

EGYPT

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FEMALE  
LABOR FORCE PARTICIPATION IN EGYPT  
AN ANALYSIS OF CURRENT  
LEVELS  
AND  
TRENDS

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(Other reports in this series covered Jordan, Morocco, Syria,  
Tunisia and Yemen).

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## I Introduction

Throughout the world, the status of women and their contribution to development are increasingly being recognized. Traditionally, development planners have tended to ignore the role of women in development and to overlook their potential when planning for economic growth. This is no less true in the Middle East, where many Western observers have a stereotype of women in Islamic cultures that romanticises their true position in society, both historically and in the context of current events. Many sociological studies are now available that should dispel this stereotype, and put the Moslem woman in perspective. These studies have added immensely to our understanding of women's role in their societies and their rights and responsibilities as well as the restrictions that govern the realization of their aspirations.

The growth of extractive industries in the Middle East, particularly the petroleum industry, has been a significant stimulus to the development of modern economies in the region. The influx of Western ideas and the movement of population to the area have both affected traditional views of women and their opportunities for economic activity. For example, the oil wealth of the United Arab Emirates has led to a development boom and demand for labor that the indigenous population has been unable to meet. Consequently, the Emirates have imported workers from other countries, such as the Yemen Arab Republic. The resulting flow of capital to Yemen has increased the demand for labor there and may indirectly affect the occupational opportunities of Yemeni

women. In turn, the migration of large numbers of foreign workers to the Emirates is viewed with some uneasiness by that government, and there has been a growing sense of the need to integrate women into the economy as a means of increasing the native work force.

These are some of the reasons that the countries of the Middle East have experienced a growth in the labor force participation rates of women and a movement of women into non-traditional occupations.

This report is one of a series of six reports on the labor market and employment situation of women in Egypt, Morocco, Tunisia, Syria, Yemen, and Jordan. Each report follows a similar format, and contains a standardized annex of data specific to that country to facilitate inter-country comparisons. The purpose of the series was to locate and examine the demographic, labor force, and employment data that are available in the Washington area, along with general data on those aspects of the physical resources, economic conditions, and other factors that affect employment conditions, with minimum attention to sociological and cultural data. The analysis focuses on the latest available data on the current situation of women in the labor force and the economic sectors and occupations where women are finding employment. We have also attempted to discover reasons why women are finding employment in those areas, and to describe the characteristics of women in the various sectors of economic activity. Where the data permit, we have analyzed the trends in

the data that have described the recent changes in the employment and unemployment situation, and the projections that have been made in the levels of population, labor force, and labor force participation.

Finally, we have attempted to identify problems and make recommendations regarding program activities and additional research that might be undertaken on the labor market opportunities for women and approaches to expanding those opportunities.

## I. POPULATION

The Arab Republic of Egypt, in the north-eastern corner of Africa, is bordered on the west by Libya, on the south by Sudan, and on the north by the Mediterranean Sea. Egypt's neighbor along a part of the eastern border, in the Sinai peninsula, is Israel, and the rest of the eastern boundary looks out along the Red Sea.

### A. GROWTH

The total population of Egypt, according to the 1976 census, was estimated at 38,228,000. In June 1979 the Central Agency for Public Mobilization and Statistics published figures that showed the population had grown to 41 million by 1979. The female population is marginally smaller than the male (20,876,000 males and 20,124,000 females). Egypt has experienced high population growth rates and in 1978 recorded a rate of natural increase which was the highest in the last seventeen years, 28.1. (The rate of natural increase is the difference between birth and death rates). During the period 1952 - 1978, the population growth rate was observed to be high in the decade of the 1950's and at the turn of the 60's, declining after 1965 and reaching its lowest point for the period in 1972, (19.9). In 1973 the population growth rate again swung sharply upward and continued the rising trend until the last recorded rate in 1978 of 28.1. Given below are the rates of birth, death and natural increase for selected years.

Table 1

SELECTED DATA ON BIRTH AND DEATHS PER 1000 POPULATION

<u>Year</u>	<u>Birth Rate</u>	<u>Death Rate</u>	<u>Rate of Natural Increase</u>
1952	45.2	17.8	27.4
1961	44.1	15.8	28.3
1972	34.4	14.5	19.9
1978	38.7	10.6	28.1

Source: Central Agency for Public Mobilization and Statistics.

Alternative projections based on varying degrees of decline in growth rates provide the following results:

Table 2

Alternative Population Projections

<u>Population</u>	<u>Rates of Growth</u>			<u>Population</u>
<u>1979</u>	<u>1980-85</u>	<u>1995-2000</u>	<u>2000</u>	<u>(Millions)</u>
(Millions)	(percent)	(Percent)		
41	2.7	2.4	71	
41	2.6	1.9	65	
41	2.6	1.4	60	

Source: Egypt's Development Strategy; Economic Management and Growth Objectives 1980-1984, Ministry of Planning Nov. 1979.

According to the Ministry of Planning:  
 "It is clear that Egypt's development policies and programs will need to be accelerated in order to achieve not only improvement of the quality of life of the forty million population of today, but also for the additional 20-25 million expected by the year 2000". (op. cit. p.3).

B. AGE

Egypt's population is characterized by its youth. Roughly 29 to 30% of its population is under 12 years of age, according to the 1976 census, and the size of this population (under 12) is almost equal to the size of the labor force in the same year. About 2.6 percent of the population is over 65 years of age. Although a breakdown by specific age groups has not been available for 1976, the population age structure for 1960, 1965, and 1970 provide indications of the major trends.

Table 3

Age Structure

(Population in 000's)

Population Aged	1960	1965	1970	Distribution in %	
				1960	1970
0-14	11,013	12,458	14,019	42.6	42.1
15-24	4,915	5,576	6,350	19.0	19.1
25-49	7,175	8,143	9,276	27.8	27.8
50-64	2,014	2,288	2,611	7.8	7.8
65-80	715	924	1,073	2.8	3.2

Source: CAPMAS

The legal working-age population is about 54.7% of the total population. However, the size of the labor force is actually about 29% of the total population, according to 1976 estimates.

## II. THE ECONOMY

From the late 60's to the mid 70's Egypt's economy has suffered pressures, many of which originated largely from outside the economy: the war of 1967 and 1973, cessation of western aid between 1967 and 1977, and slow progress towards peace in the Middle East. In more recent years the pressures have been in the form of political and economic isolation of Egypt in the Arab world, and the steep rise in the price of Egypt's main imports. On the domestic side the escalation in the world food prices led to an almost three-fold increase in the budgetary subsidies on items of mass consumption.

Heavy subsidization and slow growth of tax revenues led to increased borrowing by the Government in 1974, and the Egyptian economy entered the mid-seventies in a vulnerable state with both domestic and external resources fully stretched.

The Five Year Plan of 1978-1982 diagnoses Egypt's economic problem to broadly consist of the following:

- (1) inflation
- (2) a large deficit in the balance of payments
- (3) the inability of investment and national savings to meet the requirements of social and economic development
- (4) the difficulty of changing those traditional habits which are incompatible with development
- (5) a decrease in manpower productivity
- (6) the increase in population
- (7) a shortage of administrative leadership in areas related to development.

The disequilibrium between the government's expenditure and resources pushed the government to borrow from the Central Bank through an increase in the money supply, which in turn produced inflation. Up to 1974/1975, through large amounts of aid "from both Arab and non-Arab sources" Egypt was able to live with expenses 27% beyond her domestic resources. (Five Year Plan, 1978-1982, Vol. I, 1977; p. 4).

The economy took a turn after 1974. There was an increase in annual growth rates of GDP at constant factor cost, from 2.7% in 1974 to an average 9.3% over the next three years. The surge in investment and output growth was attained with the help of increased aid flows from OECD countries and of dramatic rises in workers' remittances. This has contributed to the tightening of the domestic market for manual labor and to sharp rises in real wages.

Table 4

GDP at Constant Prices by Economic Activity  
(in millions of Egyptian Pounds)  
(At 1970 Prices)

Econ: Activity	1973	1974	1975	1976
Agriculture	815.4	817.5	837.5	870.9
Industry, Petroleum and Mining	647.4	671.8	751.8	901.0
Electricity	56.0	60.4	69.8	75.2
Construction	112.3	83.3	128.5	134.5
Transport and Communication	163.5	180.2	241.3	239.0
Trade and Finance	313.6	350.3	386.5	392.9
Housing	124.0	127.1	130.0	159.2
Public Utilities	16.5	18.7	20.0	19.3
Other Services	826.6	863.3	919.1	976.3
GDP at factors cost	3,075.3	3,172.6	3,848.5	3,768.3

Source: Ministry of Planning

It appears that growth in the construction sector increased dramatically in 1975 and 1976. Agriculture shows relatively low and consistent growth from 0.3 to 4%. Industry, petroleum and mining fluctuate in their annual growth rate, from 3.8% in 1974 to 19.8% in 1976. Transport and communications had high annual growth rates in 1974 (10.2%), and 1975 (33.9%), but shows negative growth in 1976 (-1.0%). The "Other Services" sector shows a relatively consistent pattern of annual growth 4.4% growth rate in 1974, 6.5% in 1975 and 6.2% in 1976.

Egypt's exports consist of crude petroleum and petroleum products, primary products such as raw cotton, rice, fruits (oranges), and semi-finished products such as cotton yarn, essential oils, etc. Finished products exported by Egypt are textiles, sugar, footwear, other leather goods, chemicals, alcoholic drinks, books and periodicals and cement. Both in 1975 and 1976, out of the four categories of fuel, primary products, semi-finished, and finished products, the value of exports in the primary product group exceeded others.

Table 5

<u>Commodity Exports (Customs Basis)</u> <u>1/</u>	<u>1975</u> (millions U.S. \$)	<u>1976</u>
(a) Fuels	132.4	381.7
(b) Primary Products	698.9	660.2
(e) Semi-finished products	226.9	198.9
(d) Finished Products	341.7	285.2

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Source: CAPMAS and IMF

1/ Data based on customs records and hence differ from the balance of payments figures which are based on exchange control records.

Egypt's imports can be classified into:

- (a) Fuels: crude petroleum, coke and coal
- (b) Primary commodities: wheat, tobacco, maize, wool, sesame, etc.
- (c) Intermediate commodities: animal & vegetable oils, chemicals, waste and scrap metals, iron and steel, dye stuff, wood, paper fertilizers electrical products, rubber and rubber products, oils and wax, etc.
- (d) Capital commodities: automobiles, other transportation, textile machinery, electrical products, earth moving equipment.
- (e) Consumer commodities: durable and non-durables.

In 1976, based on customs records, and valued in U.S. dollars, the intermediate and capital commodities imports are stated as having the highest value. However the data based on customs records is not presented here, because such admissions procedure seriously under-record imports, and some imports are even understated.

III 1. THE WORKING POPULATION: Aspects of Demand and Supply

Several factors point to the fact that Egypt possesses a serious employment problem. A World Bank report points out that, on the supply side of the labor market, the acceleration of population growth is the principal cause of concern. Before World War II, population was growing at a rate of one percent per annum, taking approximately 90 years to double; in 1978 it was estimated that population was growing at 2.8 percent per annum, taking less than 30 years to double. Even if population growth rate begins to decline, there will be a long lag before this deceleration influences the rate of growth of Egyptians of working age. It is projected that over the next ten years the population between ages 15 and 60 years will increase by 7 million, at an average rate of 3.2%, a rate higher than the projected growth rate of the population as a whole.

Also on the supply side, (and it might be noted that "supply" relates to the labor force, while "demand" relates more to actual employment in economic activities), the declining labor force participation rates which characterized the 1939-1970 period seems to have been reversed. The declining participation rates were due largely to two factors: the increase in the proportion of the youngest age groups with their relatively low participation rates, a corollary of rising population growth rates, and the rapid increases in school enrollment, particularly in the 1950s and 60s. During the 1970's, however, the participation rates of males and females have begun to increase with the stabilization of population growth and the slowing of increases in enrollment ratios, and this trend is likely to continue.

Table 6

Labor Force 1/ Participation Rates  
(Percent)

Year	Females	Males	Total
1937	7.9	65.1	37
1947	7.8	62.8	37
1960	4.8	55.2	30
1966	4.2	50.8	28
1970	3.5	49.5	26
1972	4.0	50.7	27
1976	4.9	52.9	31.5

1/Defined as people aged 6 and over.

Source: Population Census, 1937, '47, '60, '66, and '76; and Labor Force Sample Surveys, CAPMAS.

1/ Defined as people ages 6 and over.

A. POPULATION NOT IN LABOR FORCE

According to the data for the Egyptian Five Year Plan 1978-1982, whose statistics published in 1977 on population were based on preliminary estimates (prior to subsequent adjustments by CAPMAS for the 1976 Census and to which discrepancies in numbers may be attributed) the labor force total was 11,709,000 in 1976, out of a population of 38.2 million. The legal non-working age population consisted of an estimated 11.7 million under 12 years of age and 1.07 million over 65. (See Table 4).

The total student population of all ages in schools, institutes, and universities was estimated at 2.8 million. There were 10.8 million persons consisting of "housewives and others, who do not desire to work, and the disabled". The Five Year Plan estimates show the total number of persons outside the labor force to total 26.5 million.

Taking into account the actual number of school students in 1976, and other physically able, working age groups currently outside the labor force, the estimates show that the available labor force in Egypt is 11.1 million.

The Five Year Plan estimates an increased rate of growth of female participation in the labor force, particularly from 1980 onwards. In its projections for the female labor force, the plan raises the rate of increase to 4.5% annually from 1980 to 1987 as a result of "increased involvement of women in education and employment." (The Five Year Plan 1978-1982, Vol. Two, August 1977, P. 174).

