staff although it was opened in 1973/74. The Faculty is covered by staff of other dentistry faculties of Cairo and Alexandria Universities. More evidence can be given to show the lack of prior planning for the expansion of the universities which

occurred without providing the required facilities; in Upper Egypt, the situation in the faculties which were opened since the 1969/70 is severe. It was noticed by the writer during a visit to Upper Egypt Faculties in 1972/73 that all these faculties were situated in parts of secondary schools or small primary school buildings as in Kena, Shohag and Asswan, in addition to the severe shortage of teaching and research facilities.

The shortage of staff is clear in these faculties as shown in the following table.

Table 8 - 3 Nos of students and staff in some regional faculties in Upper Egypt in 1972/73

Faculty	Town	No, of students	No. of staff	ratio
Arts	Menya	727	16	1 : 45
Education	Menya	1,337	4*	1 : 334
Education	Kena	634	5	1 : 127
Education	Sohag	333	Nil	Nil
Education	Asswan	158	Nil	Nil

Source: A.R.E. Ministry of Education, op.cit. Table p. 9.

* Number of staff for educational subjects.

From the above table it is seen that the faculties of education in Sohag and Asswan were without even one staff member, they were depending entirely on staff of Asyot University and sometimes from Cairo, but they were finding it difficult to second staff from other universities because of the difficulty of transport, and because of the hard conditions of living in these towns, staff often refuse to go and live near to their faculties, furthermore, the faculties were finding it more difficult to appoint staff.

Although these faculties were facing these serious problems, nevertheless more faculties were opened, some of them are still without staff members as shown in the following table.

Table 8 - 4 No. of students and staff in some regional faculties in Upper Egypt in 1976/77

Faculty	Town	No. of students	No. of staff	Student/Staff ratio
Arts	Sohag	580	9	1 : 64
Science	Sohag	193	4	1 : 48
Science	Kena	295	7	1 : 42
Science	Asswan	217	7	1 : 31
Commerce	Bani-Suif	890	Nil	Nil
Agriculture	Fayoum	149	Nil	Nil
Education	Fayoum	900	7	1 : 129

Source: M.R.E. Ministry of Education, op.cit. Table p. 7.

The Faculties of Commerce in Bani-Suif and those of Education and Agriculture in Fayoum are under the supervision of Cairo University, they are covered by staff from Universities of Cairo and Ain Shams, furthermore, completely new faculties were opened in different towns in Lower Egypt by sudden presidential or ministerial decrees before providing the required facilities. (See Table 7 - 7).

This policy of university expansion gives priority to quantity rather than quality, ignoring that the question is not how many students are enrolled in Egyptian Universities, but what quality of graduates is required. This point was strongly stressed by the Minister of Education during personal communication in Cairo, when he said to the writer that:-

"more effort should be made to improve the quality of university education which has been ignored during the consequence moves of expansion."1

The cases of Tanta University and the faculties of Upper Egypt are only examples to give evidence that the regional expansion which started in the late sixties and is still taking place has occurred without answering the following questions:

- a) Who will teach in these new faculties?
- b) How will the staff teach even if they are appointed?
- c) What equipment are required for teaching and research?

Ignoring to consider these questions in detail has led to dangerous consequences especially in the new faculties which were suddenly opened. Some consequences can be given here; the faculties sometimes find it difficult to find staff who accept to teach, for example in 1972/73, in Mansourah Faculty of Education, students of Mathematics Department waited for six months till a staff member accepted to come to the city to teach "Topology", in some faculties, lecture-theatres and classrooms have become overcrowded to the extent that students could not find a place, all these new faculties are poorly equipped with teaching and research facilities.

2. University expansion and financial resources

It is well recognised that university expansion requires providing enough financial resources which cover the cost of this expensive sort of education. And if the expansion is to be planned, one should question the way money is allocated.

As the universities in Egypt are completely financed by the government, their budget is decided by the Ministry of Finance and the universities have to accept what has been decided and distribute their budgets among their faculties. So there is always a kind of tension

between the government and the universities during the budgeting process, the universities want enough money to cope with the cost of human and material resources required for teaching and research and other university activities both inside and outside the campus, and the government cannot afford, at the same time a rapid expansion of university education is taking place. If the national financial resources are scarce; the government should control the policy of expansion or find other means of finance.

The question of financial resources represents a serious problem which should be faced by educational planners bearing in mind that the more financial resources are provided and used properly, the better quality of university education will be attained, assuming that enough financial resources would result in the availability of both human and material resources which undoubtedly affect the achievement of the expected purposes from the universities (see chapter 1). With regard to financing the new regional faculties, The Ministry of Education devotes a certain amount of money as a start regardless of whether or not that amount of money would cope with the requirements of staff salaries, equipping libraries and laboratories or setting up new buildings or even the maintenance of the existing ones. Usually this allocated money is included in the budget of the universities to which they will be affiliated.

During the writer's visit to some regional faculties (1975/76 academic year) all those running these faculties stated that their budgets come through another university which is situated away from their faculties.

This situation creates more problems for both the administration and

educational process preventing the faculties from fulfilling their purposes e.g. teaching, conducting research, carrying out projects to develop their surrounding environment, taking part in national development. This situation was and still exists in some faculties e.g. the faculties in Sohag, Kena, and Asswan depend upon the budget of Asyot University, The Faculties of Fayoum and Bani-Suif depend on Cairo University budget and the faculties of Kafr El-Sheikh depend upon Tanta University'. The dilemma which faces the government is whether to respond to social demand for university education which results in quantitative expansion which requires enough financial resources which could not be afforded by the government because of the economic problems, on the other side of the dilemma, if the government is not able to provide the required budget for the expansion and at the same time could not raise tuition fees or find additional financial resources, can the government cut the number of students admitted to the existing universities and stop the regional expansion, which may result in some problems to the government for the time being. Such alternatives were discussed in chapter 4.

3. University expansion and manpower requirements

When planning for the expansion of university education, there should be an answer to the following question, on what basis should the university expansion be planned?

In planning for university education, there are three main approaches. Two approaches only will be discussed here as they throw some light on the situation in Egypt.

First : University education should be available for everybody as a human right, and it is an aim in itself, so it is expanded apart from producing the required manpower for the national development. In this case, university education is considered as a way of raising the standard of all society by acquisition students with skills, habits and attitudes which enable them to live and create in their future life. This approach is called "Social demand for university education".

Second : University education should be geared to the national development plan by providing manpower required, participating in solving the problems of society and responding to its needs. To do so "it is essential to channel the students to fields of study needed for economic development."²

To achieve this objective, career guidance is an important mechanism, and should be introduced during secondary level. "As socialist countries adopt the second approach when they plan for educational systems, the state bears the responsibility of the requirement of national development."³

Accordingly Egypt has to adopt the manpower demand approach when planning for university education. Social demand approach can be considered on the basis that it should be adjusted to manpower demand for the country.

The trend of university expansion which started in the late sixties and early seventies and is still taking place has resulted in mass university system, "the number of students enrolling in Egyptian universities has increased in the last ten years (66 - 76) by 289%, with an average annual increase of 19%."⁴

Furthermore, the expansion was described by Blaug when he states:

"By the mid 1970's, the enrolment ratio at the secondary level was among the highest in Africa and in higher education, it was five to ten times greater than other country in the region (with exception of Libya). The universities in Egypt enrol more students than all other universities in Africa combined."⁵

This expansion has occurred regardless of manpower requirements which should be considered when drawing up the general policy of university education. The following provides some evidence for the above statement.

There has been an increase in enrolments in the faculties whose graduates are surplus to requirement. That unplanned expansion has resulted in the problem of unemployment among university graduates. This phenomenon is clear in the faculties of Arts, Law and Commerce, with regard to the expansion of The Faculties of Arts, between 1965/70, there was a surplus of 12,000 among graduates.⁶

At the time the number of students enrolled increased from 15,899 in 1971/72 to 19,703 in 1972/73, an increase of 4,804 in one year. The number of enrolments in all the Faculties of Arts in all universities increased to 25,212 in 1974, to 33,979 in 1975 and reached 43,624 in 1976/77.⁸ The total number which was projected to be admitted according to the five year plan from 1975/76 and 1979/80, amounted 60,251.⁹

The increase in enrolments in the Faculties of Arts has resulted in an increase of graduates as shown in the following table.

Table 8 - 5

No. of graduates of The Faculties of Arts in all Egyptian Universities from 1965/75

Year	Graduates		Total
	Male	Female	
1965	3,102	871	3,973
1970	3,774	1,262	5,036
1973	7,163	2,396	8,559
1975	7,587	3,994	11,581
Total	21,626	8,523	29,149

Source: UNESCO Statistical Year Book, Paris, UNESCO, 1978, pp. 444 - 445

From the above table it is seen that the number of graduates increased by 7,608 in ten years in addition to the 12,000 surplus between 1965/70, according to the estimates of the Committee of Manpower. This increase has happened although The Ministerial Committee recommended in 1965 that the number of students admitted to the Faculties of Arts should be decreased, nevertheless, completely new Faculties of Arts were opened beside increasing the number of students admitted to the existing ones to the extent that the total number of enrolments in the Faculties of Arts reached 11,972 in Cairo University, 13,566 in Ain-Shams and 12,165 in Alexandria in 1976/77.¹⁰

In spite of this unwanted expansion in the existing faculties, new faculties were opened; in El-Menya in 1970/71, in Tanta in 1975/76, in Zagazig in 1975/76 in Sohag in 1975/76 and in Kena in 1977/78.¹¹

The same situation applies to the Faculties of Law. According to the estimates of The Ministerial Committee in 1965. The need for law graduates is only 400 graduates each year till 1980,¹² and

recommended that the number of students admitted to the Faculties of Law should be lessened to avoid the problem of unemployment among graduates and the number of annual admittance should not exceed 200 students.¹³ But to the contrary, it was noticed that the number of enrolments in all the Faculties of Law was 21,323 in 1972, increased to 26,018 in 1973/74 to 37,036 in 1975, and reached 41,226 in 1976/77.¹⁴ In spite of the recommendation of the Ministerial Committee to lessen the number of students who are annually admitted to the Faculties of Law in the existing universities, Cairo, Ain-Shams and Alexandria, and should not exceed 200 students annually, nevertheless, three more Faculties of Law were opened in the regions; that of Mansourah was opened in 1973/74; that of Zagazig was opened in 1975/76 and that of Asyot was opened in 1975/76.¹⁵

As the number of students increases in the Faculties of Law, there is also an increase in the numbers of graduates over the country's requirements as shown in the following table.

Table 8 - 6 Number of graduates of the Faculties of Law
from 1965/75

Year	Graduates		Total
	Male	Female	
1965	1,821	100	1,921
1970	1,965	292	2,257
1973	3,132	546	3,678
1975	3,765	698	4,463
Total	10,683	1,636	12,319

Source: UNESCO Statistical Year Book, op.cit. p. 444.

It is seen from the table that there is a steady increase in Law graduates who are surplus to those required. With regard to the Faculties of Commerce, the Ministerial Committee recommended not to increase the number of enrolments in all Faculties of Commerce including the nine higher Commercial Institutes (Now Faculties of Commerce) above, 3,800 students a year as these numbers would cope with the needs of the country till 1980.

The number of graduates was 18,528 between 1965/70 at the same time, there was demand for only 14,000 graduates, in 1964/65 alone, the number of graduates who were surplus to requirement was 1,909."¹⁶

Yet, in 1972 the total number of students enrolled in the Faculties of Commerce, excluding those of Higher Commercial Institutions, was 35,491 and reached 48,369 in 1973/74,¹⁷ and the number has rapidly increased to 73,661 in 1975/76 and reached 85,755 in 1976/77.¹⁸

In spite of this huge expansion which is entirely against the recommendations of Ministerial Committee, one more Faculty of Commerce was opened in Bani-Suif in 1975/76 under the supervision of Cairo University. This increase in the number of students enrolled in the Faculties of Arts, Law and Commerce as shown before without the need for this increasing ^{number of} graduates and without considering the recommendation of The Ministerial Committee in 1965, gives evidence that the expansion is steadily taking place without prior planning for manpower demand. More evidence can be given to show the lack of planning for the expansion; the projected number of students to be admitted to the Faculties of Commerce, Law and Arts is steadily increasing, between 1975/80 according to the five year plan drawn up by The Higher Council of Universities. This increase is shown in the following table.

Table 8 - 7 Projected No. of students to be admitted to Faculties of Arts, Law and Commerce according to the Five-Year plan 1975/76 - 1979/80

Year / Faculty	1975-76	1976-77	1977-78	1978-79	1979-80
Arts	9,576	10,332	12,290	13,257	14,796
Law	9,637	10,505	11,683	11,684	13,148
Commerce	17,616	19,030	21,433	22,787	24,553

Source: A.R.E. Ministry of Education, projected numbers to be admitted to the Universities according to The Five-Year Plan 1975/76 - 1979/80. The Higher Council of Universities 1976.

This steady increase in enrolments in these faculties has resulted in increasing the unemployment among their graduates.

The question to be asked here is, if there is a surplus to requirement of those graduates, why ^{is} the number of enrolments being increased in these faculties?

During a personal communication with the Chairman of the specialised National Councils, he answered that question by stating that "the government finds in these faculties an outlet to solve the problem of the annual increase of secondary school leavers. These faculties absorb large numbers every year to the extent that they have become over-crowded ^{with} students e.g. in the Faculty of Arts in Cairo University the total enrolment reached 12,000 in 1976/77.

He added this would result in two consequences: First the increase of the unemployment problem among the graduates of these faculties. Second lowering the quality of education and training provided for students because these faculties have become overcrowded with students beyond the existing facilities."¹⁹

The Minister of Education answered the same question during the writer's personal communication with him, on 26.12.1978 Cairo in the Ministry of Education by stating "that this increase happens because there is no clear plan for manpower and added, the admission system must be geared to the requirements of a national plan."²⁰

In the course of showing the lack of gearing ^{of} university expansion to the requirements of graduates, it is necessary to mention the statement of The Minister of Agriculture in January 1977 when he stated that "11,000 agriculture graduates were imposed on the Ministry of Agriculture to employ them, while there were no positions available for most of them."²¹

The writer discussed that Ministerial statement with the Dean of Faculty of Agriculture of Alexandria University during the writer's attendance of the IAU seminar organised in Egypt by Alexandria University 7 - 12 February 1977. He said "there is a surplus in some specialisations and a shortage in others because most students choose to study in the general section whose graduates have become no longer required". And he added, "to solve the problem of unemployment among agriculture graduates it would be necessary to revise courses studied in Agriculture Faculties and ^{which} should be developed to fit the new agricultural projects carried out in different areas as well as gearing the admission to the faculties of agriculture to the actual requirements of agricultural sectors. This can be better done through an effective and constructive cooperation between The Ministry of Agriculture on the one hand and The Faculties of Agriculture, and The Higher Council of Universities on the other particularly in the admission process."²² This statement by Dean of Alexandria Faculty of Agriculture

was supported by those who run the agricultural projects in Western desert near Alexandria during the writer's visit to Tahrir District, they gave one example; they were in need of graduates specialised in wood and fruit protection, and they added, they were facing such problems during carrying out projects of land reclamation which should be the core of the courses studied in Alexandria Faculty of Agriculture if it is going to serve its surrounding environment.

To achieve this purpose, it is necessary to involve the Ministry of Agriculture in drawing up the policy of agricultural education within the universities.

During a personal communication with the Under-Secretary of The Ministry of Agriculture for planning (November 1977) he stated "we have no idea about what is going on in the Faculties of Agriculture, we have no power or authority in drawing up the policy of admission to these faculties or in establishing new specialisations in the light of the actual needs." He added "the number of students admitted is decided by The Higher Council of Universities, and in turn the graduates are imposed upon the Ministry to employ them even if there are no positions available for them, the majority of graduates are paid for doing nothing, so the Minister's statement is correct."²³

Another evidence for the lack of policy for manpower requirements, there is a serious phenomenon which is still going on, that is the establishment of departments of philosophy and sociology studies in the Faculties of Education in Alexandria, Tanta, Zagazig and Shebin-El Koum beside the two old departments in the Girls College and the Faculty of Education of Ain Shams University, as well as philosophy and sociology departments in the Faculties of Arts.

These new departments were established although there is a surplus to requirements. The surplus was 163 in 1971/72²⁴ and increased to 530 in 1977²⁵. This increase in the graduates of philosophy and sociology departments has resulted in employing the majority of them as teachers of the English language for which they are not qualified to teach.

The problem of unemployment among university graduates has not yet been met by the government. Since ^{the} late fifties and early sixties there has ^{been} no study done ^{to} plan the admission policy in the light of manpower requirements till 1965. This ignorance of this problem for this long-time has led to the severe situation of unemployment among university graduates and has also led to disguised unemployment that some graduates are employed by The Manpower Committee to hold positions in several sectors which do not need them.

An evidence for the unemployment problem among graduates, "in 1964/65 only one opening was available for every ten graduates from Science Faculties."²⁶ "And in the same year, there were only 691 positions available for 1,384 Law graduates."²⁷

Graduates from other faculties were also in over abundance and found it difficult to obtain employment, they had to wait for at least two years for a position, for example "in 1964/65, there were 14 openings for 139 graduates of the School of Languages, 30 for 189 students of economics and political science, and 197 for 2,049 graduates in arts."²⁸

This unemployment among graduates still exists although from 7000 to 10,000 graduates were absorbed when an emergency decree in 1961 forced the ministries to find places for them.²⁹ Then in 1962,

presidential decree was issued concerning the employment of all university graduates.

According to that decree, graduates were employed regardless to the actual need for them or even to their fitness to their jobs e.g. ^{the}majority [^] from the Faculties of Arts, Law and Commerce were employed in clerical and teaching jobs, and in some cases they do work which could be done by secondary school leavers. Moreover, some of those graduates were paid for doing nothing.

From the writer's point of view, the 1962' decree to employ university graduates was issued for political reasons to satisfy the public because each unemployed graduate was and still representing a crucial problem to his family.

Moreover, the 1962' decree to guarantee employment for all university degree holders is in itself against the planned economy policy adopted by the government.

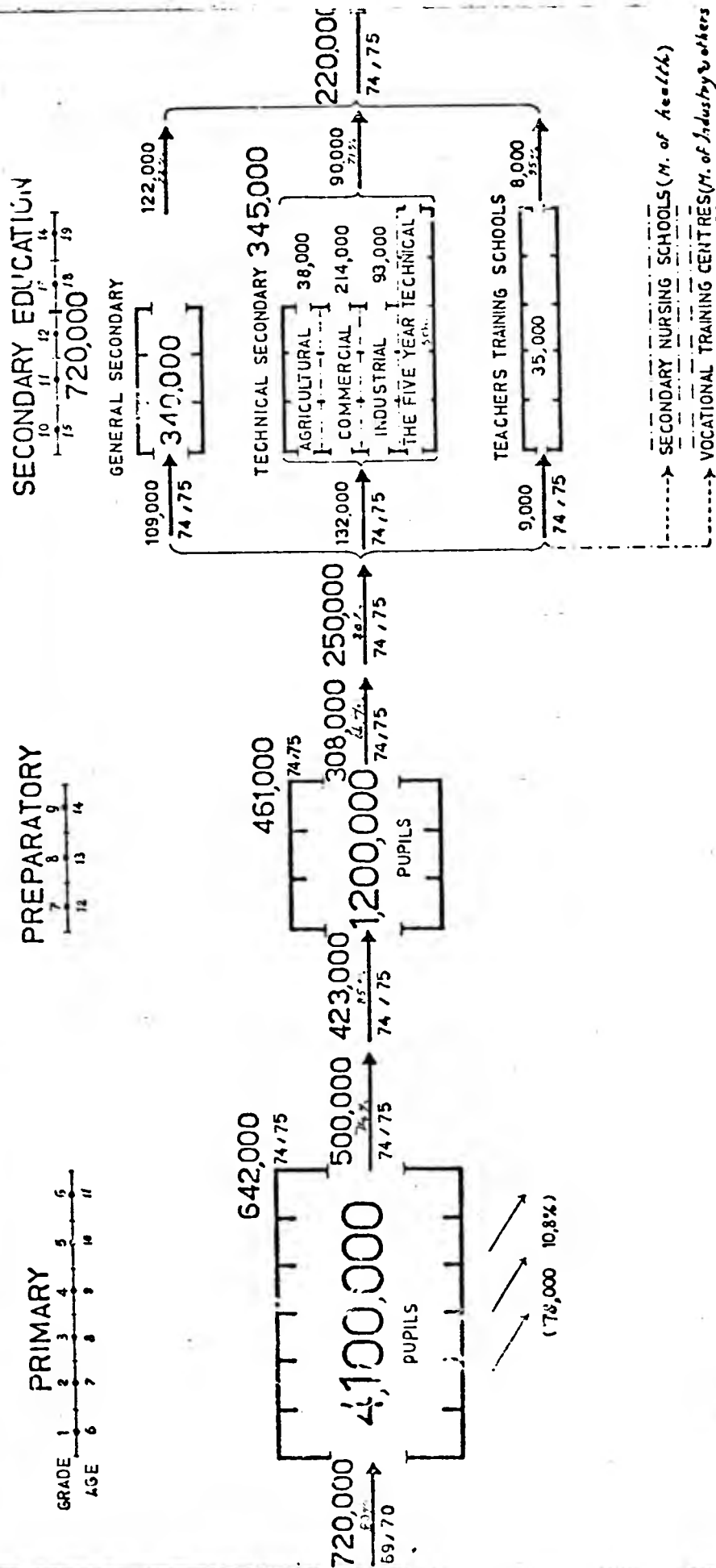
4. Factors behind the over-expansion of universities

4.1 The expansion of pre-university levels:

Since ^{the}1952' Revolution there has been a huge expansion in providing educational services to all people at all levels of the educational system previous to the university level. The government attempts to increase the compulsory rate at primary level and to provide preparatory education for most of primary school leavers. This in turn has resulted in a high rate of expansion of secondary education which is described by Blaug as the highest in Africa.³⁰ This expansion of ^{the}pre-university [^] level is shown in the following table.(also see Figure 4).

EDUCATIONAL FLOW IN ITS VARIOUS STREAMS

Figure 4



Source : Arab Republic of Egypt Ministry of Education ; Education and Training in Egypt, Cairo 1976.

Table 8 - 8 Expansion pre-university levels in Egypt from
1969-70 - 1974-75

Year Level	Primary		Preparatory		Secondary	
	enrolled	graduates	enrolled	graduates	enrolled	graduates
1969-70	3,618,663	287,381	783,892	201,185	213,144	92,593
1972-73	3,987,398	368,155	1,018,715	247,312	321,803	107,857
1974-75	4,074,893	450,000	1,099,291	274,117	340,326	121,329

Source: A.R.E. Ministry of Education Report on Education and Training
in Egypt, Cairo Ministry of Education, 1976, pp. 11 - 12.

It is seen from the table that there is a steady increase in the number of enrolments and graduates of primary, preparatory and secondary education.

Doubtless, this expansion of these levels previous to university education has resulted in a continuous pressure on the universities to the degree that it can be said that Egypt has a mass university system.

4.2 The increasing social demand for university education

This is a major driving force behind the over expansion of university education. At the same time there is a steady response from the government for that increasing demand which was reinforced by the following factors.

a) The high prestige of university education in Egyptian society; which respects university degree holders more than those without and the majority still believe that the university is the only means for better future.

As a university degree affects the social prestige of any person, "it can influence one's life and social relationships even to the extent

that a young man may find it difficult to marry a middle-class girl because he is not a university graduate."³¹

Furthermore, there is a very important factor which plays a major role in increasing the demand for university education i.e. "The social imitation by which families look to each other and young men and women want to be not less than their somewhat better neighbours and relatives."³²

This social imitation is found particularly among the working and farming classes who never saw the inside of the university and have become able to afford sending their children to the university in order to gain respectable status in society.

b) Guarantee of employment for university graduates which gives each graduate the right to hold a job in either the administration or the public sector. This policy was officially formulated in 1962. The purpose of this policy as stated by Mabro was:

"to pre-empt the politically dangerous and perhaps socially undesirable emergence of unemployment among the educated."³³

Since 1952, when the government adopted the democratisation of university education by making it accessible to every student regardless of his socio-economic status, the expansion took place without prior planning and without developing the social economic system which may absorb the increase number of graduates. The government once found itself confronted with serious problems. The chance was available for the government when the unemployment problem emerged in the late fifties, to plan and control the expansion, but to the contrary, the unplanned expansion took place and continued, and employment guarantee was adopted without economic reform to absorb the graduates.

As this was the policy, the majority of families seek university education for their children as it is the way for a relatively well paid and secure job. In this respect, it is relevant to state what has been said by Blaug during personal communication, "it is an Egyptian innovation to guarantee employment for all university graduates regardless of the available positions or even to their specialisations."³⁴

In the writer's view, if the guarantee of employment had been abolished, the pressure on the universities would have been relieved. Many families and their children could then think carefully before attending general secondary education which leads to the university so they would prefer to attend technical education or vocational training centres which produce skilled technicians who are required for the country for many years ahead.

