

EDUCATION AND LABOR FORCE IN EGYPT

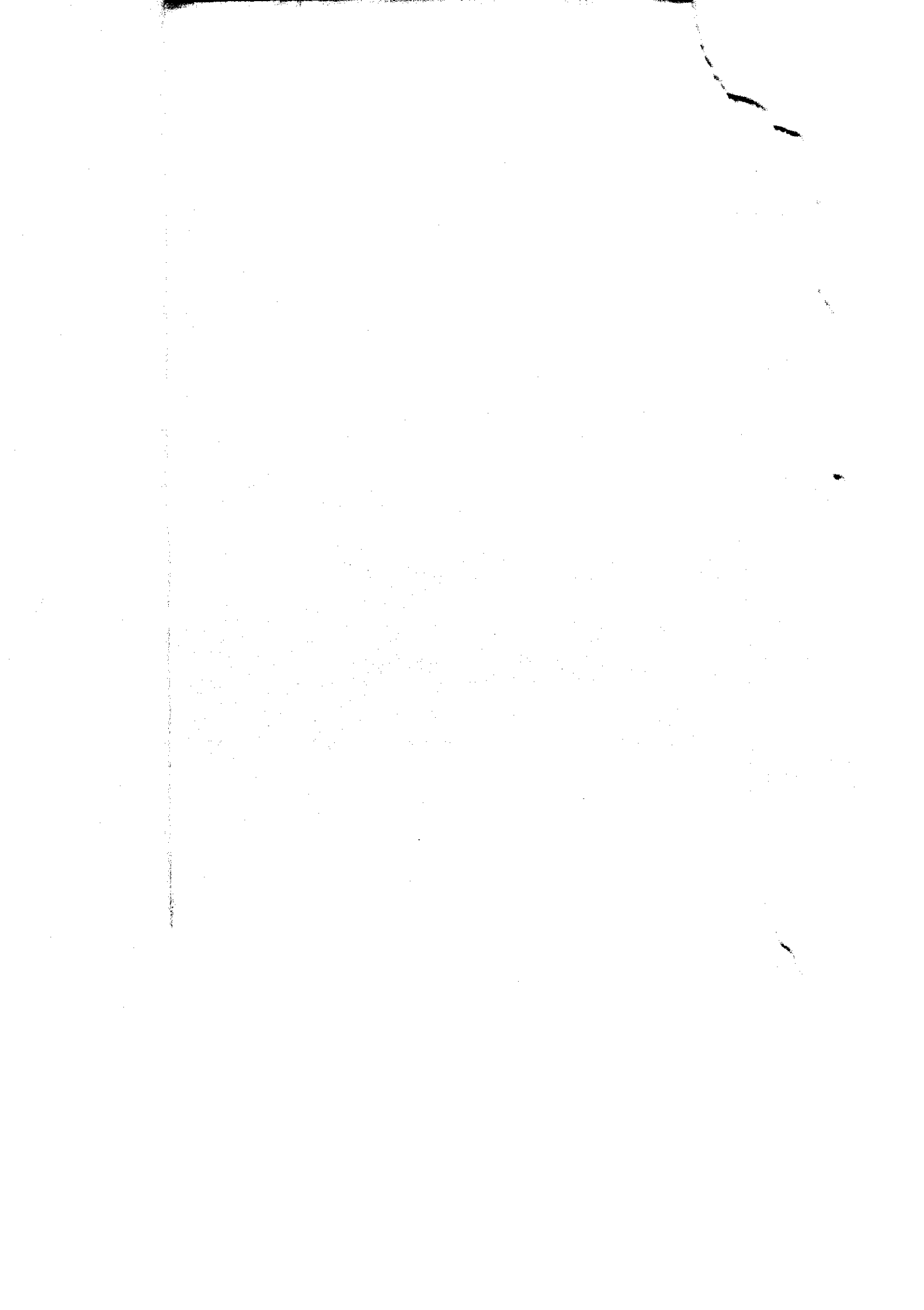
1960 - 1986

A Socio-Demographic Analysis

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INTRODUCTION

In the rapidly changing world of today, knowledge and technical skills are more than ever before essential links in the development process. The exponential growth of achievements in science and technology, and their wide application in organization and management, has rapidly increased the need for more educated people to contribute to a continuous advancement in all sectors of society.

In developing countries, this need for educated people is naturally much more crucial than in industrialized countries especially as, in the recent past, disparities between the levels of economic development in these two groups of countries have been increasing. Efforts to remedy this situation are illustrated in the fact that the growth of school enrolment in developing countries is much more rapid than in developed countries. (The Unesco Regional Office for Education in the Arab Countries, 1976, pp. 11-12).

Human resource development encompasses many constituent and interrelated elements. It includes formal education at all levels. In addition, it covers on-the job training, individual self-development, and informal as well as formal adult education (Harbison: 1965, p.x). Therefore, the increasing importance of knowledge and skills in changing society has made education inevitably a vital component in overall development plans, whereby it is expected to lead to socio-economic progress by equipping the population to participate fully in socio-economic life.

Objectives of the study:

The main objective of this paper is to study the educational characteristics of labor force in Egypt between 1960 and 1986. Therefore, the present study tries to trace the changes that have taken place in these characteristics during the period mentioned above.

In terms of this main objective, the following points will be discussed:

- 1- To study the educational attainment of the population and labor force.
- 2- To examine the relationship between the educational level and activity rates.
- 3- To study the educational characteristics of labor force by industry, occupation and employment status.
- 4- To illustrate the relation between the educational level and unemployment.

Sources of data and its limitations:

The main sources of data used in this study are the 1960, 1976 and 1986 population censuses. One important limitation of these data is that they don't show the educational characteristics of labor force by age, except in case of the occupational classification from which the major rates of economic activity and unemployment cannot be derived. As a consequence, the study doesn't include any data classified by age despite the fact that age is an important factor affecting activity rates.

Organization of the study:

Following this introduction, section I. describes the educational attainment of the population and labor force. In addition, it shows the relationship between the educational level and activity rates. Section II. illustrates the educational characteristics of labor force by industry. In the same manner, section III. reveals the educational characteristics of labor force by occupation. Finally, section IV. discusses the educational characteristics of labor force by employment status. This section is ended with the analysis of the relationship between the educational level and unemployment. The conclusion summarizes the main findings of this paper.

Section I: Educational attainment of the population and labor force
I-1- Educational attainment of the population:

It is widely assumed that before a nation can benefit from the natural blessings of modern technology and science, a very large share of its population must be literate and a substantial proportion must have secondary and college training. There is no direct cause-and-effect relationship here; education programs alone cannot induce economic development. Yet it is equally clear that lack of literacy and education can retard economic development. A certain minimum level of literacy seems to be required in order for a population to break out of the vicious circle of subsistence economy into full participation in the modern world economy based on complex technology and intricate systems of specialization and exchange.

For the reasons, the educational level of a population is of great interest and concern. Moreover, within a given population there is a very great disparity between the social and economic status of the well-educated and the poorly educated. (Bogue, 1969, p. 181).

Table (1) summarizes the educational attainment of the population in Egypt between 1960 and 1986. The educational status is shown in terms of four main categories: illiterate, read and write, middle education and high education. It should be mentioned that data on educational attainment are related to the population 10 years of age and over.