Table 7: Labor Force Balance for the Year 1976 to 1978

Item	(Thousands of Workers)											
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
(1) Total Population	38,228	39,000	39,971	40,870	41,769	42,675	43,593	44,517	45,447	46,388	47,334	48,290
(2) Outside Working Pop.	26,521	27,018	27,516	28,017	28,519	28,976	29,441	29,895	30,354	30,811	31,255	31,678
Population Less than 12 Yrs. old	11,774	11,976	12,178	12,379	12,581	12,781	12,982	13,181	13,380	13,578	13,779	13,156
Students in Schools, Institutes, and Universities(12+)	2,811	3,037	3,281	3,546	3,832	4,142	4,477	4,840	5,232	5,658	6,118	6,617
Housewives and Those Who do not Desire to Work & Disabled (12+)	10,866	10,910	10,938	10,948	10,895	10,815	10,718	10,583	10,379	10,183	9,938	9,656
Population 65 Years Above	1,070	1,095	1,119	1,144	1,211	1,238	1,264	1,291	1,363	1,392	1,420	1,449
(3) Labor Force	11,709	12,081	12,463	12,853	13,250	13,699	14,152	14,622	15,093	15,577	16,071	16,612

Table 7 Cont'd from page 11

(4) External Demand for Employment	600	680	740	780	820	850	875	900	925	950	975	1,000
(5) Available Labor Force in Egypt	11,107	11,401	11,723	12,073	12,430	12,849	13,277	13,722	14,168	14,627	15,104	15,612
(6) Required Employment in Egypt	9,628	9,988	10,359	10,738	11,135	11,642	12,166	12,729	13,325	13,957	14,617	15,324
Obvious & Disguised Unemploy.	1,497	1,413	1,364	1,335	1,325	1,207	1,111	923	843	770	487	288

- (1) Total Population of 1976 was increasing assuming that population growth rate will continue to decrease during the period 1976-87 at the same rate as during 1966-76.
- (2) The population in the age group 12-65 has been estimated by adjusting age structure ratios of 1976 census to take the age structure of those outside the Republic the night of the census into consideration. The ratios are calculated according to their rate of increase between the censuses of 1960-76.
- (3) The rate of increase of women in the labor force was calculated up to 1980 on the basis of their rate of increase between 1960-76. This rate is then raised to 4.5% annually until 1987 as a result of increased involvement of women in education and employment. The ratio of males in the labor force to the whole male population was growing on the basis of the rate of increase for 1960 and 1976 censuses.
- (4) External demand for employment was taken from Arab and Foreign Investment Authority's estimate which was subject to a rate of increase that raised the size of exported employment to one million in 1987.
- (5) The actual number of school students in 1976 was taken into consideration. The calculation is made on the basis of the average rate of increase in the previous three years. Specifically, the number of students in secondary schools was subject to an annual rate of increase of 7.2%; the number of students in general high schools was subject to an annual rate of increase of 8.5%; the number of students in technical high schools was subject to an annual rate of increase of 8.5%; the number of students in teaching schools was subject to an annual rate of increase of 7.8%; and the number of students in universities and high institutes was subject to an annual rate of increase of 10%.

Source: The Five Year Plan 1978-1982, Vol. Two, Aug. 1977.

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**B. AGRICULTURAL EMPLOYMENT**

On the demand side of the labor market, major structural changes in the economic sectors have occurred. Leading among these changes is the decline in the share of agriculture in total employment. Employment in agriculture has declined from 58.4% in 1947 to 47.7% in 1976. The limited absorptive capacity of the agriculture sector with its relatively slow rate of growth of employment is a major source of concern. In Egypt, as in other land-scarce developing societies, the major cause for decline in agriculture's share of employment has not been the rapid rate of growth in non-agricultural employment but the slow pace of land augmenting, technical progress. Given Egypt's limited cultivable land area, too slow technological innovation or innovation of the wrong type (e.g. labor saving) implies rapidly diminishing returns to labor in Agriculture. 1/

Table 8: Index of Agricultural Population per Sq. Km. in Census  
Years for Egypt

<u>Year</u>	<u>Index of Total Population</u>	<u>Index of Density of Agricultural area</u>
1882	100	100
1897	242.6	142.7
1907	164.7	165.8
1917	186.7	189.0
1927	208.8	208.8
1937	233.8	237.7
1947	279.7	278.6
1960	282.4	393.9
1966	441.2	431.1
1976	538.2	525.3

Source: Central Agency for Public mobilizations and Statistics.

1/ The total area of A.R.E. is 1 million square kilometers of which approximately 6% is currently arable and 25,00 sq. kilometers is under cultivation for production of the principal crops: wheat, maize, rice and cotton.

The high population density in 6 percent of Egypt's land area, that is, 41 million persons in 55039 sq. kilometers, amounts to 745 persons per square kilometer. Moreover, the estimated growth rate of agricultural areas in Egypt has been among the slowest, according to World Bank estimates, which explains why since 1882, the index of total population and of total population per square kilometer of arable land have increased at virtually the same pace. (See Table 6).

The only way that the downward pressure on return to agricultural labor can be alleviated is through growth of demand for labor in non-agricultural sectors.

Currently, production in the agricultural sector is characterized by technological dualism. A World Bank agricultural report states that about 85 percent of farmers use bullock and human labor. The other 15 percent use varying amounts of machine technology and produce single-purpose crops specifically for off-farm sale.

After the revolution of 1952 direct Government intervention began in agriculture with land reform. At the time about 4,000 landlords owned the same amount of land as 2,640,000 peasants, while another 1,200,000 laborers were landless. A series of reforms eventually limited ownership to 50 feddans a person (1 feddan = 1.038 acres), and land was distributed to those with little or none. Over 90 percent of land titles are currently for lots of less than 5 feddans. Leasing is common on about 40% of farms and the average farmed unit is 3.5 feddans.

Although land rents, tenancy conditions, and farm wages were changed affecting a great number of people, the problem of rural poverty, fixed land area, inheritance laws, fragmentation, a rising population and lack of opportunity has made agriculture less attractive as an area of economic activity.

The employment generation capacity of agriculture is unchanged. Over 50 percent of the population is supported by farm work. Since 1972 real wages in agriculture has fallen, as has the overall average. Despite increase in irrigated land area, improved cropping intensity and pressure of population and relatively fixed land area resulted in declining per capita performance. Total sectoral production has increased at less than 2 percent a year. Egypt no longer exports wheat but instead imports twice what it produces. The quantity of rice and cotton available for export has declined. Contribution of agriculture to the general growth of the economy has varied but it has generally been below the average rate of growth for the economy as a whole.

Growth. El-Tobgy's study of Egyptian agriculture, based on Ministry of Agriculture data for growth is measured in terms of value added at constant prices, and shows an overall growth rate of 2.2% a year from 1952 to 1971 <sup>1/</sup> (See Table below).

1/H.A. El-Tobgy, Contemporary Egyptian Agriculture (Beirub: Ford Foundation, 1974).

From 1971 to 1974 estimates by Food and Agricultural Organization and U.S. Department of Agriculture show an annual growth rate of 1.7% and a negligible increase in per capita food production largely because increases in productivity and land area lagged behind population increases.

Table 9

Value Added in Agricultural Production,  
At Current and Constant Prices (1952 Prices)

<u>Period</u>	<u>Value Added (Million LE)</u>		<u>Index (Constant prices)</u>
	<u>Current prices</u>	<u>Constant prices</u>	
1952	252	252	100
1952 - 54	279	254	101
1955 - 59	364	275	109
1960 - 64	459	311	123
1965 - 69	675	349	138
1970 - 72	839	393	156
Growth Rate (%)	6.1	2.2	2.2

Source: Ministry of Agriculture

Structure of Production

Ministry of Agriculture information reveal change in composition of output, a movement from cotton and cereals toward higher value items like meat, fruit and vegetables, between 1952 and 1977.

Among field crops, which account for 56% of the value of agricultural output (1974), berseem is the most important in area and value. Vegetables accounted for 14%, fruits 5%, meat 11%, dairy products 8%, poultry, meat and eggs 4%, and wool and honey less than 1 %, of the value of agricultural output in 1974. The leading winter crops are wheat and berseem, which provide food for the farmer and his animals. In summer, cotton

are the most important cash crops, and maize and sorghum are the major subsistence crops.

Employment & Wages

According to a World Bank report agricultural sector wages have declined faster in real terms than the overall decline in real wages and are now roughly one-third the average real wage for all sectors. Of the two components of income, wages and profits (rents here are included in profits), wage earners in agriculture have suffered a decline in income as population growth employed in agriculture shared a more slowly growing income. Vegetable growers with access to urban markets have had larger increases in income compared to cotton growers, whose real incomes seem to have fallen. (A study of wage data for cotton in 1975, by governorate, indicates that the closer the region is to Cairo the higher the wages.) The table below shows average annual wages by economic activity at current prices, and shows agriculture trailing far behind the others.

Table 10

Average Annual Wages By Economic Activity  
(LE at current prices)

	1970/71	1972	1973	1974	1975 a/
Agriculture	55.6	57.3	60.5	65.1	87.0
Industry & Mining	248.2	257.1	287.1	297.0	311.0
Construction	190.5	198.6	222.6	233.2	340.0
Transport & Commun.	260.3	266.7	279.7	291.4	315.0
Trade & Finance	162.7	182.0	190.1	195.5	219.7
Other	299.4	305.9	320.0	366.9	(-)

a/Provisional

Source: Ministry of Planning

Although it is difficult to estimate employment in this sector, there is an abundance of arguments with analyses based on obsolete and statistically inadequate data. It is clear, however, that there is a surplus of labor available, and according to a IBRD source, even if Egypt's 6 million feddans of farmland at full cropping intensity were put under three vegetable crops a year, the most labor intensive of all crops - excess manpower would still exist. The annual wage in agriculture for 1974 shown in the table above represents 130 days worked per year per worker. This suggests the possibility of serious underemployment in the agricultural area. Albeit, some of the surplus labor is engaged in public sector works, and many registered landowners lease out their land and are not active in the sector. The employment situation further has seasonal patterns with labor requirements at peak periods (harvest) sometimes six times greater than they are during slacker periods of the crop cycle.

As the foregoing discussion suggests, the agricultural employment situation is difficult to assess although enough evidence exists to show that the sector suffers from faster declining real wages compared to overall average real wages, that there is underemployment, seasonal unemployment and structural unemployment as well as regional variations in unemployment and wages (depending on proximity to urban centers).

C. NON-AGRICULTURAL EMPLOYMENT

A picture of the labor absorptive task of non-agricultural areas can in many ways be traced with information on urbanization trends. Egypt has 48% of its population living in cities, a level lower than that of various Latin American countries, and roughly comparable to the level of urbanization of Korea and Algeria, and twice that of India, Nigeria or Indonesia. Much of the population shift has occurred over the past 40 years: since 1937 urban population has quadrupled while the rural population has increased by 70%. The absolute increase in population in urban areas was twice that in the rural areas.

Table 7 shows projections of the Egyptian urbanization pattern to the year 2000, by the UN.

Table 11: Urbanization Pattern in Egypt (pop. in 000's)

	Size		Pop. %		Compound Growth Rate	
	1975	2000	1975	2000	1970-75	1995-2000
Urban	17,822	42,716	47.7	64.3	4.20	3.24
Rural	19,546	23,726	52.3	35.7	1.15	0.49

Source: UN Urban-Rural Projections from 1950-2000 (October 1974), medium tempo with medium variant; World Bank Atlas, 1974.

The projections indicate that the proportion of the total population living in urban areas will increase from approximately one-half to roughly two-thirds. The urban population is expected, in absolute terms, to more than double, an increase of 25 million in 25 years.

The capacity of the non-agricultural employment to absorb the growing labor force at rising or even constant real wages is indeed a pessimistic thought. Although the recent rates of growth of non-agricultural sector output in Egypt have been historically unprecedented, and, are even higher than those achieved by the more developed countries during their periods of industrialization, and while this sector's employment growth has also been impressive when compared to Egypt's prior experience, it is only when compared to the unprecedented growth of non-agricultural labor supply that the modern sector labor demand seems inadequate.

Previously, during the 1960's, the non-agricultural and industrial sector employment growth rate had accelerated, due not to "a higher rate of investment, but was a result of employment policies; after nationalization in 1961 and 1962 the Government compelled public companies to engage more persons than they

actually required. <sup>1/</sup> Establishments did not resist since the prevailing price system did not penalize inefficiency: the cost-plus method of pricing, together with high tariff, allowed firms to pass on the increased wage bill as higher prices <sup>2/</sup>. Firms could not lower wages in reaction to the labor oversupply as they were prohibited from doing so by labor legislation which established rigid wage schedules. There are constraints, however, under such policy rules. Since the 1974 "October Paper" and the "open door" policy there has been a return to the more normal incentive system in both factor and product markets. Table 12 shows employment growth of the agriculture and industry sectors during the 60's.

Table 12

Employment Growth in Agriculture and Industry, 1960, 1966, 1971. (000's)

<u>Year</u>	<u>Sector</u>	<u>Employment</u>	<u>Sector</u>	<u>Employment</u>
1960	Agriculture	4,406	Industry	734
1966	"	4,447	"	1,089
1971	"	4,471	"	1,045

Source: Labor Force Sample Survey, CAPMAS, 1971 and 1974.

<sup>1/</sup> R. Mabro "The Egyptian Economy 1952-1972." (Clarendon Press, Oxford 1974). P. 208.

<sup>2/</sup> Ibid., P. 137

D. TERTIARY SECTOR EMPLOYMENT

In Egypt, the movement of labor from agriculture to low-paid, low productivity jobs in certain service activities is not akin to reallocation in industry. Labor in these activities "does not generate an economic surplus; the growth of these activities is unlikely to contribute to economic development through external economies or technical progress," states Mabro. "The reallocation that takes place is ....a transfer of the locus of poverty, underemployment and low productivity from one economic sector... to another." As with rural surplus labor, the private returns to labor exceed social returns. Table 13, shows the productivity per worker of service workers to be second only to the lowest output per worker of the agricultural sector in 1974 and 1987. It is counter-productive, to say the least, that surplus workers from one labor-surplus sector (agriculture) should be forced to move to another one such as the service sector.

Table 13  
Productivity per Worker 1974 and 1976  
LE 000's (In 1976 Constant Prices)

Sector	1974 1/	1976 2/	1987 2/
Agriculture	0.4	1.5	2.1
Petroleum and Mining	3.7	4.3	12.8
Manufacturing	0.8	3.0	7.4
Construction	6.0	5.6	8.4
Electricity	1.7	7.7	15.3
Transport	0.6	13.4	9.9
Trade and Finance 3/	0.6	)	
Housing 3/	1.2	)	
Public Utilities 3/	0.4	)	
Services 3/	0.5	)	6.2

Source: 1/ Ministry of Planning  
National Bank of Egypt Economic Bulletin, Vol. XXVIII, No. 4, 1975.  
2/ Egypt: 1976-80, Five Year Plan.  
3/ All four service areas have been combined for 1976 and 1987.

## E. MIGRATION

The petroleum crisis following the October war in 1973 drew attention to the dramatic contrast among the countries of the Middle East in terms of wealth and size: the most populous countries are the poorest in natural resources, and the richest countries are smallest in population.

Egypt has the largest pool of manpower among the Arab countries and exports not only skilled but also semi-skilled, and to an extent unskilled labor to Kuwait, Saudi Arabia, Libya and the Gulf states. As a result, the entire structure of the labor force is involved in and affected by this movement.