As a result of this policy of employing graduates more parents have come to look to the universities as places for giving their children entry tickets for jobs or a piece of paper to earn the right to get a job not because of any love of learning.

c) Salary scales are fixed in relation to formal levels of education. University graduates earn more than those without a university degree regardless of the nature of their jobs.

Until recently the governments recruited graduates from technical secondary school or intermediate institutes at a starting salary of LE 18 per month while university graduates were employed at LE 20 per month, increased to LE 25 and now (LE 30) per month at the time the salary of those with intermediate certificates is still static. This wide gap in salary scales reinforced and increased the demand by many primary school leavers to attend preparatory education and insist on attending ^{the} general _^

academic secondary school which may lead them to the university. But, if the difference in salaries was too small, many parents and students would think that four or five years of study in the university are not worth that small amount of money.

If the government abolishes pricing of certificates and gives salaries according to the efforts done in jobs, this^{would} encourage many preparatory school leavers to divert their choices to technical secondary schools or training centres whose graduates are required for the country rather than attending secondary education or such faculties whose graduates are surplus to requirements.

d) The promotion system in Egypt is still geared to educational qualification and experience which is judged by the number of years in the job. According to this system of promotion, university graduates are promoted after a number of years of starting their job ^{lesser} than those who hold a General Secondary Certificate (GSC) or Technical Secondary Certificate (TSC).

There has been an attempt by the government to gear promotion to the productivity in the job and its nature,^a classification of professions has been done, but no action has been taken as yet.

Any reform in the system of promotion should be accompanied with changing the salary policy which requires abolishing the so called "pricing of the qualifications". This view was supported by KOTB, the former president of Ain Shams University and a present member of The National Council for Education, Technology and Scientific Research when he said "as far as there is pricing for qualifications, the pressure on university education would persist."³⁵

e) In recent years, the incentives in favour of university education have been reinforced by differential requirements for military service; university graduates are only required to serve one year in the army, at the time secondary leavers and their equivalent to serve one year and half while others are required to serve three years. Although this factor has little effect on the increasing demand for university education, but it should be considered as a driving factor behind the university over-expansion and it should not be neglected in any educational reform.

f) The very limited opportunities of jobs provided to secondary school leavers. In many cases it is too difficult for a secondary school leaver to get a job, preference is given to technical secondary school leavers. So it is noticed that secondary school leavers who do not gain the marks required for attending the university, try again the final examination instead of staying unemployed at home.

4.3 Political interference in the policy of university expansion

This factor has considerable influence on the over-expansion of university education. The government faces every year the problem of the increasing secondary school leavers which has become a serious national problem. The universities with their very limited human and material resources could not admit all secondary school leavers. Then the problem arises and the challenge faces the government. It has found no other alternatives to increasing the number of students admitted to universities beyond their capacities and regardless of the need for some faculties graduates just to satisfy the public opinion, regardless of the decisions taken by the universities or The

Higher Council of Universities on the numbers which should be admitted according to the scales apart from whether or not these scales are reliable, Evidence for this can be given to show the increasing number of secondary school leavers and those who are projected to be admitted and the actual number of admission.

Table 8 - 9 Nos. of Secondary School Leavers, Projected Nos. of students to be admitted and Nos. actually admitted.

Year	No. of secondary school leavers	Nos. projected by H.C.U.	Actual number of students admitted
1972-73	107,497	not shown	47,667
1973-74	123,944	51,550	58,402
1974-75	121,229	65,625	67,263
1975-76	122,422	64,990	77,903
1976-77	130,402	63,355	87,620

Source: A.R.E. Ministry of Education. Report on Education and Training in Egypt, Cairo, Ministry of Education 1976, p. 11.
h) A.R.E. Higher Council of Universities students admitted to Egyptian Universities, Years 1974 & 1977.

From the above table it is seen that the number of students who are actually admitted to the universities has increased more than the number projected by The Higher Council of Universities, this increased number is the result of the interference of the government to avoid any undesirable reaction from ^{the} people, so each year after the announcement of the result of The General Secondary Certificate Examination and before the opening of the Co-ordination Office, a presidential decree is announced to the public that the number of students admitted to the universities will ^{the} increase, and sometimes Ministerial decrees are

issued during admission procedures concerning the increase of students admitted to the universities. These decrees are imposed upon the universities and the Co-ordination Office regardless of what has been already decided by the Higher Council of Universities. The universities have no power to reject any number of students imposed upon them. This lack of autonomy of the universities is considered as one of the most important reasons behind the university over-expansion which is still going on. More evidence of the political interference in the policy of expansion, is that the projected numbers of students to be admitted to the universities have been decided by the Higher Council of Universities to be 65,000, the Ministry of Education increased the number to become 88,000 just to absorb large numbers of secondary school leavers which amounted to 132,000 in 1979."³⁶

Deans of Faculties of Education of Tanta and Mansoura stated that the over-expansion which occurred, is related to the lack of university autonomy in the sense that universities should have the freedom to decide whether or not to establish new faculties which should take place on the basis that this decision should be made in the light of manpower demand and available facilities.

During the last few years, some educationists e.g. Members of the National Council for Education, some staff of the Faculties of Education, some Universities Presidents, members of The National Council for Educational Research have all advised the Ministry of Education not to go on with this high rate of university expansion in order to improve graduates' quality. Even the Minister of Education himself has called the attention of the government to the disadvantage rather than the

advantage in carrying on with university expansion (see quotation 53).

Accordingly the Higher Council of Universities decided not to open new faculties in the regions unless human and material resources are provided, nevertheless, from time to time sudden decrees are issued by the President of The Republic, particularly during his visits to some governorates, to open new faculties, ignoring all the decisions taken by the Higher Council of Universities. For instance, the opening of the Faculties of Education in Fayoum - Kafr - El-Shiekh Ismailia and Domietta. For more details see table (7 - 7).

These sudden decrees are attributed to the pressure of the people's demand in each governorate, they want to have their own universities like others. They go to their Governor and ask him to pass their wish on to the Minister of Education or the General Secretary of the Higher Council of Universities and insist on having a university, If he fails to do so, he will be accused of being insincere, so the Governor presses the Minister of Education and in many cases he complies without any discussion on how these faculties should be organised. All this happens just to satisfy the people at the expense of the quality of university education.

4.4 Lack of manpower plan as a basis for the expansion

There is no manpower plan drawn by the government, even the study of the Ministerial Committee For Manpower in 1965, concerning the numbers of graduates required for national development was entirely ignored as stated earlier. It was noticed by the writer that there was no plan for university expansion and manpower demand. During the writer's visit to the Division of University Education in the

Ministry of Planning, the Higher Council of Universities, the question which was asked by the writer of the heads of these organisations on what basis does university expansion take place? The answer was, no plan is set up, the numbers are decided by the government in the light of the number of secondary school leavers and the regional expansion takes place because of political reasons.

This was the answer of those who should be involved in the planning for university education.

However, in dealing with the question of university expansion, it would be useful to refer to the question which was asked by Lord Robbins in his Report on Higher Education in the U.K., on the expansion when he asked "on what basis should we plan for the expansion? He answered "we should expand and plan on a basis of need."³⁷

The basis of need in the case of U.K. is that university expansion should be planned in the light of the numbers of those who want to attend the universities, in other words university expansion should be planned on the basis of social demand. But in the case of Egypt, manpower demand should be the basis for the expansion because at the present, Egypt cannot afford the expansion according to social demand or at least social demand should only be met in the light of manpower demand.

In Egypt it seems that the basis of manpower demand is ignored by those who draw "on paper" the general policy of university education. Furthermore, there is no plan for responding to social demand. Accordingly, the lack of plan for both manpower and social demand has resulted in consequences which will be discussed shortly.

4.5 The open door policy of admission

The government has made the universities open for all students. University education has become an absolute right for all students from all classes regardless of their social and economic status.

In fact, the Co-ordination Office admits students according to their marks in The General Secondary Certificate Examination, but declining the minimum marks required results in admitting more students than needed. This open door policy has also resulted in admitting students who should not be in the universities because they lack the abilities and aptitudes and even the readiness to benefit from their studies.

5. Consequences Emerging from The Over-expansion of University Education

It is now obvious from what has been stated that there is no plan and for the expansion which has resulted in certain consequences so the need is now urgent to re-examine the policy of university expansion. In this respect, it is essential before expanding the universities, to investigate the questions raised by Lord Fulton in "The Idea of A New University" which should be asked before establishing new universities, these questions are :-

- a) Where should they be?
- b) How big they should be?
- c) What should they teach?
- d) How should they teach?³⁸

It seems that these questions have been absent from the consideration

of the government and the Ministry of Education, so there was no prior planning for the expansion of regional universities ^{and} they were established without careful discussions of the following :-

- a) What sort of faculties is required?
- b) What specialisations should be studied?
- c) How many students should be admitted?
- d) Who will teach in these faculties?
- e) Who will run these new faculties?
- f) To what extent [^] financial resources be available to cope with the needs of teaching and research facilities and other equipment?
- g) What kind of services should be provided to enable both professional and administrative staff to do their jobs in a proper way?

These questions have been discussed earlier in this chapter.

More evidence is likely to be given here of the lack of planning for the new faculties e.g.

a) The establishment of new four faculties of education in the 1977-78 academic year at a time ^{when} the existing faculties of education have not yet been fully equipped. It is true that there is an urgent need for teachers, but there should be first attention to how those teachers should be prepared.

b) The establishment of new Faculties of Law and Arts although the existing faculties produce graduates surplus to requirements (see Table 7 - 7) . This unplanned policy of university education, particularly that of the expansion of regional universities, has resulted in the following consequences.

5.1 Mass University System

The annual increase in the numbers of students admitted to the universities has resulted in the over-crowding of faculties beyond their capacities which in turn ^{have} resulted in mass university system. [^]
 For example in 1974, 18,000 students were admitted to Cairo University, and if the same number will be admitted in the five following years, the total number of students will reach 120,000 in 1979. ³⁹

There has been also a great increase in all other universities during the last few years as shown in the following table.

Table 8 - 10 No. of students enrolled in some Egyptian Universities from 1972-73 to 1975-76.

Years University	1972-73	1973-74	1974-75	1975-76
Cairo	59 219	76 088	74 746	86 751
Alexandria	45 332	51 314	59 078	65 123
Ain Shams	51 084	59 022	79 148	76 680
Asyot	18 963	22 580	27 936	32 742
Tanta	6 393	14 856	17 040	26 685
Mansoura	4 898	16 183	20 047	25 553
Zagazig	6 208	8 296	11 827	15 898

Source: A.R.E. Ministry of Education. op.cit. Tables 1 - 7.

This enormous annual increase of enrolments has resulted in ^a mass [^] university system which has resulted in the following problems :-

a) The overcrowding of lecture halls and rooms to the extent that students sit on the floor or on window sills and in some faculties such as Commerce, Law and Arts they sometimes cannot find room even to stand up to listen to the lecturer. This was clear during the writer's visit to the Faculties of Commerce and Law in Cairo and Mansoura Universities,

lecture halls and rooms were like a bus or an underground train during heavy rush hours.

b) Staff have become over-loaded, and many commitments concerning examinations and correcting papers have been put upon them.

c) As a result of b, staff are unable to give time for research which is considered as a very important function of the modern university and important for their promotion.

d) Delivering lectures to large numbers of students, ignoring small group discussions and tutorials, has resulted in the spread of coaching which has become a very dangerous phenomenon which represents heavy burden on large numbers of families. This phenomenon has occurred because students' main concern has become just to pass the examination and get their degrees which may secure holding of jobs after graduation. In this respect Blaug states:

"There must be something wrong with an educational system that encourages students to gear all their efforts to the passing of examinations, leading to the next cycle of education and still more examinations, for the sole purpose of gaining entry into wage employment in the modern sector of the economy."⁴⁰

e) Programmes of activities cannot cover the majority of students in some faculties and non existent in others. These activities are essential for the development of students personalities.

f) Admission of large numbers of external students who can now attend lectures with regular students, add more problems to the universities.

g) The inability of libraries to provide service for all the students. Laboratories in most faculties are used for up to 12 hours per day, so maintenance of the equipment has become impossible.

h) The impossibility of accommodat^ging all students in university hostels and halls.

i) Severe shortage of staff because the expansion has happened at a rapid rate and has not been accompanied with providing the required staff to the degree that some faculties are open without even one staff member (see Tables 7 - 7, 8 - 1, 8 - 4).

These emerged problems were discussed by Martin Trow in his paper presented to OECD Conference on Future Structure of Post Secondary Education 26th - 24th June 1973, when he says :-

"The expansion of higher education and the transition from elite to mass systems generate a set of dilemma which are not easily solved but which persist as continuing problems for teachers, students and administrators."⁴¹

But with regard to Egypt, the solution of mass university problems lies in a) using new teaching techniques.

b) controlling the rate of future expansion.

5.2 The admission of large numbers of external students

The over-expansion has resulted in admitting large numbers of external students in the Faculties of Arts, Law and Commerce added to their large numbers of regular students. For example, in 1962-1963 30,000 regular students vis 20,000 external students were admitted to these three faculties.

Those external students⁴² represent an additional burden to the already overcrowded faculties. They students attend lectures with regular students, ^{but} the majority of them could not attend lectures

because they are engaged in jobs so they have to study at home for the examinations without guidance whatsoever. So they study by "do it yourself" method. This system is described by Szpliwicz, when he says:

"A further consequence of this program is that the aspiration of thousands of poorly trained individuals are further heightened. Possessing all the privileges of regular students, they come to share the latter's expectations concerning future employment opportunities but they are, in effect, being poorly prepared for fields which are already saturated and in which there is no demand for their services."⁴³

5.3 Steady flow of graduates

The over-expansion has resulted in the annual increase in the flow of graduates. Although the government guarantees a job for every graduate, it has become obvious since 1962 that there is an imbalance between the number of graduates and the number of positions available as shown in the following table.

Table 8 - 11 The over-production of graduates of the Universities and Higher Institutes in 1964-65

College & Institute	State of Supply and Demand	
	No. of graduates	Positions available
Law	1,584	600
Economics and political Sciences	189	30
Commerce	3,563	2,054
Commercial Institutes	535	16
Agriculture	1,541	247
Coton Institute	478	14
Arts & Humanities	2,049	197
Languages	139	14
Science	1,263	128
Social Workers	440	36

Source: A.R.E. Institute of National Planning, Report on the Policy of Education, Cairo 1966, p. 70 Table 1 (Arabic Text).

As a result of this situation, Ministerial Committee was formed to study the demand and supply of Manpower. It then put some recommendations which have been stated earlier in this chapter. Despite these recommendations, the flow of enrolments increased and subsequently the number of graduates has risen. Then the government found itself facing "a serious problem, so a presidential decree is issued to employ them, the majority of graduates are employed in jobs for which they are not prepared as it is said by Dr. H.M. Ismail (the present Minister of Education) that 75% of University graduates do not work in the professions for which they are prepared."⁴⁵ For example, graduates from the Faculties of Arts, Law and Commerce are employed in clerical jobs and sometimes they accept jobs for which lower academic qualifications are required.

The crisis of massive increase in the number of university graduates has become more acute, the universities bring on to the labour market every year a large number of graduates whose absorption into the economy depends on its growth, yet because of the present economic problems which are facing the country, it is too difficult to employ all university graduates, accordingly a large proportion of them have to wait for two or three years till they get a job. This period of unemployment after graduation creates more problems for both graduates and their families.

This problem of long period of unemployment was discussed by H.I. Singh in I.A.U. Seminar in the University of Malaysia, Kuala Lumpur when he says:-

"Thousands of graduates remained without jobs. Every Year there is a considerable addition to the labour force a sizable proportion has to wait for jobs, and those who can wait longer

succeed in getting better jobs. Those who are not in a position to wait longer because of financial constraints and accept low paid jobs begin their life with the disadvantage attending a bad start of life. They often fail to secure well paid jobs."⁴⁶

With regard to Egypt, as employment is guaranteed by the government, although there is no actual need for all graduates, a political decree solves the problem by distributing graduates among ministries and the public sector, These frequent decrees have resulted in the over-staffing of many places with university degree holders more than many advanced countries. It is clear that many of them are paid for doing nothing, others feel disappointed because they feel that they are put in an unsuitable place. All this represents a heavy burden on the economy and increases the rate of inflation in the country.

For all what has been stated above, there is an urgent need for a review of the relationships between university education and employment because "it is dangerous to allow young people to pursue courses which may lead to disappointment and frustration."⁴⁷

The problem of unemployment is clearly described by Faksh when he states:

"Thus applicants have increasingly besieged government offices for the obvious reason that many have nowhere else to go. Almost two-thirds of Egyptian higher civil servants recently interviewed said that they had sought government jobs because there was limited opportunity elsewhere, had inadequate funds to start their own business, or had regarded government as the only place for an educated person."⁴⁸

It might appear fortunate for a developing country like Egypt, to have such a large supply of educated manpower specialised in different fields, but such an observation overlooks two important considerations; first, the majority of university enrolments is in the Faculties of Arts,

Law and Commerce. Second, there is no demand for the vast majority of their graduates. For example, the total number of enrolments in universities in 1976-77 was 368,238, 170,595 out of those were enrolled in the Faculties of Arts, Law and Commerce.⁴⁹ Meantime, 222,327 students are projected to be admitted to these three faculties according to the five-year plan 1975/76 - 1979/80 while the number to be admitted to the remaining faculties is 265,833.⁵⁰

5.4 Inequality of the provision of university facilities

The over-expansion of universities particularly in the regions has resulted in the inequality of the provision of the required facilities for teaching and research between the large universities in Cairo and Alexandria and those in the regions.

The educational concept of democracy does ^{not} only mean that university education should be available for all people in all governorates, but also it implies that better chances of learning and real university atmosphere should also be provided. But the actual situation of the regional universities shows the opposite that they lack staff both professional and administrative who can give liveliness to ^{the} university atmosphere. Such comparison between the universities in Cairo and Alexandria on one side and the regional ones on the other, shows that the latter have less staff and even those who are seconded to teach in these faculties leave them immediately after finishing their lectures like an actor or actress who leave the theatre after playing his/her role.

Furthermore, regional faculties are situated in buildings which do not suit ^{the} university level, ^{with} no equipped libraries or laboratories, and no services provided for students

The question to be asked here is, is the quality of graduates of these new regional faculties such as those of Kafr-El-Sheikh, Ismailia, Shebeen El-Koum or Domietta like their counterpart in Cairo, Ein Shams or Alexandria Universities which have their own staff and have facilities for teaching and research? Doubtless these universities provide better chances for their students to learn than that provided for their colleagues in regional universities.

During the writer's visit to these faculties, it was noticed that the majority of students did not enjoy a real university life, and as a result they will be poorly prepared for their future life in terms of social and professional aspects, on the assumption that the more human and national resources are generously available, the better quality of graduates will be.

Many students claimed that their colleagues in Cairo and Ain-Shams Universities are provided with such facilities from which they are lacking.

It also seems that the government opens these new regional faculties considering them as service sectors rather than productive units for qualified manpower upon them the national development depends.

5.5 ^{the} Threat to quality of university education

The over-expansion of universities has resulted in the sacrifice of quality of graduates. There is a very important point which should be decided i.e. whether a mass university system can give each student a real training and develop the qualities and attitudes he will need in his subsequent career.

It is sometimes expected that "when an educational system expands

rapidly, there is always a risk that quality may be sacrificed to quantity. This risk is particularly marked when higher education, specially university education is made available for a large percentage of the population,"⁵¹ With regard to the situation in Egypt, the rapid and steady expansion of university education appears to some observers to constitute a serious threat to academic standards.

This threat to quality is emphasized by Maklad when he says:-

"All attention is given to quantity on the account of quality which should not be sacrificed, therefore the universities have become unable to fulfil their responsibilities."⁵²

The Minister of Education also gives a caution concerning the unplanned university expansion and its results when he says:-

"The emotional response to popular demands for higher education in the regions, and so far the establishment of regional faculties and universities may without the provision of adequate facilities, result in a calamity, not only for the regional faculties, but also for university education in Egypt."⁵³

In this respect it is relevant to refer to the report on medical education in Egypt to show to what extent the expansion of medical faculties without providing material and human resources, affect the quality of doctors. The report was written in an Egyptian magazine under the title "Solution is needed for medicine and treatment" it states "The British Council in the U.K. has withdrawn his recognition of the BSC in Medicine obtained from Egyptian Universities since June 1976, and did not give a work permit to any medical graduate to work as a doctor unless he passes an equivalent examination". The Report adds "only few of those who apply for a doctor's position can pass the examination."⁵⁴

These restrictions which were put by the British Council are

considered important by medical educators because "A doctor is often in the position of having to take life or death decisions, and those who train him want to equip him with the knowledge and skills enabling him to study his patients rationally and to treat their diseases."⁵⁵

For the above reasons, restrictions have been placed on access to medical courses in France, The Netherlands and Germany. In Sweden, the Faculty of Medicine is among closed faculties and admission policy sets specific limits on the number of student places."⁵⁶

What has been done by the British Council with regards to medical degrees awarded by Egyptian Universities was predicted by Maklad in 1976 in his Report on the severe situation of Egyptian Universities when he states:-

"The steady expansion of university education and of regional universities in particular, without providing them with the essential facilities, will result in lowering the academic standard of graduates, and there is a caution that one day all foreign universities will not recognise degrees obtained from Egyptian Universities."⁵⁷

Further caution was shown by the President of the Egyptian Medical Association to stop establishing new faculties of medicine in the regions. Furthermore, he asked the Ministry of Education to lower the number of students who are annually admitted to the Faculties of Medicine in order to improve the quality of graduates and to keep their international standing.⁵⁸

What has been said for medical faculties can also be said for other faculties e.g. The Faculties of Engineering and even the Humanities Faculties such as those of Arts, Law and Commerce which have become overcrowded with students beyond available facilities.

7. Conclusion

It is now clear from all that has been stated in this chapter that university education lacks prior planning in order to avoid any further serious consequences, so there is an urgent need for drawing up a plan for the expansion which should be controlled.

Examination of University expansion in Egypt shows:-

On the positive side

Although the writer has criticised the present policy of university expansion according to certain measures, there are some reasons which are in favour of expanding university education. These reasons are

a) The increasing demand for highly qualified manpower in particular specialisations to cope with the needs of the development plan, e.g. Doctors, Engineers, Teachers and Physicians.

b) The provision of regional universities in order to achieve the principle of equal educational opportunities for all the people, to develop the regions and satisfy the wishes of those who are capable to benefit from university education.

c) The creation of new types of industries and new jobs in many sectors to keep abreast with the progress of science and technology, requires the provision of particular specialisations within the universities.

This expansion should be accompanied with the provision of those facilities which are essential for achieving the above purposes. This must be done in a framework of a plan which should be set up early enough before the expansion.

On the negative side

There is some disagreement with the trend of expansion which is still taking place, for the following reasons:

a) The expansion of faculties which produce graduates surplus to requirements.

b) The expansion of numbers admitted to universities under the pressure of public opinion to absorb the annual increase of secondary school leavers.

c) The expansion of regional universities or faculties by presidential or ministerial decrees without prior planning.

d) All the attention is given to the quantity rather than quality which should not be sacrificed.

e) The expansion is taking place at the time there is a shortage of financial resources and a lack of human and material resources.

It has become obvious from the discussion of the policy of expansion of university education that it lacks planning. This uncontrolled policy of expansion has resulted in a serious consequence as has been already stated in this chapter. Moreover, unless university expansion is planned, more serious consequences will emerge which will affect the development of the country as well as the development of university education itself.

The question to be asked here is, on what basis should the expansion of university education be planned? The following bas^{is}es are very important.

a) The expansion has to be geared to manpower requirements in terms of numbers and qualities needed for national development.

b) The availability of financial resources.

c) If the government continues its response to the social demand for university education, this should be done in the light of the available human and material resources e.g. staff buildings and equipment etc.

d) The required university courses should be given priority when allocating the budget of the universities. This requires the adaptation of ^a cost-benefit approach as financial resources are scarce because of economic problems.

e) Control is needed for the admission to pre-university level particularly secondary education.

f) Regional expansion should not occur unless there is a provision of teaching and research facilities, services such as transport, accommodation and other university activities in order to provide a real university atmosphere at least not less than of the old universities because one cannot feel the real university life when he visits one of the regional universities or faculties.

These are just general basic lines which should be considered when reforming the policy of university expansion in Egypt. Further discussion for reforming the policy of expansion will be cited in the last chapter.

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CHAPTER NINE

MAJOR PROBLEMS OF EGYPTIAN UNIVERSITIES
WITH SPECIAL REFERENCE TO THE CASE OF
CAIRO AND MANSOURAH UNIVERSITIES

CHAPTER NINEMAJOR PROBLEMS OF EGYPTIAN UNIVERSITIESWITH SPECIAL REFERENCE TO THE CASE OF CAIRO AND
MANSOURA UNIVERSITIES1. Introduction

As pointed out in chapters 7 and 8, the rapid expansion of university education which took place during the sixties and is still taking place has resulted in mass university system. This over expansion has resulted in many problems for the universities because the quantitative expansion has not been accompanied by an increase in the provision of human and material resources which enable the universities to fulfil their responsibilities.