The table reveals that illiteracy in Egypt is still high. In 1960, 56.2% of the men and 83.1% of the women were illiterate. By 1986, these percentages had dropped to 37.4% and 62.6% respectively. Consequently, it seems that in 1986 about half of the population was illiterate. Egypt shares many developing countries in this respect where illiteracy still prevails. There is a very slow rate of decline in illiteracy. A facile explanation is, partly, that population is growing faster than educational and literacy efforts can cope with.

Table (1): Percent distribution of the population by educational status and sex (10+), Egypt (1960-1986).

Educational status	1960			1976			1986		
	M	F	Both Sexes	M	F	Both Sexes	M	F	Both Sexes
Illiterate	56.2	83.1	69.7	42.1	71.0	56.3	37.4	62.6	49.7
Read & write *	32.6	12.4	22.5	28.1	12.8	20.6	40.8	26.3	33.7
Middle education **	8.9	3.3	6.1	25.1	13.1	19.2	16.7	9.4	13.1
High education	1.6	0.3	0.9	3.2	1.0	2.1	4.7	1.4	3.1
Not stated	0.7	0.9	0.8	1.5	2.1	1.8	0.4	0.4	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: CAPMAS, 1960 Population census, Table 48, P303.

CAPMAS, 1976 Population census, Table 10 PP. 143-144.

CAPMAS, 1986 Population census, Table 16, PP. 82-84.

* Including less than middle - level education.

** Referring here to below-university education.

Actually, in all areas of the world, developed or developing, illiterate women outnumber men. The greatest disparity between male and female illiteracy in Egypt reflects less access schooling for females and a generally less valued status in society. Illiteracy of males can be explained in terms of economic reasons whereas that of females can be due to the same reason and other social factors.

Illiteracy prevailing in Egypt constitutes an enormous social, economic and cultural problem. Great efforts should be devoted to reducing illiteracy to the lowest possible level in order to avoid its impact on development, as it is closely linked to the socio-economic development. It is inadequate to rely solely on the classical school-system in this respect because its effect is only felt after a long-time lag. Out-of-school adult education and literacy campaigns have an important role to play in this respect.

On the whole, the educational profile of Egypt in 1986 is not so encouraging in spite of the observed improvement compared with 1960. Illiteracy is still high especially among females. Such educational profile is reflected in the educational attainment of the labor force which will be discussed in the coming sub-section (I.2).

I.2- Educational attainment of the labor force:

The Egyptian labor force grew from about 7.5 million workers in 1960 to 10.5 millions in 1976, to 13.2 millions in 1986 with an average rate of growth of about 2.9% per year. This increase can be due to two main factors: population growth and the effect of changes in socio-economic factors upon the rate of participation in economic activities. Education seems to be one of the most powerful factors tending to increase participation in economic activities especially among females, not only by breaking down the traditional barriers, but also by opening up new and desirable employment opportunities.

For these reasons, the distribution of the labor force according to education is an important composition. The educational attainment of the labor force is summarized in table (2).

Considering the basic features, the table shows that the degree of illiteracy is very high, 45.6% of the total labor force in 1986 was illiterate. The second largest group is composed of people with middle-level education who form somewhat less than one-third of the total labor force.

Further examination of the figures in table (2) reveals some of the changes which have taken place since 1960. Some notable changes in the educational status of the labor force did occur during this period. That is, there was a noticeable decline in the percentage of illiterate members of the labor force as well as a small but definite upward shift in the educational level. Thus, the number of persons in the various literate categories (categories 2,3 and 4) increased relatively. The largest increase occurred in categories 3 and 4 which comprise those who received middle and high education. Part of the increase in the relative importance of the educated is, of course, due to the fact that total labor force in 1960 was smaller than in 1986. This, however, does not account for all the increase in the literate and educated part of the labor force from 35.8% in 1960 to 54.4% in 1986. The introduction of new production techniques in industry and the relative shift of employment between industries, in general, has increased the demand for more skilled and better-educated workers and, in the same time, decreased the demand for the unskilled and uneducated.

The educational profile of the labor force (especially of females) seems to be completely different from that of the population. Illiteracy among female labor force had dropped sharply from 78% in 1960 to 13.2% in 1986. On the other hand, the percentage of the more educated groups had increased six times (in case of middle education) and seven times (in case of high education). This reflects the "selectivity" nature of female labor force who are engaged mainly in non-traditional

Table (2): Percent distribution of labor force by educational status and sex (10+), Egypt (1960-1986).

Educational status	1960			1976			1986		
	M	F	Both Sexes	M	F	Both Sexes	M	F	Both Sexes
Illiterate	62.7	78.0	63.8	54.2	30.7	52.3	49.6	13.2	45.6
Read & write	29.1	7.3	27.6	26.2	8.8	24.8	24.5	6.4	22.6
Middle education	6.2	11.1	6.5	14.0	41.6	16.2	19.4	65.0	24.3
High education	1.7	2.2	1.7	4.2	13.7	5.0	6.5	15.4	7.5
Not stated	0.3	1.4	0.4	1.4	5.2	1.7	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: CAPMAS, 1960 Population census, Table 36, P. 222
 CAPMAS, 1976 Population census, Table 11, PP 145-146
 CAPMAS, 1986 Population census, Table 16, PP. 82-84.

occupations. In addition, such change refers to more improvement in the educational attainment of female labor force compared with males.

I.3- Educational level and activity rates:

Relationships between education and economic activity are of special interest for developing countries as an aspect of the many-sided questions of the economic and social effects of expanding provisions for popular education. These relationships are two-fold: first, prolongation of schooling has the obvious effect of decreasing activities rates of young people of school age; and second, it may affect the propensity and the opportunity to engage in economic activity in later life (U.N. 1968, p. 56).

Since educational attainment has been used as an indicator in studying the factors which affect activity rates, an attempt is made in this sub-section to show how the level of education affects the likelihood of individuals being in the labor force. Table (3) shows activity rates by educational status and sex.

The analysis of activity rates of the population regardless of their educational attainment shows that these rates had declined between 1960 and 1986. In addition, the table reveals that female participation in labor force is very low compared with males.

Activity rates for both sexes combined show a direct relationship with the educational level. Male activity rates show a direct relation with both illiteracy and high education. Decrease of male activity rates between 1960 and 1986 is clear in case of less than middle-level education. Female activity rates show a direct relation with the educational level. In other words, activity rates increase with the educational level. Moreover, activity rates among highly educated females are much higher than middle educated ones.

Table (3): Activity rates by educational status and sex (10+), Egypt (1960-1986).

Educational status	1960			1976			1986		
	M	F	Both Sexes	M	F	Both Sexes	M	F	Both Sexes
Illiterate	86.3	5.6	37.9	91.6	2.7	36.5	88.5	1.8	35.2
Read & write	69.9	3.6	51.7	66.4	4.3	47.4	55.4	2.1	25.7
Middle education	53.6	19.9	44.4	39.4	19.9	33.1	77.7	59.3	71.2
High education	92.5	74.8	90.5	93.4	89.1	92.4	92.8	96.8	93.7
Total	77.8	6.0	41.7	71.3	6.3	39.3	66.9	8.5	38.4

Source: The Same source of Table (2).