The migration pattern in the Middle East is characterized by a complex network of flows that is dominated by Egyptian workers in other Arab states. According to Choucri, the distinctive features of the migration are the following:

- 1) It is a pattern of flow among developing countries; labor remains within the region rather than moving further out.
- 2) It involves the entire structure of the labor force.
- 3) It is not permanent but temporary in nature, generally from one to four years.
- 4) It is recognized as an explicit feature of the political economy of the region.
- 5) It is maintained by economic imperatives; the supply and demand for labor generate an underlying rationale that places pressures on policy responses for regulating and facilitating the movement of labor.

The volume of labor migration has risen notably since 1973 and has resulted in the internationalization of labor. Egypt leads among the labor-exporting countries (comprised mainly of Jordan, Yemen and Egypt) in the region. Between 1968 and 1971 the number of Egyptians leaving annually to work abroad nearly doubled; between 1971 and 1973 the number doubled again, in excess of 500,000 and has remained at high levels since then. Development programs of newly rich Arab oil exporting countries have generated demand for labor at all skill levels. Rates of pay enjoyed by Egyptian labor are 5-10 times (or more) what they can earn at home. The closest, though still crude, estimate is that the stock of Egyptians working abroad reached one million in 1979. The principal migrant-receiving countries are Saudi Arabia, Libya, the Gulf States, and Kuwait. (The "self-sufficient" countries as far as such labor movement is concerned are Tunisia, Morocco, Syria and Iraq, although it might be noted that many Moroccans work outside Morocco, mostly in France).

The exact extent of influence caused by migration on manual wage increases since 1973 is difficult to determine. However, the experience of the construction industry between 1966 and 1974 suggests a significant impact. Average wages in construction rose by 28% between 1972 and 1974; over the previous six years the cumulative increase was less than 10%. Yet the output of the construction sector, hence presumably the domestic demand for labor, was actually lower in 1974 than in 1972. The association between the significant increase in wages and increase in external demand for labor thus appears clear.

Egypt has long provided the technology of the Middle East, exporting professional manpower and more recently, relatively unskilled workers as well. Teachers, engineers, lawyers, doctors from Egypt have formed the backbone of the professional communities in Libya, Kuwait, Saudi Arabia, etc.

Although precise figures are not available, educated estimates of migrants are in the range of over one million, or 10% of the total labor force. Government figures place remittances at LE 157.5 million in 1976.

F. Unemployment

The 1976 census shows the number of unemployed persons to total 38,312 and estimates that only 5,308 out of these are women. This is a surprisingly small number, particularly so when we compare the number of unemployed persons in 1960 estimated at 164,086 of which 32,963 were women.

As in most developing countries, unemployment data in Egypt suffer from problems of definition and measurement. Nevertheless they are all we have, and changes in unemployment rates are an indicator, though crude, of changes in the balance between supply and demand.

Table 14(a), which has data only up to 1972, shows a declining aggregate rate of unemployment since 1957. The unemployment rates available for more recent years are not strictly comparable.

Table 14(a): RATES OF UNEMPLOYMENT BY ECONOMIC ACTIVITY: 1957-72

Year	Sector					Aggregate rate of unemployment
	Agri-culture	Manu-facturing	Con-struction	Commerce	Services	
1957	2.1	4.4	10.7	1.9	-	5.1
1958	1.8	5.1	13.7	2.4	-	3.5
1959	1.9	5.4	17.8	2.6	2.8	4.9
1960	2.2	6.0	15.3	2.5	3.1	4.8
1961	3.0	6.1	16.3	2.6	3.7	4.7
1962	0.4	2.9	5.6	1.2	1.3	2.2
1968	0.6	4.7	7.4	1.6	1.5	2.8
1969	0.4	2.3	4.7	0.9	1.0	2.5
1970	0.3	1.8	5.4	0.7	0.8	2.2
1971	0.1	0.8	0.8	0.7	0.3	1.7
1972	0.1	0.5	0.5	0.3	0.2	1.4

Sources: Labor Force Sample Surveys, CAPMAS.

As mentioned earlier, the 1976 census reported the group classified as unemployed to number less than 25% of the total unemployed persons in 1960.

According to estimates shown in Table 9, the 1972 rate of unemployment (1.4%) is the lowest since 1957. The 1976 census reports an even lower level: that the unemployed are a mere 0.4 percent of the total labor force.

In viewing the sectoral levels of unemployment, we find agriculture to contain the lowest rate and traditionally, appears to be an area of low unemployment rates, with the highest rate since 1957 recorded at 3.0% in 1961, (again, allowances must be made for definition and measurement problems, particularly in the agricultural sector). Manufacturing shows a declining rate of unemployment also, but has faced relatively high rates in the past compared to agriculture, commerce, and services. The most spectacular decline in unemployment rates is shown by the construction industry, plagued up to 1971 by the highest unemployment rates among all the major sectors of the economy, but taking a turn in 1962, and again showing a significant drop from 1971 onwards, the 1972 rate being only 0.5%. From the data it can be concluded that in construction, rates of unemployment declined faster than other sectors, largely because the increase in labor demand exceeded increase in labor supply by a particularly large margin. This is supported by other evidence: claims of absolute scarcities of certain construction skills (See N. Choucri, et al - 1978), and the rapid wage increase in the sector, (See Section Construction Sector of this report).

Of the unemployed in 1976, almost 57% are illiterate, compared to 46.7% in 1960. Unemployment is second highest at the next level of educational status, the "literate" who are 20.7% of the unemployed. The third level in educational status, "certificate below intermediate" however shows the lowest level of unemployment among all the six groups classified by educational status.

The picture is somewhat different for female workers: though illiterate women have the highest rate of unemployment, in keeping with the national trend, the second highest unemployment level is to be found among women with "intermediate" level education (16.3%) and the third highest among those with "High" level education (10.5%). Hence unemployment does not decrease linearly as education level increases.

The lowest share of the unemployed women is found in the group with "Certificate below Intermediate."

Table 14(b)

Percent Distribution of Unemployed by Educational Status, 1976

	F	M	I
Illiterate	58.1	56.7	56.9
Literate	7.5	22.9	20.7
Certificate below Inter.	2.2	2.8	2.7
Intermediate	16.3	8.1	9.2
High	10.5	7.0	7.5
Not stated	5.2	2.4	2.8

Source: Population Census 1976.

There is a lack of information regarding underemployment in the case of Egypt. The closest measure we can use as an indicator of underemployment is to look at the levels of productivity per worker for the sectors, described in Table 13. As noted before, services, including the government sector, is reported to contain large number of surplus or low productivity workers. In the case of government it is a policy to absorb every graduate of college/university who wishes to join the public sector.

The population census shows two categories of unemployed persons. Translated, these are persons (a) unemployed (experienced), and (b) "Seeking a job for the first time":

(a) The highest unemployment level for males in the unemployed (experienced) category is the 30-34 age group (7,393), followed by the 35-39 age group, (4,518 persons). For women who are unemployed (experienced), the largest age group is also 30-34 years (1,234), but this time followed by the 10-14 years age group, which is clearly baffling, given that it is a very young group to be included in the "experienced" and unemployed category, yet at the same time quite sizeable (1,024) compared to other groups. Clearly, it is necessary to determine the definition and connotation of the terms used to classify employment status in the Census of 1976.

(b) The census figures do not show any persons over 30 years of age to be "Seeking jobs for the first time" (See Table 15, Census of 1976). However, in the interest of utilizing the data that are available, it may be noted that the largest group "seeking jobs" among males are the 20-24 age group (138,776), and among females it is the 6-9 age group. The population under this classification is much larger than those classified "unemployed(experienced)".

TABLE 15  
The Unemployed (experienced) \*and Those Seeking Work For the First Time  
By Sex and Age, Egypt 1976

		6-9	10-11	12-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65	NEC	Total
Unemployed (experienced)	M	-	1,298	2,820	491	510	357	8,393	4,518	4,031	3,411	3,816	2,800	1,973	-	17	34,435
	F	-	553	1,064	59	89	32	1,234	633	577	362	459	281	296	-	4	5,643
	T	-	1,851	3,884	550	599	389	9,627	5,151	4,608	3,773	4,275	3,081	2,269	-	21	40,078
Seeking Work	M	131,315	40,777	77,957	87,254	138,776	44,977	-	-	-	-	-	-	-	-	-	521,056
	F	126,088	23,225	32,396	27,184	65,778	11,417	-	-	-	-	-	-	-	-	-	286,088
	T	257,403	64,002	110,353	114,438	204,554	56,394	-	-	-	-	-	-	-	-	-	807,144

Source: Derived from Table 8, Census of 1976, p. 137.

\*It might be noted that there is a discrepancy of 1,776 persons in the data for the "unemployed" category of this table when compared to the unemployed in Table 16, where the total is 38,312.

To summarize, unemployment appears highest in the 30-34 age group for both men and women. For those "seeking work" the largest group is to be found in the 6-9, and the second largest in the 20-24 age group, among the females. The third group among women is the 12-14 years old classified as "seeking work". It is necessary for our purpose to obtain the definitions used by the census authorities in establishing classifications, and until this is done, some of the categories and their values must be used with caution.

TABLE 16: EGYPTIAN ARABS BY EMPLOYMENT STATUS, SEX AND EDUCATIONAL STATUS (Persons 10 yrs. & over)

Employment Status	Sex	Illiterate		Literate		Certificate Below Intermediate		Intermediate Certificates		High <sup>1/1</sup>		Not Stated		Total	
		1960	1976	1960	1976	1960	1976	1960	1976	1960	1976	1960	1976	1960	1976
Employers	M	346,521	586,112	103,970	221,059	9,499	4,500	9,320	9,616	5,751	6,543	623	6,148	555,684	833,978
	F	10,686	10,439	730	2,604	66	4,500	106	275	94	256	11	186	11,693	13,863
	T	357,207	596,551	104,700	223,663	9,565	4,603	9,426	9,891	5,845	6,799	634	6,334	567,377	847,841
Self Employed	M	1,183,530	1,225,672	466,030	670,951	11,864	14,508	10,192	12,064	5,707	2,813	2,203	15,189	1,679,526	1,941,197
	F	30,013	30,013	3,134	17,516	215	438	176	449	78	99	132	653	51,047	49,168
	T	1,230,842	1,255,685	469,164	688,467	12,079	14,946	10,368	12,513	5,785	2,912	2,335	15,842	1,730,572	1,990,355
Paid Employees	M	1,973,807	2,934,466	977,969	1,535,457	101,240	172,364	230,352	537,258	98,824	361,364	11,270	53,707	3,393,442	5,594,616
	F	225,676	166,213	19,366	42,316	6,153	22,995	41,515	191,260	10,650	91,910	3,523	4,176	308,883	518,870
	T	2,199,483	3,100,679	997,335	1,577,773	107,393	195,359	271,867	728,518	109,474	453,274	14,793	57,883	3,702,325	6,113,486
Unpaid Family Workers	M	775,358	336,572	282,525	36,332	6,965	59	5,500	-	157	-	7,099	9,209	1,077,604	382,172
	F	112,526	30,934	8,649	1,484	51	3	66	-	9	-	1,782	956	123,183	33,379
	T	887,884	367,506	291,174	37,816	7,116	62	5,566	-	166	-	8,881	10,167	1,200,787	415,551
Other Unpaid Workers	M	13,162	1,171	5,569	660	270	6	94	-	81	-	146	26	19,322	1,863
	F	1,660	163	321	154	41	5	28	-	16	-	34	3	2,094	325
	T	14,822	1,334	5,890	814	311	11	122	-	97	-	180	29	21,416	2,188
Unemployed	M	55,348	18,720	43,046	7,559	4,826	937	22,995	2,684	4,384	2,315	529	789	131,123	33,004
	F	21,344	3,085	4,606	400	903	118	4,896	868	1,021	560	193	277	32,963	5,308
	T	76,692	21,805	47,652	7,959	5,729	1,055	27,891	3,552	5,405	2,875	722	1,066	164,086	38,312
Labor Force 1+2+3+4+5+6	M	4,347,721	5,102,711	1,959,089	2,472,018	134,664	192,374	278,453	561,622	114,907	373,035	21,870	85,068	6,856,701	8,786,530
	F	419,204	240,847	36,806	64,474	7,529	23,662	46,787	192,852	11,862	92,825	7,675	6,233	529,863	620,913
	T	4,766,925	5,343,560	1,995,895	2,536,492	142,193	216,036	325,240	754,474	126,766	465,860	29,545	91,321	7,386,564	9,407,443
Unable to Work	M	132,015	265,769	29,880	85,746	2,619	2,738	4,307	19,240	1,760	10,366	4,103	10,936	174,684	394,795
	F	298,703	622,132	4,958	20,510	403	1,427	979	3,289	36	642	4,038	23,256	309,117	671,256
	T	430,718	887,901	34,838	106,256	3,022	4,165	5,286	22,529	1,796	11,008	8,141	34,192	483,801	1,066,051
Not Seeking Work	M	557,092	197,307	814,793	1,188,425	60,092	672,785	303,574	363,973	7,416	18,331	32,577	51,321	1,775,544	2,492,112
	F	6,804,515	8,692,106	1,011,961	1,595,085	91,477	433,042	146,665	234,812	3,973	31,452	63,400	211,333	8,121,971	10,997,830
	T	7,361,607	8,889,413	1,826,754	2,783,510	151,569	1,105,827	450,239	598,785	11,389	49,783	95,977	262,654	9,897,535	13,489,972
Not Stated	M	3,224	55,357	2,179	34,511	266	4,782	409	10,861	63	4,024	894	21,528	7,057	131,063
	F	1,776	592	333	274	16	167	20	438	5	372	496	211	2,646	2,954
	T	5,000	55,949	2,512	34,785	282	4,949	429	11,299	68	4,396	1,390	21,739	9,703	133,117
Total	M	5,040,052	5,621,146	2,805,941	3,780,700	197,641	872,679	586,743	955,696	124,165	405,756	59,444	168,853	8,813,986	11,804,830
	F	7,524,198	9,355,677	1,054,058	1,680,343	99,425	458,298	194,451	431,391	15,876	125,291	75,609	241,053	8,963,617	12,292,053
	T	12,564,250	14,976,823	3,859,999	5,461,043	297,066	1,330,977	781,194	1,387,087	140,041	531,047	135,053	409,906	17,777,603	24,096,883

<sup>1/1</sup> University first degree, postgraduate diploma, masters' degree and doctorate.

G. WOMEN NOT IN THE LABOR FORCE

Table 12 shows a total of 13,489,972 persons 10 years old and over not seeking work, of whom 10,997,830 are women. According to the 1975 Census data, 10,005,912 women over 10 years of age are housewives. Roughly 4,208 women are estimated to be retired/pensioners, and 13,912 women are "handicapped, not able to work." Full-time female students (it might be noted that these categories are not necessarily mutually exclusive) total 2,588,191, the largest number to be found in the 6-9 age group. If we exclude this group for purpose of comparison with Table 21 (ages 10+), the number of female students is 1,675,165.