Furthermore, the lack of planning for the provision of such facilities has resulted in a severe situation within the universities which affects the whole university life.

This chapter deals with the following problems;

First : The problem of the provision of human resources which includes:-

- a) Shortage of teaching staff.
- b) Shortage of administrative staff.

Second : The problem of the provision of material resources which includes:-

- a) Lack of adequately equipped libraries.
- b) Lack of adequately equipped laboratories.
- c) Shortage of buildings.

- d) Lack of ancillary services.
- e) Lack of accommodation for both staff and students.

2. Staffing the Universities

The teaching staff, is considered one of the most important inputs of university education because it affects to a great extent the quality of the university's performance.

The importance of teaching staff is emphasized by Onushkin when he states:-

"Teaching staff is one of the most important components determining the quality of a University's performance and, to a great extent, the amount and quality of the university contribution to the social and economic development of the country."¹

Then he stresses on the attention which should be given to the teaching staff when he says:-

"Therefore, the proper planning and management of teaching staff formation, and the continuous evaluation of its quality and most efficient utilisation is, or should be, one of the most important tasks undertaken by the heads of universities."²

Lord Robbins also states in his Report about the importance of the staff to the universities when he says:-

"The merit of any educational institution depends on the quality of those who teach and learn in it and the test of its administration and organisation is how well it facilitates the free communication of mind with mind."³

In the light of the above statements on the importance of the teaching staff, the universities should be generously staffed with highly qualified members in order to achieve their following responsibilities.

The teaching staff have an obligation to preserve and advance knowledge and to serve the intellectual needs of the nation and they have to keep abreast of new developments in their subjects, so allowance should be made to enable them doing research and to get the chance for further reading in their fields.

Teaching staff can contribute to such developments outside the university so they should be encouraged if they have the desire to do so because the modern university is no longer a place for instruction but has an essential role in national development.

Some university staff who have become acknowledged experts in their own fields of study are required to undertake many duties in the cause of learning and in the interest of the country and indeed of the world.

For all the above reasons, the ratio of staff to students in the universities thus needs to be reasonable that can allow staff to cope with their following commitments;

2.1 Commitments of staff in Egyptian Universities

Before discussing the present situation of the problem of shortage of staff in Egyptian Universities which has become serious recently, it is useful to discuss the different responsibilities of the staff both inside and outside the university. These commitments can be divided into four categories as follows:

a) Teaching Commitments: This includes; delivering lectures, running and sharing in seminars, organising discussion groups, giving tutorials, supervision of post-graduate studies.

Delivering lectures are a very important task of the staff as they

give students the chance to listen to, and be inspired by the staff who are advancing knowledge in their own subjects. The importance of lectures is emphasized by A. Laing when he says:

"Lectures are a good means of opening up a subject to students, especially a subject that would daunt the student if he approached it through unassisted reading."⁴

Accordingly, staff have to spend time in order to prepare their lectures in such a way that would suit the students and to stimulate them. To do so, staff should not be over-loaded with lectures in order to give them time to prepare for their lectures properly.

Running and sharing seminars is an unescapable duty of the staff because seminars are^a well organised method of teaching within the university which is based on previously prepared work or a paper by a group member. This method of teaching gives students the chance to read, investigate and look for lists of readings, as students in the university level should not be spoon-fed.

The staff have a major role in organising discussion groups; lectures are not enough means of teaching because students need to ask for explanations and to give their own opinions. To achieve this aim, it is important to organise small discussion groups which are run by the staff.

Giving tutorials. Tutorial system is well used in the universities of advanced countries such as U.K., U.S.A. and in some developing countries which have universities with small numbers of students.

This system provides personal contact between the staff and students which is considered as stated by J.P. Corbett:

"The only really effective way of ensuring that when students run into difficulties of whatever

kind some teachers know about it immediately and is placed in a position in which he is encouraged and enabled to give help."5

For the above advantages of that system, it should be provided and conducted in such a way to achieve the teaching function of the university.

The staff have an important role in the supervision of post-graduate students, which is considered one of their most important duties and should be taken into consideration when staffing the universities and when deciding the teaching load of the staff as well as the number of post-graduate students for each staff member.

b) Research commitments of the staff: As pointed out in chapter 1, research is one of the most important functions of a university.

The staff need to do research in two ways:-

a) personal research in their own fields so as to increase their knowledge and to improve their teaching, and it is considered in Egyptian Universities as pre-condition for promotion from one position to another.

b) sharing in team research which is financed by the university or any other government body and is directed towards solving such national problems or to develop sectors, in firms or industry.

Therefore, allowance has to be made to allow the staff doing this important commitment.

c) Administrative commitments of the staff: In Egyptian Universities, especially in the new regional ones, the staff take an essential part in running their faculties e.g. they participate in preparing the timetable, preparing for the exams but in some faculties the staff are engaged in too much administrative work because of the

lack of enough administrative staff in the new faculties. This results in the split of their effort and time which could affect their professional commitments.

d) External commitments of the staff: Some of the university staff have commitments outside their faculties such as, consultants in some factories or companies, sharing in the implementation of some projects, members of some councils, and some university staff share in conferences locally or internationally.

All the above commitments need to be considered when staffing the universities.

2.2 Shortage of Staff in Egyptian Universities and its effect on their performance

The problem of shortage of staff in Egyptian Universities has become one of the most serious problems which has emerged as a result of the rapid expansion of university education which has occurred during the sixties and is still taking place up till now.

The problem of provision of staff is getting worse because of the following reasons:

a) University expansion has not been accompanied by the provision of enough staff particularly for the regional universities and faculties which are suddenly established without prior planning for the provision of human resources.

b) Allowing some staff members to be seconded to other Arab and African countries without payment by the donor although their faculties are in urgent need for them.

c) The migration of staff abroad for financial reasons.

d) Stopping sending mission members to study abroad for some years especially during the sixties although the expansion was going on. Even when the government started sending graduate students to study abroad in 1973, some of them did not return after getting their degrees. According to the figures of the Ministry of Education only 1808 out of 3284 mission and study leave members, returned between 1973-1977, after finishing their study.⁶

e) The poor organisation of post-graduate studies within Egyptian Universities, so there is a lack of enough supervisors, lack of incentives given to them, lack of research facilities especially, libraries and laboratories, in addition to the lack of setting up a plan for the future demand for staff.

f) Some of the staff who were seconded to other countries through the Ministry of Education, refused to return after the expiry of their secondment period and continued in personal contract. For instance in a Report written by Professor K.Desouki, he states:

"it is estimated that in 1974-75, the number of professors and assistant professors seconded to Arab Universities mounted in Cairo University alone, to 19% of its teaching staff members, 4% of whom refused to return after the four year period allowed and kept abroad in personal contract."⁷

g) Some regional faculties find difficulty in appointing new staff members because of the hardship conditions of living, the lack of accommodation and the bad transport. The present situation has become serious to the extent that there are some faculties in the regional universities are still without even one staff member, others are with two or three staff although some of them have been established some

years ago such as the Faculties of Dentistry in Tanta and the Faculties of Education in Kena, Sohag and Asswan (see Table 9 - 7).

Joseph S Szyliowicz gives an evidence for the severe shortage of staff in Egyptian Universities when he says:

"They too face serious difficulties as evidenced by the fact that the number of students enrolled is roughly two to four times more than the existing facilities were designed for, as the student population grew, the number of faculty did not keep pace and teaching loads increased."⁸

And he adds:

"Suffice to point out that in 1930 the ratio for the faculty of letters was 1 : 7.4, in 1962, 1 : 107."⁹

This means that the quality of university education was better during the thirties, forties and the early fifties than today. This assumption is based on the fact that the more staff members are provided, the better quality of university graduates because the staff will be able to teach in small groups, to give tutorial, to supervise students' activities, to do research and to have the chance to contact with students both inside and outside lectures.

In fact university education before the 1952 Revolution, was only available for the elite who could afford paying the fees, so the number of students was small with favourable staff/student ratios. But this does not mean that university education today should be an elite system.

On the contrary, the writer would like to make it clear for the government, the Ministry of Education and the Universities' authorities that if the universities have become open doors for all classes, the quantitative expansion should be accompanied with increasing human and material resources to provide better learning for students and to keep past international standing of Egyptian Universities.

2.3 Present situation of staff shortage

The very rapid expansion of universities which resulted from the open door policy of admission to the universities has resulted in a serious imbalance between the number of staff and the number of students enrolled in the universities.

The following tables show evidence for this imbalance.

Table 9 - 1 Students and Staff Nos. in Cairo University
between 1973-1976

Faculty	1973 - 1974			1975 - 1976		
	No. of enrolments	No. of staff	ratio	No. of enrolments	No. of staff	ratio
Arts	8,287	75	1:111	12,460	102	1:127
Law	8,810	45	1:96	13,575	57	1:238
Commerce	11,916	19	1:627	15,894	26	1:611
Medicine	8,420	377	1:23	9,195	380	1:35
Engineering	6,874	182	1:38	8,243	151	1:33
Agriculture	4,577	146	1:31	4,935	160	1:31
Dar-El-Ulum	3,720	35	1:106	4,063	42	1:96
Veterinary Medicine	2,087	80	1:26	2,318	99	1:26
Pharmacy	2,310	61	1:38	2,612	85	1:31
Dental	1,792	35	1:51	2,116	55	1:38
Medicine Economic	1,629	24	1:68	2,797	32	1:72
Science	2,148	157	1:14	2,449	105	1:23
Mass Communica- tion	899	9	1:100	1,924	13	1:125

- Source: a) Statistics of The Higher Council of Universities
1973-1974, p. 8.
- b) Data collected from Cairo University faculties during
field visits, 1975.
- c) Ministry of Education, Education and Training in Egypt,
Cairo, Ministers Office, 1976, p. 11.

It seems from the previous table that:-

a) The number of students increased at a high rate in the Faculties of Law, Arts, Commerce, Economic and Political Sciences and Dar-Al-Ulum, (The House of Sciences) at the time the rate of increase in staff was very low.

b) Staff/student ratio increased in 1975-76 in some faculties ^{more} than in 1973-74 such as in the faculties of Science, Mass Communication, Medicine, Economic and Political Sciences and was highly increased in The Faculty of Law.

In the course of showing the severe shortage of staff today in Egyptian Universities, it would be useful to show the ratio of staff in both theoretical and practical faculties as stated in the project which was done by The Institute of National Planning (INP), as shown in the following table.

Table 9 - 2 Students and Staff Nos in Egyptian Universities during the period 1955-1961

Year	Theoretical			Practical			Total		
	No. of students	No. of staff	ratio	No. of students	No. of staff	ratio	No. of students	No. of staff	ratio
1955-65	36,652	801	45.7	20,398	2060	9.9	57,050	2861	19.9
1956-57	33,232	800	41.5	23,038	2145	10.7	56,260	2945	19.1
1957-58	35,723	851	42.0	22,664	2167	10.4	58,387	3018	19.3
1958-59	37,297	883	42.2	26,154	2141	12.2	63,451	3024	21.0
1959-60	39,438	860	45.8	29,559	2238	13.2	68,997	3098	22.3
1960-61	40,555	816	49.7	34,017	2364	14.4	74,572	3180	23.4

Source: Fahmy, M.S. Long-term Manpower Planning Research, Memorandum on Estimations of Teacher Requirement for The period 1955-80, project carried out in INP, Cairo 1955, p. 6.

It seems from the table that the ratio was better than that of today although its rate was not keeping pace with the rate of increase in students.

The second piece of evidence for the shortage of staff shows the increase in the numbers of students in Asyot University without increasing the number of staff.

Table 9 - 3 Students and staff Nos. in Asyot University in 1976-1977

Faculty	No. of students admitted	No. of students enrolled	No. of staff	Staff/student ratio
Law	774	1,446	8	1:181
Commerce	1,616	7,195	16	1:450
Science	258	1,279	134	1:10
Medicine	535	2,712	90	1:30
Pharmacy	252	1,356	27	1:49
Engineering	564	2,845	91	1:31
Agriculture	470	2,807	78	1:36
Veterinary Medicine	290	1,282	36	1:36
Education	829	2,759	* 13	1:212
Arts (Sohag)	401	580	9	1:64
Science (Sohag)	102	193	4	1:48
Science (Kena)	97	295	7	1:42
Science (Asswan)	151	217	7	1:31
Education (Sohag)	324	1,785	* 1	1:1785
Education (Kena)	195	1,443	* 3	1:481
Education (Asswan)	215	870	Nil	Nil
Total	7,073	29,054	530	1:55

Source: A.R.E. Ministry of Education. Nos. of students and staff in Egyptian Universities, Cairo Minister Office, Table p. 7.

* N.B. Number of staff in these faculties is for educational subjects, e.g. educational psychology, principles of education, methods of teaching. Basic subjects are taught by staff of the faculties of Arts and Science in other universities of Asyot - Cairo - Ain Shams.

The Faculties in Sohag, Kena and Asswan are affiliated to Assuit University.

It seems from the table that all the university faculties are understaffed, e.g. the Faculty of Commerce has only 16 staff members to teach 7195 students, the ratio is also high in the faculties of education in Asyot, Sohag, Kena and Asswan. Even in the Faculty of Science which has the largest number of staff they are ^{also} responsible [^] for teaching in seven faculties of education and science in Kena, Sohag and Asswan.

The following table shows the shortage of staff in El-Menya University which was established as independent University in 1976-77.

Table 9 - 4 Students and Staff Nos. in El-Menya University in 1976 - 1977

	No. of students admitted	No. of students enrolled	No. of staff	Ratio
Arts	1,167	3,032	33	1:92
Science	106	326	13	1:25
Engineering	541	2,851	17	1:168
Agriculture	444	1,678	43	1:39
Education	563	2,500	* 6	1:417

Source: A.R.E. Ministry of Education, op.cit. N.D. Table p. 9.

* This number of staff is for educational subjects, e.g. psychology, principles of education, education and society, history of education.

N.B. Two new faculties for Applied Arts and Medicine are under establishment to be added to the university.

The above table reveals a severe shortage of staff, All faculties are still depending on the staff of Asyot University to which they were

affiliated before becoming an independent university.

The situation in Tanta University is not better than in the other universities although the university was established in 1969, for there is a serious shortage of staff in most of the faculties as shown in the following table.

Table 9 - 5 Students and staff Nos. in Tanta University in 1976-77 academic year

Faculty	No. of students admitted	No. of students enrolled	No. of staff	Ratio
Medicine	579	2,995	97	1:31
Science	276	1,109	43	1:26
Education	753	3,589	20	1:165
Commerce	3,054	7,677	10	1:768
Arts	377	864	2	1:432
Pharmacy	102	474	8	1:59
Dental Medicine	99	356	Nil	Nil
Agriculture Kafr-El-Sheikh	768	2,688	66	1:41
Total	6,008	19,748	246	1:80

Source: A.R.E. Ministry of Education. op.cit. N.D. Table 6.

It seems from the table that this university too is suffering from a severe shortage of staff e.g.

a) The ratio in the Faculties of Commerce and Arts is very high, in the Faculty of Commerce, 3,054 students admitted in one year and is still with 10 staff members compared with 1975-1976 (See chapter 8 - Table 8 - 1).

b) The Faculty of Dental Medicine is still without staff although three years have passed since its opening in 1973-74.

c) The Faculty of Arts is still with two staff members, meantime the number of students increases annually. In this respect, it is necessary to state what has been said by the Dean of Tanta Faculty of Education who supervises the Faculty of Arts, during personal communication, he said 'The faculty finds difficulty in appointing staff, and if we find one staff member, his or her appointment' papers should pass through many offices and this takes a long time because of the undue routine procedures.

d) With regard to the Faculty of Science, although it has the largest number of staff with regard to the number of students, it bears the responsibility for teaching science subjects in the Faculty of Education, as well as teaching science subjects to students of the preparatory year of the Faculties of Medicine, Pharmacy and Dentistry. Other evidence to show the shortage of staff in Mansourah University in two different years is shown in the following table.

Table 9 - 6 Students and Staff Nos. in Mansourah University in 1975-76 and 1976-77

Faculty	1975 - 1976			1976 - 1977		
	No. of students	No. of staff	Ratio	No. of students	No. of staff	Ratio
Medicine	2,866	77	1:39	2,778	90	1:30
Science	1,287	58	1:22	1,315	65	1:20
Education	2,792	12	1:232	3,279	17	1:193
Pharmacy	1,143	3	1:381	1,103	12	1:92
Law	4,087	11	1:371	5,844	12	1:487
Commerce	6,314	10	1:631	8,050	13	1:619
Engineering	4,212	27	1:156	3,998	39	1:103
Agriculture	2,843	37	1:77	2,934	39	1:75
Education (Domietta)	-	-	-	200	Nil	Nil
Total	25,544	235	1:108	29,501	287	1:103

Source: a) Data collected during the writer's visit to Mansourah University.

b) Ministry of Education. op.cit. Table 5.

- N.B. a) The staff of the Faculty of Education are for educational subjects as explained before in the previous tables.
- b) The staff of the Faculty of Science are responsible for teaching science subjects in the faculty of education as well as the preparatory year in the Faculties of Medicine and Pharmacy.

It ^{is} revealed from the table

a) There is an increase of 1,757 students in the Faculty of Law in one year with an increase of only one staff member.

b) There is an increase of 1,736 students in 1976-77 in the Faculty of Commerce with only an increase of three staff members.

In looking at the table it seems that the staff/student ratio is still high, this means that the increase in students' enrolment is not accompanied with equal increase in numbers of staff.

c) The Faculty of Education in Domietta which was opened without staff, is covered by the staff of the Faculties of Education and Science in Mansourah University.

In the course of showing the shortage of staff in Egyptian Universities, more evidence can be given to show the lack of planning for the provision of staff for the expansion of regional universities which is taking place constantly. The following table shows the regional universities which are without staff members and those with less than 10 staff members.

Table 9 - 7 Shortage of staff in new regional faculties
in the 1976-77 academic year

Faculty	Town	Administered by the Univer- sity of	Opening date	No. of students	No. of staff
Commerce	Beni-Suif	Cairo	1975-76	890	Nil
Agriculture	Fayoum	Cairo	1976-77	149	Nil
Education	Fayoum	Cairo	1975-76	900	7
Arts	Zagazig	Zagazig	1975-76	922	8
Pharmacy	Zagazig	Zagazig	1975-76	558	3
Education	Zagazig	Zagazig	1971-72	2840	3
Education	Domietta	Mansourah	1976-77	200	Nil
Arts	Tanta	Tanta	1975-76	864	2
Dental Medicine	Tanta	Tanta	1973-74	356	Nil
Commerce	Tanta	Tanta	1973-74	7677	10
Pharmacy	Tanta	Tanta	1973-74	474	8
Arts	Sohag	Asyot	1976-77	580	9
Law	Assuit	Asyot	1975-76	1446	8
Science	Sohag	Asyot	1975-76	193	4
Science	Kena	Asyot	1973-74	295	7
Education	Sohag	Asyot	1971-72	1785	1
Education	Kena	Asyot	1970-71	1443	3
Education	Asswan	Asyot	1973-74	870	Nil
Education	Shebeen-El-Koum	Monafia	1971-72	3099	10
Education	Menya	El-Menya	1973-74	2500	6
Dental Medicine	Cairo	Al-Azhar	1976-77	319	2
Education	Cairo	Al-Azhar	1970-71	1802	9

Source: Ministry of Education. Expansion of Universities in Egypt
Ministers Office, Cairo, 1978.

N.B. Three more new Faculties for Education opened in 1977-78 in
Kafr - El-Sheikh - Benba - Ismailia (Suez Canal)

It seems from the table that:

- a) There is no prior plan for staffing the faculties before establishing them to the extent that there are some faculties without even one staff member. These faculties are covered by staff of other faculties.
- b) There are some faculties which were established a long time ago and are still under-staffed such as the Faculties of Education in Zagazig, Dental Medicine in Tanta, and Education in Kena, Sohag, Asswan and Shebeen El-Koum.
- c) Most of the regional faculties are affiliated to the nearest universities to their towns. This situation creates many problems to these faculties which will be discussed in the course of explaining the consequences of the shortage of staff in Egyptian Universities.
- d) The establishment of regional faculties is taking place in constant years before consolidating the existing ones by providing them with human and material resources.

Before discussing this poor situation within the universities and its serious consequences, it would be useful to show staff/student ratio in some advanced countries to compare it with that of Egyptian Universities.

Table 9 - 8 Staff/student ratio in some advanced countries in 1960

Country	staff/student ratio
U.K.	1:8
France	1:30
West Germany	1:35
Holland	1:14
Sweden	1:12
U.S.A.	1:13
U.S.S.R.	1:10

Source: Robbins Report. op.cit. p. 14.

Furthermore, the universities are divided into three categories according to the staff/student ratio as stated by Lewis Awad in his book "The University and The Modern Society."

First class	University	ratio	1:10
Second class	University	ratio	1:15
Third class	University	ratio	1:60

In the light of these three categories, Egyptian Universities can be judged as more than a third class university since the ratio in Cairo University in 1976 reached 1:65 while that of Mansoura was 1:108 (see Appendices 3 & 4). Table 1, that of Tanta reached in 1977 1:80 (see Table 9 - 5) and that of El-Menya reached in 1977 1:93 (see Table 9 - 4).

3. Consequences resulting from the shortage of staff in Egyptian Universities

The problem of the shortage of staff which has become common in all universities has resulted in the following consequences.

3.1 Overloaded staff - due to the rapid increase in students enrolled in the universities, teaching load is very heavy. The minimum number of hours devoted weekly to lectures is normally as high as 12 for lecturers, 10 for assistant professors, and 8 for professors. These obligations of the teaching staff provide very little time for personal reading, investigation and research or even for thinking about fundamental aspects of their subjects, and on the whole their time is taken up by the day-to-day demands of teaching.

The actual situation is still worse because of the additional hours

which may be expected from the teaching staff due to the very high number of students, some staff members teach more than 20 hours per week. In this respect it is useful to state that the staff who completed the questionnaire in Cairo University answered that :-

67% of them teach between 10 - 20 hours per week

33% of them teach more than 20 hours per week

(see Appendix 3 Table 3)

In the Mansourah University 60% of the staff teach between 10 - 20 hours per week, while 33% teach over 20 hours per week. (see Appendix 4 Table 3).

This situation does not allow the staff to do personal work and allow any participation in the community life of their faculties.

In this respect, it is worth mentioning what has been said by the Dean of the Faculty of Arts in Cairo University during personal communication in his office, he said, "because the staff are overloaded, they have no time to be devoted to their other commitments such as doing research, supervision of post-graduate studies, sharing in the developments of their departments, and getting the chance to contact with students."

3.2 Transfer of staff to teach in different faculties - Because of the severe shortage of staff in some faculties especially in the regional ones, the main dependence of these faculties lies on the staff from Cairo, Ain Shams and Alexandria Universities, e.g. 78% of the staff of Cairo University teach in other faculties besides teaching in their faculties, 74% of them face travelling difficulties (see Appendix 3 Table 3).

Even in Mansourah University although it is under-staffed 75%

of the staff who completed the questionnaire stated that they teach in other institutions as well as Mansourah University, 92% of them face travelling difficulties (see Appendix 4 Table 3).

These difficulties of transport affect to a great extent the secondment of staff, for instance the staff who travel from Cairo and Alexandria to teach in Mansourah University, in many cases arrive in Mansourah when the time of their lectures is over, and in some cases they return home from midway.

The same problem faces the staff who travel from Cairo to teach in Assyot University or its affiliated faculties, sometimes they spend 8 hours in travelling to teach 2 hours and sometimes they cannot arrive in time.

Because of the problem of the bad transport, some staff refuse to teach in the regional universities such as those in Upper Egypt in El-Menya - Kena, Sohag and Assyot and even in the faculties in Kafr El-Sheikh - Shebeen El-Koum in Lower Egypt.

Furthermore, because there is not enough staff to teach in the new faculties, staff teach in two different faculties in different cities. This was clear when staff who were travelling to teach in Mansourah, stop at Tanta to deliver two or three lectures and then move to Mansourah.

This inefficient system of staff secondment has emerged because of certain reasons:-

a) The faculties which are opened in the regions are affiliated to one of the old universities on which the responsibility of teaching lies regardless of the provision of enough staff.

b) There is the lack of co-ordination between the universities particularly in organising the timetable.

c) Staff in Egypt today have become interested in extra teaching hours in other faculties, and they do make efforts to be chosen to teach. This phenomenon has become common because the staff are suffering from the lack of financial resources ^{wich} which to cope with their increased personal needs and their professional commitments accordingly, they find in the secondment system an outlet for these financial problems.

During personal communication with some of the staff who commute from one faculty to another to deliver lectures, they stated "this system of secondment results in raising the split of their duties, and affects their efforts so they do not find time to read, to do research and to enjoy their university life with their colleagues and students."

This financial problem is considered one of the reasons for the shortage of staff, ^{been} During recent years it has obvious that an increased number of the staff leave Egypt for Arab Universities where they can earn around ten times of their salary in Egypt.