Some explanations of the previous findings can be summarized in the following points:

- 1- Declining activity rates between 1960 and 1986 reflect the impact of prolongation of schooling which has the obvious effect of decreasing activity rates of young people of school age. Provision of universal schooling up to age 15 would put about 25% of the population at school. This means withdrawal of so many young people from labor force. It has been observed that in countries where compulsory education ends at the sixth or seventh grade and in countries where formal vocational schools are not looked upon with favour-like Egypt the opportunity for the population to enter earlier into the labor market is greater. The reverse is noticed in countries where the level of compulsory education is high. This shows the impact of compulsory education on reducing activity rates among young people of school age. In addition, the decline in activity rates among young people in Egypt was largely due to the governmental policy of prohibition of preemployment of children below age 12.
- 2- Low activity rates among females can be explained in terms of various factors. Women in a large number of developing countries, and especially in the rural sectors of these countries, are powerless, economically and socially dependent, and isolated from the main stream of life outside the immediate family cycle. In Moslem societies this situation is related to the practice of female seclusion, typically justified as an assurance of chastity before marriage and faithfulness thereafter (Ridker, 1978, p. 20). Among other things, it leads to limitations on their economic activities outside the home. It should be mentioned that the low level of the female activity rates makes for a low activity rate in the population as a whole.

There are indicators that underreporting of females in the labor force has a substantial influence on the level of their participation rate, especially in agriculture. Such underreporting may be due to

the traditional thinking or it may result from the importance of women's work being discounted for reporting.

The increasingly liberal attitudes towards female employment among the younger generations may increase the propensity of females at given educational levels to participate in the labor force. Education seems also to be the most powerful factor tending to increase female participation in economic activities, not only by breaking down the traditional barriers, but also by opening up new and desirable employment opportunities. With increasing education one may expect women's share in the labor force to grow in the coming decades.

3. High activity rates among illiterate males can be explained in terms of the high proportion of males engaged in the agriculture sector (42.5%) which is dominated by illiterates.
4. Increasing female participation in the labor force with the educational levels is partly due to the educational progress of females which make employment opportunities more available for the educated. One cannot ignore the effect of the improved educational profile of female labor force in this regard. In addition, the high percentage of female labor force in white-collar occupations (77.5% of the total female labor force)- which are occupied by the more educated groups-explains the direct relationship between the female activity rates and their educational level.

Section II: Educational characteristics of labor force by industry

Labor force structure reflects to a great extent the level of development attained by the production process adopted in the country in question⁽¹⁾. The following aspects of the structure of the Egyptian labor force is examined here:

⁽¹⁾ For more details, see:

Oshaba, I.K. (1991) Utilization of census data on labour force in scientific research and development planning, in CDC Research Monograph Series-No.20, pp.397-409.

- 1- Classification by industry which reflects the degree of division of labor.
- 2- Classification by occupation which features the skills possessed by the economically active population.
- 3- Classification by employment status which describes the organizational structure of the economy.

II.1- Industrial composition of labor force:

The industrial composition of labor force presents the distribution of workers according to productive activities in the society. It denotes the establishment in which the person works. A doctor who practises his occupation at a textile factory would be classified as a member in textiles factory while he will be classified as doctor from the point of view of his occupation. The distribution of labor force by economic activities is very important for knowing the kinds of prevailing activities in the country and its relationship with economic development (C D C, 1972, p.17).

The International Standard Industrial Classification of all economic activities (I.S.I.C.) is used in classifying the Egyptian labor force by industry. In addition, the industrial classification is grouped in three major groups, i.e. Agricultural sector (A-sector), Manufacturing sector (M-sector) and services sector (S-sector). (see Table 4).

As shown in Table (4) one-fifth of the active population are employed in the Manufacturing sector. Furthermore, the trend observed in Egypt is that the importance of the Agriculture sector has been declining in favor of the services and manufacturing sectors. This trend is not the same as the experiences of Western developed countries during the 19th century where the transition occurred first from the Agriculture sector to the Manufacturing sector, and then from the Manufacturing sector to the Services sector. Education has undoubtedly an important part to play in this connection. The fact is that general education dominates vocational education, and that functional out-of-

Table (4): Industrial Composition of labor force by sex (10+), Egypt (1960-1986).

Industry	1960			1976			1986		
	M	F	Both sexes	M	F	Both sexes	M	F	Both sexes
	Agriculture, hunting and fishing	57.3	40.7	56.1	48.5	19.5	46.7	42.5	8.9
Mining and quarrying	0.3	0.0	0.3	0.3	0.2	0.3	0.4	0.3	0.4
Manufacturing	9.9	4.6	9.5	13.7	13.4	13.6	13.1	10.1	12.8
Electricity, gas and water	0.8	0.1	0.5	0.6	0.7	0.6	0.8	0.8	0.8
Construction	2.3	0.1	2.1	4.5	1.0	4.2	8.0	1.0	7.3
Commerce	8.6	7.1	8.5	8.6	7.2	8.5	7.4	5.8	7.3
Transport, storage and communication	3.7	0.5	3.5	5.0	2.4	4.8	5.8	3.1	5.6
Services	16.0	43.7	18.0	17.2	51.3	19.5	20.2	65.5	24.3
Activities not adequately described	1.4	3.2	1.5	1.6	4.3	1.8	1.8	4.4	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agricultural sector*	57.3	40.7	56.1	48.5	19.5	46.7	42.5	8.9	39.5
Manufacturing sector*	13.0	4.8	12.4	19.1	15.3	18.7	22.3	12.2	21.3
Services sector*	28.3	51.3	30.0	30.8	60.9	32.8	33.4	74.4	37.2

Source: CAPMAS, 1960 Population census, Table 31, pp. 130-135

CAPMAS, 1976 Population census, Table 17, pp. 174-181

CAPMAS, 1986 Population census, Table 17, pp. 85-87

- * Excluding activities not adequately described.
- * Agriculture sector includes agriculture, hunting and fishing.
- * Manufacturing sector includes mining and quarrying + manufacturing + electricity, gas and water + construction.
- * Services sector includes commerce + transport, storage and communication + services.

school education is quite insufficient. This leads to a lack of qualified manpower that could enforce the development of industrial activities.

The direct transition to the services sector cannot be separated from another important factor which is the high rate of urban growth in Egypt resulting from rural-urban migration. This migration has been caused by various socio-economic and demographic factors. While present rural-urban migration in developed countries is motivated mainly by the better employment opportunities in towns, these "pull factors" in developing countries are augmented by a number of "push factors" resulting from the backward economic conditions in rural areas as well as from the pressure of rapid population growth which encourages the rural population to migrate towards towns. However, the relatively low importance of industry and other productive activities in towns force these rural migrants to seek jobs within the services sector. Hence, this services sector is different from the "classical" services sector. While, classically, the services sector holds a large share of the population in close connection with the Agriculture and Manufacturing sectors, contributing much to their growing efficiency, the services sector in these developing countries is to a great extent parasitic, and tends to be independent of the whole economic structure. (The Unesco Regional Office for Education in the Arab Countries, 1976, p. 25).

The high proportion of employment in the services sector in the developing countries is of a different character than that of the increasing proportion of employment in services in the developed countries. In the developed nations the shift is a direct consequence of consumption patterns; in the developing nations the services sector is partly residual. Migrants from the rural areas find temporary service jobs in the cities, swelling the ranks of the disguisedly unemployed. The high proportion of employment in the service sector is mostly a reflection of inefficiency and of atomization of trade and personal services rather than a reflection of the desire of the people for more services.