Table 17: Women not in Labor Force, 1976

Full time students (ages 6+)	2,588,191
Full time students (ages 10+)	1,675, 165
Housewives	10,005,912
Retired/pensioners	4,208

Source: Census, 1976, Table 8

The categories do not explain adequately what the almost eleven million women (from which we can exclude about 1.6 million students) not seeking work, are actually doing. Table 12 suggests that about 8.4 million of these women are illiterate. There is a need for further investigation of this group to determine how many of these are itinerant workers, petty traders and the like.

### III 2. FEMALE EMPLOYMENT

#### A. WOMEN IN THE LABOR FORCE

According to the Egyptian census data for 1976 there appears to have been virtually no growth in the overall female labor force over the period 1970-76. The size of the female labor force seems to have remained almost constant with a marginal reduction of about one percent over the six years. Apart from definitional and reporting discrepancies/problems, this non-growth can also be partly explained by demographic changes such as the massive migration of labor that occurred following the 1973 oil crisis and growth in demand for labor in oil rich Arab States. Such changes altered the regular pattern of labor market conditions and flows.

Although the female labor force remained virtually constant in size according to the census count, the trends in sectoral changes continued as before. In the sectoral shifting or reallocation of female labor, agriculture lost about 41,000, industry gained in its share by 13,000 (from 89,000 in 1970 to 102,000 in 1976), and services increased by about 22,000 (from 386,000 to roughly 408,000) in 1976. The progressive decline in the size of the agricultural labor force is, if anything, a positive trend in the case of Egypt. Further relieving of pressure on agricultural land and production is necessary, for even the current concentration of labor in agriculture is excessive given that it holds roughly 45% of the total Egyptian labor force and contributes only 28% to the GDP. (Sectoral contribution to GDP derived from World Bank Economic and Social Data for 1976/1977.)

The services sector, which absorbed 65% of the increase in female labor between 1960 and 1970 can be divided into government services and private services, with a significant proportion of the latter falling into what is becoming popularly known as the "informal sector," as distinct from establishments or small firms.

That very large part of the services sector which is non-governmental and non-establishment, v.i.z. the informal sector, consists for the most part of relatively low-skilled and mostly low income workers.

Table 18  
Working Population Classified by Economic Activity in Census:  
Total Population 1937, and 1976

Economic Activity	1937	1976	%
Agriculture, forestry, fishing %	4,020,431 69.2	4,878,632 47.7	21
Mining, quarrying %	10,828 0.2	33,402 0.31	208
Manufacturing %	352,706 6.1	1,366,642 13.4	287
Construction %	120,706 2.1	423,752 4.1	251
Electricity, gas, water %	20,966 .4	61,681 0.6	194
Commerce %	439,542 7.6	856,531 8.4	95
Transport and communication %	138,911 2.4	479,373 4.7	245
Services %	701,749 12.1	1,947,761 19.0	177
Activities not adequately described %	3,433 0.1	182,179 1.8	431
<u>Total Working population</u>	<u>5,809,272</u>	<u>10,229,953</u>	<u>76</u>

Source: Population Census, Egypt 1937 and 1976.

The tertiary sector, which has increased its share of total employment from 24 to 38% between 1937 and 1976, is much larger than the industrial sector when measured in terms of employment. Table 18 shows that between 1937 and 1976 roughly 57% of the total increment of 4.42 million to the Egyptian labor was employed by the tertiary sector. The share of the industrial sector in the total employment of women was only 13.3%, compared to the tertiary sector's 57.5%, over four times that of the former, in 1970 (see table 19). By 1976 the tertiary sector's share of total female employment had grown to over 60% while industry's share increased only to 15%. However one cannot neglect industry's growth in female employment: whereas in 1960 services share was over 10 times as large as industry's, in 1976 it was reduced to only four times as large as industry's share of female labor. (Table 19).

Compared to the agriculture sector, the jobs available in the services and manufacturing sectors usually require a minimum level of education. The trend in Egypt however is the entry, in larger numbers, of women into services as compared with manufacturing. Findings show that this is due to several factors. One is that in the Arab region, according to a World Bank report, the services sector has a relatively larger output value than the manufacturing sector, and offers relatively large numbers of jobs. Hence services can accommodate more labor than the manufacturing sector.

Another factor is that the variety of jobs offered in the services sector is larger than in the manufacturing sector, and this helps in accommodating different levels of educational attainment and different kinds of female labor demand for jobs.

Expansion of female employment in the transport and construction areas have been small, compared to the increments in services.

Since 1960 changes in the sectoral pattern seem to have followed a general trend for employment of the labor force. The services sector showed the second largest absolute increase in total (male/female) employment in the period 1960-70, and has had the largest absolute increase in the employment of women. By itself, the service sector has absorbed 23% of the increment to the total Egyptian labor force during this period.

As for women, between 1960 and 1970 there was a net increase to the total female labor force of about 127,000. When we take into account the decrease in the agricultural sector of 59,000 most of whom, we may assume, transferred into the services or industry sectors, we can see that the total increase in the size of female labor force in the non-agricultural sectors was 186,000. Of this increase in female labor, services absorbed roughly 65% and industry absorbed 35%, the former showing an absolute increase of 122,000 at the end of the period and the latter growing by 65,000.

Table 19  
Labor Force Estimate in Agriculture, industry and Services  
(000's)

	Total			Male			Female		
	Agri.	Ind.	Serv.	Agri.	Ind.	Serv.	Agri.	Ind.	Serv.
1950	3804	786	1739	3595	738	1522	209	48	217
1960	4366	913	2203	4111	888	1939	255	25	264
1970	5068	1750	2501	4872	1660	2115	196	89	386
1976*	4667	1877	2811	4512	1775	2403	155	102	408
<u>Percentages</u>									
1950	60.10	12.42	27.48	61.40	12.60	26.00	44.05	10.20	45.75
1960	58.35	12.20	29.45	59.25	12.80	27.95	46.90	4.55	48.55
1970	54.38	18.78	26.84	56.34	19.20	24.46	29.15	13.32	57.53
1976	50.00	20.08	30.00	50.25	19.80	27.62	23.16	15.38	61.40

Source: ILO Labor Force Estimates, 1950-1970, Africa, Vol. 2, Geneva 1977, and National Census, 1976.

\*1976 Total does not include "activities not adequately described" with a total of 175,783 persons, of whom 30,887 are women and 144,896 are men; hence percentages are close approximations of the proportions.

**B. LABOR LAWS AFFECTING WOMEN**

Egypt became a member of the ILO in 1936. By 1963 it had ratified 32 of the ILO Conventions. Labor Law No. 19 of 1959 provided a uniform labor code for Egypt, covering all workers, including agricultural workers. This law and later presidential decrees regulated the structure and functions of unions, defined collective bargaining as well as individual and collective labor contracts, and set forth means for settlement of labor disputes.

The government normally sets wage and salary levels in the public sector and minimum wages in the private sector. While unions in the private sector have begun to acquire more potential for collective bargaining on wages and workplace issues, institutionalized collective bargaining has not advanced far in determining wages. It is noted that in both public sectors, unions have been concerned primarily with protecting members' jobs and living standards in the face of rapid inflation.

New labor laws passed in July 1977 cover national social security and public sector employment. They regulate the grade structure, salary scales and increases, promotions, incentive awards, bonuses and cost of living allowances for the 2.75 million public sector employees.

The daily minimum wage is set at 150 piasters (about \$2.22). The legal minimum age is 12 years. Women have equal employment rights to men.

The labor law stipulates equality of pay for women. Most of the provisions currently in force reflect the standards established by the ILO conventions. Women are entitled to a pregnancy and confinement leave in the private sector of up to 50 days with 70 percent of salary and in government sectors of 30 days with full salary. A woman may not be dismissed during her prescribed maternity leave or during a total period of 6 months due to the results of pregnancy or confinement. These benefits of paid leave etc. are to be accorded to women provided they have completed 7 consecutive months of work in the service of the same employer before the interruption. Two nursery breaks of 30 minutes each are accorded nursing mothers during the working hours for a period of 18 months. Any establishment employing more than 100 women, (a fairly high minimum) must provide suitable nurseries for their children under six. Enterprises employing women are required to have seats to enable women to rest. The subscription by the woman worker for the use of nursery varies from 5% to 3% of her salary per child, depending on the number of her children currently using the nursery. The nursery is to have medical, teaching, feeding, and recreational facilities. Furthermore, a female worker who chooses to retire after marriage or child birth may claim a leaving indemnity equal to one-half month's pay for each of the first five years of service and one month's pay for each additional year.

There are also included in the social insurance act, provisions for women relating to benefits of medical care during confinement and premature pension on attaining the age of 45.

Jobs Closed to Women:

Women were banned from work in certain types of employment which are deemed hazardous to their health and/or morals, or which are arduous. Order No. 64 and later, Resolution 19 of 1978 issued subsequent to the labor code, enumerates these types of employment, some of which include work in bars and gambling clubs, in underground mines and quarries, and in the manufacture and handling of explosives (See following page). Juveniles, men and women in the agricultural sector and in domestic workshops were not covered by the legislation.

Ministerial Resolution No. 19/1978

On defining works women are not allowed to be engaged in

- Issued by Minister of Manpower and Vocational Training.

It is impermissible to use women in the following works:

- 1) Bars and gambling casinos.
- 2) Preparing alcohol and all kinds of liquors.
- 3) Underground in mines, quarries and all other works related to excavating minerals and cutting stones.
- 4) Furnaces used in melting and refining metals.
- 5) Explosives and related activities.
- 6) Melting and blowing of glass.
- 7) The mixing and kneading process of the electric batteries and their repairments.
- 8) Asphalt industry.
- 9) Tanneries.
- 10) Depositories of manure made of human ordure, animal dung, bones or ashes
- 11) Skinning, cutting, scalding animals and melting their fats.
- 12) Caoutchouc; Rubber.
- 13) Loading and unloading goods in docks, quays, ports, storehouses and all sorts of portorage.
- 14) Steevadoring cottonweeds in vessels holds.
- 15) All carbon processing states except that of sorting the bones prior to their burning.

Nightwork:

The Ministerial Resolutions No. 63 and No. 64 of 1978 governing women's nightwork were abrogated.

Ministerial decree No. 20 of 1980 is currently the instrument regulating night hours for female workers.

Article 1 of the resolution permits employment of women during the hours 7:00 p.m. to 8:00 a.m. in any of the following jobs, occasions and circumstances, (provided that Law No. 19 of 1978 regarding the inadmissibility of using women in physically or morally abusive work be not breached):

- 1) Hotels, restaurants, pensions, cafeterias and buffets subject to the superintendance of Ministry of Tourism. Also theatres, cinemas, music and song halls and all other similar public places.
- 2) Shops that open their doors at night in the two cities of Port Said and Suez on the arrival of steamships carrying pilgrims during Haj season.
- 3) Hospitals, sanitariums and other health centers.
- 4) Pharmacies and mass-media centers.
- 5) Joint ventures established according to Law No. 43/1974 for Local and Foreign Capital and Free Zones Investment where work circumstances necessitate such delay in working hours.
- 6) Airports, tours offices, aviation and projects and firms involved in the local transportation of persons and goods whether by land, sea or air.

- 7) Working in preparation of vegetables, fruits, roses and flowers for exportation.
- 8) Working in gathering blood in slaughterhouses.
- 9) Leading posts or jobs requiring high degree of self confidence.
- 10) Selling agents or Commercial agents, who have assignments outside the business quarter.
- 11) Working during feasts, festivals, other occasions and the seasonal works started on Item IV of Article (120) of The Labor Law referred to above.
- 12) In case women's work becomes necessary to avoid an evitable loss due to the nature of goods, the Labour Office should be informed within 24 hours of the details of the emergency case and of the time needed to accomplish it. A written consent must be obtained from the Office which can be issued later.

Article (2)

Working women in the weaving and spinning companies, lawyers and accountants offices, exhibitions and international fairs may take place from 2 p.m. to 10 p.m.

Article (3)

It is conditional to employ women under any of circumstances or in any of the jobs referred to in the above two previous articles, that employers should obtain a license issued by the Administration

of Manpower and Vocational Training after verifying that the stipulated securities and facilities for transportation and safety in favour of women employees have been fulfilled.

Unions:

Presidential decree No. 62 of 1964 set the number of unions at 27, extended freedom of association to all workers including civil servants and nationalized industry workers, provided for formation of vocational trade union committees for agricultural workers, and also for industrial establishments which employ fewer than 50 workers.

To join a trade union a worker, male or female, must be 15 years of age or over. No worker may join more than one union (Article 163). No applicant can be refused except by a two-third majority decision of the executive board, and a worker not accepted may file his/her objection in the magistrates' court within whose jurisdiction his/her workplace is located.

The Egyptian Federation of Labor (EFL) has 21 affiliated general unions (see Appendix for names), with an estimated membership of more than 2 million members. Professional groups such as teachers, engineers, doctors and lawyers, have their own separate organizations.

Separate legislation (No. 375 of 1977) provides special benefits for workers in the free trade zones.

It provides on-the-job training at any Egyptian training center, for a maximum of 6 months, at the employer's cost.

GENERAL UNIONS OF THE EGYPTIAN FEDERATION OF LABOR (EFL)

- General Union for Spinning and Weaving
- General Union for Land Transport
- General Union for Railways
- General Union for Agricultural Workers
- General Union for Petroleum and Chemicals
- General Union for Trade Workers
- General Union for Bank and Insurance Workers
- General Union for Post, Telegraph and Telephones
- General Union for Workers in War Production
- General Union for Engineering Industries
- General Union for Management and Social Services
- General Union for Workers in Construction and Wood
- General Union for Health Services
- General Union for Workers in the Press, Printing and Information
- General Union for Workers in Mines and Quarries
- General Union for Food Industries
- General Union for Maritime Transport
- General Union for Tourism and Hotels
- General Union for Public Utilities
- General Union for Education
- General Union for Air Transport

### Application and Enforcement

The legal minimum working age is 12 years. The 1978 census shows that almost 8 percent of the female economically active population is in the 6-11 age group. It is a boon for analysts that the census minimum age for counting economically active population is 6 years, much lower than in other countries, hence we know that one-third of the population aged 6 years old or a little older is reported to be in the labor force. The violation of the legal minimum age, however, appears to occur largely in the agriculture sector, where the legal code is neither applied nor enforced.

Egyptian labor code demands equal pay for female workers. In 1978 the average per capita annual wage was estimated at LE 224. However, there is a great variation in annual wages by sector; agriculture: LE153; industry, petroleum and mining LE311; construction LE340; trade and finance LE220; and services (mainly government) LE430. Data on the current average wages for men and women in the various sectors is lacking. (LE = 1 U.S. \$).