3.3 The shortage of staff has resulted in the ignorance of the tutorial system which is important and essential for the modern university. This system which enables the staff to meet students individually or in small numbers, is explained by Lord Robbins in His Report when he says:

"'tutorial system' is meant a system that ensures that the pupil comes into personal contact with his teachers, that he can bring his individual difficulties and problems to them, and that his progress is a matter of sympathetic concern to them, we are whole-heartedly in favour of a tutorial system."¹¹

With regard to the situation in Egyptian Universities, all the attention is given to delivering lectures to large numbers of students

as in the Faculties of Law, Arts and Commerce ^{where} one staff member teaches
 1000 students and sometimes more than that number.

During personal communication with some of those who completed the questionnaire in Cairo University stated that they are convinced that the tutorial system should be conducted in their faculties but they have no time and are engaged in too much teaching. So nowadays Egyptian Universities have become only places for theoretical instruction even in science faculties which depend on practical work, delivering lectures has become the most used method of teaching in many cases, in this respect it is relevant to state that 72% of Cairo staff give tutorials less than five hours per week, and only 28% give more than five hours per week. (see Appendix 3 Table 3).

3.4 Lack of contact with students in lectures

Contact between staff and students in lectures is very important as it enables the staff to ask in order to make sure that students are following him and to attract their attention. It also enables students to ask for more explanation or clarification, and to give their own views and comments. Such contact like that makes teaching alive and fruitful and meaningful so students become positive during their lectures and lessons.

But because of the shortage of staff this contact has become difficult even impossible in many cases. In this respect Khattab states in his paper on University Education in Egypt which was presented to Bagdad Conference in 1976 when he says:

"as a result of the increasing number of students enrolled in the universities and the relative decrease of staff members, the relation between

the staff and the students has become very weak and not real, all this has led to the weakness of the spirit of university life."¹²

The lack of contact between staff and students in lectures can be seen through the reasons given by two samples of Cairo and Mansourah Universities as shown in the following tables.

Table 9 - 9 Reasons for the lack of contact between staff and students during lectures in Cairo University

Reasons	%
1. Lack of time	35
2. Excessive number of students	34
3. Lack of space	31
	100

Source: Appendix 3 Table 6

N.B. the percentages in the above table and all the following tables are referred to the total number of answers received not the persons replied.

Number of answers received in this section 233

Table 9 - 10 Reasons for the lack of contact between staff and students during lectures in Mansourah University

Reasons	%
1. Lack of space	39
2. Excessive number of students	26
3. Lack of time	24
4. Lack of audio-visual aids	11

Source: Appendix 4 Table 6

N.A. Number of answers received 516.

It seems from the tables that lectures are delivered within Egyptian Universities in very large numbers especially in theoretical faculties such as those of Arts, Law and Commerce, so one can find one thousand students or more in a small lecture theatre, this was quite clear in the Faculties of Law and Commerce in Cairo University, during the writer's visit to that university, lecture theatres looked like a train during rush hours to the extent that one could not recognise the lecturer among students. As a result lectures are delivered from one side, the lecturer is speaking and students are writing after him during the time of lectures.

In a situation like that, how can the lecturer ask students or receive questions from them. So contact is very one-sided, and in many cases many students finish their university studies and their lecturers could not even recognise their faces.

Some staff members in both Cairo and Mansourah Universities stated that frequent contact in lectures is required but how can this be done within circumstances of overcrowded rooms and lecture theatres and they added that university teaching should not be based on the one side lecture. Their statement is true on the assumption that the smaller numbers are in lectures, the better teaching and the easier contact and interaction with students.

3.5 Lack of contact between staff and students outside lectures

Shortage of staff has also resulted in the lack of contact between staff and students outside lectures in their offices, in cafeteria, in students' places of activities, on their way to lectures and during students journey's, and joint common room for staff and students.

The following are the reasons given by samples of Cairo and Mansourah Universities for the lack of that contact.

Table 9 - 11 Reasons for lack of contact with students outside lectures given by Cairo University staff

Reasons	%
1. Excessive teaching hours for students during the day	20
2. Lack of accommodation e.g. rooms for contact	18
3. Excessive teaching hours for staff	17
4. Teaching in other faculties	16
5. Excessive number of students	15

Source: Appendix 3 Table 7

N.B. Number of answers received 445.

Table 9 - 12 Reasons for lack of contact with students outside lectures given by Mansourah University staff

Reasons	%
1. Excessive teaching hours of staff	17
2. Excessive number of students	17
3. Excessive teaching hours for students during the day	15
4. University life is poorly organised	15
5. Lack of accommodation	13

Source: Appendix 4 Table 7

N.B. Total number of answers received 516

From the above tables it seems that the most important reasons for the lack of contact outside lectures with students are as follows:

a) Some faculties are under-staffed, so staff have excessive teaching hours as in Mansourah University, so 48% of the staff teach between 10 - 20 hours per week and 33% of them teach over 20 hours. (see Appendix 4 Table 3).

b) The staff of large universities such as Cairo find it difficult to make contact with all the students.

c) Some staff are engaged in too much teaching in their faculties and other faculties to the extent that they leave the faculties as soon as they finish their lessons.

d) There is a lack of such places in order that staff can contact with students, this situation is clear in Mansourah University as a new university which suffers from enough buildings. Even in Cairo University, the increased number of students has not been accompanied with extending the buildings which in turn resulted in shortage of places for meeting students e.g. common room, staff rooms etc.

Such communications between the staff and students may help the staff to:

a) advise students on solving their personal problems as well as their academic problems;

b) explain any difficulties which may arise during lectures or practical work;

c) give students direct guidance which enable them to finish their studies successfully and may help them to succeed in their future career.

This informal contact with students outside lectures is given more attention by Lord Robbins in his Report when he says:

"inadequate communication between teacher and student is also a factor in the failure of some students to obtain the qualification for which they are studying."¹³

Furthermore, more evidence can be given for the importance of the frequent contact between the staff and students, O.L. Brook states in his book:

"The Modern University"

"When students are asked to suggest reforms of universities they nearly always give prominent place to the need for closer relationship between staff and students."¹⁴

This close relationship is desirable that every student should know at least one staff member to whom he can turn for advice.

3.6 Lack of supervision of post-graduate studies

Post-graduate studies within the universities should be given attention for the following reasons:

a) The enormous extension of knowledge in all fields of studies urges the need for higher studies and there is a need for university staff to cope with the increasing numbers enrolled in the universities. This requires giving attention to the supervision of M.A. and Ph.D students specially demonstrators and assistant lecturers.

b) The scientific and technological revolution, the pace of social change, and the complexity of modern social and economic organisation all demand an increasing number of persons capable of understanding, developing and applying modern techniques in science and applied science as well as the social sciences.

In Egyptian Universities, supervision and teaching post-graduate students are among the important commitments of the staff.

The question to be asked here is, to what extent is supervision of staff being provided for post-graduate students? In Cairo University, 95% of staff who completed the questionnaire answered that supervision is inadequate and gave the following reasons for that as shown in the following table (see Appendix 3 Table 8).

Table 9 - 13 Reasons for the lack of supervision of post-graduate studies in Cairo University

Reasons	%
1. External commitments	18
2. Overloaded staff	17
3. Lack of time	15
4. Excessive number of students	15

Source: (Appendix 3 Table 8)

N.B. Number of answers received 581

In Mansourah University 88% of the sample (128) replied that supervision is not adequate, the following are among the main reasons for the lack of supervision.

Table 9 - 14 Reasons for the lack of supervision of post-graduate studies in Mansourah University

Reasons	%
1. External commitments	15
2. Excessive number of students	14
3. Lack of time	13
4. Lack of motives	13
5. Overloaded staff	12

Source: Appendix 4 Table 8

N.B. Number of answers received 645

It seems from the above Tables that external commitments of the staff are given the first place among the reasons stated by both Cairo and Mansourah staff, so some staff have some undue obligations to the administration of their faculties as in Mansourah University such as equipping the libraries, distributing lists of students among departments because of the lack of administrative staff.

Some staff members are consultants to some companies and factories, others are members in the National Specialised Councils (NSC), so they have to attend their meetings and prepare the reports on the issues discussed by the Councils, and some of the staff participate in projects carried out outside the universities such as medical surveys, agricultural projects.

Staff in both Cairo and Mansourah Universities are overloaded with teaching hours (see Appendices 3 & 4 Table 2), so there is very little time which can be devoted to the supervision of post-graduate students.

Among the reasons given by the staff, the number of post-graduate students is large, meantime there is not enough staff members to supervise the work of the students.

The following table shows the imbalance between the number of post-graduate students and the number of staff who are entitled to supervise their work.

Table 9 - 15 Nos of post-graduate students and staff supervising them in selected universities in 1976-77

University	Faculty	No. of post-graduate students (FGS)		Total	No. of staff supervise (PGS)	Ratio
		M.A	Ph.D			
Cairo	Arts	672	249	921	62	1:15
	Law	-	665	665	40	1:16
	Commerce	100	65	165	21	1:8
Ain Shams	Arts	569	128	697	54	1:13
	Commerce	176	36	212	26	1:8
	Agriculture	536	292	828	102	1:8
	Girls	240	108	348	76	1:5
Alexandria	Arts	483	132	615	60	1:10
	Commerce	89	19	108	19	1:6
	Medicine	118	383	601	173	1:4
	Agriculture	501	167	668	109	1:6
Zagazig	Medicine	67	20	87	17	1:5
	Education	1	2	3	1	1:3
Mansourah	Commerce	29	41	70	2	1:35
	Science	169	46	215	34	1:6
	Education	32	13	45	5	1:9
Tanta	Education	13	1	14	2	1:7
	Commerce	5	1	6	1	1:6
Assyot	Science	197	69	276	71	1:4
	Education	28	8	36	6	1:6
	Science	54	7	61	3	1:20
Monafia	Asswan					
	Agriculture	34	21	55	30	1:2
	Engineering	22	-	22	6	1:4

Source: A.R.E. Ministry of Education. op.cit. Tables 1 - 8.

It seems from the table that there is an excessive number of graduate students enrolled in post-graduate studies, at the same time that there is a shortage of staff taking into consideration that post-graduate students need to see their supervisors intermittently if they face sudden problems which may affect carrying on their work.

Supervision of post-graduate students requires enough time to read students papers and dissertations in order to give their comments which enable students to carry on their work. This of course requires time which is too difficult to be provided by the staff who are engaged in too much teaching to undergraduate students in addition their external commitments as mentioned earlier.

Another important reason for the lack of adequate supervision of post-graduate students, i.e. the lack of incentives, some years ago, the staff were not paid for the supervision of M.A. and Ph.D degrees, now, they are paid, but not quite enough to encourage them to accept supervision of theses, or to give attention to them, they are paid in charge of supervising students theses for two or three years, the amount of (LE 50 for M.A., LE 100 for Ph.D, with maximum annual payment of LE 300). If there are two supervisors, this amount of money has to be shared between them.¹⁵

The staff can get three or four times of the above amount by teaching extra hours for three months. This low payment ^{has} resulted in the indifference and the lack of interest to supervise theses. An evidence in favour of that statement can be given, when staff of Cairo and Mansourah Universities were asked to state their academic interests in a rank of order, supervision of theses came at the bottom of their list (see Appendices 3 & 4 Table 4).

It is also seen from the table that because of the lack of enough staff in some faculties, students have to register their theses in other faculties, this situation creates more difficulties for students to contact with their supervisors.

In some cases a staff member supervises three or four students for whom he cannot provide enough time, this situation results in delaying finishing their theses.

So, it is required here to give more incentives to the staff who supervise post-graduate students e.g. considering the number of theses they supervised when they are promoted, increasing financial allowance, decreasing their teaching load etc.

3.7 Little research

One of the direct consequences of the shortage of staff is that little research is being done in the universities. As has been stated in chapter 1, research is considered one of the important functions of the university which should be conducted side by side with teaching (for more details on the importance of research, see chapter 1).

In Egyptian Universities, research can be done in two ways;

- a) research done by a team of staff members which is directed to solving problems either on the local or on the national level;
- b) personal research which is considered a pre-condition for promotion from one position to another, as well as to refresh the knowledge of staff in order to enrich their teaching.

Accordingly, allowance should be made to enable the staff to do research, this commitment should also be considered when deciding staff teaching load.

It must also be understood that an institution which stays at the level of undergraduate studies, could hardly be considered a university, since a university is characterised not only by its teaching, but also by its research environment which come out of post-graduate work.

With regard to Egyptian Universities, the shortage of the staff and the heavy teaching load of the existing staff have affected to a great extent the amount of research done within the universities. When two sample of the staff of Cairo and Mansourah Universities were asked to state the problems which inhibit them from doing research in their departments, the following problems concerning the provision of staff were among their answers.

- a) Overloaded teaching hours of the staff.
- b) External commitments of staff.
- c) Teaching in other faculties.

(see Appendices 3 & 4 Table 9).

Of course these excessive commitments of the staff have not left any time to be devoted for research, and the staff's main concern has been directed to teaching as it has become an important source for extra money which they cannot get by doing research.

3.8 Less participation by staff in projects and programmes done by the universities

As a result of the increased teaching commitments of the staff within their faculties as well as their commitments in other faculties, the staff are unable to participate fully in such projects which are planned by the universities to develop their environments as an important responsibility of the modern university.

Although the staff have shown their interest in sharing in the projects organised by the university, their heavy teaching load has resulted in the split of their efforts and time.

4. Lack of administrative staff

It is important to provide enough qualified administrative staff for the universities in order to achieve their purposes. The universities should be generously staffed to cope with their commitments which can be summed as follows:

- a) distributing students to departments;
- b) providing departments with information on different aspects of the faculty;
- c) preparing timetables;
- d) preparing for examinations;
- e) conducting students' affairs e.g. registration, paying the fees, examination results.

It is a waste of money and human resources if the staff have to undertake administrative commitments which can be undertaken by administrative staff with less qualifications. This would save time which ^{could} be devoted to teaching and research. This does not mean that academic staff should not contribute to ^{the} administrative affairs of their faculties, but they have a role in taking administrative decisions ^{on} the condition that they should not be engaged in too much administrative work to the extent that no time will be devoted to their professional commitments.

To what extent are the universities staffed? The following table shows the numbers of students and the number of administrative staff in Cairo and Mansourah Universities.

Table 9 - 16 Students and administrative staff Nos. in
Cairo and Mansourah Universities in 1975-76

Faculty	Cairo University			Mansourah University		
	No. of students	No. of staff	ratio	No. of students	No. of staff	ratio
Medicine	9195	106	1:87	2866	63	1:45
Science	2449	45	1:54	1287	25	1:51
Education	-	-	-	2792	17	1:164
Law	13575	37	1:367	4087	17	1:240
Commerce	15894	62	1:256	6413	30	1:215
Engineering	8243	54	1:153	4212	45	1:94
Agriculture	4935	27	1:183	2843	49	1:58
Pharmacy	2612	52	1:50	1143	22	1:52
Dar-El-Ulum	4063	12	1:338	-	-	-
Veterinary Medicine	2318	41	1:57	-	-	-
Dental Medicine	2116	46	1:46	-	-	-
Economic & Political Sciences	2797	12	1:233	-	-	-
Mass Communication	1624	30	1:54	-	-	-
Arts	12460	35	1:356	-	-	-

Source: Data collected by the writer during the field work in Cairo and Mansourah Universities in 1975-76.

The above table reveals an imbalance between the number of students and the number of staff especially in the faculties with large numbers of students such as those of Arts, Law, Commerce and Dar-El-Ulum. To what extent does the administrative staff carry out their duties effectively? 90% of the sample of Cairo University answered that administrative staff do not carry out their functions adequately, and gave the following reasons to their answers as shown in the following table.

Table 9 - 17 Reasons for the lack of efficiency in carrying out the duties by administrative staff in Cairo Universities

Reasons	%
1. Lack of annual increase in staff members relating to annual increase in students numbers	18
2. There are no incentives e.g. extra pay	17
3. The faculty is understaffed	17
4. Lack of well qualified staff	13
5. Its members are delegated from other sectors without experience in university affairs	12

Source: Appendix 3 Table 14

N.B. Number of answers received 520

In Mansourah University, 85% of its sample answered, no and gave the following reasons.

Table 9 - 18 Reasons for the lack of efficiency in carrying out the duties of administrative staff in Mansourah University

Reasons	%
1. Lack of annual increase in staff relating to the annual increase in students numbers	15
2. The faculty is understaffed	15
3. Lack of qualified staff	14
4. Its members are delegated from other sectors without experience in university affairs	13

Source: Appendix 4 Table 14

N.B. Number of answers received 555.

It seems from the above tables that both universities suffered from a shortage of administrative staff, this shortage has resulted in the following.

a) Delay in finishing students affairs because each administrative staff member has to deal with the affairs of a large number of students. (see Table 9 - 16).

b) Delay in finishing staff affairs which doubtless affects achieving their professional commitments as they depend on such arrangements done by administrative staff.

c) Some academic staff members undertake too much administrative work particularly in the new faculties at the expense of their teaching and research commitments. This was clear when the new faculties were established in the regions in 1971, e.g. two administrative staff members were running the Faculties of Education in Shebeen-El-Koum and Zagazig because these faculties had no Deans to run them at that time. The same situation applies to the new regional faculties.

5. Lack of material resources

5.1 Lack of equipped libraries

It is unbelievable to imagine that a university can be established without a library because "a university is not primarily a place of teaching, but a place of learning".¹⁶ So a good library is an essential tool for all activities of the university to achieve the functions of teaching and research.

Today, among the criteria by which the university can be judged, to what extent it has equipped libraries and research facilities.

Furthermore, the library is essential for students who write their essays on different subjects. It is also essential for both post-graduate students and the staff who are engaged in doing research.

In order to achieve the purposes of the library within the university

there are certain conditions which should be given attention;

- a) It should be run by professional staff.
- b) There should be enough study places in the reading rooms.

Catalogues should be provided.

d) There should be enough copies according the number of students using the library.

- e) Good lighting and a quiet atmosphere.
- f) Post-graduate students should have separate reading rooms.

g) It should be opened for a long-time of the day than any other part of the university so as to enable each student to come to the library according to his convenient time.

The question which should be asked here is, to what extent does the library within Egyptian Universities fulfil its purposes?

In Cairo University, 96% of the staff who completed the questionnaire answered this question by stating that the library either partly fulfils its purposes or does not fulfil them at all, some of the reasons given by them are shown in the following table.

Table 9 - 19 Reasons for the lack of fulfilling the purposes of the library as given by Cairo University staff

Reasons	%
1. Overcrowding by students	17
2. Opened for limited hours	14
3. Badly built	14
4. Lack of well qualified library staff	13
5. Not well enough equipped rooms	12

Source: Appendix 3 Table 11

N.B. Number of answers received 616.

In the case of Mansourah University, 95% of the staff who completed the questionnaire stated that the library does not completely fulfil its purposes, among the reasons given by them are shown in the following table.

Table 9 - 20 Reasons for the lack of fulfilling the purposes of the library in Mansourah University

Reasons	%
1. Not well enough equipment	14
2. Badly built	12
3. Lack of qualified staff	11
4. Small number of borrowed books	11
5. Opened for limited hours	10
6. Overcrowding of students	10

Source: Appendix 4 Table 11

N.B. Number of answers received 806.

In Cairo University the situation is not satisfactory; there is a main library inside the campus which serves all the faculties, it has not been expanded to serve the annual increasing number of students, the same building is still with its three reading rooms whose capacity does not exceed 20 students each, meantime the number of students increased from 36,321 in 1962 to 88,217 in 1977¹⁷ and the main library is still with the same facilities. The number of copies does not cope with the large numbers of those who use the library, and students were claiming to the staff of the library that they find difficulty in borrowing books and this results in wasting their time; photocopying facilities are

not available which are necessary to save students time. These problems were clear during the writer's visit to the university in 1975 during the field work.

Besides the main library inside the campus, there are libraries in the faculties which are situated far away from the main library, these libraries are situated in small rooms, not well lighted and surrounded with noise.

Furthermore, some of those who run the libraries are not trained in librarianship but they are appointed by the Ministerial Committee of manpower.

Mansourah University, has no main library in the campus like Cairo University. All the faculties have semi-libraries; books are stored in small rooms, there are two tables for reading, in some faculties there is one table. It is worth mentioning that the Faculties of Law and Pharmacy have no libraries (1975-76 academic year).

All the libraries are underequipped, they lack enough copies of books, references and periodicals, except the library of the faculty of Medicine, it has many books, references and medical periodicals but it is still in need of financial resources to get more books and references to cope with the annual increased numbers of students as well as staff and post-graduate students who are engaged in medical research which reached 276 students in 1976-77.¹⁸

The Faculty of Education has a small library and a small store attached to it, no more than 12 students can use the library at the same time, the number of books available is very limited so the student has to wait a long time till the required books are available and the library is opened for limited hours (from 9.30 am to 2.00 pm) this time is not convenient to students.

Furthermore, post-graduate students could not find the required books and references for their M.A. and Ph.D theses so they are obliged to travel to Cairo where they can use the British Library, The American Library and the Library of Ain-Shams Faculty of Education.

During personal communication with the Dean of the faculty, he stated "the library requires development and equipment as it does not fulfil its purposes, but this needs financial resources which are not available". The situation of the Faculty of Education applies to the Faculties of Commerce, Science, Engineering and Agriculture. With regard to the situation in Tanta University, in a report on the shortage of human and material resources in the university, an example of the faculty of pharmacy is given "there is a claim that the faculty had no real library, it has no seats or reading tables, it lacks foreign books and references which cover pharmacology and it looks like a cell in a prison."¹⁹

In Zagazig University, the situation is dramatic as was described by a staff member of London Institute of Education after his visit to the university, he stated that the size of the library of the Faculty of Education is half of the size of a classroom and the books are not well classified. It seems that when establishing the new universities, the need for the provision of the library is not given any attention as it is a luxury which should not be provided.

The above examples give evidence for that statement.

Consequences of the lack of equipped libraries

a) The concentration of students on the traditional method of learning by listening to lectures and writing notes for the examination.

b) Because of the problems which face students whenever they go to the library, they lose their enthusiasm to approach it, so the indifference of the universities authorities to equip the libraries has transferred to students towards the importance of the library.

c) The failure of the university to instil in students the habit of reading and the skill of using the libraries resources.

d) The delay of post-graduate students in finishing their theses and dissertations.

e) Less research is done by the staff in their specialised fields.

5.2 Lack of equipped laboratories

The importance of laboratory work - Laboratory work is ^avery important part of science teaching and research and even in humanities such as psychology and languages.

If laboratory work is run efficiently, it can provide students with an invaluable opportunity of consolidating their knowledge and of making the subject studied too lively.

To gain full benefit from laboratory work, the following conditions should be provided:

- a) adequate provision of the material required for students;
- b) enough apparatus to cope with their numbers;
- c) enough staff to supervise students during their work;
- d) provision of enough assistants and technicians to prepare for students' experiments;
- e) enough space, lighting and ventilation.

All the above conditions should be provided, otherwise students's

time will be wasted and they may misjudge laboratory work as a method of teaching.

To what extent do laboratories in Egyptian Universities fulfil their purposes in the light of the above condition?

In Cairo University, 91% of the staff who completed the questionnaire stated that laboratories do not fulfil their purposes? Among the reasons given by them are shown in the following table.

Table 9 - 21 Reasons for the lack of fulfilling the purposes of laboratories in Cairo University

Reasons	%
1. Overcrowding of students	19
2. Lack of material	17
3. Lack of supervision	15
4. Lack of apparatus	15

Source: Appendix 3 Table 12

N.B. Number of answers received 404.

In Mansourah University, 87% of the staff who completed the questionnaire stated that laboratories in their faculties do not fulfil their purposes. Among the reasons given by the staff are shown in the following table.

Table 9 - 22 Reasons for the lack of fulfilling the purposes of laboratories in Mansourah University

Reasons	%
1. Using laboratories of other faculties	17
2. Overcrowding of students	15
3. Lack of material	13
4. Lack of apparatus	13
5. Badly built and lit	11
6. Lack of supervision	10

Source: Appendix 4 Table 12

N.B. Number of answers received 555.

In Cairo University as seen from table 21 the increased numbers admitted to the university has resulted in overcrowding the laboratories because they have not been expanded to meet these large numbers, there is a shortage of material and apparatus, this problem was strongly emphasized by the staff and technicians during personal communication with them during the field visit to the university's faculties. There is also a lack of supervision during laboratory work as a result of the shortage of the staff so students are left to do their work without any assistance given to them. In some cases supervision is left to demonstrators and assistant lecturers who can offer some assistance in some experiments and are not familiar with others, but each student should have at least a senior staff member assigned to see him at least once a week to check out his work.

There is an important point which was strongly stressed by the staff who run laboratories, i.e. the lack of maintenance for apparatus and the other equipment within laboratories.