Although agriculture is still the basic source of wealth in the economy, and although its products form an essential element for the satisfaction of basic needs and for industry, the Egyptian woman has not been equipped to participate more effectively in agriculture development, which requires the use of modern equipment and technology. Such gap in women's education and training, especially in rural areas, hinders her contribution to the economy in this respect. Fewer women are engaged in agriculture outside their homes and families whereas more women are entering into services.

In general, while the agricultural sector remains the most important from the standpoint of women's participation in economic life and their employment opportunities, there is nevertheless a movement towards the non-agricultural sectors of economic life, particularly towards the services sector and to a far more limited extent the manufacturing sector.

II.2- Industrial composition of labor force by educational status:

As mentioned above, the industrial classification is grouped in three major groups, i.e., Agricultural sector (A-sector), Manufacturing sector (M-sector) and services sector (S-sector) in order to facilitate the analysis of the industrial composition of labor force by educational status (see Table 5).

The table reveals that the Agricultural sector is dominated by illiterates. About 80% of the total labor force engaged in agriculture are illiterate. No real change had happened between 1960 and 1986 in the educational composition of the labor force in agriculture. This shows that the proportion of the labor force engaged in agriculture is highly correlated with illiteracy. Moreover, middle and highly educated persons represented a very low percentage (3.7%).

Table (5): Industrial composition of labor force by educational status and sex (10+), Egypt (1960-1980).

Educational status	1960			1976			1986		
	M	F	Both Sexes	M	F	Both Sexes	M	F	Both Sexes
Agriculture Sector									
Illiterate	78.6	93.8	79.4	80.4	90.8	80.8	78.5	80.4	78.6
Read & write	20.3	5.1	19.5	16.4	4.1	16.0	17.9	8.6	17.7
Middle education	0.7	0.1	0.7	1.8	2.5	1.8	3.1	8.5	3.2
High education	0.1	0.0	0.1	0.3	0.8	0.3	0.5	2.5	0.5
Not stated	0.3	1.0	0.3	1.1	1.8	1.1	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Manufacturing sector									
Illiterate	49.9	75.4	50.6	43.6	32.2	43.0	44.7	21.2	43.4
Read & write	42.2	14.6	41.5	35.5	20.3	34.7	36.2	26.2	35.7
Middle education	6.6	8.5	6.6	16.6	38.5	17.8	14.9	41.5	16.3
High education	1.0	1.0	1.0	3.3	8.2	3.5	4.1	11.1	4.5
Not stated	0.3	0.5	0.3	1.0	0.8	1.0	0.1	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Services Sector									
Illiterate	38.3	67.8	41.8	23.3	18.6	22.7	26.7	6.9	23.1
Read & write	40.3	7.5	36.6	38.1	8.8	34.5	29.1	4.2	24.5
Middle education	15.8	19.0	16.2	27.7	51.9	30.7	31.8	73.6	39.3
High education	5.0	3.9	4.9	10.3	20.1	11.5	12.4	15.3	13.1
Not stated	0.4	1.8	0.5	0.6	0.6	0.6	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: The same Source of Table (4).

Since the Manufacturing and Services sectors are mainly existing in the urban areas, the educational characteristics of labor force in these two sectors show a different profile from that of the Agriculture sector.

As long as the Manufacturing sector is concerned, data in Table (5) reveal that about 43% of the total labor force engaged in this sector in 1986 was illiterate compared with 50.6% in 1960. Moreover, the percentage of illiterate females in this sector had dropped from 75.4% in 1960 to 21.2% in 1986. In addition, the percentage of middle and highly educated persons had increased as three times as high between 1960 and 1986.

What has been mentioned in analysing the educational composition of labor force engaged in the Manufacturing sector can be repeated in case of the Services sector. In other words, the Services sector is dominated by educated labor force. Consequently, about 77% of the total labor force in this sector in 1986 was educated compared with 57.7% in 1960. The proportion of middle-educated females in this sector had increased from 19% in 1960 to 74% in 1986.

It is necessary to stress the fact that the educated don't want to do manual work. Much of the drive to widen the opportunities for children to acquire a secondary and tertiary school education, and much of the resistance that has frustrated the efforts to give schooling on all levels a technical and practical direction, stem from parents who want to save their sons from the socially degrading necessity of manual work. The parent's views are reflected in the young people's refusal to entertain the notion of taking employment outside the urban white-collar occupations. These attitudes have an anti-rural bias that is a serious obstacle to progress in countries where agriculture is by far the most important industry and agricultural reform is of overwhelming importance. The educated don't want to go to the villages, even those who come from rural areas see education primarily as a means of escaping the misery and deariness of village life (Jolly, 1973, p. 198).

Although the educational structure of labor force in the Manufacturing and Services sector had improved, the corresponding structure of the Agriculture sector had not witnessed any real change. This constitutes a serious obstacle towards the development of agriculture. It seems necessary, therefore, to make education job-oriented and practical in nature, taking into consideration the economic and social needs of the environment. Development of agriculture cannot be achieved depending on illiterates. In this way, education would contribute effectively to achieving a stable increase in economic activity rates, to developing the productive (especially the agricultural) sectors of economy, and to improving female participation in economic life.

Section III: Educational characteristics of labor force by occupation

It would be difficult to overemphasize the importance of the occupational classification of the individuals for general social science analysis. This significance was stated succinctly by M. Edwards in his famous study of comparative occupations: "The most nearly dominant single influence in a man's life is probably his occupation. More than any thing else, perhaps, a man's occupation determines his course and his contribution in life. Indeed, there is no other single characteristic that tells so much about a man and his status as does his occupation".

III.1- Occupational composition of labor force:

The occupational classification of a person refers to the type of job he holds. It provides a stock of the actual skills which are being used by the economically active population. It is also an indicator of the changing occupational needs required at different stages of economic growth. In the course of economic development, the occupational distribution of the economically active population shifts as a consequence of changes in the demand for goods and services, and the supply of human skills required for various occupations. In general, the occupational structure reflects the skills composition of the labor force and indicates, in general terms, the kinds of functions performed in the economy. For example, the administrative, executive and managerial

workers may be considered as decision makers; clerks are viewed as record keepers; the sales and transport workers are conveyors of goods and services; while farmers, miners and craftsmen are producers of goods. (C.D.C., 1973, pp. 149-150).

The international standard classification of occupation (I.S.C.O) is used in classifying the Egyptian labor force by occupation. The occupational composition of the labor force is summarized in Table (6). Occupations are further grouped in four main groups of occupations as shown in the same table.

There is a close similarity between Table (6) and the distribution of labor force by industries (Table 4). For instance, the farming occupations constitute the largest portion of the economically active population which is true in almost every agricultural country in the world. White-collar workers came next in the occupational scale followed by the industrial workers. The percentage of labor force in white collars, blue collars and services workers occupations combined is more than that in farm occupations by 21.8 percentage points in 1986 compared with 9.1 percentage points in 1960. The percentage of females in farming occupations had decreased from 33.2% in 1960 to 6.1% in 1986. In white-collar occupations the percentage had increased from 24% to 77.5%. For males, the increase is clear in white-collar occupations and the decrease is apparent in farming occupations.