As such the stipulation of the labor code makes it expensive for establishments to hire women. Equality of pay in addition to many special benefits accorded to women, provision of seats on the premises, etc. make the hiring of men simpler and cheaper compared to employing women. Many enterprises do not apparently honor all these provisions, for example, 1970 statistics show that several failed to provide nursery facilities. There were only 978 nurseries catering to 46,988 needy children, some two-thirds of which are located in rural areas (Abdel Kader, 1973: 41). Also in spite of provisions mandating equal pay for equal

work, women tend to have lower wages. Wage differentiation on the basis of sex is of course most pronounced in agriculture, less in commerce and industry, and least distinct in the service sector (Badran, 1972: 17).

Women are left out of occupations because the labor laws are not enforced effectively. Employers often contravene the provision that no discrimination be made on the basis of sex. Most of the discrimination originates with the societal conventions about the suitability of the type of employment for women, and this not only keeps women from applying for many jobs, but the government as well as private organizations are known to frequently reserve positions for men. (Each government agency is accorded independence in setting the criteria for the nomination, appointment and promotion of personnel, and few women are seriously considered even for many appointments primarily because they have not previously held such a rank).

Protective legislation for women in the labor force often acts to maintain segregation by sex and constrains greater female participation in the labor force.

The rights in hiring, training and employment lack operationalization, for other than ensuring "equality", there are no programs or targets related to the goal of equal treatment.

Institutional supports are lacking. Need for day care facilities in organizations tends not only to be ignored, but the provision that only at the 100-worker minimum level is a day-care nursery to be established, makes it easy to evade establishing

one. In other words, employers can ensure that women up to the 99th will have to do without. Further, the employer's disincentive to hire the 100th woman is clear for his cost at hiring this person will be far greater than her marginal productivity. On the whole hiring women in large numbers may be viewed as a poor investment. (See section on Recommendations, for further discussion of legal provisions for women).

C. SOME CHARACTERISTIC FEATURES OF THE FEMALE LABOR FORCE

Published data indicate that Egyptian women not unlike women of the region, have a very low rate of participation in economic activities. The 1976 census reports the participation rate for women is 5.3 percent, i.e., the proportion of the women in the labor force, out of the population of women aged 12 years and over. The proportion of the labor force that is female is 6.9 percent. Some of the interesting features of the female work force are briefly outlined below.

- Women professionals, managers, and other types of white collar workers comprise more than 49% of all working women. Only 2 to 3 percent of all factory workers in 1977 are reported to be women.

- Surprisingly, Egyptian women with education tend to dominate the labor force rather than illiterate women from social classes whose need for a supplementary income would appear to be greater. Men from upper and middle classes also tend to hold liberal attitudes towards their women working, but generally under certain conditions, such as positions that are specially prestigious or work which involves contact mostly with other women.

It is clear that women in the labor force appear to be clustered in occupations which require an education, and educated women consequently comprise a high proportion of the female labor force.

Table 20

Percent Distribution of Each Occupation that is Female 1/

<u>Occupations</u>	<u>1969 % Female</u>	<u>1978 Female</u>
Scientific, Professional, technical	24.6	26.3
Managers	5.2	9.7
Clerks	11.3	22.5
Salesperson	9.7	5.0
Agricultural occupations	6.1	2.0
Transport and communications	0.3	) 2.4
Laborers and workers	5.1	) —
Service workers	18.7	9.0

Source: CAPMAS, 1969, 1978.

1/ The 1969 and 1978 estimates must be used with caution as they may not be comparable due to definitional changes.

- Professional occupations which are part of the service sector also show a preponderance of Egyptian women. A large part of this is explained by the seclusion tradition of the Arab region: a girl should be educated by female teachers, a woman's health is to be treated by a female doctor and cared for by female nurses. As put by Ester Boserup: "In countries where women live in seclusion, the demand for professional women...is a necessary result of those rules." (Boserup, 1970).

- Egyptian women seeking work tend to be mostly younger women rather than older ones. The participation rate for women reaches its peak in the 20-29 age group in non-agricultural activities, and 6-9 and 10-19 in agriculture, and decreases in general with advancing age, reaching a minimum at 65 and older age groups.

- The division of labor by sex in Egyptian rural households accounts for the high activity rates for girls starting at age 6 and peaking between the ages 12-14 and 15 to 19 in agriculture. In mining and quarrying female activity is highest at the 20-24 age group, and similarly with manufacturing industries, electricity gas and water, construction, and wholesale and retail trade, restaurants and hotel work. In the transport, storage and communications sector, and the other services including finance, insurance, real estate and business services as well as community, social and personal services, women belonging to the 25-29 age group have the highest participation rate.

- The viability of agriculture and farm work in Egypt is said to depend heavily on unpaid labor. This unpaid labor is comprised to a great extent of women's work and of child labor. The 1976 Census data indicate that girls in the 6-9 years age group have the highest participation rate among female unpaid family workers.

More women in the 15-19 and even up to the 20-24 age group tend to work as own account workers than women belonging to other age groups. Most of the women who are active as employers tend to be much older, most of them to be found in the 40-44 age group.

- For the college graduate, male or female, the government is employer of the last resort. This contributes to the existence of surplus labor in the service sector. It also makes the typical service sector worker a moonlighter. Many government workers drive taxis after office hours, or work in shops or do other part-time jobs. The percentage of females working in services is 50.5%, and roughly 10% work in manufacturing.

Table 21: Major Female-employment Economic Activities and their Share of Female Labor Force, 1976 (ISIC at two-digit level)

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Farming, Hunting and Poultry	22%
Social and Related Service	25%
Cotton, Ginning, textile and leather	8%
General administration and security	14%
Personal and domestic services	9%
Retail trade	6%
Total	84%

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Source: Census for Egypt, 1976

Of the 34 economic activities listed (at a two-digit level of detail) in the census, the six shown above hold approximately 84% of the entire population of economically active women. The other 16% are thinly distributed in the other 28 classification of economic activity. However, it is of interest to note certain sectors like electricity, gas and water and construction have shown the highest increase in female employment between 1960 and 1976, albeit they have a small base figure to begin with. Neverthe-

less, female employment in 1976 was 1143% the level of 1960, and in electricity, gas and water, it was 1658.8% the size of the base figure. (See Table 22).

- Evidence exists to show a fairly steady decline in the aggregate rate of unemployment since 1957. Such changes, however accurate in measurement, are all we have as indicator of changes in the balance between supply and demand. Nonetheless, they support the impression that open unemployment is not a problem and that in the 1970's the Egyptian labor market has been progressively tightening. Compared to other developing countries where rates of open unemployment are four to five times those prevailing in Egypt, the Egyptian rates can be said to be unusually low.

In 1976 the census shows the total number of unemployed persons is roughly 38, 000, less than 25% of the total number (164,000) classified as unemployed in 1960. (Table 12).

Some explanation of the recent tightening of the market for manual labor in Egypt can be located on both the supply and demand side. The most notable contributing factor is external migration of workers.

EMPLOYMENT:

IV. Female Employment by Economic Sector

A. The Service Sector

Women's participation in the service sector is by far the largest compared to other sectors. The 1976 census estimates 327,294 women or roughly 50% were engaged in "community, social and personal services". This is in marked contrast to the 89,609, or 13%, in manufacturing, and even in agriculture where the total number of women was 155,564 or 23%, less than one-half of the participation in the services sector.

The nature of the services sector, a large portion of which is informal, is such that allows for easy entry, and hence more and more workers are permitted to obtain a share of the total income generated in that sector even though they may not raise total output.

When viewed from the perspective of declining marginal productivity, as more workers join this largely informal sector, the rapid growth of the service sector is a symptom of the larger employment problem in Egypt. However, although one may make theoretical assertions about the economic role of this sector in terms of its size and output, there exists in the case of Egypt a lack of evidence on income trends and labor utilization necessary to assess them. One can only say that in Egypt as in many other LDC's, a higher share of the labor force is to be found in tertiary activities than in the more developed countries at comparable stages of development.

In viewing the agriculture, industry and services sectors, we find a trend of declining proportion of working women in agriculture:

from 44.05 percent of female labor force in 1950, 46.90 in 1960 and 29.15 in 1970, and 23.16% in 1976.\* Industry's trend has been fluctuating, at least up to the 1960's: 10.20% in 1950, 4.55% in 1960, and taking an upward trend in 1970 with 13.32%. Analysis of the data from the 1976 Census show that the industrial sector's share of the female labor force is 15.38 percent. The trend for the services sector is the only one consistent and rising: 45.75% in 1950, 48.55% in 1960 and 57.53 for 1970, according to ILO estimates based on local government statistics. By 1976 the share of the services sector grew to 61.40 percent. There is a sizeable group of women workers, 4.63%, according to 1976 census estimates, whose work comes under "activities not adequately described." For the sake of parity one can assume at least one-third belong each to the three major sector groups.

(The division of activities according to the three sectors are based on the U.N. International Standard of Industrial Classification code of economic activities, revised in 1968. The "industrial" sector is comprised of: manufacturing; mining and quarrying; electricity, gas and water; and construction. "Agricultural" sector is comprised of: agriculture; fishing; forestry; and hunting. The "Service" sector includes wholesale and retail trade, restaurants and hotels; transport, storage and communications; finance, insurance, real estate and business services; and community, social and personal services.)

\* 1950, 1960, and 1970 are ILO estimates; 1976 is estimated from 1976 census data.

Women comprise roughly 15 percent of the total service workers in Egypt at present compared to the industry sector where only 5.43% of the workers are female. As mentioned earlier, this preponderance in services is due in part to the low level of training and education required for many of the occupations that are included within the range of activities described in the service sector, which can accommodate many diverse and traditional skills, and also allows for easy entry or reentry. In Egypt, like in other culturally conservative areas, women have limited access to training opportunities, and as a result women's jobs tend to be based on traditional skills rather than formal training. Not only are women heavily represented in the service sector, and many of these are professionals, their number in service activities is roughly four times that of women in industry and almost three times the total number of female workers in agriculture.

In 1950 the agriculture and service sectors were roughly equal in their share of women workers, (about 45 percent each, with 10 percent in industry). Up until 1960 there was no substantial movement of women into the service sector (47 percent in agriculture and 48.5 percent in services). It was not until 1970 that a substantial change appears with a reduction in agriculture's share to 29% and an increase in services' share of women workers to 57.5%. In 1976, agriculture's share declined to further 23%, and services rose to about 61.5%. It is important to examine the nature of this change and the occupations in which women are engaging in growing numbers.

In 1976, the services sub-group in which women are most heavily concentrated are the "general society" or community, social and per-

sonal services, with about 80% of the total in services, compared to the 12% share of wholesale and retail trade and 4% each in transport, storage and communication services, and finance, insurance, real estate and business services. The preponderance of women in "general society" services can be attributed in large part to the social and related, including education and health services, where almost all work as employees and only 0.3 percent are active as employers and own account workers. Women in the category of "general society services" alone account for almost 25% the total economically active females in Egypt.

The other main employers of women currently in the labor force are cotton, ginning, textile and leather industries, employing 45% of the total number of women in manufacturing industries and almost 6% of the total female labor force.

As mentioned earlier, there is a lack of evidence on wages and incomes related to employment in the service sector.

#### Major Occupations of Women in Services Sector

The services sector includes Transport and Communication; Wholesale Retail trade, Restaurants and Hotels; Finance, Insurance and Real Estate, and Social, Community and Personal Services.

In 1976 the service sector employed roughly 60% of the female labor force. Listed below are some of the major occupations of the Service Sector in which women are represented in substantial numbers, (and some in which women are not necessarily in large numbers, but which are unusual and indicate the scope for women entering non-traditional occupations).

<u>OCCUPATIONS:</u>	<u>TRADITIONAL</u>	<u>No.</u>	<u>NON-TRADITIONAL</u>	<u>No.</u>
Social Worker		6400	Aircraft pilots, navigators, flight engineers	46
Steno and typist		2802	Protective service workers	498
Bookkeeper, cashier		19786	Economist	222
Stock clerks and other clerical workers		66653	Accountants	11056
Government Administrators		10109	Lawyers	1571
Barber, beautician		1033	Government executive officers	9405
Commercial Artists		688	Transport & Communications Supervisor	363
Nurses		29925	Postmasters	252
Medical doctors, dentists and med-assistants		6285	Pharmacist	1790
Salesperson, vendors		18159	Production Supervisor and foremen	154
Mail distribution clerks		1046	General Mangers and Production managers	1327
Working proprietors (Wholesale & Retail Trade)		13316	Managers (Catering and Lodging Establishments)	109
Clerical Supervisor		3134	Personnel Specialist	690
Agronomist		3329	Architects	344
Midwives		2151	Civil Engineers and Tech.	(347 + 93) = 440
Teachers		89668	Electrical " "	(542 + 673) = 1,215
Cooks, Waiters		1866	Mechanical " "	(229 + 117) = 346

Maids	33679	Chemical Engineers and Tech.	(137 + 31) = 168
Building caretaker	10757	Metallurgical " "	(7 + 19) = 26
Charworker, cleaners	8945	Mining " "	(29 + 2) = 31
Telephone operator	1714	Industrial Engineer and Others	820

It is interesting to note that although there were an estimated 1,917 female lawyers there is not a single female judge. The 1244 judges in Egypt in 1976 were all males.

Clerical workers in the service sector comprise almost 16% of all female service workers. If we take all industries together we find that in 1976 there were 135,064 female clerical workers, roughly 19% of the total female workers. An estimated 60% of all female clerical workers were engaged in government sectors; manufacturing industries' share was about 15%. Cooks, maids and waitresses comprise almost 9% of the total female service workers.

There appear to be no women engaged as transport equipment operators, although there are female transport and communications supervisors (363). These must be largely communications (telephone and telegraph) supervisory positions.

B. Manufacturing Sector

1. Wages

The average gross money wage (i.e. wages before deduction of income taxes and social security contributions payable by the workers) has been derived from payroll data supplied by a sample of establishments furnishing data on hours and employment. The trend of wages (per week) are shown as average earnings for all industries in 1969, 1972, and 1975.