Some faculties use other faculties' laboratories e.g. students of the preparatory years in the faculties of Medicine - Pharmacy - Dental Medicine use the laboratories of the Faculty of Science in addition to its students, as a result, these laboratories are being used for a long time daily, this has led to the destruction of much apparatus and the lack of doing maintenance.

The case of Mansourah University

The situation is much worse than that of Cairo as seen from the reasons in Table 9 - 22. Furthermore, it was clear during the writer's field work that:-

a) There are three small laboratories in the building of the Faculty of Education for Zoology, Chemistry and Physics, they are used by the students of the Faculties of Education, science and students of the preparatory year of the Faculties of Medicine and Pharmacy.

b) In many cases students were asked by the staff to leave the laboratories before finishing their work because another group was waiting to use the laboratories.

c) Because of the lack of staff, in most cases laboratory work was left to demonstrators some of whom were just graduated and some of whom face difficulties to give guidance to students during their supervision.

d) The number of apparatus available does not cope with the number of students who use them, so students have to wait till the others finish their experiments, and sometimes one could see that from 4 - 6 are using one apparatus.

e) Students of the Faculty of Education have to move to the faculty of science for other laboratory work, in some cases they commute between the two faculties twice or three times a day.

f) There was a shortage of material to the extent that students not could find the required material to complete their work.

g) Lack of assistant technicians who should prepare laboratories for students' work. In some laboratories there were one or two technicians for 70 students and in other cases than that number.

The same situation applies to Tanta University and all the new regional universities, e.g.

In Tanta University, the Faculties of Education (Science section), Pharmacy, Dental Medicine, Science and preparatory year of the Faculty

of Medicine, all of them use the laboratories which are situated in the Faculty of Science. Students of the Faculty of Education who do laboratory work in the Faculty of Science and they have to return to their faculty in the same day for their lectures and lessons of educational subjects, and it is a long distance between the two faculties. The staff claimed too that students arrive late to the faculty and this results in the wastage of lecturer's time. When the writer asked the Dean, why there ^{was} a lack of co-ordination between the two faculties? He answered, the Faculty of Science makes the timetable and we cannot refuse it as they are responsible for teaching science subjects and priority is given to their students.

It was noticed that the staff and technicians of laboratories of the Faculty of Science did not treat well students of other faculties. Furthermore, a report on Tanta University, stated that students of the Faculty of Pharmacy were obliged to leave laboratories at 3.00 pm although their time was allowed till 4.00 pm, this happened because technicians were supposed to leave because their shift was over.²⁰

There is also a severe shortage of material and apparatus in the faculties to cope with the large number of students who use the laboratories, and sometimes it takes a long time till the required material arrive; one of the staff stated during personal communication "we asked for salt which is necessary for experiments, but we waited for six months till we got it because of the rigid rules." He added, it is impossible that students wait this long time without laboratory work. Within these circumstances which are surrounding the universities, it is impossible that laboratory work can be done effectively.

This situation within Egyptian Universities was described by a team of UNESCO experts in their report on higher education in 1969 as follows:

"There is not enough equipment for each student at the laboratories, therefore, students work in groups under the guidance of demonstrators."²¹

The report gave an example for the situation in the faculties of agriculture when it states:

"It appears that there are much more students at the agricultural faculties of the universities now than their material resources can permit; sufficient equipment for studies and research work is lacking. There is no proper ventilation at the chemical laboratories in the new buildings of the universities in Alexandria, Asyot and Ain-Shams, so they work with toxic pesticides on the open tables, which should not be allowed at all."²²

The above statements of UNESCO Report show to what extent Egyptian Universities are suffering from the lack of laboratory equipment which is necessary to both teaching and research.

5.3 Lack of buildings

The provision of suitable and equipped buildings for the universities is considered a pre-condition before establishing them and before expanding the existing ones. The distribution of buildings among departments should be done according to the nature of the functions assigned to each department, for instance the building which suits a library may not suit a laboratory and so on.

Another important point which should be borne in the minds of policy makers of university education in Egypt that each level of education requires certain ^a type of building, e.g. the building which is built for

a primary school does not suit a secondary school and a secondary school building does not suit a university. Therefore, before establishing the university buildings the following questions should be asked; for which purposes are the buildings designed? and what kind of department will occupy each building?

The question to be asked here is, to what extent do the buildings of Egyptian Universities fulfil their purposes?

In Cairo University, 91% of the staff who completed the questionnaire answered that the buildings of their faculties do not fulfil their purposes and gave the following reasons for their answer.

Table 9 - 23 Reasons for the lack of fulfilling the purposes of the buildings in Cairo University

Reasons	%
1. Not well equipped	25
2. Overcrowding of students	22
3. Buildings not lit	20
4. Using buildings of other faculties	16

Source: Appendix 3 Table 13

N.B. Number of answers received 391.

In Cairo University, the buildings have become overcrowded of students because of the continuous flow of students who are annually admitted to all the faculties. So, in the Faculties Law, Commerce and in some departments of the Faculty of Arts, one can find students sitting on the steps and window sills.

The buildings of the Faculty of Agriculture are very old and inconvenient and need rebuilding. The Faculty of Mass Communication is situated in one of the floors of the Faculty of Economics and Political Sciences.

The building of the Faculty of "Dar Al-Ulum" is very old and is near to collapse, and Cairo University has been warned by the Ministry of Housing to evacuate the faculty to another building, ^{but} no [^] action has been taken yet.

In Mansourah University, 94% of the staff who completed the questionnaire answered that the buildings of their faculties do not fulfil their purposes, and gave the following reasons as shown in the following table.

Table 9 - 24 Reasons for the lack of fulfilling the purposes of the buildings in Mansourah University

Reasons	%
1. Not well equipped	13
2. Overcrowding of students	13
3. Using buildings of other faculties	12
4. Badly lit	12
5. Built for other reasons	10

Source: Appendix 4 Table 13

N.B. Number of answers received 732.

In Mansourah University, the situation is worse than that of Cairo University; the Faculty of Education is situated in a part of the neighbouring secondary school and later on some rooms were built as well as one lecture-theatre ; at the same time these rooms and Lecture - theatre are used by students of other faculties e.g. those of Medicine, Science and Pharmacy.

The Faculty of Law is still situated in a block of the Faculty of Engineering since its opening in 1973, the Faculty of Science is situated in a primary school building which does not suit a faculty at all.

Even the buildings of the Faculties of Agriculture, Commerce and Engineering which were well built with the assistance of UNESCO, as higher institutes in 1957, but they have become overcrowded with students.

Generally, the problem of providing suitable and equipped buildings has become acute in most universities. All the new universities are established before providing the buildings which suit the university level, this is done to the lack of ^a sound plan and the sudden decrees of opening new universities in the regions because of certain reasons which have been discussed in chapter 7. For instance, the Faculty of Education in Zagazig is situated in primary school buildings, the Faculties of Pharmacy and Dental Medicine in Tanta University have no special buildings and use the building of the Faculty of Science which is overcrowded. The Faculty of Education was sharing the building of the Faculty of Science (now moved to a new building which was built to be a modern secondary school).

Consequences resulting from the shortage of buildings

a) There is a lack of rooms for lessons and halls for lectures which affects to a great extent the teaching function of the university, so students attend lectures and practical work in large numbers and there are no modern facilities such as cinema - to graphic equipment, tele-apparatus, mechanical boards etc.

b) The overcrowding of the existing building has led to the lack of contact between students and their teachers and the inability of students to follow their lessons.

c) The lack of suitable buildings for libraries that can fulfil their purposes successfully.

d) The overcrowding of laboratories has resulted in the lack of effective laboratory work.

e) The lack of rooms for the staff has resulted in the lack of contact between the staff and students and students outside lectures.

f) The frustration of the staff to do research, and to give tutorials to their students.

g) The lack of students' activities which are very important for the development of students' personalities.

5.4 Lack of University accommodation

The provision of accommodation for university staff and students should be given attention by those who plan for university policy, because this provides better atmosphere for both staff and students to work and to enjoy the university life.

The problem of the lack of accommodation is related to the national problem of housing which has become serious. The expansion of universities has taken place without providing enough accommodation for the new universities or expanding the existing ones.

In Cairo University, enrolments reached 87,000 students in 1977 and no more than 10,000 students can find accommodation in the university halls of residence.²³ So students have to look for their own accommodation which has become too difficult to find in Cairo these days, others have to travel a long distance between the campus and the university.

Staff can hardly find accommodation near to the university or even at any part of the city, post-graduate students who study abroad for

Ph.D's claimed many times that they need accommodation, some of them returned to their faculties and are facing the problem although

much effort has been made it does not cover all the students and staff. In Mansourah University, although the majority of the students come from outside the city, accommodation can only be provided for 2,000 students from the total number of students which reached 29,250 in 1977.²⁴

Many students commute every day between their homes and their faculties and they face severe difficulties in transport, in most cases they arrive late, this results in missing their lectures and lessons, In the winter, during heavy rainy days students who use buses and motor cars cannot come to the university and this may last some days, in addition to all that, travelling difficulties affect their performance during their lessons.

This is a very serious problem in Mansourah University, ^{for} most of the staff travel daily between Mansourah and other cities especially Cairo and Alexandria. ^{some of} The staff who are appointed to the university some of them prefer to stay in Cairo and Alexandria because they have their own accommodation, others added to the university and the Governor of the district for accommodation but their claim went in vain.

For staff who travel, their journeys last a long time and doubtless this affects their performance inside their faculties.

Because of the very bad transport, in some cases staff arrive in the city when the time of their lectures is over. This is also one of the reasons why staff of other faculties refuse to be transferred to teach in Mansourah University.

During personal contact with most of these commuters, they stated that if accommodation could be provided for them in Mansourah, they would have moved to be near to their faculties and save their time and effort.

The serious shortage of accommodation for staff has resulted in the following:

- a) They sometimes miss their lessons.
- b) Low productivity of their teaching and doing research.
- c) They are unable to help students, ^{with} their activities within their faculties.
- d) Lack of time devoted ^{to} and loss of contact with students outside lectures.
- e) The difficulty in appointing new staff so the faculties advertise for new positions but no staff member is willing to accept any of them.

The same situation applies to all the faculties in the regions of Shebeen El-Koum, El-Menya, Kena, Sohag and Zagazig etc.

5.5 Shortage of ancillary services

The provision of ancillary services for the universities is essential to enable them in achieving their functions. These services save the time and effort of the staff which can be devoted to perform their professional duties.

To what extent are these ancillary services available in Egyptian Universities?

The staff of Cairo and Mansourah Universities who completed the questionnaire, gave the following answers as shown in the following table.

Table 9 - 25 The availability of ancillary services in
Cairo and Mansourah Universities

Service	Answer	Mansourah % (1)	Cairo % (2)
Typing	not entirely provided	68	53
	practically nothing		
	worth saying	68	53
Duplicating	not entirely provided	55	58
	practically nothing		
	worth saying	38	28
postal services	not too well	41	61
	poor	50	34
Dining facilities	partly available	31	46
	non existent	67	51
Transport	not too easy	10	18
	very difficult	84	79

Source: Appendices 3 & 4 Table 15

N.B. a) % of the number of sample 128
b) % of the number of sample 140

As seen from the table, both universities suffer from the lack of ancillary services. The situation is not satisfactory in Cairo University although it is the biggest and ^{most} famous university in Egypt, and in Mansourah the situation is worse than that of Cairo University. With regard to the new regional Universities, they are poorly provided with such ancillary services.

The lack of provision of ancillary services has resulted in the following:

a) Because of the lack of typing facilities, in many cases the staff have to deal with typing their messages either by their own or by typists outside the university.

b) Because of the lack in duplicating and printing facilities, teaching and research are affected.

c) The lack of dining facilities does ^{not} enable the staff to carry on their duties and encourage them to stay longer time in their faculties.

d) The poor postal services result in delaying the affairs of departments and in turn in delaying in carrying out the responsibilities of the staff.

e) As pointed out before the very bad transport results in both delaying the arrival of staff, and their incomplete performance within their departments because of the very hard efforts during travelling to arrive early.

5.6 The Lack of Financial Resources

From what has been stated in chapters 3 & 4, it has become clear that unless enough financial resources are provided for the universities, they will not be able to achieve their roles assigned to them (see chapter 1).

The lack of enough financial resources was given among the reasons for the lack of the provision of human and material resources by the staff who completed the questionnaire, Presidents of the Universities, Deans of the Faculties and The Minister of Education. It is true that the country is facing economic problems but it is the responsibility of the government to provide the required financial resources by other alternative means of finance or to control the expansion which is still taking place. These alternative means of finance will be discussed in the next chapter.

6. Conclusion

It is obvious from what has been stated in this chapter that Egyptian Universities are suffering from severe shortage of both human and material resources because the expansion has not been accompanied by the provision of the required facilities which can cope with the large numbers of students within the universities. The shortage of staff has resulted in teaching students in large numbers, little research has been done, the difficulty of ^{making} contact between staff and students both inside and outside lectures, the lack of supervision for post-graduate studies and the difficulty of ^{holding} tutorials and organising ^d discussion groups.

The shortage of material resources has affected both teaching and research within the universities, e.g. the lack of equipped and organised libraries has resulted in the difficulty of ^{ing} conduct/research by the staff, and ^{ing} writing essays or dissertations by students.

The shortage of laboratories' equipment has affected students' practical work as well as the experiments done by the staff, particularly demonstrators and assistant lecturers whose research depends to a great extent on laboratories.

The lack of enough lecture-theatres, classrooms, rooms for the staff has made it too difficult to organise discussion groups, to give tutorials to students and to make contact between the staff and students.

This poor situation within Egyptian Universities, needs an urgent short term plan to provide the universities with the required facilities in order to improve the quality of university teaching and research and to keep for Egyptian Universities their international standing, moreover, to enable the universities to respond to the demands of the society.

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CHAPTER TENREFORMING UNIVERSITY EDUCATIONIN EGYPT

with regard to :-

1. The role
2. Admission policy and procedures
3. Policy of expansion

CHAPTER TEN

REFORMING UNIVERSITY EDUCATION IN EGYPT

(Its role, students' admission and policy of expansion)

It has become obvious from the examination of the role of the universities, admission policy and its procedures, and policy of expansion, that there is an urgent need for reforming university education policy.

1. Reforming the role of the universities

When planning for the role of Egyptian Universities, it is important to ask, what is a university for? What are its responsibilities in national development? How should university activities be organised? What is required for the university to achieve its roles? The universities in the modern world have a variety of functions wider than those assigned to them in the past so they play a major role in the overall national development. In this respect Altbach states:-

"As universities become more important to their societies and are asked to take on more functions, they naturally have to expand their roles from training a small elite to serving needs of complex societies. Inevitably, such expansion in the role involves pressure for change within the institution."¹

In Egypt, public funds are the major source of university financing, universities' budgets increase annually, thus they must justify their growing demand for more money by responding to society's needs and not only to be places for giving students certain amount of knowledge in different subjects.

This point was strongly emphasized by the President of The Republic during his speech to Upper Egypt Universities staff on May 1979 after students' riot in Asyot University, the President called the attention of the universities to set up their plans which aim at effective participation in building the new society, and he further stated that the universities ^{should} give more attention to the aspect of achievement of their students rather than preparing them for good citizenship.

The universities have not played yet their full role because of the following reasons:

a) The very rapid increase in enrolments within the universities has resulted in dangerous consequences e.g. the difficulty of providing such activities for all students, overloaded staff who could not find enough time to be devoted to research, contact with students etc. Moreover, the universities have become places for collecting an entry ticket for jobs rather than preparing their students for future citizenship in their society.

b) Rigidity of curricula, some courses are studied within some faculties which are not relevant to the actual need of development e.g. students who study courses of sociology and philosophy in the Faculties of Education while there is no actual need for them. The question of irrelevance of curricula was stressed by Dean of Alexandria Faculty of Agriculture (now Minister of Agriculture) during a visit to Tahrir District in 1977 when he stated that agricultural projects need specific types of graduates such as those specialised in fruit protection, land reclamation which should be included among the university courses if they are going to respond to the demands of agricultural development.

c) Lack of enough financial resources to enable the universities to carry out their projects both inside and outside the university. Furthermore, there is a severe shortage of equipment required for teaching and research. There is also a lack of incentives given to staff who carry out projects and conduct research, This has resulted in the diversion of the staff to look for extra teaching hours for additional financial resources.

d) There is a lack of co-ordination between the universities and the involved ministries in national development such as agriculture, industry, education etc. There is no unified policy for research set up to be carried out by the universities with collaboration of other research centres.

All the above reasons ^{have} prevented the universities from playing their proper role in national development.

The following are suggestions for reforming the role of the universities.

1.1 The cultural role

The universities have a major role in initiating and developing new ideas and formulating new models as well as transmitting the cultural heritage.

Egyptian Universities have ^{an} inescapable duty towards cultural heritage. They can make a considerable contribution to the process of its reappraisal, examination and development.

They ^{should} organise galleries and museums both inside and outside the universities and ^{they} should be open to the public not only for the professional.

All university faculties ^{should} conduct courses apart from their specialisations which include the original components of the cultural heritage. These courses ^{could} also include the essential aspects of the ideology of society which covers its values, views and social, economic and political policies. These courses can help to overcome the problem of illiteracy among the educated.

University staff ^{might} organise weekly programmes with the co-operation of the T.V. and Radio which deal with discussing some issues such as democracy, socialism and positive criticism. In order to make these programmes more useful, they should be advertised to the public who should be invited to attend these programmes in order to make them alive and interested through face-to-face arguments. Conducting such programmes helps to bridge the cultural gap which may exist between the educated and the illiterate people which results in the lack of common standard of understanding among people which doubtless affects their relationships.

Public lectures can be organised by university staff to be delivered in various places surrounding the university, they can cover some political, economic and social issues as well as some values which are important for a good society among these values, trust, love, justice, freedom and truth.

In this respect Sanford explains this role of the university when he states:

"A University or other institution of higher education serves society best by upholding these values in its corporate actions, in its evaluations of events and processes: in larger society, above all in its efforts to build devotion to them in its members."²

This role of the university requires the practice^{of} all these values inside the campus in order to enable the university' community to build devotion to them among local communities around the university.

In this respect Sanford again states:

"A university or college can serve by being a model for other sub-societies, within limits set by its requirements of autonomy, it can act to improve the larger society."

The universities^{would} publish : pamphlets which cover political, economic, social and law issues, e.g. the staff of the Faculties of Law can publish pamphlets in an easy language readable to the public which explains the rights and duties of the citizens, the staff of the Faculties of Economic and Political Sciences could publish pamphlets on the organisation of political parties, democracy, socialism, inflation etc.

Through conducting pure research, the universities can contribute to the increase of human knowledge which in turn enriches the culture of the present generation which will be passed on to the next.

In order that the cultural role can be best played, essential co-operation is needed with the Ministry of Culture in order to make full use of its facilities and all other interested government bodies. Frequent contact between the universities and their environments is required.

1.2 Solving health problems

There is an urgent need for an extensive medical care for the people particularly for those in rural areas. The government has announced through its ruling party that medical care should be provided for every citizen. Medical faculties have an important role in achieving

this national aim with ^{the} collaboration of the Ministry of Health. They need to set up annual plans for conducting medical surveys by staff and students in the final years during the academic year to investigate diseases and discover drugs to counter them. In order to achieve the purposes of these surveys, medical teaching hospitals are to be established and well equipped in order to study practically the cases collected during medical surveys.

Effective channels of contact are required between medical faculties and ^{the} health division in each district e.g. in each faculty of medicine, there is a need for a centre to receive any medical reports and cases which need to be investigated in the laboratories of the faculties by staff and post-graduate students, the results of such investigation have to find their way to ^{the} health division in order to enable it to offer the required treatment.

Medical missions can be sent to rural areas and overcrowded places in the cities in order to discover health problems and to raise medical awareness of the people. These missions have to cover most of the areas surrounding the university and have to be sent periodically. In order to raise the quality of medical care offered to the people, medical faculties ^{should} take an essential role in training of nurses because their training is under the supervision of the Ministry of Health without ^{any} involvement of medical faculty staff who can give useful experience and knowledge on medical care.

Because of the difficulty of covering all the areas by sending medical missions, the medical faculties ^{should} conduct courses in medical guidance to train medical advisers who ^{could} be distributed among medical units in rural areas to offer medical advice to the people in order to

raise their medical awareness.

These roles which can be best played by medical faculties through equipping the faculties and their attached hospitals, providing enough staff, giving financial incentives to staff, creating effective channels of contact between the universities and the Ministry of Health and its bodies, as well as international Health Organisations e.g. WHO, UNICEF, FAO.

1.3 The development of the educational system

As the universities are at the apex of the national educational system and are staffed by those who possess professional experience in different fields, they have a major role in the development and the improvement of the national educational system.

The Faculties of Education within the universities are perhaps most concerned with this role, but, in the meantime, no other university faculties can afford to neglect this role entirely. This role is emphasized by Fafunwa when he states:

"in most anglophone universities, the faculties, institutes and departments of education are involved directly or indirectly, with activities at the pre-school, primary, and secondary levels."⁴

The President of The Republic and the Minister of Education in July 1978 have called attention to the necessity for the development of the national educational system and further put the responsibility on the universities to undertake the leading role in achieving this role.

The important question to be asked here, ^{is} how can this role be played by the universities?
^

They can play an important role in the evaluation of the curricula in educational levels in order to make them suitable to each level and

relevant to the needs of the society. This can be done by the general academic boards representing all universities. These boards can be divided into sub-divisions, each division concerned with a particular subject e.g. Boards of Social Science can be divided into, history board, geography board, sociology board and so on. Co-operation with head teachers, teachers and inspectors is essential and their views have to be considered.

The Faculties of Education play an important role in organising in-service training, courses, for teachers of all subjects, these programmes can be best conducted during the mid-year and summer vacation when the faculties' facilities are not in regular use. At the same time some courses can be run throughout the academic year, especially for the teachers who are engaged in too much examinations work during summer holidays particularly secondary school teachers who spend at least two months in the GSCE "July and August" then they have to return to their schools in September.

These in-service training courses may include methods of teaching, educational administration, educational psychology, such courses are run in most countries where "Institutes of Education assist the Ministries of Education and teachers in organising pre-service and in-service courses for teachers at the primary, secondary and teacher education levels."⁵

The problems of the educational system need to be given more attention by staff of the Faculties of Education both by doing field research and by choosing these problems to be the core of the theses done by demonstrators and assistant lectures, as well as post-graduate students.

In order to make full benefit of these studies, joint centres have

to be established in the Faculties of Education to ease exchange contact between the faculties and the schools and local educational authorities. Moreover, incentives are important to be given to staff and post-graduate students whose research or theses would contribute to solving any of the problems of educational system.

Such co-operation requires the establishment of executive committees composed of local educational authorities and faculties staff members in order to exchange their ideas and discuss the problems which face both of them and co-operate with each other to suggest their solutions. The Faculties of Education can arrange for regular visits by staff and students to schools of all levels. These visits can be paid at times different from ^{the} teaching practice period in order to discuss with school staff the salient problem facing them in the field e.g. the problem of textbooks, school activities, low standard of achievement of some students etc. The staff can benefit from such visits and discussions concerning ^g teaching their subjects so they can make their lessons and lectures more vital and alive.

The Faculties of Education have an important role in providing the schools with modern audio-visual aids as well as training school teachers and technicians who use these educational media, moreover training them how to make these teaching aids in their schools. Laboratories of audio-visual aids of the faculties can be transferred to surrounding schools, or teachers and their pupils can be invited to visit these laboratories and other departments in the faculties. This role is well played by London Institute of Education by arranging visits to the schools and inviting the schools to come to the Institute. These visits are well organised by the School Relations Office. Such school

relations offices are required to be established in each faculty of education in educational institutions.

The Faculties of Education have a leading role in illiteracy programmes, which ^{will} start in January 1980. All departments, and particularly the department of curricula and methods of teaching can play a major role in providing the required books, audio-visual aids, training teachers for adult education and advice on the organisation of illiteracy classes.

In order to enable the Faculties of Education to play their role properly, one or two staff members can be nominated as consultants to different groups of schools to whom they can refer when they face any educational problems e.g. shortage of educational media, raising the drop-out ratio, organisation of school activities, organisation of examinations, shortage of facilities etc.

The Faculties of Education not only have a major role in the development of pre-university levels, but also they have an important role in organising programmes for training demonstrators and assistant lectures, these programmes may include methods of teaching, educational psychology which covers, motivation, individual differences, the development of adolescence and communication theory, attending of these programmes is a pre-condition for holding the position of lecturers, lecturers and associate professors have to attend these programmes before promotion to the next position, if they did not attend them before.

In this respect, M. Ezzat Abd El-Maugood who supervised an experiment in staff training in Cairo University in 1975-1976 explains the necessity of running such staff training programmes when he says:

"with the increase in college enrolment, a great deal of pressure has been placed on university administrators to provide a better education.

The students have exposed the ineffectiveness of the teaching-learning process. They claimed that the Institutional objectives are not clear, the curriculum is not relevant, the student-teacher relationship is not positive, but instead unhealthy, the teaching methods and activities are subversive in nature and the examination system is inhuman and outdated."6

Accordingly, there is an urgent need to organise these programmes by all the Faculties of Education which have enough staff to cover these programmes.