The relative shift of employment from one sector to another affects the composition of occupations of the labor force because the working force of each industry has its particular occupational structure. For example, most the labor in agriculture consists of unskilled and semi-skilled labourers, while in industry we find a larger variety of skills, e.g. professional, technical, clerical and blue-collar workers. If there is a relative shift of employment from agriculture to industry, the proportion of farmers and unskilled labourers will go down while the proportion of white-collar occupations will go up.

Table (6): Occupational composition of labor force by sex (10+), Egypt (1960-1986).

Occupation	1960			1976			1986		
	M	F	Both Sexes	M	F	Both Sexes	M	F	Both Sexes
Professional, technical and related workers	2.6	12.3	3.1	6.0	25.9	7.5	10.4	40.5	13.1
Administrative and managerial workers	1.1	0.9	1.1	1.1	1.7	1.1	0.8	1.0	0.8
Clerical and related workers	3.7	2.9	3.6	6.3	19.3	7.3	6.4	32.5	8.8
Sales workers	8.1	7.9	8.1	6.7	4.7	6.5	5.6	3.5	5.5
Services workers	8.4	24.5	9.3	8.4	9.1	8.5	7.3	4.7	7.1
Farmers, fishermen, hunters and related workers	54.6	33.2	53.5	44.4	11.6	42.0	41.0	6.1	37.8
Production-process workers, craftsmen and workers in transport and communication.	19.8	10.2	19.2	22.4	8.3	21.0	26.1	6.5	24.3
Workers not classifiable by occupation	1.7	8.1	2.1	4.7	19.4	5.8	2.4	5.1	2.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White-collar*	15.5	24.0	15.9	20.1	31.6	22.4	23.2	77.5	28.2
Blue-collar*	19.8	10.2	19.2	22.4	8.3	21.3	26.1	6.5	24.3
Farm workers*	54.6	33.2	53.5	44.4	11.6	42.0	41.0	6.1	37.8
Services workers*	8.4	24.5	9.3	8.4	9.1	8.5	7.3	4.7	7.1

Source: CAPMAS, 1960 Population census, Table 41, pp. 277-284

CAPMAS, 1976 Population census, Table 25, pp. 450-465

CAPMAS, 1986 Population census, Table 18, pp. 88-90

- * Excluding workers not classified by occupation.
- * White collar occupations include professional, technical and related workers + administrative and managerial workers + clerical and related workers + sales workers.
- * Blue collar occupations include production - process workers, craftsmen and workers in transport and communication.
- * Farm workers include farmers, fishermen, hunters and related workers.

Table (7): Occupational composition of labor force by educational status and sex (10+), Egypt (1960-1986).

Educational status	1960			1976			1986		
	M	F	Both Sexes	M	F	Both Sexes	M	F	Both Sexes
White-Collar occupations									
Illiterate	26.2	31.0	26.6	5.7	2.8	5.3	11.7	2.5	9.4
Read & write	32.6	3.4	30.1	25.7	6.1	22.4	12.8	2.8	10.3
Middle education	29.9	53.7	52.0	48.5	66.0	51.3	53.9	76.8	59.7
High education	11.0	11.4	11.0	19.7	25.0	20.5	21.6	17.8	20.7
Not stated	0.3	0.5	0.3	0.6	0.1	0.5	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Blue-Collar occupations									
Illiterate	49.3	73.7	50.0	47.8	48.6	47.8	49.1	38.1	48.8
Read & write	45.5	20.9	44.6	41.9	32.4	41.7	44.9	46.8	44.9
Middle education	5.0	4.9	5.0	9.5	18.1	9.7	5.6	14.0	5.8
High education	0.0	0.1	0.1	0.0	0.0	0.0	0.4	1.2	0.4
Not stated	0.2	0.4	0.3	0.8	0.9	0.8	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Farm workers									
Illiterate	79.0	96.9	79.7	80.2	93.8	80.4	78.4	82.9	78.5
Read & write	20.1	2.6	19.5	17.2	4.3	17.1	18.3	8.4	18.2
Middle education	0.7	0.1	0.6	1.5	0.6	1.5	2.8	5.9	2.8
High education	0.0	0.0	0.0	0.1	0.1	0.1	0.4	2.7	0.4
Not stated	0.2	0.4	0.2	1.0	1.2	0.9	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Services workers									
Illiterate	51.3	88.8	56.8	38.6	74.2	41.3	45.9	65.1	47.1
Read & write	46.4	8.8	40.8	52.9	18.5	50.3	48.1	26.6	46.8
Middle education	1.9	0.9	1.8	6.4	4.8	6.3	3.4	4.4	3.4
High education	0.1	0.1	0.1	1.4	1.0	1.3	2.6	3.9	2.7
Not stated	0.3	1.4	0.5	0.7	1.5	0.8	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: The same source of Table (6).

illiterate females working in blue-collar occupations had decreased from 73.7% in 1960 to 38.1% in 1986. Highly educated persons are rarely engaged in blue-collar occupations.

The analysis of the educational structure of service workers reveals that more than half of them know how to read and write, but 47.1% of them were illiterate. As a consequence, middle and high education were not an obvious characteristic of the services workers.

Since non-traditional occupations (white-collar occupations) which characterize urban activities require academic and vocational training, one expect the percentage of educated to be higher in these occupations. Therefore, about 90% of the labor force engaged in white-collar occupations were literate and educated. It is observed that 60% of them were middle educated.

In sum, farming occupations are engaged by illiterates whereas blue-collar and services occupations are dominated by illiterates and those who read and write. In contrast, white-collar occupations are occupied by a high percentage of those who received middle education. In addition, the change in the educational structure of various occupations between 1960 and 1986 can be observed in case of white-collar occupations.

One has to be very careful not to attribute the increase solely to higher demands to formal education due to an upgrading of occupational traits, because this increase is in part the outcome of an "upward educational drift" produced by social and demographic changes. As the economy develops, there is a change in the structure of the labor force, i.e. there is a tendency towards increasing the proportion of white-collar workers vis-a-vis blue-collar workers, and among the blue-collar workers for increasing the proportion of skilled vis-a-vis unskilled workers.

The process of change in the occupational distribution of the labor force is also reinforced by the ongoing technological change in each industry considered separately. The change in occupation structures is also compounded by technical innovations which cause the abolition of some occupations and the creation of new ones. In spite of the uniqueness of the effect of technological progress on the occupational structures of specific industries, the combined effect of the introduction of new production techniques in industry and the relative shift of employment between industries is, in general, to increase the demand for more skilled and better trained workers, and decrease the demand for the unskilled and uneducated.

It is observed that female employment in domestic and similar service occupations has been giving way to employment in white-collar service occupations, e.g. work in the professions, in public service, in banking and commerce and in social and cultural work of one kind or another. The apparent and quite striking attraction of women to white-collar occupations seems to be a feature of the situation in the developing countries as well as in the industrialized countries. A preference for non-manual work is evident in many countries particularly amongst the educated classes and also particularly, though by no means exclusively, among the girls for whom industrial opportunities are far more limited than for boys. Women tend to move in greater numbers into more highly skilled work and into technical and professional work. This is very largely a reflection of improvements in the education and training of girls and women but it also reflects a breakdown of prejudices, traditions, and attitudes which tended to have the practical effect of relegating women to the lower rungs of the skill ladder (Adams, 1971, p. 103).