TABLE 22

Trend of Wages \* in Manufacturing (All industries)

Year	Male	Female	Total (Piastres per week)
1969	410	298	403
1972	468	320	458
1975	556	375	543

(\*Weekly). Source: Yearbook of Labor Statistics, ILO., P.400

TABLE 21

Wages in Manufacture by Industry, Egypt 1970 & 1975

(weekly in Piastres)

<u>Year</u>	<u>Food</u>	<u>Beverages</u>	<u>Tobacco</u>	<u>Textile</u>	<u>Clothing</u>	<u>Footwear</u>	<u>Wood</u>	<u>Furniture</u>	<u>Paper</u>
1970	392	548	742	530	307	410	354	300	367
1975	561	649	655	570	417	608	499	562	531
	<u>Printing</u>	<u>Industrial Chemicals</u>	<u>Other Chemicals</u>	<u>Refining Petroleum</u>	<u>Petro-Products</u>	<u>Rubber Products</u>	<u>Plastic Products</u>	<u>Pottery, China</u>	
1970	573	524	586	794	404	474	421	293	
1975	857	601	612	875	877	730	572	521	
	<u>Glass</u>	<u>Other Non-Metal Minerals</u>	<u>Iron &amp; Steel</u>	<u>Non-Ferrous</u>	<u>Metal Products</u>	<u>Machinery</u>	<u>Electrical Machinery</u>	<u>Transport Equipment</u>	
1970	385	465	717	647	448	639	428	667	
1975	578	645	628	516	709	708	572	729	
		<u>Scientific &amp; other instruments</u>		<u>Other Manufacturing Industries</u>					
1970		441		388					
1975		516		504					

Source: Yearbook of Labor Statistics, ILO., 1979.

## 2. OUTPUT/EMPLOYMENT ELASTICITY

Trends show that the urban population has quadrupled in the last forty years, and this places a heavy burden on the non-agricultural sector to efficiently employ the growing labor force. To determine the prospect of additional employment in industries and ascertain its impact on output, analysts often estimate output elasticities. An IBRD study focuses on the relationship between output and employment growth in the various sectors in Egypt. Table 24 shows measures of output elasticity of demand for labor for the period 1961-66 and 1971-76.

### Employment and Output.

In trying to determine investment with an eye to employment generation, the output elasticity measure may be of use in indicating the magnitude of additional labor that an industry can efficiently absorb (the word efficient is used in the economic sense). The limitation of the table used here, however, is that under each sector, manufacturing for instance, there is lumped together at least forty diverse productive activities whose differences in labor and capital intensity vary widely with the nature of the industries. However, the purpose here is to view the six broad sectors comparatively. The elasticities are purely descriptive: the lower they are the greater the increase of output associated with a given (lower) rate of growth of employment, and the higher the implied increase in labor productivity. Stated another way, it is a ratio which shows the unit change in output with a unit change in labor. Generally, if the elasticity of substitution between labor and capital is less than unity, the share of wages in total income will fall. (Hence an increasing skew in the functional or factoral distri-

bution of income may be another result of the employment problem). As in many other developing countries, most sectors in Egypt show elasticities well below unity. For example, in transport and communications, during the period 1971-76 the elasticity was only .45; i.e. growth of output of over 66% was associated with a growth in labor of only 30%.

Although modern sector employment has been impressive when measured against earlier experience and the experience of other LDC's, it is only when measured against the unprecedented increase in labor supply that the growth of labor demand appears inadequate.

The manufacturing sector has an elasticity of .9 for the period 1961-66; for the period 1971-76 the elasticity is much lower, .38. That is, the ratio  $L/Q$  shows that growth of output is greater than the given rate of growth of labor. Put another way, the "efficiency" of labor is greater. The output per unit of labor is influenced by any number of reasons: new technology, or a more capital intensive structure, more training and skill on part of labor, of efficiency of labor due to other modernization of techniques, management, or organization.

Whether low output elasticities of demand for labor may be due to greater efficiency of labor or of capital and technology, the fact remains that it does not ease the concern about Egypt's employment problem. Elasticities for "other services" are higher, .99 in the period 1961-66, and 1.17 for the period 1971-76. This means that trend of employment in the services sector is growing at a rate faster than the rate of growth of output.

Table 24: THE OUTPUT ELASTICITY OF DEMAND FOR LABOR: 1961-66; 1971-76

Sector	1961		1966		1961-1966			1971		1976		1971-1976		
	Labor/ <sup>b</sup> force	Output/ <sup>a</sup> (1964/65 prices)	Labor/ <sup>b</sup> force	Output/ <sup>a</sup> (1964/65 prices)	Labor force growth rate	Output growth rate(X)	Output elasticity of demand for labor (7)=(5/6)	Labor/ <sup>b</sup> force	Output/ <sup>a</sup> (1970 prices)	Labor/ <sup>b</sup> force	Output/ <sup>a</sup> (1970 prices)	Labor force growth rate	Output growth rate	Output elasticity of demand for labor (14)=(12/13)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Manufacturing, petroleum, mining	734	314.1	998	436.9	6.0	6.6	.90	1,045	640.1	1,210	701.0	3.1	8.2	.38
Construction	159	44.2	206	88.5	6.0	16.6	.36	295	118.9	434	134.5		2.6	
Transportation and communi- cation	260	114.1	340	201.3	5.1	11.3	.45	324	143.6	422	239.0	6.0	13.3	.45
Public utilities	37	19.8	51	34.6	6.3	11.1	.57	26	54.1	47	94.5		11.2	.7
Commerce	641	162.0	699	190.7	1.5	2.2	.68	808	274.2	1,016	392.9	5.1	8.7	.58
Other services	1,489	313.6	1,602	462.4	7.5	7.6	.99	1,541	693.8	2,276	976.3	9.5	8.1	1.17

<sup>a</sup> In millions of Egyptian pounds

<sup>b</sup> In 000s

Sources: A. Habro ( )  
Basic Economic Report

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Abnormally high elasticities, such as that demonstrated by the services sector, is also a problem in that there is the tendency for labor incomes to decline due to the accumulation of surplus labor.

In the manufacturing industries, elasticity was higher during the 1961-66 period because of government regulations that compelled companies to engage more labor than actually required, and growth of output was not linked to the "optimum" size or growth rate of industrial employment. Return to a more market orientation during 1971-76 is reflected in the lower elasticity of demand for labor which fell from .90 in 1961-66 to .38 in the later period.

The service sector is by nature more labor-intensive. If one were to focus on employment generation as a goal, and to be concerned with the volume of jobs created, as well as its quality, it is useful to realize that generally, basic, large-scale industries (such as steel) tend to be relatively more technology-based, and capital intensive, whereas secondary and small-scale industries tend to be more labor intensive. (There are exceptions and differences in capital intensity may vary within the group of basic industries, or among the secondary and small-scale industries, but what is stated above is a general pattern).

The tertiary sector, of which services is a part, increased its share of total employment from 24% to 38.6% in 1976. For each worker employed in industry, three were hired in the tertiary sector. Commerce (Wholesale and Retail Trade, Restaurants and Hotels, and "Other services" are responsible for most of the expansion).

Table 25 shows certain selected industries and allows for comparison of the proportion of labor employed by each. Of the five major industries listed, textile is the largest employer, textile industry workers comprising over 50% of the total number of workers in the five areas of economic activity. Metal working and food industries are the second and third largest employers.

TABLE 25  
Distribution of Workers in Industrial  
Companies in Selected Areas of  
Economic Activity

	1977	%	1978	%
Textile Industry	292,498	50.9	295,667	50.4
Food	87,679	15.2	89,237	15.2
Chemical Industry	56,643	9.9	58,338	9.9
Metal Working Industry	116,273	20.2	122,250	20.8
Mining Industry	21,715	3.8	21,877	3.7
TOTAL	574,808	100.0	587,369	100.0

Source: Ministry of Industrial and Mineral Resources. Annual Report, 1978

It follows that the industries using large proportion of labor are the ones having an impact on overall demand in the labor market. They also tend to be the industries whose elasticities are high, i.e. their rate of growth of output tends to be associated with the rate of growth of employment. These industries will always tend to have large number of positions available, in order to expand output (and partly also due to normal turnover). Increase in demand for labor from the smaller employers (industry) may affect the labor market in case of growth, where there is expansion to the size of existing firms or when there are additions to the number of existing firms in the industry.

Table 26

- 67 -

## Development of Labour in Industrial Sector 1976

Sector	Physical year 1976												Year 1977			Net Nos of Positions Created/Destroyed in the Year			
	Centre 5		Centre 6		Centre 7		Centre 8		Centre 6/2		Others		Total labour of current activities	%	Personnel associated with investment activities		TOTAL	TOTAL	Personnel associated with investment activities
	Production labour	"	Service Labour	"	Marketing Activities	"	Management	"	Social Services	"	Exempted	"							
Textile Industry.	175129	57.3	54835	39.6	6853	34.1	26710	40.0	2061	46.	27078	59.6	225667	51.4	000	225667	222408	000	3169
Food Industry.	42671	13.5	23495	17.	6400	32.1	7927	11.2	564	12.6	3706	8.2	64231	14.6	5000	69231	67679	456	1555
Chemical Industry.	27598	7.3	19116	13.8	2441	12.1	6760	12.2	618	13.8	2728	6.	54281	9.4	4057	58338	57343	2095	1635
Metal working Industry.	56119	18.	36368	26.2	3342	16.6	11043	20.7	1226	27.4	11027	24.3	119645	20.8	2005	121650	116273	5387	5387
Mining Industry.	12142	3.9	4743	3.4	1019	5.1	2740	4.9	7	0.2	855	1.9	21556	3.8	0.1	21557	21715	158	158
TOTAL	311109	100.0	132576	100.0	20123	100.0	99700	100.0	4476	100.0	45394	100.0	575360	100.0	11169	586529	574608	1921	1921

Sources: Ministry of Industry and Mineral Resources. Annual report of the Industrial Sector 1976. A.R.E., Cairo, 1976.

Table 26 shows the type of personnel engaged in the five selected industries, and the proportions of their respective totals. In the last column each industry lists the number of total positions available in the year. If we exclude the Metal working industry, textile shows the highest number of available positions, as only can be expected. Surprisingly, though metal working, which employes only 20.8% of the labor, has the highest number of vacancies (48% of the total); the number of available positions is roughly 5% of the total number (of workers) already employed, and over 10% of the size of the production labor alone. This is due to the large current investment activity in the metal-working industry, in metal products, machinery, electrical machinery, iron and steel and other non-ferrous metal producing firms. It is worth noting here that metallurgical firms are known for their exclusion of female workers, by law (no women to be in melting and refining metals) and by practice. The Food industry is the third largest employer (15.2%) but is tied, (or actually superseded) by the Chemical industry. The new high in demand for labor is also due to a spurt of investment activity in chemical firms for producing industrial chemical, petroleum and gas products, and other chemicals. Chemical firms tend to be employers of substantial number of female workers: to name only two occupations, there are over 296 female chemical engineers and over 1300 chemical process workers in the manufacturing sector. The Food industry also employs women in relatively large numbers: it employs about 3200 female processors, to name only one category. Mining and quarrying is at the bottom in the rank of employers (3.7%) and also has the least demand for labor.

3. Major Occupations of Women in Manufacturing

In analyzing the trend to determine the integration of women into the economic mainstream, particularly in the expanding nonagricultural sector, it is useful to focus on the major occupation groups occupied by women. Further, to focus on the pace and direction of the trend it is relevant not only to examine the occupations distinctive because of the inclusion of large numbers of women, but also occupations distinctive because of their exclusion of female workers. Below are some of the major occupational headings, in which women appear, mostly in relatively substantial numbers and in some not so substantial numbers. The occupations have been divided into the traditional occupations for women and the more unusual type or non-traditional.

<u>OCCUPATIONS:</u>	<u>TRADITIONAL</u>	<u>No.</u>	<u>NON-TRADITIONAL</u>	<u>No.</u>
Tailors and dressmakers		23661	Production Supervisor and foremen	1059
Fibre preparers		1210	Production manager and general managers	313
Spinners		3272	Accountants	1864
Weavers		5627	Lawyers	176
Knitters		2307	Machine tool operator and seter	367
Dyer and others		1636	Electrical Fitters, assemblers, joiners, repairmen	430
Food processors and related		3179	Sheetmetal worker	90
Tobacco preparer		381	Construction worker*	571
Clerical workers		19751	Machine fitter	174
Bookkeepers, Cashiers		615	Chemical process workers	1304
Basketweaver and brush maker		1248	Engineers and Technicians:	
Shoemakers		745	Civil	75
Clerical Supervisor		612	Electrical	541
Steno and Typist		615	Mechanical	358
Glass and ceramic worker		434	Chemical	296
			Mining	45
			Industrial and others	569
			Pharmacists	357
Rubber and Plastic worker		402		

Footnote: \*There are more women engaged as construction workers in manufacturing industry than there are in the construction sector.

OCCUPATIONS (cont'd):

Building caretaker	1001	Medical doctors, dentists	980
		Metal grinder and tool maker	367

The textile industry, to be sure, emerges as the largest employer of women; women with occupations associated with textile and clothing subgroups are the most numerous. Clerical workers also is a popular category for women. It is becoming clear, however, that a large number of rather non-traditional occupations and areas are opening up for women. Production supervisor and foremen, chemical processors, sheetmetal workers etc. are categories that entail training in specific skills; the production foremen and supervisor, production manager and general manager positions require both managerial and technical training. It is encouraging to note that some establishments have been willing to train women and to select them for promotion. The women on their part are also willing because of the perceived acceptable and viable uses of the training received, and the economic rewards associated with it.

The expanding industries, as shown in Table 26 and their unusual growth in demand for labor are the metal working industries, and the chemical industries. The food processing and textile industries, already large employers of women, have relatively consistent demand for large number of workers.

When we focus on level of employment by education level we find that in 1960 79% of the female labor force was illiterate, and by 1976 their representation in the labor force had dropped to 36%. In looking at the cross-classification by employment status, we find that the trend is similar for paid employees: literate and educated women tend to be hired in greater numbers; where in 1960 illiterate women comprised 73% of all paid employees, by 1976 their proportion had dropped to a minority, of 32%, as more educated women began to enter the labor market, (See Table 16), and the economic need of the illiterate female workers were neglected. The unemployment level, as a result, is the highest for illiterate women, who comprise 58% of the unemployed among women. (It is worth noting here that the number of women working as unpaid family workers is declining at every level, from 112,526 in 1960 to 30,934 in 1976 among illiterate women; from 8,649 in 1960 to 1,484 in 1976 among the literate, and the unpaid family worker is non-existent in 1976 among the intermediate and high level educated women).

The unemployment rate, although highest for illiterate women, does not however, decrease linearly as education level increases. The unemployment level is not the lowest for the most educated women, but for those with certificate below intermediate level, only 2.2%, compared to the 16.3% unemployed women of intermediate level education; for university first degree and above, the unemployed are 10.5% of the total. Hence there appears to be a sizeable market for this level, probably to be found in large pool of clerical workers.