1.4 Economic development

The universities have a major role in economic development by developing human resources. This role is explained by Thompson when he states:

"Higher education, therefore, can be said to provide the main thrust in development. The assumption here is, of course, that the higher education will be of good quality and will, in content, be relevant to local circumstances and it will be applied in the service of the nation."7

This importance of human resources to economic development is stressed by Harbison when he states "the goals of modern societies are, political, cultural and social as well as economic, human resources development is a necessary condition for achieving all of them"8

From the discussion of the role of Egyptian Universities in economic development, it ^{has been} revealed that their contribution is less than it ought to be because of some reasons among them, the lack of enough financial resources, the over increase in enrolments within the universities has resulted in heavy teaching commitments on the staff, the rigidity of curricula so they have become irrelevant to the needs of the economic development, lack of co-operation between the universities and the other

ministries involved in economic development. (for more reasons see chapter 2).

The following are some recommendations for an effective contribution to the economic development which can be made through the development of agriculture and industry.

a) The development of agriculture

Because of the severe shortage of meat and livestock products in the country, there is a need for expanding the ranches of the Faculties of Agriculture where they can breed and fatten steers and cattle. This role can be best done by the help of the Faculties of Veterinary Medicine which can provide protection for these ranches. Private ranches can be supervised by the Faculties of Agriculture which can offer advice to people on the best way to benefit from these ranches. The Faculties of Agriculture have an essential role in achieving "the green revolution" which aims at increasing the cultivated land by 6 million Feddans by the year 2000 according to the projection of the Ministry of Planning. This increase is required to cope with the needs of the increasing population. The Faculties of Agriculture can send missions to these areas in order to test the soil and to provide modern means of irrigation and agricultural mechanisation, e.g. harvest machines, machines for irrigation, modern instruments for crop protection. The Faculties of Agriculture in collaboration with the Ministry of Agriculture and Agricultural Research Centres could ^{conduct} different experiments concerning the improvement of seeds and the best way to get rid of the pests which attack crops and cause a great loss of agricultural production. The Faculties of Agriculture ^{conduct} short courses for agricultural advisers who could then transmit modern agricultural information to farmers which may help

them to overcome their problems.

The Faculties of Agriculture ^{should} establish centres whose aim is to make close contact with Agricultural Divisions in the regions and collect the real problems of agriculture and channel them to the involved departments, then the solutions, advice and assistance should flow out to the people in their areas.

The issue of relevancy has to be considered by the universities with regard to the courses studied in the faculties and the real circumstances and problems of their surrounding areas. e.g. the courses studied in the Faculties of Agriculture should not be ^{of} the same type, [^] each faculty has to consider the demands of its areas, for instance, agricultural projects in Tahir and Nobaria districts need graduates specialised in land reclamation, fruit protection and foresting. Thus these specialisations have to be taken into consideration when designing the curriculum.

The Faculties of Agriculture ^{should} devote one day every week to the public to come to the faculties to meet the staff and get the required information, and consult them on their problems. This should be announced to the farmers in all the villages around the faculties. In addition to that frequent visits have to be organised by staff and students to different cultivated areas.

In order to enable the Faculties of Agriculture to respond to all these demands, enough financial resources are required to equip their laboratories, to keep their ranches, to increase their livestock production and to do their experiments. Moreover, co-operation is required between the universities, The Ministry of Agriculture, Agricultural Research Centre and local agricultural authorities.

b) The development of industry

As Egypt tends to develop its industry, the universities have an essential role in the development of this important sector of the economy.

According to Geological surveys done in Egypt, there is ^a great possibility of discovering different kinds of raw materials required for industry such as, coal, iron near Borollos Lake, in Sinai, Aswan and New Valley,¹⁰ and according to the report of the committee of production and Economic Affairs, Egypt has about 280 mineral sediments and formations which include iron, manganese, chrome, nickel, magnesium, gold etc.¹¹

The Faculties of Science "Geology department" and Engineering should take part in doing extensive exploratory work in these [^] areas to discover these raw materials.

The Faculties of Engineering are required to conduct short refreshment courses for those who have been graduated some years ago in order to keep abreast with the new knowledge and techniques in their fields. These courses can be conducted either in the universities or in the factories and firms.

Technical faculties within the universities can establish service centres which ^{could} offer assistance and advice to factories and private industrial firms, they ^{could} also train their workers in order to increase their capacities and skills which may result in increasing industrial production. Technical faculties ^{could} serve their areas by adjusting their courses to the actual needs of the surrounding factories and firms and to the needs of national economy in general, e.g. if there is a factory of textiles near to the Faculties of Engineering, so

courses in textiles should be conducted in these faculties in order to produce the required manpower.

The Faculties of Engineering can participate in the implementation of identified projects in different areas so that industry can benefit from the technical expertise of the universities and from the results of their recent research. In addition, the universities can add additional payment which can be used in equipping their faculties. An example can be given here this is the Polytechnic of Central London (PCL), different departments participate in such projects at home and abroad, which adds income to their financial resources.

Providing valuable guidance for industry is considered one of the important duties of the universities, this can be best done by including some staff members in the management of certain industrial projects and companies. An example can be given to the university of New South Wales in Australia where the staff are encouraged to take part in the management of industrial projects and accept consultances with the industrial firms (see chapter 1). So in order to follow this example, incentives should be given to staff e.g. declining their teaching load, and financial allowance in order to encourage them to take an effective part in the development of industry.

Research related to industry needs a close link with industrial concerns aimed at the development of industry and the increase of industrial production.

Technical faculties within the universities can arrange for regular visits by students and staff to factories and industrial firms in order to enable students to acquire real and practical experience on their future career. These visits have to be included in students' timetables.

In-service training is required to be conducted by technical faculties to enrich the experience of manpower according to the progress which has occurred. This training can be arranged for manpower of industry e.g. skilled and semi-skilled manpower and the heads of departments in factories to cope with the new progress of machines and acquire them the experience and skills to use these new machines. This requires equipping the faculties with modern machines and material. These courses help to increase the productivity per head and in turn the industrial production.

In order to enable the universities to play their role, they need enough equipment, enough staff, co-ordination with the Ministry of Industry.

1.5 Research

From the discussion of the role of the universities in the modern world, it has become clear that research is considered an important task of any university. The role of the universities in doing research is still less than it might be because of certain reasons e.g. staff are overloaded, lack of equipped laboratories and libraries, lack of incentives, shortage of financial resources. (see chapter 1 for details on the importance of research).

How can research be best done in Egyptian Universities? The following are some suggestions:

The Universities can set up research centres in order to co-ordinate the distribution of research funds which should be adequate to conduct research within the faculties as well as field research. These centres can also direct funds to those problems to be investigated.

Each department within the faculty ^{should} set up its research plans, pure and applied, and estimate the required resources.

There is an urgent need to make close links with other research centres outside the universities in order to co-ordinate their efforts e.g. there are more than one institution concerned with educational problems, Faculties of Education, The National Council for Education, National Centre for Educational Research. If each institution is left to do research individually, there might be repetition in such research and waste of time, money and effort. So such co-operation is required in doing research which tackle national educational problems e.g. illiteracy, the spread of coaching at all educational levels, reforming primary education etc. Team research composed of all educational institutions can best deal with the problem and save time and money. The same situation applies to the agricultural problems, industrial problems and so on.

In order to ⁱⁿ benefit from research results, there is a need for establishing ^a national committee for research whose purpose is to classify research done ⁱⁿ each field and then help in making results available for those who need them. The Committee could

also make close links between the universities and research centres on one side and the corresponding firms, factories, companies, and social economic, educational establishments etc. in order to base research on their actual problems and to feed them back with the results which might enable them to solve their problems. Such co-operation ^{would} enable the universities and research centres to collect data required for research and to do any needed field work.

In order to achieve the research function of the universities, the

following aspects have to be considered when planning for research.

- the provision of adequate libraries and equipped laboratories;
- reduced teaching load of staff who are engaged in doing research;
- incentives are very important in order to keep the motivation and enthusiasm of the staff who do research, such incentives are required such as allowances, priority in promotion;
- the provision of financial resources taking into consideration that research is an expensive piece of university activities, additional resources for financing research can be given to the universities by those firms, companies, factories and establishments who will benefit from the results of research;
- the provision of chance for the staff to contact with the universities of advanced countries which may enable them to keep abreast with the latest progress occurred in their fields. This contact doubtless will enrich their research. In addition to that, exchange visits are required between the staff and their colleagues in universities in advanced countries e.g. U.K., U.S.A., France, W.Germany etc. to exchange their views and ideas;
- increasing financial allowances ^{to be} given to the staff who supervise demonstrators and assistant lecturers as well as post-graduate students' research.

1.6 Preparing students for future citizenship

The Universities are no longer ^{the} only places for filling students' minds with different kinds of knowledge, that is only one function, but also places for the development of students' personalities in order to enable them to live in accordance with the ideology of their society.

On May 1979, the President of the Republic called the attention of the universities to concentrate more on the development of students to create citizens who can live in harmony with their society.

At the present, the universities with their large numbers of students are unable to achieve this role because of the reasons discussed in chapter 2.

The following are some suggestions for reforming the role of the universities in preparing students as citizens. The universities can conduct "national courses" which include the major issues of the ideology of the society in its broad sense. These courses can include, such values of the society as, justice, love, freedom, they can also cover political issues such as party system, democracy and socialism. Such courses can equip students with adequate knowledge of the philosophy of society.

The adoption of the tutorial system is needed to provides the chance for students to meet at least one staff member when they face any problems. But because of the difficulty of providing tutors for the large numbers enrolled within the universities, each staff member can be assigned to see more than one group each week till the universities are adequately staffed. The time of tutorial has to be included in staff teaching load.

The universities can organise the system of families which was existed some years ago, that each family is composed of a group of students under certain name and supervised by one of the staff members. Under this system students can exercise their activities in the light of the regulations of the universities and guided by a staff member, This system provides an invaluable chance to develop the students personalities.

The adoption of tutorial and family systems ensure frequent contact particularly outside lectures, which gives students the opportunity to discuss any matters concerning their studies or their personal life in non formal meetings.

The universities can organise several kinds of activities e.g. physical, social and cultural both inside and outside the campus. Programmes of such activities can be announced to students monthly or quarterly. An example can be given to follow, ^{e, g} London Institute of Education sets up its activities programmes each term both inside and outside such as journeys, visits, lectures and social functions.

With regard to Egyptian Universities, they need to give attention to such activities particularly outside the campus which create valuable interaction between the universities and their communities.

In this respect Tinbergen states:

"University activities should also have closer links with the population's way of life so as to avoid the creation of elites hardly familiar with the day to day problems of the majority of the population."

This can be done through an obligatory period of work in a rural area as well as doing an obligatory piece of research in such an environment. This will help many graduates to be familiar with these areas when they are appointed e.g. doctors, teachers as some university graduates now refuse to work in rural areas particularly those who stayed in the cities during their period of education from primary up to university.

The universities can arrange for visits to the outside community, and invite professional leaders to come into the faculties and discuss with students the problems of the country and give them some information on their future professions.

Furthermore, the universities can arrange for an open day every week or every fortnight, to enable students to get enough information on what is going in their society, visits can be paid to social and economic establishments, rural areas and industrial projects. This open day visit has ^{been} frequently recommended by the President of The Republic in many occasions. These visits are important for students so they can get familiar with those areas in which they may work in the future.

1.7 Life-long education

As pointed out in chapter 1, the universities can play an important role in life-long education. How can Egyptian Universities carry out this role? The universities can offer a variety of programmes:-

a) Professional programmes can be organised for those who are in service and require some form of higher learning, e.g. doctors, lawyers, etc. These professional programmes are essential because no formal training in a university faculty can fully prepare a person for a profession (see chapter 1).

These programmes enable the professionals to update their knowledge since there is a rapid growth in science and technology.

b) Refresher courses. These courses are designed in order to bring any person who has been out of formal education for a while up - to - date in subject matter, he or she may once have learned and has forgotten or subject matter that has changed since the person was in formal education.

c) Retraining courses. These courses are designed to train students in fields different from their original field of work. These

courses are essential for those graduates who are appointed by the Ministry of Manpower and are holding jobs for which they were not prepared.

d) Each University can establish a public service centre which offers various programmes for the public regardless of their formal educational background. These programmes ^{should} serve societal as well as individual needs. They include foreign languages, typing, home economics, shorthand etc.

e) The Universities have an essential task in extending the knowledge of those who are holding secondary school qualifications and did not attend the university; those secondary school leavers of all divisions, general, technical and teacher training, all need ^{to} extend their knowledge of their specialised fields particularly those of the academic secondary school leavers who hold jobs for which they are not well prepared.

In order to make full use of these courses, some incentives can be given to those who attend them such as additional increment or more points to be given to them when they are promoted

The universities can take a leading role in literacy programmes which will begin on the first of January 1980 and will last for one year. So the universities with the collaboration of The Centre of Basic Education in Sirs El-Layan (in Monafia District Egypt) can prepare the required books, train teachers, and the Faculties of Education can take a very important role in this programme.

The concept of illiteracy in its broad sense does not mean that some people cannot either read or write, but the broad sense of the concept covers cultural, social, economic and political illiteracy even among

the educated. So the universities' faculties can play an important role which should be planned immediately to take part in this important national project.

1.8 Workers' education

This role needs to be given attention by the Egyptian Universities in the face of the challenge of social, economic and cultural development, modern advances in science and technology and the trend of the democratisation of education up to the higher level.

Today, workers' education has taken a new dimension as a means by which the trade unions could help the workers deal with their problems as well as conceiving their duties and rights.

In Egypt, workers' education can achieve the following objectives.

Educating workers in such a way that they join union organisations and participate in their activities and form workers' organisations where they do not exist.

Training members of the workers' organisations to be more effective and to participate in the running of these organisations as well as developing the technical capacities of trade union officers.

Workers' education promotes the effective participation of workers in the choice of the objectives of their organisations and in the development of the societies and communities to which they belong.

Workers' education ^{could} also help workers to understand the objectives of workers' organisations and to promote their interest in the labour movement.

How can the universities contribute to workers' education?

They can provide workers' organisations with library services which

cover different areas such as economic, law, politics to increase their understanding on workers' organisations. They can also organise with the collaboration of their trade unions and their constitutions,

literacy programmes because some of those workers cannot read or write. This can be done by providing audio-visual aids and assisting in improving trade union teaching methods and techniques.

Staff of the Faculties of Law, Commerce, Economic and Political Sciences, Social Services, can help the trade unions to study in depth the history of trade unions movements as well as offering them consultations and advice on their problems and interests. This role of the universities is required to be played because the majority of workers' communities lack such information on trade unions' objectives, and their participation in the development of their communities.

The universities can organise courses dealing with the above aspects for workers' leaders who can transmit this information to their colleagues, the universities can also conduct research and field studies related to the problems of industrial societies.

To achieve this role, there should be full co-operation between the universities and trade unions as well as all the other government bodies concerned e.g. The Ministries of Labour and Culture

2. Reforming the admission policy and its procedures

From the critical appraisal of the admission policy and its procedures, it is now obvious that both the policy and its procedures need to be reformed.

Certain reasons can be given for the need for reforming the admission policy.

The lack of ^amanpower plan has resulted in an annual increase in unemployed graduates particularly among those of humanities faculties.

The lack of autonomy of the universities in admission policy has led to the admission of large numbers of students over the capacity of the faculties as well as the admission of some students who are not capable for university studies.

The undue interference of the government in university admission policy has led to the admission of students with low grades in the GSCE who are actually not fit for university education.

The open door policy of admission to the universities encouraged people to attend their children in general academic secondary education and consequently the demand for university places has steadily increased.

There is also no clear and stable policy when projecting the numbers of students admitted to the universities.

2.1 Reforming admission policy

In order to avoid the problem of unemployment among university graduates, admission policy should take into consideration the country's need for manpower. This can be best done through a Ministerial Committee For Manpower representing all ministries whose aim is to project the future requirements of manpower for the economy and social services. Then these projections should be passed on to the Higher Council of Universities to translate them into action. These numbers must not be changed by the HCU.

As Egypt follows ^aplanned economic policy, there must be a close link between the requirements of economic plans and the number of graduates. It is dangerous to the economy to employ graduates surplus to its

needs because they will be paid for doing nothing or doing jobs which are not relevant to their specialisations. This phenomenon was clear since the 1962' Decree of employing all university graduates. Some graduates were employed in places which are not relevant to their university studies,

Offices have become overcrowded ^{with} graduates who do nothing.

As Egypt is a socialist country, ^{the} ~~the~~ [^] numerus clausus system is required to be adopted in admission policy. This system is explained by Gyorgy Adam when he states:

"it is well known that in Socialist Countries the numerus clausus system ensures the equilibrium between the number of applicants admitted to higher education and the manpower need of society i.e. the relation between input and output of universities."¹³

This system has ^{been} ~~^~~ adopted in some Socialist Countries such as the U.S.S.R., Hungary and in other countries such as Sweden where it is applied to the admission of certain faculties e.g. Medicine, Engineering, Pharmacy, Dentistry.

Adam further states with regard to that system:

"in reality even in Western European and American Universities with traditional free entry policies, numerus clausus has been introduced in recent years or is in preparation at present because of major difficulties in intra-university learning facilities and extra university employment conditions."¹⁴

With regard to the case of Egypt, ignoring the equilibrium between the numbers of students admitted and the needs of society may result in raising the number of frustrated young people and an increasing mass of poorly trained graduates who are unable to find employment. Moreover, since the ^{right} to have a job is one of the basic human rights of a socialist country, thus the input has to be adjusted to the output needs

instead of offering jobs to graduates for which they are not well prepared or employing them for doing nothing.

University graduates are full of enthusiasm after graduation when they hold jobs irrelevant to their specialisations, they feel frustrated and disappointed.

The policy of guaranteeing employment for all university graduates has to be abolished and employing only those who are required for the national economic development plan. Such an abolition of guaranteeing employment for all university graduates will help in relieving the pressure of the demand for university education and make families and their children think seriously before attending general academic secondary education. This point must be given a considerable attention because the demand for university places has remarkably increased since the Republican Decree in 1962 of employing all graduates, and is a major factor in the over expansion of university education.

There is an urgent need to give the universities autonomy in the admission policy. They must be given the freedom to accept or reject any students in the light of academic requirements for each course which are put by their academics. This requires the formation of Academic Boards, e.g. Medical Boards, Engineering Boards, Humanities Boards and so on. These boards should decide the minimum academic standard required for admission to each university course and its courses which should be studied in general secondary education.

The views of the universities should also be considered when projecting the numbers of students in the light of the available facilities such as lecture theatres, classrooms, laboratories.

To achieve this university autonomy in the admission policy, the

interference of the governments should be limited to the extent that it ^{should} only co-operate with the universities in setting up admission plans.

The open door policy of admission to the universities has resulted in certain consequences, e.g. admitting students to ~~M~~edical faculties and technical faculties who are not up to standard. Moreover, this open policy has resulted in a mass university system beyond the capacity of the universities' facilities and in an annual flow of graduates who are surplus to those required, accordingly there is an urgent need to place certain restrictions on the admission to some faculties such as Medicine, Pharmacy, Engineering, Dentistry, Veterinary Medicine. Several reasons can be given in favour of such restrictions such as : the staff of these faculties should not be overloaded in order to enable them to have enough time for demonstration lessons, laboratory work, these faculties require high academic standards, numbers of students should not be over the capacity of available facilities, e.g. buildings, laboratories, lecture theatres, libraries etc. Finally many countries have replaced restrictions on the admission to these faculties, such as Sweden where admission is restricted to the Faculties of Medicine, Engineering, Pharmacy and Dentistry, also France and The Netherland ^{have} placed restrictions on medical faculties. The aim of these restrictions is to raise the quality of graduates.

With regard to Egypt, entrance examinations and aptitude tests are important in selecting students who are fit for these studies in order to reduce the dismissal ratio among students after their first year and to raise the quality of the graduates.

There is also a need for abolishing ^{the} pricing of certificates because

putting the price of university certificate on the top of the pricing list has resulted in the increased demand for university education. For example, ^{the} salary of technical secondary certificate holders is now LE 17 per month, while that of the university graduates is LE 30 per month. This big difference encourages most of the preparatory school leavers to attend the general academic secondary rather than technical. The writer suggests in this respect that the salary has to be given according to the nature of the job and the effort required e.g. the technical secondary school leaver who works as a technician in a factory or in an industrial firm can be paid more than a university graduate who works as a clerk in an office, or at least the same salary, but this does not mean that the technical secondary certificate holders must be paid more than all the university graduates. If this is too difficult to do now, another alternative can be given, i.e. lowering the difference between both certificates, salaries to a nominal level, so families and their children will think seriously whether studying four or five years in the university which would cost them too much, ^{does} not make any difference in the salary worthwhile.

The system of pricing of certificates was criticised in the study done by The National Council for Education, Scientific Research and Technology (NCESRT), it states "the prevalent wage policy which combines the qualifications i.e. the university degree and not performance at the work, with the wage, a thing which we, alone, of all the countries of the world, socialist or capitalist, do."¹⁶

The system of promotion which is geared to educational qualifications has to be reconsidered in order to take into consideration the standard of performance as well as experience.

In order to relieve the pressure on general secondary education which results in an annual increase in the secondary school leavers, it is important to expand various types of technical secondary education to produce skilled manpower which is needed for some years ahead.

The rush of secondary school leavers will continue for some years till the admission to the general secondary is controlled, accordingly, in order to solve the annual problem of secondary school leavers, it is urgent to introduce new types of intermediate institutions which offer two year courses for those who could not be admitted to the universities. These institutes can introduce courses which produce skilled workers in some professions which have become required and people have begun to believe that they are a good source for a high income.

Such courses which can be introduced as, mechanics, electricity plumbing, carpentry etc. Students who attend these courses need to be motivated so as to encourage them to continue their training because most of those students try again^{for} the GSCE^{and}, if they manage to get admission to any university faculty, they leave these courses after their first year.

Certain incentives can be suggested by the writer;

- They can be given^a monthly allowance in course of doing their training in factories and companies.
- Raising their salaries to the extent that no big difference exists between theirs and that of university graduates.

Any reform of university education policy has to be accompanied with reforming policy of pre-university levels. Moreover, any plan for reforming admission to the universities must be accompanied by

reforming admission to pre-university levels particularly admission to the general secondary education. For example in 1974-75 the total enrolments in all types of secondary education reached 720,000, 340,000 of these were enrolled in the general secondary education¹⁷ so admission to the general secondary has to be controlled in order to relieve the pressure on the universities, otherwise the problems of admission to the universities will persist. In this respect Frank Bowles states:

"Admission to higher education is not a single administrative act, performed when a student moves from secondary to higher education, but a process which extends over a period of years during which a series of selections determines those students who continue towards the goal of ultimate entry to higher education."¹⁸

Adam supports Bowles statement when he says:

"experts in education policies underline that access to higher education cannot be separated from secondary school, because very important selection processes occur already there."¹⁹

The Ministry of Education has realised this view and proposed a proposal for the development of the educational levels prior to university in order to adjust the system to the needs of society and to relieve the pressure on universities. Most of the proposed reform^{is} concerned with preparatory and secondary levels. Forms of the Ministerial proposal have been sent to the universities, the Faculties of Education, the schools, educational authorities, The NCE, NCESRT and the People's Assembly to discuss it and raise their comments and suggestions before applying for it.

It was announced on 18.11.79 that the Education Committee of the Peoples' Assembly has agreed to the proposal without adequate argument about it. However, the proposal is criticised by the writer on the next page.

The following diagram shows the Ministerial proposal.

Figure 5 Ministerial proposal for the Development of the educational system in Egypt 1979.

Level	primary and preparatory									secondary			university				
Age	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Grade	1	2	3	4	5	6	7	8	9	1	2	3	1	2	3	4	5
													some industrial schools				
													1	2	3	4	5
													teacher training				
													1	2	3	4	5

Source: Ministry of Education - proposal for the Development of The Educational system, Cairo, Ministers Office 1979 (Arabic Text).

N.B. Study in Secondary level lasts three years, and lasts five years in some courses, e.g. teacher training school, some industrial school.

The main proposed changes in The Ministerial proposal are :-

- a) Abolishing the primary school certificate examination.
- b) Extending compulsory education up to nine years.
- c) General secondary education will be combined with the technical secondary to become a general comprehensive secondary which includes a variety of courses, technical and academic, students can also choose among other courses according to their interests and aptitudes.

- d) Only academic courses are required for admission to the universities.
- e) Period of study in secondary covers three years, but in some courses covers five years e.g. teacher training, some industrial schools.

Critical Appraisal of the proposal, while the writer agrees that the proposal aims at achieving major needed changes in the educational system, particularly in ^{the} secondary level which will doubtless help in relieving ^{pressure} on university education, [^] there are some points raised by the writer which have to be carefully discussed before applying the proposal.

As announced by the Minister of Education, the application of this new system will begin from the next academic year 1980-1981, this period is considered a very short time to plan for changing any educational system. Moreover, this period is not enough to equip all secondary school with material, apparatus and workshops required for practical studies.