III.2- Occupational composition of labor force by educational status:

The introduction of technological change also has an effect on the content of occupations. In the recent past, as productivity increased,

the required level of theoretical knowledge necessary to perform successfully in a job became higher. Less physical effort and slower reaction time were required of workers for the performance of an occupation whereas before a high degree of skill was synonymous with manual dexterity, the introduction of modern methods of production demanded a better understanding of the principles involved in the production and distribution processes, the skill to control and repair machines and the ability to combine manual and mental work. The complexity of equipment and its high cost imposed a higher responsibility, coupled with the ability to communicate with the written word for continuity of operations and evaluation of results. Finally, the advance of technology required workers to take on additional tasks; first the ones relating to their immediate occupation and later branching out into quite different ones. This broadening of occupational profiles necessitated more knowledge on the part of employees in each occupation (Adams, 1971, p.105).

All these new requirements for new occupations or modified traditional ones demanded increased education and training. The greater demand for better training and greater knowledge found its expression in the ever-increasing educational attainments of workers in different occupations.

Table (7) illustrates the occupational composition of labor force by educational status. There is a close similarity between the industrial composition of labor force by educational status (Table 5) and the occupational composition of labor force by educational status (Table 7).

The table shows that farming occupations were engaged by illiterates. Nearly 80% of the total labor force in these occupations were illiterate. In addition, farming occupations had not witnessed any real change in their educational structure between 1961 and 1986. This seems to be true in case of blue-collar occupations where about half of the total force in these occupations were illiterate. However, the other half were educated. It should be mentioned that the percentage of

This change in the composition of the labor force affects the social structure of society, since social class is usually related to occupational membership. Different social classes have different propensities to "consume" education. ("consumption of education" is the use of education for other than productive purposes in the economic sense). When the change in the proportion of the different occupational groups is in the direction of increasing the proportion of these groups with a higher propensity to "consume" education, there is an overall increase in the demand for formal education even by those who do not enter into the labor force. But the increase in the educational levels of those that do not participate in the labor market puts pressure on their peers that do go into the labor force to acquire at least the same level of formal education, even though the successful performance of their jobs may not actually require so much formal education (Adams, 1971, p.107).

Besides, the new entrants to an occupation, by having usually a higher level of formal education than the existing older members, because there is a trend of increasing the years of compulsory education over time, provide a "floor" of formal education levels for succeeding entrants. This floor has a tendency to "drift upwards", since in general employers demand higher formal education levels during times when there are surpluses in the labor market, and are reluctant to lower the educational requirements during labor strategies in the same degree.

It is observed that in Egypt traditionally too much attention, relatively, has been paid and continues to be paid to the education of professional and technical occupations where the gestation period is relatively long and where the way to become proficient in these types of jobs is singular and generally fairly well defined. The less conspicuous but yet important skilled manual workers, until recently, have drawn much less attention from educators and economists, despite their numbers and their role in production.

We should not forget, however, that although the way to become a skilled worker is not clearly delineated, training a craftsman may

require years of formal schooling in addition to on-the-job training and work experience. In some cases training may be substituted for schooling and vice versa, and skills appropriate to one occupation may be transferable in varying degrees to other occupations. In short, there are multiple paths of skill acquisition leading to the same objective: the production of an individual who responsibly meet the requirements of an occupation.

Section IV: Educational characteristics of labor force by employment status

IV.1- Employment status of labor force:

The analysis of the labor force distribution by employment status throws light on the economic structure of the country. This distribution is associated with the level of development particularly the organizational aspect of economic structure. Thus the proportions of employer, self-employed, employees, unpaid workers and others in the labor force are viewed as indicators to the degree of complexity of economic production. For instance, it has been observed that the percentage of "employees" in the labor force increased with the level of economic development while the reverse is observed with regard to the "self-employed" and "unpaid family workers".

The employment status classification (in which the principal categories are employers, own-account workers, unpaid family workers, etc) refers to the individual's position in relation to other workers, if any, in the enterprise. (C.D.C. 1973, p.120).

Table (8) shows the distribution of labor force in Egypt by employment status. In 1986 among the economically active population only 3.9% were employers and 25% were own-account workers. The employees constituted the majority of the economically active population (59%). The unpaid workers constituted 2%.

The employees constituted the majority of the economically active male (57.6%) and female (68.7%). However, male own-account workers constituted more than one-fifth of the total economically active male, where the corresponding percentage of the total economically active female is about 4%. As a consequence, males tend to be own-account workers more than females.

Paid employees had increased considerably between 1960 and 1986. In contrast, unpaid workers had decreased about eight times in 1986 compared with 1960. The category classified as self-employed, increased in proportion to the total economically active population. The

Table (3): Employment status of labor force by sex (10+), Egypt (1960-1986).

Employment status	1960			1976			1986		
	M	F	Both sexes	M	F	Both sexes	M	F	Both sexes
Own account workers	24.4	9.5	23.4	20.5	6.1	19.4	27.1	3.6	24.6
Employers	8.1	2.2	7.7	8.8	1.7	8.2	4.3	0.9	3.9
Paid employees	49.6	58.6	50.2	62.2	67.9	62.7	57.6	68.7	58.8
Unpaid workers*	16.0	23.4	16.5	4.0	4.2	4.0	1.9	1.9	1.9
Unemployed**	1.9	6.3	2.2	4.5	20.1	5.7	9.1	24.9	10.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: The same source of Table(2).

- * Unpaid workers include unpaid family workers and other unpaid workers.
- ** Unemployed: A person is considered unemployed if he (or she) is able to work and seeking work but not employed. Also a person is considered unemployed if he was employed but at the date is not employed.

very substantial increase in the number classified as unemployed, about two-fold between 1960 and 1986, is indicative of a very serious unemployment problem in Egypt.

The increase in the employee category reflects the growing role of government, industry, business, and other service institution as job providers and employers of an increasingly large share of the economically active population. It also reflects the bureaucratic trend where the state is becoming increasingly the sole employer of the majority of the economically active population.

On the whole, two main factors can be mentioned as responsible for the changes in the structure of the Egyptian labor force by employment status:

1- Type of production:

It is often true in the early stages of development, as in the case at present in many less developed countries, that most economic activities are carried in small, family-paid and family-managed enterprises. As development proceeds, this system gives way to a more complex type of economic organization with large-scale mass production enterprises. These shifts are reflected by changes in the status structure of the labor force; the proportionate shares of self-employed persons, unpaid family workers, and, perhaps, employers decline, while the proportion of the employee group increases. (Nassef, 1970, p. 165).

2- Urban growth:

The differences in the status patterns between urban and rural areas are very similar to those between developed and developing countries. It is observed that those classified as employers, self-employeds, or unpaid family workers decrease in proportion with the increase in urbanization. As is expected, the paid-employee group is perhaps the only group, along with the unemployed category, which increases in percentage with the increase in urbanization. Such rural-

urban differences result primarily from the nature of work in the different economic sectors dominant in rural and urban Egypt. Work on family farms, whether as employees, self-employed, or unpaid family workers, is much more common in rural areas. In services and industry, the prevalent economic activities are paid jobs. (Nagi, 1971, p. 164).