The trend in all sectors (except commerce) is of a growing number of white collar workers as a proportion of total employment in each. (See table 27). The more substantial increases of white collar workers appear to be in mining and quarrying, public utilities (electricity, gas and water), transport, and services. From all indications, these are sectors in which the government is active. The increase is the most striking for the utilities sector, with white collar workers growing in size from 13 to 45% of total workers in the sector. Although one may question the efficiency of allocation of labor, it is not within the scope of the present study. What is relevant is to note that, as the stock of school-leavers increase each year (with low cost of education and assured employment by government) the proportion of white collar workers can only rise, and the phenomena of underemployed workers continues unrelieved.

Since a large proportion, over 68%, of the female labor force is literate (and above), and a sizeable majority of these employed in the government-dominated sectors, they only contribute to the problem of surplus, underemployed workers in the services sector. In 1977, according to ILO estimates, female white collar workers were estimated to be 52% of the total employed female work force in Egypt.

Further study is necessary to investigate methods by which literate women can be diverted from entering the huge cadre of dead-end meaningless, and often low-productivity jobs e.g. by learning other skills that are in shortage, and can be utilized in other economic growth sectors, e.g. supervisory and administrative jobs in expanding sectors like food industries,

the pressing need for skilled labor in construction industry, technical work related to transport and utilities, and even light metal-working occupation skills, all occupations with attractive wages. An inventory of current and projected skill needs, associated with the growth sectors, should be investigated, and findings used to set up technical and vocational training centers for upgrading and/or expanding work skills. Entry of educated women into the private sector should be encouraged and facilitated. Since the private sector is cost-conscious in an open market system, and more concerned with productivity per unit of labor, and hence with skill and efficiency of workers, VTC's can be set up to impart such skills through training of women. VTC's should also be set up for young female workers from lower-income families, particularly for the illiterate female workers, where the unemployment rate is the highest, 58%, and where the need is obviously the greatest. Hence what is envisaged is two types of VTC's; one for upgrading the skill of illiterate women, and the second type for women with education below intermediate and professional levels, for imparting technical skills related to production, and other marketable skills in demand in the various sectors.

Output elasticities are also useful in forecasting training needs. Women should be trained for sectors whose output elasticities (of demand for labor) are not abnormally high, i.e., in industries where employment is not growing at a rate faster than the growth of output so that there may not be the danger of labor incomes declining due to labor surplus. On the other hand, to train too many workers for industries whose output elasticity of demand for labor is very low or rapidly declining due to

increasing capitalization of the production process, would also contribute to the creation of cadre of skilled workers who cannot be absorbed or fully utilized. Ideally, one should look to industries whose output elasticities are not declining rapidly, even if low: women can also be trained for industries whose output elasticities are not too much below unity, where plans for substantial expansion of output will always be related to substantial demand for labor.

Table 27 - WHITE-COLLAR WORKERS AS A PROPORTION OF TOTAL EMPLOYMENT  
IN VARIOUS SECTORS: 1960 AND 1974

Sector		Professional, Technical, Administrative	Clerical Workers	All White-Collar
Agriculture	1960	.1	.2	.3
	1974	.5	.7	1.2
Mining/Quarrying:	1960	5.1	4.7	9.8
	1974	13.8	9.4	23.2
Manufacturing:	1960	2.4	3.9	6.3
	1974	4.2	6.0	10.2
Construction:	1960	5.9	.1	6.0
	1974	10.7	6.4	17.1
Public Utilities:	1960	4.2	9.2	13.4
	1974	23.5	21.8	45.3
Commerce:	1960	2.0	5.8	7.8
	1974	1.8	3.1	4.9
Transport:	1960	3.7	8.1	11.8
	1974	5.0	19.7	24.7
Services:	1960	18.7	11.8	30.5
	1974	29.3	14.5	43.8

Source: 1960: Census; 1974: Labor Force Sample Survey in Choucri, et al., 1978.

### C. Construction Industry

There are two main features of the construction sector: the shortage of construction labor, and the move to more capital intensive techniques of production. Wage increases in the construction sector during the 1974-77 period were greater than in other sectors. The rate of unemployment too declined faster than in other sectors. It has been suggested in World Bank reports that increase in demand for construction labor exceeded increases in supply by a particularly wide margin. This is confirmed by other evidence. The recent rapid move to more capital intensive construction techniques has led to absolute scarcities of certain skills. That these persist even now despite rapid wage increases is explained by the cost and time devoted by the construction sector in training skilled workers. It has even been stated that given the crucial role of construction in capital formation, and the non-tradeable nature of this sector's output, continued shortages of construction labor may place a binding constraint on the growth of aggregate output on GNP. (Choucri, et al, 1978).

The shortage of construction labor is due largely to the increase in external demand for labor (from oil-rich Arab States), and has hiked up construction wages in Egypt by 28% between 1972 and 1974; whereas over the six years previous to 1972, the cumulative increase was less than 10%. Yet the output of the construction sector, hence presumably the domestic demand for

labor, was actually lower in 1974 than in 1972. Thus the increase in wages may be attributed to increase in external demand for labor.

Although currently construction employs only a small proportion of the total labor force, i.e. about 4.1% according to 1976 census, and even a smaller proportion of the female labor force, (a little over 1 percent), construction labor has quadruppled from its original size since 1967.

Women have begun to enter the construction sector at a much faster rate now than before. Where in 1960 there were an estimated 220 women workers in construction, in 1976 almost 7000 women were reportedly engaged in the sector. More women (about two-thirds of the total) are engaged in the "general contracting" industry, and one-third in the "sub-contracting" activity, whereas males are far greater in the sub-contracting industry of construction, since this is the labor-intensive segment of the sector, (with a labor force two and a half times larger than the former segment). It is necessary to determine whether women have penetrated the manual labor, craftsmen or technician's cadres. Of the women who work in general contracting, a good

78% have a high school degree or better and are involved mostly in white collar jobs. The association between education and labor force participation is not an ambiguous one in this case. In the sub-contracting field, however, while there are some educated women, (roughly 25% have a high school education or more), the majority are illiterate. These are the women who have penetrated the ranks of manual construction work previously closed to women. This is in response to the growth in demand for construction labor emanating from shortages caused by external demand, and consequent rise in domestic construction wages.

Given the incentive of higher wages and some training for basic construction skills and craftsmanship such as carpentry, women can be induced to enter this growing industry. The light construction work women can engage in, are, as defined under the U.N. occupation and profession code: painters, carpenters, parquetry workers, draftsmen, and electrical fitters, and the like.

If we take the skilled and unskilled occupations separately, we find that a majority of the non-skilled and low-skilled jobs that the non-educated women fill are those related to food supply.

Those more specifically involved at the construction site tend to be charworkers, cleaners and building caretakers. A very small number are engaged as roofers, painters, and sheetmetal workers, and only one female was an insulator. There are practically no females in the ranks of carpenters, joiners or parquetry workers, as plasterers or glaziers. Roughly one thousand women were estimated to be in occupations belonging to the "laborers, not elsewhere classified" category in construction. These are jobs that very likely involve some low-skilled or non-skilled category of work created as slots supportive of and subordinate to the other specified occupations in the construction sector.

It is encouraging however to note women's absorption into some of the more "technical" areas of construction. More than thirty women in 1976 worked as electrical fitters and related electronics workers, and a surprising twenty were employed as production supervisors and foremen. There were even two reported cases of women engaged as stationery engine and related equipment operators. Though small in size, such representation is large in connotation: it suggests that the barrier at least is broken in these cases, and that there is scope for such similar transition in the rest of construction industry.

As mentioned earlier most of the women are employed in indoor paper-work types of occupations related to construction work such as printers for blueprint plans, typesetters and compositors, and

other general office workers such as filing and stock clerks, typists, telephone operators, cashiers and bookkeepers. Of the well-educated women in the construction-sector, almost 500 are accountants, over one hundred are managers, and more than seventy are lawyers.

Construction Sector Jobs Where Women have been Absorbed: 1976

<u>Traditional</u>		<u>Non-Traditional</u>
Typist	Office:	Accountants
Telephone operator		Lawyers
Clerks		Managers
Cashiers and bookkeepers	Site:	Supervisor and foremen
Charworker and cleaner		Electrical fitters
Food supply, cook		Insulator
Poultry and vegetable worker		Roofers and painters
Building caretaker		Sheetmetal workers
		Engine and Equipment operators

Table 28: TRENDS IN AVERAGE WAGES PER WORKER IN VARIOUS SECTORS, 1974-77  
(in Egyptian pounds)

	Construction	Agriculture	Services	Mining & Industry
1974	233.2	70.8	295.0	297.0
1975	376.2	106.5	314.8	292.0
1976	378.7	107.0	327.1	305.0
1977	378.3	107.6	340.0	334.7
Total increase from 1974-77	62.2%	52%	15.3%	12.6%
Increase in consumer prices, 1974-77:	32%			

Source: N. Choucri et al. (1978).

V. Education for Women: An Aspect of Labor Supply

As in most developing countries, the female literacy rate in Egypt has lagged behind that for males. When focusing on adult women, 15 years and older, the discrepancy between men and women's literacy rates are even greater. This at least suggests that, in recent years, more girls in their early years are now taught reading and writing skills as are male children. This is in keeping with the general trend: enrollments at all levels particularly at the post-primary level, have been increasing for the last three decades at rates between 6 and 10% annually.

The Egyptian educational policy is based on "the right of every citizen irrespective of sex to have access to free education at all stages according to the talents and abilities within the framework of equal opportunities." Education is compulsory for all children of both sexes from six through 12 years of age. However, this may be difficult to implement as is the case in most LDCs. Fewer girls begin school than boys and according to 1970 data, of the female student body enrolled in primary schools (roughly 38% of the total student body at primary level), only one-fifth managed to reach the preparatory stage. It is notable, however, that women comprised as many as 25% of the student body at the university level. (The ratios have improved, as we shall see, in the late 70's).

Table 29  
Proportional Distribution of Egyptian Students  
According to Educational Stage in 1969/1970

	<u>Female Students</u>	<u>Male Students</u>
Primary	38%	62%
Preparatory	32%	68%
Secondary	30%	69%
Higher	25%	75%

Source: Islahel-Sherbani, 1972

Until recently, higher education for Arab women was relatively rare. However, in the case of Egypt, there were early breakthroughs by some urban, upper class feminist-minded men and women who asserted the right of women to be given higher educational opportunities and also economic roles. As more educated Egyptian women gained in social prestige, and grew larger in number, the greater has been the effect on younger girls to attempt a similar status. It appears, nonetheless, that the educational system through its curricula, particularly at primary and secondary levels, does not prepare women for the same roles as men. The stated intention of the school curricula is to prepare women "to improve living conditions within the family, to help increase incomes, and to enlighten women sufficiently for them to be able to be informed about the outlines of the country's plans." (Islahel-Sherbini, 1972).

Although the quality of education for women leaves much to be desired, female attendance in the last 20 years has grown at a rate higher than the growth rate for male attendance.

During the period 1954 to 1971, the number of females enrolled at various levels of the education cycle more than tripled, from 630,000 to 1,923,000 (CAPMAS, quoted in Geile and Smock, 1976).

In 1970 the proportion of students who are female in primary school reached 38 percent (Khalifa, 1973: 85). However most dramatic of the increases has been at the college level; from 8.4 percent female in 1952/53 to 28.4 percent in 1970/71 (Khalifa, 1973: 86).

More recent information, presented in the educational pyramid for 1978-79 shows how, after ages 9-10, the enrollment level for girls keeps dropping till it reaches its minimum at age 16 for girls at the school stages. At this age and above it is not tangibles such as actual marriage rates which affects enrollment for girls but intangibles due to such factors as parents' expectations and anticipations (to see grown daughters married) that cause school attendance to plummet downward. Nevertheless, the fact that by Grade 12 there exists at least one-third retention of the numbers joining at the early primary level, is a positive trend.

The pyramid also shows that female enrollment at higher education levels is less than one-third of the total attendance. (The higher enrollments for each sex is shown as total numbers, not each grade separately.)

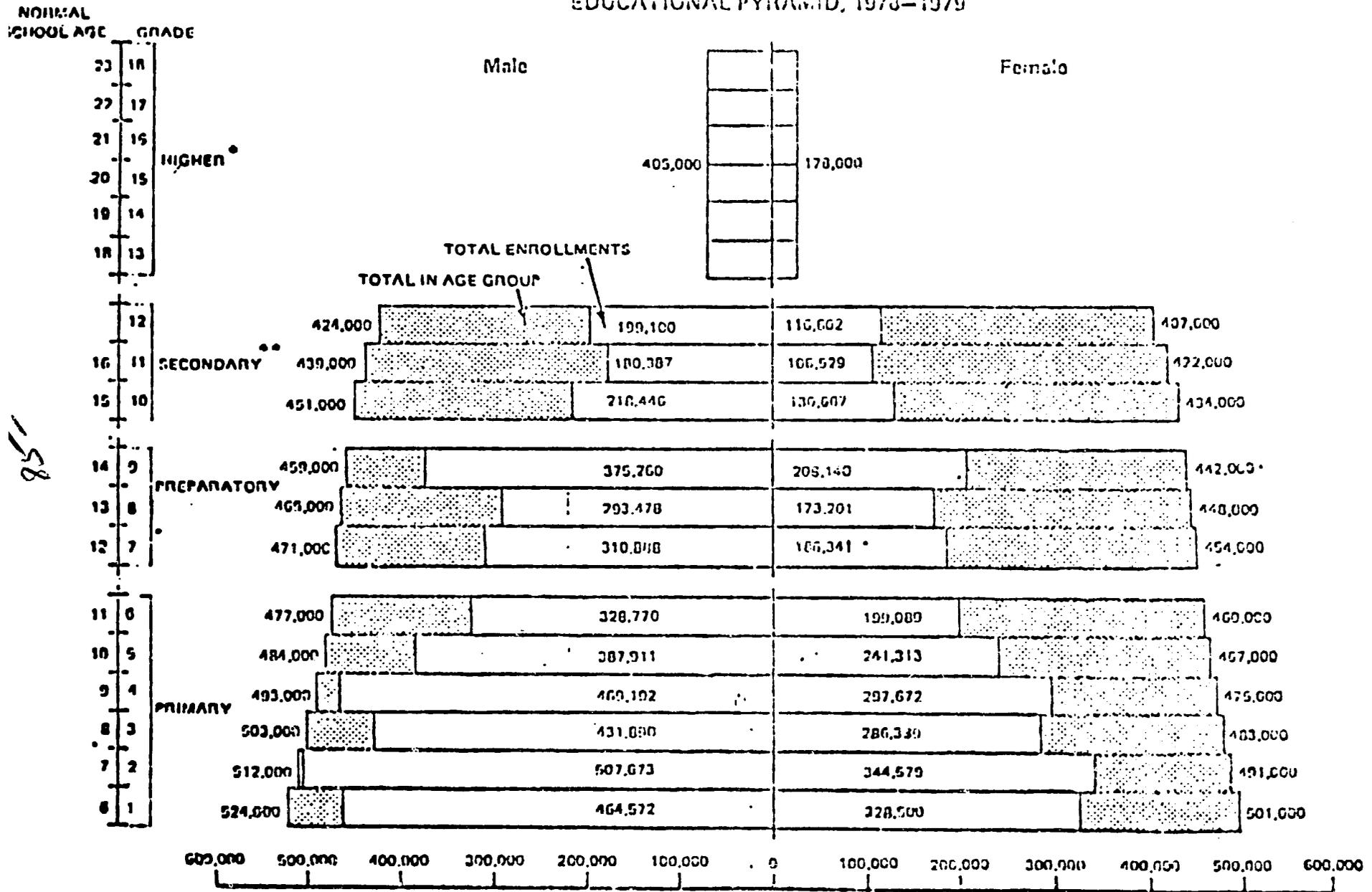
Table 30  
Proportional Distribution of Egyptian  
Students According to Educational Stages in 1978/79

	<u>Female Students</u>	<u>Male Students</u>
Primary	40%	60%
Preparatory	37%	63%
Secondary	37%	63%
Higher	31%	69%

Source: Statistical Yearbook, CAPMAS, 1979.