The provision of financial resources required for expanding ^{the} preparatory level as well as equipping all general secondary schools to be comprehensive, is beyond the ability of the government at the present because of the economic problems.

It has been absent from the consideration of the Ministry of Education that the academic standard of children in primary education is very low according to the official reports and the rate of drop-out is as high as 22% in some districts and reached 10.8% on the national level in 1974-75.²⁰ In addition to all that, only 80% of the children at the compulsory age are admitted to primary schools.²¹ This means that

attention must be given first to absorb all the children in primary education and to improve the quality of ^{this} education before extending the compulsory period, so that ^{all} children who reach grade 6 and can be able to read or write, before they go on to grades 7, 8, 9.

So there must be a careful study of the application of the comprehensive system, and study of cases of other countries.

However, the proposal is still under examination and needs extensive argument by all those who are involved in educational policy. The discussion of this proposal may take some time before ^{its} application. The writer suggests that for the present, the admission to the general secondary education should be controlled and ^{only} admit preparatory school leavers with high grades as well as giving attention to their records in preparatory school to show their fitness for academic secondary education. Such control of the admission to secondary level may help in solving the problems of admission to the universities.

2.2 Reforming admission procedures

With regard to the reform of admission procedures, several reasons can be given for the need for reform; the system of exemption undermine the principle of equality of educational opportunities, the admission of large numbers of external students, the lack of guidance given to students early enough before starting admission procedures, dependence on the GSCE results is not ^{an} adequate criterion for selecting students who are capable of university studies, admission of students of science division to humanities faculties e.g. Law, Arts, and ^{further} the choice card does not help students to be admitted to their favourite faculties.

The following are suggestions for reform:

The system of external students has to be reviewed and reconsidered because of its disadvantages, It should not be ^{used} as an outlet in order to solve the problem of secondary school leavers. The question to be asked here is :-

a) Did the government create this system to provide university studies for a wider range of students, b) or was it created just to absorb large numbers of secondary school leavers?

If the answer is "b", this system should be discontinued because it creates more problems for the universities in addition to those already have (see chapter 6).

If the answer is "a" the writer suggests the following alternatives;

a) If the intention of the government is to keep this system going, the annual admitted numbers can be reduced ^{by} taking into consideration that the faculties to which they are admitted have become overcrowded with regular students and produce graduates surplus to those required. Such ^a reduction in numbers should take into consideration the faculties facilities e.g. staff, buildings.

b) This system can be replaced with another system i.e. correspondence university education. It can be organised as follows :-

- Each university establishes its central office to receive the application forms of students who wish to study any course in its faculties according to the conditions put by the university council or by the HCU.

- Each faculty establishes ^a correspondence education department [^] whose aim is to provide students with material, instructions and consultations. This department can be a channel of contact between the students and their faculties.

- At the end of each academic year, students have to pass the same examination as regular students ^{so as} to be promoted to the following year.

- Opportunities can be provided for all secondary school leavers in previous years who did not get the chance to attend any university courses in the year they got their General Secondary School Certificate, Technical Secondary School leavers can also be given the chance to study such courses.

The application of this system ^{would} help to relieve the pressure on the universities and provide students with study material because most of them are engaged in work and cannot attend lectures and classes or make contact with the staff.

With regard to the system of exemption, it needs to be reviewed and re-examined. This system creates inequality in the admission to the universities and is against the principle of equality of educational opportunities. It is undeniable to accept that a student with 50% in the GSCE can be admitted to the Faculty of Medicine because he is included in the exempted groups, meantime another student with 87% cannot be admitted to the same faculty because of the lack of 3% if in this case that this faculty for example admits students with 90%. Moreover, some students could not get admission to their favourite faculties because of $\frac{1}{2}\%$ or 1%, while exempted students do not face this situation, and are admitted to the faculties they wish regardless of their grades obtained in the GSCE.

This system was strongly criticised by Aly Abd El-Razik former Minister of Education who stated that those students who are admitted according to this system show poor performance during their study,

some of them withdrew their papers after their first year, moreover, most of those students are admitted to the Faculties of Medicine, Engineering, Pharmacy, Dentistry which require high grades (see chapter five for more details).

In spite of the disadvantages of this system, if the government, for certain reasons, is willing to keep this system going, it could be organised as follows:-

- the numbers should not exceed their decided quota;
- deciding minimum percentage for the admission of those students to each faculty e.g. students who wish to attend the Faculty of Medicine, their percentages should not be less than 75%;
- classifying students who wish to attend each faculty and putting them in a rank of order and admit only the numbers decided according to their quota.

These restrictions to the system of exemption are required so as to raise the quality of university graduates and to achieve social justice by not allowing students with very low grades to attend faculties which are only attended by students with high grades.

With regard to students' guidance, there is an urgent need for guidance for students early enough before attending secondary education.

The universities ^{should} announce in advance to students the subjects enabling students to enroll in each course so that students may be able to choose in accordance with such announcements at the very outset when they first get enrolled in general secondary school and particularly in the last two years when students choose among various courses e.g. arts, science, mathematics. Students also need to be informed on the opportunities of employment for each course after graduation.

Such guidance can be introduced to students through establishing a central office affiliated to the Higher Council of Universities as well as establishing regional offices in order to provide secondary schools with sufficient information on university courses and admission requirements to each course.

An example can be given to follow, in the U.K. The Universities Central Council on Admission UCCA, provides all the schools with adequate information on the requirements for each university course as well as opportunities of employment in the future. Pamphlets giving all the information are sent to the schools in May early enough before starting admission procedures. Such guidance and counselling services enable students to make their decisions which are theirs and not merely responsive to external pressures, because parents sometimes push students into inappropriate studies to satisfy vicariously their own ambitions. Moreover, when students lack information on university courses, clearly defined occupational goals, and are not aware of the possibilities open to them at the time of taking up their studies "as a result they make unrealistic choices and become dissatisfied and uninterested, with a resulting loss in motivation."²²

As pointed out in chapter six, the GSCE is the sole criterion for admission, because of its bad effects it is unreliable measure for selecting students who are fit for university studies and predicting those who can complete their studies successfully, So there is an urgent need to hold entrance examinations which can be administered at individual universities and gradually built up until they comprise an entire cohort of university students. At the same time the Co-ordination Office of Admission (COA)^{should} continue as a means of contact between the

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universities and students e.g. students who wish to study medicine, should apply first to the COA, then their papers are gathered and sent to each Faculty of Medicine which holds ^{an} entrance examination.

Students who pass, are admitted, those who do not ^{have} pass, their papers returned to the COA in order to ask them to choose other courses. This system can be applied to all Faculties.

These entrance examinations can be held on a national scale. For example the COA gathers the applications of students according to their first choice, e.g. Engineering, Pharmacy, Medicine, then the students have to pass the examination organised by the corresponding boards, passing ^{of} these examinations is a pre-condition for admission to any faculty. Those who do not pass enter an examination in the faculties of their second choice and so on.

It might be difficult at the present ^{time} to hold such examinations for all secondary school leavers, but these examinations are urgently required for much faculties such as, Medicine, Dentistry, Pharmacy, Engineering in order to raise the quality of their graduates and to eliminate the rate of drop out.

In addition to what has been stated, due attention is required to be given to students' records during secondary education ^{and} which should include their interests, abilities, hobbies and aptitudes, ^a copy of each student's record should be attached with his application form. This would help academic boards to decide precisely whether or not the student is fit for the type of course he wishes to study.

With regard to the choice card, the number of choices should be reduced to a number which cover the students' real choices instead

of obliging them to name 32 faculties and intermediate institutes which may include some in which they are not interested. Students should only name the type of faculties e.g. Medicine, Commerce, Law, Science etc. instead of stating all the university faculties, so that they can be admitted according to their grades or after passing entrance examinations if they have been introduced,

In this respect, it would be useful to give an example to follow, in the U.K., students who apply to the UCCA for admission to the universities, state only five choices which can be easily defined, if students are not offered admission, the UCCA asks them to state other choices and so on.

Another reason in favour of reducing the number of choices, can be given, The Ministry of Education now adopts a policy of regional admission that students have to name only the faculties or institutes in their regions or the nearest to them if they have no university faculties, They can also name other faculties if they do not exist in their regional university. Thus there is no need to oblige them to name choices which cover faculties or institutes existing in other regions.

2.3 The issue of establishing^a private university in Egypt

During the last few months, there has been an extensive discussion on the possibilities of establishing^a private university with full tuition fees.

The following reasons have been given in favour of the establishment of that university:

a) It can absorb the students who study abroad and pay high fees because they could not find places in the existing universities. It can also help students to be admitted to their favourite faculties instead of accepting admission to faculties or institutes against their wishes because of their relatively low marks in the GSCE.

b) It can also be a model for Egyptian Universities to be followed, and can attract the staff of the existing universities who wish to be seconded to universities of Arab Countries as they will be paid as in those countries.

c) The University can also absorb large numbers of students from Arab and African Countries who go to study in Europe and U.S.A. Universities.

But the establishment of this university is impossible at the present, The following reasons are given by the writer against the idea of the private university.

- The difficulty of financing this university. It is well known that university education is very expensive and tuition fees paid by students cannot meet the need of human and material resources required for teaching and research. Thus the government will find itself obliged to finance this university at the time the existing universities are suffering from financial resources.

- The establishment of the Private University is against the principle of equality of educational opportunities because it will offer excellent education for those who can afford to pay the high fees. Furthermore, those privileged students can choose the faculties they wish to attend regardless of their marks, ^{and} meantime under-privileged students will not have this opportunity although they get the same marks.

- This university will add extra commitments to the staff of the existing universities, and because of financial reasons, some staff will devote most of their time to this university and less care will be given to their original universities.

- The government may find ^{it} difficult to satisfy the need^s of Arab and African Countries ^{with} University staff assuming that this university will pay the same salaries, equal to the salaries paid by Arab Universities.

- At the present, the government guarantees jobs for university graduates, now there is an intention that that guarantee of employment will be abolished, so there is some doubt that many students will have the interest or motivation to attend this university.

- Students of the Arab Countries prefer to be admitted to the famous universities which have international standing such as Cairo, ^{and} Ain-Shams. So there is some doubt that those students will accept to be admitted to this unknown university.

- The government ^{should} direct its effort to reform the existing universities instead of creating a kind of discrimination between the universities, and it should be borne in mind that the establishment of the private university is not an alternative for improving university education in Egypt.

- From past experience, some of the private higher institutes were affiliated to the Ministry of Higher Education because they were unable to offer the required standard of education. So there is much doubt ^{whether} the private university can offer better education for the students.

For all the above reasons, the writer disagrees with the idea of

establishing a private university, rather efforts should be directed to the provision of enough human and material resources for the existing universities.

3. Reforming the policy university expansion

As pointed out in chapters 7 & 8, there is an over-expansion of university education in Egypt which has resulted in serious consequences. So there is an urgent need for reform, The following reasons can be given for the need for reforming the policy of expansion.

- The continuous emotional response to the people's demand in the regions to open new universities on faculties as well as increasing the numbers admitted to the existing universities, this unplanned expansion has resulted in lowering the quality of university education which is threatening the international standing of Egyptian Universities.

- Opening traditional types of faculties in the regions results in more unemployed graduates e.g. the opening of completely new faculties of Arts, Law and Commerce whose graduates have ^{been} surplus to the requirements for some years . . .

- Financial resources are scarce so there is a need to adopt a cost-benefit approach which ensures equal distribution of the financial resources among educational levels as well as among university courses.

- The increasing social demand for university education has been reinforced by some factors, e.g. guarantee of employment, families views to university education, pricing university certificates. For more details, (see chapter 7 & 8).

In planning for the policy of expansion there should be differential application of the three main approaches for planning which have been discussed in chapter 3.

Approaches to planning the policy of expansiona) Social demand approach

As social demand for university education has increased during the last few years, Egypt cannot ignore it entirely as a socialist country adopting the principle of equality of educational opportunity, but social demand can only be met in the light of the capacity of the universities and the availability of financial resources with which to cope with the need of human and material resources. Moreover, the response of the government should only be to those who are capable for university education. In other words, the response to social demand must not be absolute for all secondary school leavers. This approach requires projecting the numbers of preparatory school leavers who attend the general secondary schools as well as projecting the numbers who will pass the GSCE so as to project the numbers who may be admitted to the universities in the light of measures put by the HCU.

b) Manpower demand approach

When planning for university expansion, manpower demand has to be applied so as to reduce the numbers of unemployed graduates. This requires a close link between the economic plan and the rate of expansion of university education so as to satisfy the needs of the economic system. In this respect, Woodhall states in favour of the adoption of this approach in planning university education when he says:

"manpower forecasting has been suggested as a means of avoiding a surplus of qualified manpower, or any type of mismatch between demand and supply."²³

Accordingly, it is very urgent to relate university expansion to manpower requirements to avoid the problem of surplus of graduates who wait for years till they are offered jobs, and most of whom are

and appointed by The Ministerial Committee of Manpower, are paid for doing nothing or holding jobs for which they were not prepared. This has resulted in disguised unemployment among graduates which represents a threat to the economy. It is better to control the rate of expansion and respond to social demand for university education in the light of manpower requirements. Moreover, as the government pays for university education, the response to social demand should be limited and restrictions have to be replaced on admission.

e) Cost-benefit approach

When planning for university education in Egypt, this approach is urgently needed to be applied for the following reasons:-

- There is a shortage of financial resources to be allocated to the universities, As a result, available financial resources should be directed to the type of university courses which produce graduates who are required for national economic development, In other words, resources should be allocated to university courses which give high rate of return for both individuals and society.

- Available resources have to be distributed among the educational levels according to priorities e.g. resources ought not be directed to expanding the universities while the provision of places at primary level is still not enough to cope with the rapid population explosion.

In this respect Blaug states that:

"higher education is overexpanded relative to primary education and that resources ought to be diverted from the higher to the lower levels of education."²⁴

with regard to the case of Egypt, the rate of enrolments in primary education is still 80% of the children at compulsory age, meantime ^{the} population increases

by 800,000 annually. The lack of places for all the children is attributed to the lack of enough financial resources which cope with the provision of new school buildings, teachers and equipment etc. In this case priority ought to be given to the expansion of primary education as well as improving its quality as it is considered the minimum level which must be provided for every citizen or as the educationists call it "basic education."

3.2 Planning the regional expansion of universities

The remarkable expansion of regional universities which has been taking place ^{has} lacked prior planning, Accordingly the following conditions should be taken into consideration in the planning for the regional expansion of universities.

a) There must not be any emotional response to the people of the regions and open completely new faculties by sudden political decrees in order to satisfy the people.

Dr. Mostafa Kamal Helmy the Minister of Education has called the attention of the government to the dangerous consequences of this emotional response when he states:-

"the emotional response to popular demands for the establishment of regional faculties and universities may, without the provision of adequate facilities, result in a calamity, not only for the regional faculties but also for university education in Egypt."²⁵

It is worth mentioning here that the political leadership must bear in mind that the policy of university education should be in the hands of educational experts and planners in the concerned councils.

b) There is no need to extend the traditional type which already exists in the old universities, particularly the faculties whose graduates are surplus to the requirements e.g. although there is surplus of the graduates of the faculties of Arts, Law and Commerce, nevertheless, these faculties are opened in the regions, this will result in more unemployed graduates. Accordingly, new faculties in the regions should be established to satisfy the needs of their regions as well as the needs of the national economic development.

c) When establishing the new regional universities, the number of the population and the total enrolments in general secondary education, should be taken into consideration as the policy of admission to regional faculties and universities is restricted to secondary school leavers in each region in order to achieve the aims of the regional university expansion (see chapter 7).

d) There should be prior planning for the provision of human and material resources early enough before opening regional faculties or universities because most of them are facing severe conditions.

Although the Higher Council of Universities in 1976 "has decided not to start any new faculty before committees have made a scientific and realistic study of the availability of manpower and of the material facilities required"²⁶ The real situation shows the opposite (see Table 9 - 7).

So it is essential to provide the following facilities when expanding the regional universities; buildings which suit university studies, equipped libraries and laboratories, staff, administrative and ancillary services staff, accommodation for both staff and students, transport services to encourage staff seconded to teach in these faculties,

and the allocation of financial resources which may cope with the equipment of these faculties.

All the above facilities must be provided before expanding the regional universities so as not to repeat the drastic situation which is now facing the regional universities. (see for more details in chapter 8).

3.3 Alternative means of financing the regional expansion

Because of the shortage of financial resources required for the equipment of regional universities because of the country's economic problems which make the government unable to allocate the required budgets, the writer suggests the following alternative means for allocating financial resources.

a) Increasing university tuition fees, but they will still be free as the suggested fees are nominal, studentsⁱⁿ humanities faculties pay LE 8 instead of LE 3:75, and students in the scientific faculties pay LE 12 instead of LE of 6.75. This increase in tuition fees could raise a considerable amount of money to help in equipping the faculties. Moreover, the government is now studying the possibility of making university education only free for students with good grades during their study, others havin^g to pay the full fees. The writer agrees with the government's project but financial aid must be given to under-privileged students who may not get the required grades for exemption because of some reasons beyond their control, this aid should cover the fees if they are going to pay as well as other expenses.

b) Each governorate^{should} devote a proportion of income tax paid by its people and transfer it to its university.

c) High income parents who have students in the universities should pay extra money when paying their income tax. This money can be devoted to the universities or the faculties in the regions.

d) The universities can add extra resources to their budgets by sharing in the implementation of some projects. This can be done by technical faculties. The Polytechnics in U.K. can be given as an example to follow, They share in carrying out some projects at home and abroad, so they can add extra income to their budget which enables them to get more equipment and carry out more research. So universities can charge factories and firms in their regions for organising training courses for their manpower.

e) The government can get long term loans from banks and direct them to the universities to cope with their equipment.

4. Summary

It is clear from what has been stated in this chapter that there is an urgent need for reforming university education, the universities need to be supported and equipped in order to enable them to respond to the needs of the society through playing their assigned roles.

The admission policy needs to be adjusted to the manpower requirements, the universities must enjoy their autonomy in projecting the numbers of students and in selecting students according to the academic requirements put by their academic boards. Capacity of the universities should be taken into consideration when projecting admitted numbers.

With regard to admission procedures, the system of exemption needs to be re-examined and reviewed, numbers of external students have to be reduced or ^{the}abolition ^{of} the external system and replacing it with "correspondence

university education system, There is a need for guidance to be introduced to students in secondary education, Necessity to hold university entrance examinations for secondary school leavers, Restrictions too have to be placed on the admission to medical and technical faculties. The choice card needs changing^g to help students to be admitted to their favoured faculties.

With regard to the policy of university expansion, there is an urgent need to apply^a cost-benefit approach in planning university education policy in order to give priority to university courses which produce graduates needed for the national development.

Manpower demand approach is^{also} needed in order to adjust the expansion to the requirements of manpower in order to avoid the surplus of university graduates and to produce the type of manpower needed for national development. Social demand for university education^{should} be met in the light of manpower requirements and the availability of financial resources/and can only be met for those who are capable of university studies.

The policy of university expansion has to be planned by^a differential application of the three main approaches, i.e. social demand, manpower demand and cost-benefit. Such reform of university education depends upon such requirements, e.g. co-operation of political leadership with all bodies and councils involved in university education policy, the establishment of a ministry for the universities which can supervise all the concerned councils in university education policy, the autonomy of the universities, the availability of financial resources and convincing the public opinion with the aim and necessity of the reform.

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APPENDICES

- Appendix One: Organisation of Egyptian Universities
- Appendix Two: Form of the Questionnaire
- Appendix Three: Tabulated data of Cairo University
- Appendix Four: Tabulated data of Mansourah University

APPENDIX ONEORGANISATION OF EGYPTIAN UNIVERSITIESThe Higher Council of Universities (HCU)

It was established in 1950 as a central machinery for planning and co-ordination among the universities.

The Council is presided by The Minister of Education, it is composed of:-

- (a) Presidents of Egyptian Universities.
- (b) Deputy-presidents of the Universities.
- (c) One delegate from each university chosen by each Universities Council from among its members for a term of one year.
- (d) Five individuals chosen for their experience in University education and public affairs for a renewable term of two years and appointed by a decree issued by The Minister of Education.
- (e) The Secretary General of The Council.

Objectives of the Council:

(a) The Council is responsible for planning for the general policy of university education and scientific research in universities, and operating towards its orientation and co-ordination so as to meet and attain objectives in social, economic and scientific development plans.

(b) The Council co-ordinates university studies and academic degrees, teaching in corresponding faculties, institutes and departments of universities and university teaching posts.

(c) The Council is also concerned with determination and creation of fields of specialisation of professorships, equivalence of foreign academic degrees as well as co-ordination among faculty members in various universities.

(d) At the end of each academic year, the Council determines the number of students to be admitted in the forthcoming year in each faculty and put the regulations for admission.

(e) The Council sets up by-Laws of the universities, and approves the faculty regulations.

(f) It gives comments on the government grants given annually to each university.

(g) The Council deals with relevant issues presented by The Minister of Education or any of the universities, such as any problems that may arise.

(h) It reviews and evaluate all educational effort in the nation.

Activities and Services:

To ensure practical application of the activities, and the preparation of extensive and thorough studies, the council has set up the following committees:-

1) Committees and sectors of University studies

These comprise 13 Committees covering all discipline, e.g. Medicine, Engineering, Agriculture etc. Each Committee includes specialised members of the Higher Council together with deans of the respective faculties as well as a number of professors and well known specialists from outside the universities within each discipline. Each Committee forms a number of sub-committees on different subjects.

2) Committee for Equivalence of Academic Degrees

This Committee deals with the equivalence of academic degrees of various levels awarded by foreign institutions of higher education with these awarded by Egyptian Universities.

The Committee is presided by the Secretary General of The Higher Council and comprises representative from all universities.

3) Permanent Committees for the evaluation of Academic work

These Committees are concerned with consideration of work presented from applicants for appointment in the posts of assistant professorships and professorship. They total about 150, these committees are reformed every three years.

4) Committee for University Cultural Relations

This Committee is concerned with planning and co-ordination among

the universities in "cultural exchange with foreign universities" and institutions in the field of higher education and scientific research.

The Committee is presided over by the Secretary General of the Higher Council, and vice-presidents of universities for graduate studies and research, or members.

5) General Secretariat of the Council

The Council has a general secretariat headed by the secretary general, who ranks as vice-president of a university.

The law necessitates that he should have occupied the post of professor in a university for a period not less than five years.

The secretary general of the Council sponsors the administrative and financial aspects of the general secretariat which is composed of a number of specialised units.

Administration and organisation of the University

The University Council (UC)

The University Council is the governing body of the University. It is presided over by the president of the university as a chairman and consists of :-

- a) The two deputy presidents.
- b) Deans of the Faculties and institutes of the University.
- c) Four notable either in education or public affairs to be appointed for two years liable to renewal by the Minister of Education after nomination by the Council.
- d) The secretary general who participates in discussions.

The Council of the University is concerned with :-

- a) Drawing the general plan and policy of teaching and research and providing the necessary potentials to fulfil the functions of the university.
- b) Setting the executive rules for the university and the internal regulations for faculties and institutes.
- c) Drawing the general outline and scheme for teaching, research and examinations.

- d) Dealing with all the education, administrative and financial affairs of the university.
- e) Appointment and transfer of staff members.
- f) Awarding degrees, scientific certificates, diplomas and honorary degrees.
- g) Obtaining the university funds, investing them and financing projects and different means of expenditure.

The University Council is entitled to cancel any decisions taken by faculty or institute Council in case they do not conform with the applied laws and regulations.

The President

He is appointed by the President of the Republic according to the advice of the Minister of Education. He must have occupied the post of professorship in one of the universities for at least five years. His appointment lasts for four years liable to renewal.

The president runs the university's scientific, administrative and financial affairs, and he represents the university before other organisations.

Vice-Presidents

The vice-president is appointed by the President of The Republic according to the Minister's advice after the nomination and approval of the president of the university. He must have occupied the post of professor in one of the universities for at least five years. His appointment lasts for four years liable to renewal.

The University has two Vice-Presidents. The senior replaces the president in his absence. One is in charge of the undergraduate affairs while the other is in charge of research and post-graduate affairs.

Council for undergraduate affairs

This Council is presided over by the vice-president for undergraduate affairs, as chairman, and it includes, as members :-

- a) Vice-Deans of faculties and institutes for undergraduate affairs.
- b) A number not less than 3 and not more than 5 of eminent persons experienced in university education and public affairs.

The Council is concerned with

- a) Drawing the general plan and policy of undergraduate studies in the different faculties and institutes of the university.
- b) Preparing the general schedule of lectures, seminars and practical laboratory hours.
- c) Organising the students' services and their cultural, physical and social activities.
- d) Organising admission of students and fixing the required numbers each year.
- e) Fixing the examination dates for undergraduates in the faculties and institutes.

Council for post-graduate studies and research

The Council consists of the vice-president for graduate studies and research, as chairman, and the following are members :-

- a) Vice-Deans of faculties and institutes for post-graduate studies and research.
- b) A number of eminent persons, not less than three and not more than five, experienced in university education and public affairs.