IV.2- Employment status of labor force by educational status:

Table (9) summarizes the employment status of labor force by educational status. The first four categories of status (i.e. own-account workers, employers, paid employees and unpaid workers) are discussed in this sub-sections. With regard to the remaining category "unemployed", sub-section IV.3 is devoted to deal with the relationship between the educational level and unemployment.

The table illustrates that most of the own-account workers are illiterate. Moreover, highly educated are not own-account workers. The majority of the employers are illiterate (62%) whereas 28% of them read and write. Paid employees show a different educational structure. About 40% of them were illiterate. Unpaid workers are characterized by illiteracy. Highly educated are not unpaid workers.

It should be mentioned that the degree of illiteracy had remained constant among employers and increased among unpaid workers between 1960 and 1986. In contrast, the degree of literacy had increased among paid employees.

A comparison between Table (9) and Table (10), which illustrates the employment status of labor force by industry-helps to find some explanations of the previous findings. High illiteracy observed among own-account workers, and unpaid workers can be due to the fact that most of them are concentrated in the Agriculture sector. As shown in section II, work in agriculture doesn't always require any educational qualifications. On the other hand, high literacy among paid employees is highly correlated with their higher proportion in the manufacturing and

services sectors compared with the Agriculture one. The services sector was held by literates. This seems to be true, to some extent, in case of the manufacturing sector (see Table 5).

IV.3- Educational level and unemployment:

Wastage of labor resources mainly takes the forms of unemployment (that is, a complete lack of employment for a part of the labor force) and underemployment (that is, employment which is deficient in quantity or quality, so that it doesn't sufficiently occupy the worker's time and productive capabilities or so that it yields inadequate earnings). The level of unemployment and underemployment in a country is primarily determined by economic conditions though demographic trends affecting the size and composition of the labor force also exert an influence. An important factor influencing the level of unemployment is the form of the economic structure as reflected by the proportionate shares of employers and other status groups in the labor force. The risk of unemployment bears primarily on employees.

Levels of unemployment are related to the stage of industrial development and the proportion of the labor force which is composed of employees. In countries with a low level of industrialization, the problems of unemployment are reflections of the poverty and low productivity to which these areas are subject. High rates of unemployment are recorded in some less developed countries where there is a relatively large urban population or an important wage-labour sector in agriculture. (U.N., 1973, pp. 329-331).

The unemployment rate is considered an important economic indicator. It is defined as the percentage of unemployed workers in the labor force. Data in Table (11) show that unemployment rates of the population had increased significantly between 1960 and 1986⁽¹⁾. Some important issues concerning unemployment in general

⁽¹⁾ It should be noted that the unemployment rate increased to 10.5% in rural areas and 13.7% in urban areas in 1986, from a rate of 6.4% and 9.5% in 1976, respectively. See: Zayyan, E.S(1991) Labour force structural characteristics and changes in Egypt., 1976-1986 in CDC, op.cit, p. 296

Table (11): Unemployment rates by educational status and sex (10+), Egypt (1960-1986).

Educational status	1960			1976			1986		
	M	F	Both Sexes	M	F	Both Sexes	M	F	Both Sexes
Illiterate	1.3	5.1	1.6	2.4	6.0	2.5	2.5	1.3	2.5
Read & write	2.2	12.7	2.4	2.2	11.4	2.5	4.1	7.5	4.2
Middle education	6.6	10.6	7.1	12.4	24.8	14.9	27.0	29.8	27.8
High education	3.8	8.6	4.3	8.9	18.2	10.9	25.2	31.3	26.0
Total	1.9	6.3	2.2	4.5	20.1	5.7	9.1	24.9	10.8

Source: The same source of Table (2).

Table (9): Employment status of labor force by educational status and sex (10+), Egypt (1960-1986).

Educational status	1960			1976			1986		
	M	F	Both sexes	M	F	Both sexes	M	F	Both sexes
Owa account workers									
Illiterate	69.8	92.4	70.5	62.0	59.7	62.0	71.1	81.1	71.2
Read & write	28.5	6.4	27.8	34.0	34.9	34.0	24.9	12.3	24.7
Middle education	1.3	0.8	1.3	3.0	3.9	3.0	2.6	2.7	2.6
High education	0.3	0.2	0.3	0.1	0.2	0.1	1.3	3.8	1.4
Not stated	0.1	0.2	0.1	0.9	1.3	0.9	0.0	0.9	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Employers									
Illiterate	61.9	91.2	62.5	69.5	74.3	69.5	62.1	48.8	61.8
Read & write	33.6	6.4	33.1	26.0	18.5	26.0	28.2	13.9	27.9
Middle education	3.4	1.5	3.3	2.9	4.1	2.9	5.4	20.5	5.7
High education	1.0	0.8	1.0	0.8	1.8	0.8	4.3	16.8	4.6
Not stated	0.1	0.1	0.1	0.8	1.3	0.8	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Paid employees									
Illiterate	57.4	71.6	58.6	49.1	29.7	47.4	42.9	11.6	38.9
Read & write	29.4	6.5	27.4	25.6	7.6	24.1	26.6	7.4	24.1
Middle education	10.1	16.7	10.6	18.3	45.6	20.6	22.9	66.0	28.4
High education	2.9	3.4	2.9	6.0	16.4	6.9	7.6	15.0	8.5
Not stated	0.2	1.8	0.5	1.0	0.7	1.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Unpaid workers									
Illiterate	71.1	90.6	73.2	87.1	91.6	87.3	86.7	88.1	86.8
Read & write	27.0	7.7	25.0	9.5	4.8	9.2	18.2	11.8	13.1
Middle education	1.2	0.2	1.1	0.7	0.8	0.7	0.0	0.0	0.0
High education	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not stated	0.7	1.5	0.7	2.7	2.8	2.6	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Unemployed									
Illiterate	41.3	63.1	45.9	28.9	9.2	23.5	18.8	0.7	10.5
Read & write	33.5	14.7	29.7	18.2	5.0	10.9	11.2	1.9	8.9
Middle education	21.4	18.6	20.8	39.1	51.4	42.5	57.5	78.0	62.6
High education	3.3	8.0	3.2	8.5	12.4	9.5	17.6	19.4	18.0
Not stated	0.3	0.6	0.4	10.3	22.0	13.6	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: The same source of Table (6).

Table (10): Employment status of labor force by industry and sex (10+), Egypt (1960-1986).