Duties of The Council

- a) Drawing the general plan and policy for post-graduate studies and research in the different faculties and institutes and admission of post-graduate students.
- b) Preparing a general plan for university missions, study leaves and scholarships abroad.
- c) Setting programmes to complete the staff and to form full teams of research workers.
- d) Drawing plans for holding conferences, symposia and seminars locally as well as participating in the like abroad.

- e) Delegating members of staff to attend conferences, symposiums and seminars abroad.
- f) Stipulating scholarships and grants.
- g) Distributing research budget according to suggested plan.

The Secretary General

Each university has its own secretary general who is appointed by the President of The Republic according to the Minister's advice after the nomination and approval of the president of the university. He must be experienced in university affairs.

The secretary general is in charge of administrative and financial work under the supervision of the president and vice presidents. He is responsible for carrying out the laws and regulations of the university. He is assisted by two secretaries. The senior assistant replaces the secretary in his absence.

Organisation of administration on the Faculty Level

The Faculty Council

The Council is presided over by the Dean of the faculty or the institute, as chairman and it includes, as members:

- a) The Vice-Deans.
- b) Heads of departments.
- c) A professor, in yearly rotation from each department.
- d) One associate professor and one lecturer in faculties and institutes of not more than ten departments and two associate professors and two lecturers if the departments comprise more than ten members of staff. Membership takes place in yearly rotation according to seniority.
- e) Not more than three persons distinguished in their special field of learning.

Functions of the Council

- a) Drawing the general plan for missions, study leaves and awarding foreign scholarships.

- b) Preparing a programme for completion of staff necessary for the faculty.
- c) Organising administrative and financial affairs and preparing the budget.
- d) Planning for the required number of students to be admitted.
- e) Transferring students to and from different faculties and their registration.
- f) Registration of post-graduate students and the titles of theses for M.A. and Ph.D degrees, as well as appointing examining committees for the different dissertations.
- g) Awarding degrees, certificates and diplomas.
- h) Nominating candidates for missions, scholarships and study leaves.
- i) Proposing the appointment of new members of staff in the faculty and their transfer and delegation to and from other faculties.
- j) Caring for students' welfare.

Dean of the Faculty

He is appointed by The Minister of Education according to the Presidents' nomination of one of three professors who get the highest number of votes in the election held by the faculty council or according to the presidents' nomination of one of the professors of the faculty in certain cases. The appointment lasts for three years liable to renewal. The Dean runs the faculty's academic, administrative and financial affairs. He is also responsible for the execution of the regulations and decisions of the faculty council, the university council and the boards of universities.

Vice Deans

Each faculty has two Vice-Deans to help the Dean in the administration of the faculty. The senior of them replaces the Dean in his absence. One of them is in charge of undergraduate studies and students affairs, while the other is in charge of post-graduate studies and research.

In some faculties, only one Vice-Dean may be appointed. The Vice-Dean is a professor appointed to the post by the Minister according to

the nomination of the Dean and the approval of the president of the university. His appointment lasts for three years liable to one renewal.

The Faculty Conference

The Dean asks the conference to convene at least once during the academic year. All the recommendations of the conference are presented to the departments Councils and the Faculty Council. The Conference is composed of the Dean as a chairman, and all members of staff and representatives of assistant lecturers and demonstrators, as well as of representatives of students on the basis that they should be brilliant in their studies.

The Department Council

Each faculty has a number of departments, according to the internal regulations of the faculty. Each department includes certain specialisations. It has its own entity, academically, administratively and financially.

The department Council is composed of all professors and associate professors in the department and not more than five lecturers in yearly rotation according to seniority.

The Council is concerned with examining the affairs of the departments, academic, administrative and financial. It is the responsibility of the department council to draw up the general policy and plan of teaching and research work, to set the curricula to be taught, co-ordinate research work and appoint supervisors.

The Council also processes the members of staff to be appointed, to be transferred, delegated or seconded and to be sent over to scientific conferences and seminars.

Head of Department

The head of the department is selected from the three senior professors in the department and appointed by the president of the university after the nomination and approval of the Dean. The appointment lasts for three years liable to one renewal. In case of the

number of professors is less than three, the senior professor occupies the post of head of the department. The head is responsible for academic, administrative and financial affairs within the policy and plan drawn by the Faculty Council and the department Council according to the stipulated rules and regulations.

The Department Conference

The conference is held at least twice during the academic year at the request of the head of department. The Conference is composed of the head of department, as chairman, and all members of staff in the department, two representatives of the assistant lecturers and demonstrators and two representatives of the students, excellent at their studies.

Organisation and recruitment of the teaching staff

Categories of the teaching staff:

The teaching staff of the universities consists of demonstrators, lecturers, assistant professors and professors.

a) Demonstrators: Each year a number of the top graduates in each department are appointed demonstrators. They often help professors, assistant professors or lecturers in teaching, but sometimes they are exempted from teaching to allow them using their time in the preparation of their Ph.D, which is a prerequisite for any position on the staff.

b) Assistant Lecturers: Demonstrators who finish their M.A. degrees are appointed as assistant lecturers so they can leave a teaching load which does not exceed 14 hrs per week to enable them to prepare for their Ph.D degrees.

c) Lecturers: Once assistant lecturers get their Ph.D degrees either from an Egyptian University or from abroad they are entitled to be promoted to lecturers, and they become members of the staff.

d) Professors and assistant professors: Besides teaching, they supervise research work done in the department, especially by demonstrators and assistant lecturers. The teaching load of the professor is eight hours per week, assistant professor 10 hrs per week and of lecturer 12 hrs per week. These rules apply for all faculties and all discipline.

Appointment of staff

There are two essential qualifications for appointment as lecturers:

a) A Ph.D degree from an Egyptian University or its equivalent in any other foreign university.

b) An interval of at least six years between graduation (B.A. or B.Sc) and application for the post of lecturer.

A candidate for the post of assistant professor should fulfil the following requirements:

a) Have held the post of lecturer for at least five years at one of the Egyptian Universities or at any other institute of the same status.

b) An interval of eleven years since graduation.

c) Original research work and significant social or sporty activity inside the university.

A candidate who is not already a member of the staff should fulfil the following requirements:

a) Have obtained a Ph.D at least three years in advance.

b) An interval of at least thirteen years since graduation.

c) Original research work.

A candidate for the post of professor should fulfil the following requirements:

a) Have held the post of assistant professor for at least five years at one of the Egyptian Universities or at any other institute of the same time.

b) An interval of at least 16 years since graduation.

c) Original research work.

The promotion of staff is done on the basis of the appraisal of research work by such committees.

APPENDIX TWOQUESTIONNAIREFOR STAFF IN UNIVERSITIES IN EGYPT ABOUT THE PROBLEMS FACING THEM

- Notice: a) The replies will be treated as anonymous and confidential
- b) The success of this study depends on your objective replies
- c) We hope that we will have your full co-operation
- d) Please do not sign
- e) Please do not write your name at any part of the questionnaire

1. Personal information

- a - How many members of staff are in your department?
- b - How many hours do you teach per week?
- c - How many hours do you devote to your tutorials per week?
- d - How many days are you transferred to other faculties per week?
- e - How far are these faculties from your faculty?
- i) - In the same town
- ii) - In the same town but it is difficult to arrive in time
- iii) - In another town which is sited a long distance from where you live

2. What are your specific academic interests?

- a -
- b -
- c -

3. Your contribution to the administration of the faculty is:-

- a - Preparing the timetable
- b - Preparing for the exams
- c - Distributing students to departments
- d - Helping students in solving their personal problems
- e - Any other comments. Please specify:

.....

4. Contact with students in the lectures is:

- 1. Close and frequent
- 2. Accidental and infrequent
- 3. Non-existent

If numbers 2 and 3, give reasons:

- e.g. a) Excessive numbers of students
 b) Lack of space
 c) Lack of time
 d) Any other reasons

.....

5. Contact with students outside the lectures is:

- a - Close and frequent
- b - Accidental and infrequent
- c - Non-existent

If b) or c), give reasons:

- e.g. a) Teaching in other faculties

- b) Excessive teaching hours
 - c) Excessive teaching hours for students during the day
 - d) Lack of accommodation
 - e) Any other reasons not in a) - d)
-
-
-

6. The supervision of post-graduate students is:

- a) Adequate
- b) Inadequate

If a), please give examples:

.....

.....

.....

If b), please give reasons, e.g.

- a) Lack of time
- b) Overcrowded staff
- c) Excessive number of students
- d) External commitments
- e) Poor organisation and administration

If any other reasons, please specify:

.....

.....

.....

7. Do any problems inhibit your research in your department?

- e.g.
- a) The library is under-equipped
 - b) Teaching in other faculties
 - c) Over-loaded teaching hours

- d) There is not enough material
- e) External commitments
- f) Shortage of financial resources
- g) Lack of encouragement from the University
- h) Any other problems. Please specify:

.....

8. Activities within the faculty (social, cultural, physical, and scientific)

are a) available b) not available

if a) Please specify:

.....

if b) Please specify, e.g.

- a) Lack of supervisors
- b) There are no places
- c) There is not enough equipment
- d) Timetable is badly made
- e) Any other reasons. Please specify:

.....

9. The library

- a) Fulfills its purposes in every way
- b) Partly fulfills its purposes
- c) Does not fulfil its purposes

If a) please give reasons:

.....
.....
.....

If b) or c) please give reasons, e.g.

- a) Lack of well qualified staff
- b) Badly lit
- c) Opened for limited hours
- d) Overcrowding of students
- e) Not well enough equipped
- f) Badly built
- g) Any other reasons. Please specify:

.....
.....
.....

10. Laboratories: Do they fulfil their purposes?

- a) Yes
- b) No

If yes, please specify:

.....
.....
.....

If no, please give reasons, e.g.

- a) Lack of material
- b) Lack of apparatus
- c) Overcrowding of students
- d) Using the laboratories of other faculties
- e) Lack of supervision

f) Badly built and lit

g) Any other reasons, please specify:

.....
.....
.....

11. Do the buildings within the faculty fulfil their purposes?

a) Yes

b) No

If Yes, please specify:

.....
.....
.....

If No, please give reasons, e.g.

a) Built for other reasons

b) Out of date

c) Badly sited

d) Overcrowding of students

e) Badly lit

f) Using buildings of other faculties

g) Not well equipped

h) Any other reasons. Please specify:

.....
.....
.....

12. Do the administrative staff in your faculty carry out their functions efficiently?

a) Yes

b) No

If Yes, please give examples:

.....

If No, please give reasons, e.g.

- a) The faculty is understaffed
- b) Lack of well qualified staff
- c) Its numbers are delegated from other sectors without any experience in university affairs
- d) Lack of annual increase in staff numbers relating to the annual increase in student numbers
- e) Any other reasons. Please specify:

.....

13. Ancillary services

- a) Typing well provided not entirely provided practically nothing worth saying
- b) Duplicating well provided not entirely provided practically nothing worth saying
- c) Postal services well done not too well poor
- d) Dining facilities available partly available non-existent
- e) Transport well provided not too easy very difficult
- f) Any other comments:

.....

14. Does your faculty take an active part in national development?

- a) Yes
- b) No

If Yes, please give examples:

.....

If No, please give reasons, e.g.

- a) There is no encouragement
- b) There are no available means of doing so
- c) Conservatism of ideas
- d) Rigidity of curricula
- e) There is no confidence among the faculty to take its part
- f) Any other reasons. Please specify:

.....

15. Any other comments not included in questions 1 - 14:

.....

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TABULATED DATA OF THE QUESTIONNAIRE

(Cairo and Mansourah Universities)

APPENDIX THREE

TABULATED DATA OF THE REPLIES OF

CAIRO UNIVERSITY SAMPLE

Number of Sample 140 staff members

Covering Eleven Faculties

within the university

Table 1 Basic Data of Cairo University in
1975-1976 academic year *

Faculty	Opened date	No. of students	No. of staff			Prof. staff/student ratio
			prof.	admin	ancillary	
Medicine	1925	9,195	280	106	56	1 : 35
Arts	1925	12,460	102	35	26	1 : 125
Science	1925	2,449	105	45	36	1 : 23
Commerce	1935	15,894	26	62	38	1 : 611
Law	1935	13,575	57	37	8	1 : 238
Engineering	1935	8,243	251	54	170	1 : 33
Agriculture	1935	4,935	160	27	73	1 : 31
Dar El-Ulum	1946	4,063	42	12	32	1 : 96
Veterinary Medicine	1947	2,318	89	41	39	1 : 26
Pharmacy	1955	2,612	85	52	85	1 : 31
Dental Medicine	1956	2,116	55	46	78	1 : 38
Econ & Political Sciences	1960	2,797	32	12	13	1 : 72
Mass Communica- tion	1970	1,624	13	30	10	1 : 125
Total		82,281	1,270			1 : 65

* Source: Data collected during the writer's visit to Cairo University
faculties

Table 2 Size of departments

Number of staff	%
1. Those with less than 5 members	7
2. Those with between 5-25 members	79
3. Those with more than 25 members	14

Table 3 Staff teaching commitments

Replies	%
1. Those teaching less than 10 hrs per week	10
2. Those teaching between 10-12 hrs per week	57
3. Those teaching over 20 hrs per week	33
4. Those giving tutorials less than 5 hrs per week	72
5. Those who give tutorials more than 5 hrs per week	28
6. Those who teach in other institutions as well as Cairo University	78
7. Those with travelling difficulties between their accommodation and campus	74

Table 4

Academic interests of staff

Replies	%
1. Those interesting in doing research	18
2. Those who keep up to date knowledge	16
3. Those interested in teaching	12
4. Those who participate in conferences	11
5. Those interested in field studies	10
6. Those who are interested in studying the problems of surrounding environment	10
7. Those engaged in developing post-graduate studies	8
8. Those interested in supervision of theses	7
9. Those interested in scientific journeys	5
10. Those interested in developing their department	5
	100

N.B. These percentages are of the total number of replies received 716 not the number of persons replying

Table 5

Contribution of staff to the administration of the faculty

Replies	%
1. Those who help students in solving their problems	19
2. Those who help in preparing for the exams	18
3. Those who contribute to the distribution of students to departments	14
4. Those who help in preparing timetables	13
5. Those who run technical sections	12
6. Those who share in the meetings of the faculty council	11
7. Those who supervise students' activities	7
8. Those who help in organising scientific journeys	6
	100

N.B. Total answers received 601

Table 6 Reasons of lack of contact between staff and students in lectures

Reasons	%
1. Lack of time	35
2. Excessive number of students	34
3. Lack of space	31
	100

N.B. Total answers received 233

Table 7 Reasons for lack of contact between staff and students outside lectures

Reasons	%
1. Excessive teaching hours for students	20
2. Lack of accommodation	18
3. Excessive teaching hours	17
4. Teaching in other faculties	16
5. Excessive number of students	15
6. Misunderstanding of its value	14
	100

N.B. Total answers received 445

Table 8 Reasons for inadequacy of supervisions of post-graduate studies
(95% answered inadequate)

Reasons	%
1. External commitments	18
2. Over-loaded staff	17
3. Lack of time	15
4. Excessive number of students	15
5. Poor organisation and administration	15
6. Lack of technical assistants and equipment	12
7. Lack of co-operation between staff	8

N.B. Number of answers received 581 100

Table 9 Problems which inhibit staff doing research

Problems	%
1. Lack of encouragement from the university	12
2. Shortage of financial resources	12
3. External commitments of staff	11
4. The library is under-equipped	11
5. Teaching in other faculties	10
6. Over-loaded teaching hours	10
7. There is not enough material	9
8. Lack of co-operation with other organisations	9
9. Daily problems of staff	8
10. Lack of setting up a plan for research within departments	8

N.B. Total answers received 868 100

Table 10 Reasons for the unavailability of activities for students in their faculties
(71% answered that they are not available)

Reasons	%
1. There is not enough equipment	21
2. Timetable is badly made	19
3. Excessive number of students	16
4. Lack of supervisors	16
5. There are no places	15
6. Misunderstanding of its value	14

100

N.B. Total answers received 414

Table 11 96% answered that the library does not fulfil its purposes. Reasons given by staff

Reasons	%
1. Overcrowding of students	17
2. Opened for limited hours	14
3. Badly built	13
4. Lack of well qualified staff	13
5. Not well enough equipment	12
6. Not well organised	11
7. Badly lit	10
8. Rigid rules of borrowing	9
	100

N.B. Number of answers received 616

Table 12 Why do laboratories not fulfil their purposes?
91% answered no

Reasons	%
1. Overcrowding of students	19
2. Lack of material	17
3. Lack of supervisors	15
4. Lack of apparatus	15
5. Badly built and lit	13
6. Using laboratories of other faculties	12
7. They are used for a long time daily	9

N.B. Number of answers received 404 100

Table 13 Why buildings do not fulfil their purposes?
91% answered no

Reasons	%
1. Not well equipped	25
2. Overcrowding of students	22
3. Badly lit	20
4. Using buildings of other faculties	16
5. Badly sited	8
6. Out of date	5
7. Built for other reasons	4

N.B. Number of answers received 397 100

Table 14 Why the administrative staff do not carry out their functions efficiently?

90% answered no

Reasons	%
1. Lack of an annual increase in staff members relating to the annual increase in students' numbers	18
2. There are no incentives	17
3. The faculty is understaffed	17
4. Lack of well qualified staff	13
5. Its numbers are delegated from other sectors without any experience in university affairs	13
6. Lack of supervision	12
7. They are not up to standard when they contact with staff	10
	100

N.B. Number of answers received 520

Table 15 Ancillary Service

	%
Typing: well provided	22
not entirely provided	53
practically nothing worth saying	25
Duplicating well provided	14
not entirely provided	58
practically nothing to say	28
Postal Services: well done	5
not too well	61
poor	34
Dining Facilities: available	3
partly available	46
non existent	51
Transport: well provided	3
not too easy	18
very difficult	79

N.B. These percentages are related to the number of persons replied the questionnaire 140.

Table 16 Does the faculty take an active part in national development
82% answered no

Reasons	%
1. There is no confidence among the faculty to take this part	23
2. There is no encouragement	21
3. Rigidity of curricula	20
4. There are no available means to do so	19
5. Conservatism of ideas	17

N.B. Number of answers received 368 100

Table 17 General comments by staff

Comments	%
1. The increased number of students over the capacity of the universities	19
2. Rigid rules within the universities	17
3. Lack of accommodation for the staff	14
4. Lack of equipped places for staff	13
5. Lack of autonomy of universities	11
6. Low salary of staff	10
7. Engagement of staff in other jobs for financial reasons	10
8. Personal bias in evaluating scientific research	6

100

N.B. Total answers received 588

APPENDIX FOUR

TABULATED DATA OF THE REPLIES OF

MANSOURAH UNIVERSITY

Number of Samples 128 staff members

Covering Eight Faculties

of the university

Table 1 Basic Data of Mansourah University in
1975/76 Academic Year

Faculty	Date of opening	No. of students	No. of staff		Ancillary	Prof/staff/ student ratio
			Prof.	Admin.		
Medicine	1962	2,866	77	63	120	1 : 39
Science	1969	1,287	58	25	130	1 : 22
Education	1969	2,792	12	17	16	1 : 232
Pharmacy	1971	1,143	3	22	36	1 : 381
Law	1973	4,087	11	17	13	1 : 371
* Commerce	1974	6,314	10	30	20	1 : 531
* Engineering	1974	4,212	27	45	180	1 : 156
* Agriculture	1974	2,843	37	49	102	1 : 77
Total		23,030	235	235	617	1 : 98.39

* These faculties were higher institutes opened in 1957, and were administered by The Ministry of Higher Education, they were transferred to be faculties administered by Mansourah University in the 1974-1975 academic year.

Number of students of the Faculty of Commerce does not include external students who amount to 2,514.

Table 2 Size of Departments

Number of staff	%
Less than 5 members	43
From 5 - 10 members	29
From 10 - 15 members	22
More than 25 members	6
	100

Table 3 Staff teaching commitments

Replies	%
1. Those teaching less than 10 hrs per week	7
2. Those teaching between 10-20 hrs " "	60
3. Those teaching over 20 hrs " "	33
4. Those giving tutorial less than 5 hrs per week	79
5. Those teaching in other institutions as well as Mansourah University	75
6. Those with travelling difficulties between their accommodation and campus	92
	100

Table 4 Academic interests of staff

Replies	%
1. Doing research	20
2. Reading modern references	16
3. Teaching	14
4. Participatory in scientific conferences	12
5. Doing field studies	11
6. Studying problems of the environment	10
7. Development of their departments	10
8. Supervision of theses	7
	100

N.B. These % refer to several answers received from the same person. Total number of answers received on this section 581.

Table 5 Contribution of staff to the administration of their faculties

Replies	%
1. Helping students to solve their problems	22
2. Distributing students to departments	21
3. Preparing for the exams	21
4. Preparing the timetable	13
5. Taking part in organising their faculties	10
6. Equipping laboratories and libraries	7
7. Supervise students' activities	6
N.B. Total number of answers received 481	
	100

Table 6 Reasons of Lack of Contact between staff and students in lectures

Reasons	%
1. Lack of space	39
2. Excessive number of students	26
3. Lack of time	24
4. Lack of audio-visual aids	11
N.B. Number of answers received 330	
	100

Table 7 Reasons for contact between staff and students outside lectures

Reasons	%
1. Excessive teaching hours of staff	17
2. Excessive number of students	17
3. Excessive teaching hours for students during the day	15
4. Poor organisation of university life	14
5. Lack of accommodation	13
6. Lack of time	13
7. Teaching in other faculties	11
N.B. Number of answers received 516	
	100

Table 8 Reasons for inadequacy of supervision of
post-graduate studies
88% answered that it is inadequate

Reasons	%
1. External commitments	15
2. Excessive number of students	14
3. Lack of time	13
4. Lack of motives	13
5. Over-loaded staff	12
6. Poor organisation and administration	12
7. Lack of equipped libraries	12
8. Lack of equipped laboratories	9
	100

N.B. Total answers received 645

Table 9 Problems which inhibit staff doing research

Problems	%
1. The library is under-equipped	14
2. Shortage of financial resources	13
3. External commitments	13
4. Lack of encouragement from the University	13
5. There is not enough material	12
6. Over-loaded teaching hours	10
7. Teaching in other faculties	10
8. Lack of co-operation between the University & other research centres	10
9. Lack of frequent contact with staff of European Universities	5
	100

N.B. Total number of answers received 773

Table 10 Reasons for the inavailability of activities for students in their faculties
79% answered that they are not available

Reasons	%
1. Timetable is badly constructed	17
2. There is not enough equipment	16
3. There are no places	16
4. Lack of financial responses	14
5. Lack of supervisors	14
6. Staff's accommodation is far from the campus	13
7. No attention is given to such activities	10
	100

N.B. Total number of answers received 460

Table 11 95% of the sample answered that the library does not fulfil its purposes
Reasons given for their answer.

Reasons	%
1. Not equipped well enough	14
2. Badly built	12
3. Lack of qualified staff	11
4. Small number of books borrowed	11
5. Opened for limited hours	10
6. Overcrowding of students	10
7. Rigid rules of borrowing	9
8. Badly lit	8
9. Lack of financial resources	8
10. Not well organised	7
	100

N.B. Total number of answers received 806

Table 12 Do laboratories do not fulfil their purposes?
87% answered "no"

Reasons	%
1. Using laboratories of other faculties	17
2. Overcrowding of students	15
3. Lack of material	13
4. Lack of apparatus	13
5. Badly built and lit buildings	11
6. Lack of supervisors	10
7. They are used for a	
8. Not well organised	10
	100

N.B. Total number of answers received 555

Table 13 Do the buildings do not fulfil their purposes?
94% answered that they do not fulfil their purposes

Reasons	%
1. Not well equipped	13
2. Overcrowding students	13
3. Using buildings of other faculties	12
4. Badly lit	12
5. Built for other reasons	10
6. Badly sited	9
7. Out of date	9
8. There are not enough rooms for staff	8
9. Buildings of departments are not well equipped	8
10. Not well cleaned	6
	100

N.B. Total answers received 732

Table 14 Why the administrative staff do not carry out their functions?

Reasons	%
1. Lack of an annual increase in staff member relating to the annual increase in student numbers	15
2. The faculty is understaffed	15
3. Lack of well qualified staff	14
4. If members are delegated from other sectors without any experience in university affairs	13
5. They misunderstand the rules of the university	12
6. Lack of control by Deans and their Heads	11
7. They work for limited hours daily	10
8. Their salary is very low	10
	100

N.B. Total answers received 555

Table 15 Ancillary services in the faculty

	%
Typing:	
well provided	4
not entirely provided	68
practically nothing worth saying	28
Duplicating:	
well provided	7
not entirely provided	55
practically nothing worth saying	38
Postal Services:	
well done	9
not too well	41
poor	50
Dining Facilities:	
available	2
partly available	31
not existent	67
Transport:	
well provided	6
not too easy	10
very difficult	84

N.B. The % are related to the number of sample 128

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