Employment status	1960		1976		1986	
	M	F	Both Sexes	M	F	Both Sexes
Own account workers						
A-Sector	65.1	25.0	64.0	59.6	27.8	58.9
M-Sector	6.3	10.1	6.4	11.4	28.7	11.7
S-Sector	28.6	64.9	29.6	29.0	46.8	29.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Employers						
A-Sector	75.9	45.4	74.8	80.7	72.7	80.6
M-Sector	6.4	42.5	7.6	6.1	6.3	6.1
S-Sector	17.7	12.1	17.6	13.2	21.0	13.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Paid employees						
A-Sector	41.6	25.5	40.2	39.6	15.0	37.5
M-Sector	20.8	4.7	19.4	24.1	15.9	23.4
S-Sector	37.6	69.8	40.4	36.4	69.1	39.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Unpaid workers						
A-Sector	91.4	91.8	91.4	92.6	94.5	92.8
M-Sector	2.6	2.3	2.6	2.6	2.2	2.5
S-Sector	6.0	5.9	6.0	4.8	3.3	4.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Unemployed*						
A-Sector	45.6	54.5	46.4	45.6	12.1	39.7
M-Sector	27.2	5.6	25.1	25.6	13.2	23.4
S-Sector	27.2	39.9	28.5	28.8	74.7	36.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source:

CAPMAS, 1960 Population census, Table 30, pp. 124-129

CAPMAS, 1976 Population census, Table 15, pp. 161-168

CAPMAS, 1986 Population census, Table 22, pp. 114-117

* Unemployment here is restricted to persons who were employed but at the census date not employed.

and unemployment among the educated in particular can be summed up in the following points:

- 1- In Egypt, rural-urban migration influences the pattern of urban population growth as well as all the socio-economic components of town life such as the social and public services and the employment market of the cities. Because of the high rate of rural-urban migration, shanty towns and unplanned urban settlements emerge, without much public services to meet their increasing demand. These migrants arrive usually unskilled to work in towns, they add to unemployment in urban areas-which is already high especially among the educated-or find a marginal and unproductive job in the already over-inflated service sector. Special types of education could and should be designed in order to provide these migrants with some basic learning that would increase their chances of finding appropriate productive jobs. (Unesco Regional Office for Education in the Arab Countries, 1976, pp. 255-262).

On the other hand, rural-urban migration on the part of the educated is obvious. By showing aspirations and opening new horizons, education provides a strong single motive for migration. It affects rural-urban migration especially in the following three ways:

- a) Rural youth migrate to urban settlements to take advantage of better educational facilities available there. Naturally, this migratory movement depends on the socio-economic and educational conditions of the rural population and the availability of educational facilities in urban settlements.
- b) Those among the rural population, with a higher educational attainment, are motivated to move out of the rural areas in search of better economic prospects. Such a migratory movement tends to leave rural areas greatly depleted of people with relatively higher education and may further depress the already depressed villages.

- c) The curriculum may encourage migration. Often, inadequate curriculum fails to equip the rural youth for meaningful roles in their communities. In order to find employment which correspond to their attainment level and type of education, they migrate.
- 2- Women's position as regards unemployment depends on factors which are very complex. The level and types of economic activity, the special characteristics of the female labor force, particularly its distribution according to age and marital and family status, traditional customs and practices, the attitude and policies of employers, the attitude of women themselves toward work, administrative practices governing unemployment benefit or allowances, policies relating to retirement-all these are among the factors which play an important role in the unemployment picture of women. Women, in general, still lack skill and vocational training outside the home and they suffer from the absence of properly oriented guidance and training facilities. The sharp competition for jobs between men and women often tends to deprive the latter of work opportunities in modernised industries, while at the same time mechanization of small industries has often tended to lead to the replacement of women workers by men. Moreover, while the tertiary sector (domestic service and commerce above all) and seasonal activities continue to provide employment opportunities, these are frequently unstable, subject to underemployment and to temporary employment. The high unemployment rates among females are notably obvious among those who have received middle education (ILO, 1963, p.22-24).

Unemployment of women must be born in mind because it arises in a general economic, social and psychological context already somewhat unwelcoming in most cases to the employment of women, by reason, in particular, of the inadequate expansion of employment opportunities for all, the extra social changes involved in employing women workers with the progressive

extension of measures for their production, and the substance in many different circles of traditions and attitudes hostile in some degree to the employment and vocational advancement of women.

- 3- The expansion of university education in arts, law and commerce has already caused a new unemployment problem among the university graduates. On the other hand, increasing unemployment rates among those who received middle education show the expansion in secondary education. (Nagi, 1971, p.63). This is because the number of secondary school graduates who have not admitted to the universities has risen sharply in recent years. These middle school graduates are without any special skills and, therefore, are difficult to absorb in a limited labor market. Their problems are further compounded by a number of social and economic difficulties. First, the sociocultural climate of Egyptian society is such that once a student receives a secondary school certificate, he becomes an "urban" person who tends to seek and accept only white-collar employment. Second, students who come from rural communities cannot return to work on the farms because this would be socially unacceptable, as well as economically undesirable. Third, governmental departments and business establishments are grossly over-staffed and can absorb very few additional clerks. In an already limited labor market which stigmatize manual and blue-collar work, the plight of middle school graduates, ill-equipped to handle blue-collar tasks even if they existed, is serious indeed.

CONCLUSION

The main findings in this study can be summarized in the following points:

- 1- Illiteracy prevailing in Egypt constitutes an enormous social, economic and cultural problem. Great efforts should be devoted to reducing illiteracy to the lowest possible level in order to avoid its impact on development, as it is closely linked to the socio-economic development. It is observed that males tend to be less illiterate than females. The greatest disparity between male and female illiteracy in Egypt reflects less access schooling for females and a generally less valued status in society. Further special attention should be given to female participation in the educational system, especially from the intermediate level onwards. The educational profile of the labor force (especially of females) is somewhat different from that of the population. Illiteracy among female labor force had dropped sharply between 1960 and 1986. On the other hand, the percentage of the more educated groups had increased. This reflects the "selectivity" nature of female labor force who are engaged mainly in non-traditional occupations. In addition, such change refers to more improvements in the educational attainment of female labor force compared with males who are basically occupied by farming occupations.
- 2- Declining activity rates between 1960 and 1986 reflect the impact of prolongation of schooling which has the obvious effect of decreasing activity rates of young people of school age. On the other hand, increasing female participation in the labor force with the educational level is partly due to the educational progress which makes employment opportunities more available for the educated. Education seems to be the most powerful factor trending to increase female participation in economic activities, not only by breaking down the traditional barriers, but also by opening up new and desirable employment opportunities. With

increasing education, one may expect women's share in the labor force to grow in the coming decades.

- 3- A relatively small proportion of the active population are employed in the manufacturing sector. Furthermore, the trend observed in Egypt is that the importance of the agriculture sector has been declining in favor of the services sector. Education has undoubtedly an important role to play in this connection. The fact is that general education dominates vocational education, and that functional-out-of school education is quite insufficient. This leads to a lack of qualified manpower that could enforce the development of industrial activities.

The agriculture sector in Egypt is dominated by illiterates. This constitutes a serious obstacle towards the development of agriculture. It is necessary, therefore, to make education job-oriented and practical in nature, taking into consideration the economic and social needs of the country.

- 4- The occupational composition of the labour force in Egypt shows a close similarity with the industrial composition. As a consequence, the farming occupations constitute the largest portion of the economically active population which is true in almost every agricultural country in the world.

It is observed that in Egypt traditionally too much attention, relatively, has been paid and continues to be paid to the education of professional and technical occupations. The less conspicuous but yet important skilled manual workers, until recently, have drawn much attention from the educators despite their role in production. There are multiple paths of skill acquisition leading to the same objective: The production of an individual who can responsibly meet the requirements of an occupation.

- 5- The analysis of the labor force distribution by employment status shows that the employees constituted the majority of the economically active population. The changes in the employment status of the Egyptian labor force are greatly affected by the prevailing types of production and the increasing rate of growth of urban population in Egypt.
- 6- Rural-urban migration contributes too much to the increasing employment rates especially in urban areas. In addition, the unplanned expansion in secondary and high education has caused serious unemployment and underemployment problems in Egypt.

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