Table 31:

ARAB REPUBLIC OF EGYPT  
EDUCATIONAL PYRAMID, 1978-1979



\* Higher total enrollments, not each grade separately and including grades 13 and 14 of secondary five year schools.

\*\* Secondary but excluding grades 13 and 14 of five year secondary schools

\*\*\* Includes over age students

Note: Includes over age students.

Compared to enrollment levels shown in Table 29 for 1969/70, female students show improved proportional distributions for all stages except the secondary stage where there appears to have been no change from the 37/63 of the female/male split. The stage at which women have shown the highest growth rate and altered the male/female ration most substantially has been the higher education level.

Table 32: STUDENT ENROLLMENT IN TECHNICAL INSTITUTES

Year	Commerce			Technical			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
72/73	8483	5580	14063	6358	384	6742	14841	5964	20805
73/74	10586	6371	16957	7642	430	8072	18228	6801	25029
74/75	10863	7040	17903	8969	346	9315	19832	7386	27218
75/76	12096	7306	19402	9059	368	9427	21155	7674	28829
76/77	13085	7459	20544	10399	598	10997	23484	8057	31541
77/78	16927	9620	26547	9314	614	9928	26241	10234	36475

Source: Statistical Yearbook, 1978.

Table 33: COMPARATIVE FIGURES OF TECHNICAL INSTITUTES GRADUATES

Year	Commerce			Technical			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
72/73	1730	1605	3335	1614	60	1674	3344	1665	5009
73/74	2275	2449	4424	2328	246	2571	4603	2495	6998
74/75	2201	2243	4444	2317	129	2446	4518	2372	6890
75/76	2323	2077	4400	2411	124	2535	4734	2201	6935
76/77	2701	2425	5126	2600	129	2729	5301	2554	7855
77/78*	3069	2478	5547	3024	292	3316	5093	2770	8863

Source: Statistical Yearbook, 1978.

For women there also appears to be growing emphasis on technical education at levels as early as secondary schools. Although the proportional distribution of overall male/female enrollment is moving a trend favoring females (in both general and technical fields), the absolute rate of growth of female enrollment on the technical side has been faster, between 9 to 11 percent between 1972 and 1978.

Table 34  
Enrollment in Secondary Education, Proportion of Female Students  
1977/78

Year	Total (M+F)	General % Female	Technical % Female
72/73	619,143	32.1	32.3
73/74	642,653	32.8	32.9
74/75	684,950	33.3	33.9
75/76	732,355	34.1	33.9
76/77	796,411	34.6	35.0
77/78	848,317	35.3	36.1

Source: Statistical Yearbook, 1978.

Hence from the point of view of labor supply there appears to be no shortage of women with some broad technical knowledge, particularly when one notes that in 1977/78 the number of female "technical" students in secondary schools were almost one-fourth the size of the female labor force of 1976.

If women are to be integrated into the national economy at meaningful levels, programs and projects can be developed to provide economic opportunities, keeping in mind the numbers currently available and soon to become available in the job market.

Given the growing female proportion (36.1% in 1977/78) in the technical side of secondary education, there is opportunity for their employment in every sector and in a wide range of occupations.

For example, apart from construction sector jobs, there are fields open in the electricity, gas, water and sanitary services. This is also an area where shortages have been created due to migration of utilities-related skilled and semi-skilled labor. According to the Census female workers in 1976 are 1658.8% the size of the base year figure of 1960 for the utilities sector alone. Naturally, the cumulative increase is large given a small base figure, but it shows a trend of rapid growth in a new area of employment for women.

Information on higher education enrollment of women provides some indication of the fields of specialty selected and to a limited extent the sector which may possibly absorb such training. Communications and Advertising, Tourism and Hotels, Technology and Electronics facilities had no female enrollment at all in 1972/73, whereas by 1977/78 substantial numbers of women are shown to be in these fields, and Technology appears to be most popular of the four. (Table 35).

Table 35  
Female Enrollment in Selected Fields at Universities

<u>Faculty</u>	<u>72/73</u>	<u>75/76</u>	<u>77/78</u>
Commerce	12,256	26,004	30,213
Law	3,729	8,084	11,374
Economics	573	263	1,378
Archeology	245	590	571
Communications and Advertising	-	814	920
Tourism and hotels	-	150	177
Medicine and Pharmacology	8,364	12,171	14,602
Engineering	2,816	5,480	6,636
Physcial Sciences	2,552	4,236	5,183
Technology	-	1,586	1,407
Electronics	-	193	186

Source: Statistical Yearbook, CAPMAS, July 1979.

## V. RECOMMENDATIONS

1. In attempting to affect a greater participation rate for females in the work force and to augment the absorptive capacity of sectors to employ women, it is necessary to delineate what interventions are more relevant to obtain desired outcomes and to identify where policy interventions might be appropriate.

- In order to increase opportunity outside of the home to earn money, which will not only improve living standard, widen ideological scope and strengthen the capability of women to increase power in the family, it is necessary first to provide techniques and means whereby she can reduce the burden of her household work. Easy access to water, electricity, gas or kerosene for cooking particularly in non-urbanized areas, are only some of the basic facilities that will reduce much of the time women spend in household chores, and release them for outside employment.

The Egyptian law provides specific facilities. Article (8) of Ministerial Resolution No. 68 states: "Nurseries are permitted to accept donations, grants and wills to contribute in achieving their purposes." Provision for child care removes one of the more serious barriers to women's participation in economic activity. Development agencies such as AID may act as coordinator, and designate local organizations to contact groups of firms which employ women, for purpose of collaborating together to establish nurseries. Article (6) of the same law states: "Employers are

allowed to delegate any organization or social agency with the (above stated) services. A group of firms may collaborate together to establish a nursery, even if the number of women employed by each of them does not reach one hundred."

2. There is a large "informal sector" in which women are involved. Information regarding this activity is lacking as the government officials neither wish to recognize nor deal with this sector. Many women in this sector produce goods and services at exploitatively low wages and there is, from all indications a surplus of labor in this area. Further study is necessary to analyze this sector and to develop measures to enhance women's income earning capability through means such as marketing systems for goods and services that women are involved in.
3. A serious and oft-mentioned problem is transportation. Women entering crowded buses does not alleviate the already pervasive aura of mistrust by men (of other men with their women), or allay the concern of men with the possible sexual misbehavior of wives. The problem of the working woman begins at her door, with an unhappy transportation system. Companies could be assisted in organizing hired buses for their female employees.
4. A comparative view of wages in manufacturing sector shows rapid growth in certain sectors. As discussed earlier, food is a fast-growing industry in Egypt and conventionally a large source of employment for women. Metal working industries and particular chemical industries are expanding sectors with new opportunities of employment for women. In 1975 over 1,300

women were employed as chemical processors. Wages in food have risen sharply compared to beverage, tobacco, textile. Not only is food an expanding industry with growing demand for labor (which can be largely female), and rising wages which increased 40% in 5 years, from 392 piastres in 1970 to 561 in 1975 (per week); it is intrinsically labor intensive with work socially acceptable for women and related to the sexual division of labor in the household. Also, processed food, packed and canned can free the woman from much time spent at home on food preparation, storage, cooking and preserving. Reducing household work will free women to seek jobs.

Wages in leather manufacture are high whereas wages in producing footwear is low; unfortunately women abound in the latter but are almost non-existent in the former. (Footwear and other leather goods comprise an important category among the finished products exported by Egypt). Training centers should be set up for teaching skills related to the petroleum refining and petro products, which are not only rapidly expanding, but also have the highest average wage levels compared to most other industries. (See Table 23, Wages in Manufacture by Industry).

5. Literate women can be diverted from entering the huge cadre of dead-end meaningless, and often low-productivity jobs by learning other skills that are in shortage, that can be utilized and are relevant to other economic growth sectors, e.g. the labor demands of sectors like food industries, need for skilled labor in construction industry, technical work related to transport and utilities, and even light metal-working occupation skills. An

inventory of current and projected skill needs, associated with the growth sectors, should be investigated, and findings used to set up technical and vocational training centers for upgrading and expanding work skills. Entry of educated women into the private sector should be encouraged and facilitated. Since the private sector is cost-conscious in an open market system, and more concerned with productivity per unit of labor, and hence with skill and efficiency of workers VTC's can be set up to impart such skills through training of women and thus making the hiring of women an attractive investment. VTC's should also be set up for young female workers from lower-income families, particularly for the illiterate female workers, where the unemployment rate is the highest, 58%, and where the need is obviously the greatest. In essence what is envisaged is two types of VTC's; one for upgrading the skill of illiterate women, and the second type for women with education below intermediate and professional levels, for the purpose of imparting technical skills related to production, and other marketable skills in demand such as construction.

6. Mere availability of education opportunities and job vacancies is not enough to generate a change in the entire employment and education profile of Egyptian women. The response of the target group is important. The female response can be stimulated through both access and opportunity. Firstly, it is necessary to increase job opportunities (and education and/or training opportunities) by concentrating not only in the urban centers but also locating in rural areas.

Secondly, convenient location of a training center, or factory (or school) close to the communities to be reached is important. To wait for the gradual influence of urban values to reach rural areas is impractical in a society where 52% of the population reside in rural areas.

7. Legislation and law are among important factors that can be used to increase the response of Egyptian women to the expansion of new jobs and training opportunities, but they should not be excessive. Legislation such as maternity leave and right of exemption from night work, etc. may attract female participation in the labor force, but the size and extent of the benefits also has disadvantages from the point of view of the employer. Why pay a woman the same wage as a man when she may get pregnant two or even three times during her work life, will not work at night even when the crunch is on, and who gets special female benefits, in addition to everything else? As a result, the laws are often ignored, particularly in cases where they are not suited to the social or economic environment. The economic environment, interaction of demand and supply will determine what benefits the market can bear. Previously, agricultural wage stayed below minimum wages, until the interaction of demand and supply of labor justified the enforcement of the legal minimum. Legislation and laws may be issued but cannot be expected to be enforced unless the social and economic conditions prevailing allow it to do so.

8. It is acknowledged that though employment generation is a high priority of the government, and should be kept in mind as a major goal in all investment activity, modernization and the technological imperative takes its own course even in developing societies. Public and private officials prefer to talk in terms of current technology, the latest in techniques of production, with its implied capital intensity, as followed in the West. Although the goal of employment generation must always be resurrected by development agencies, it is sometimes difficult to go against the tide. The construction industry has gone ahead with substantial investment in new, large capital equipment, and is experimenting with substitution for labor. It is necessary that women be trained for skills in the use of such capital equipment and not be segregated by training only for light manufacturing industries, and hence be excluded from participating in important spheres of national development.

To conclude, in viewing the non-agricultural sector, it is neither necessary nor appropriate to ask for the deliberate expansion of economic sectors employing primarily women, such as light industry, services, etc., and to change the development path of the country in order to accommodate women. As seen from technical enrollment levels, and from estimates in previously male-dominated occupations, women are beginning to make change instead of waiting for it to be made for them. And they can be

helped, not with excessive concessions that only recognize their handicaps, but with support such as appropriate laws, institutional support such as day-care nursery, training and technical education equal with men, that will help them to be independent and to perceive the multiplicity of their roles in society.

Lastly, change in women's roles and status is presently motivated by nationalistic rather than individualistic ideology. It is in this context that the desire to develop and the wish to reaffirm certain traditional ways of life take on the ambivalence that characterize women's status today. Most males, especially the educated ones would like to see women develop new roles and qualities, as these appear more compatible with the ongoing structural changes, but only on condition that these new values are added to (not substituted for) the traditional qualities. The women too prefer to assert their right to change within the boundaries of a nationalistic ideology.

ANNEX TABLES

Annex Table E1

Egypt

Population by Age Sex and Year

1965, 1970, and 1975

(numbers in thousands)

Age	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total - All Ages	29,389	14,803	14,586	33,329	16,791	16,538	37,543	18,944	18,598
0 to 9 Years Old	8,950	4,570	4,380	9,950	5,068	4,882	10,669	5,449	5,220
10 to 14	3,478	1,774	1,704	3,990	2,038	1,952	4,599	2,344	2,255
15 to 19	3,008	1,532	1,476	3,430	1,750	1,680	3,939	2,013	1,926
20 to 24	2,578	1,310	1,268	2,945	1,498	1,447	3,368	1,717	1,651
25 to 44	7,025	3,536	3,489	8,021	4,045	3,976	9,193	4,647	4,545
45 to 54	2,071	1,018	1,053	2,369	1,169	1,201	2,715	1,345	1,370
55 to 64	1,353	645	708	1,549	739	810	1,786	855	931
65 Years Old and Over	926	418	508	1,076	485	590	1,274	575	699

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

## Annex Table E2

## Egypt

## Labor Force by Age Sex and Year

1965, 1970, and 1975

(numbers in thousands)

Age	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	8,309	7,708	601	9,319	8,648	671	10,517	9,722	795
10 to 14	537	425	112	539	444	95	527	426	101
15 to 19	1,067	954	114	1,149	1,036	114	1,250	1,116	134
20 to 24	1,178	1,081	97	1,329	1,213	116	1,516	1,373	143
25 to 44	3,602	3,417	185	4,128	3,898	231	4,752	4,471	281
45 to 54	1,048	995	54	1,205	1,139	66	1,384	1,306	78
55 to 64	609	580	29	689	650	38	784	740	44
65 Years Old and Over	268	258	11	279	268	12	304	291	13

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

## Annex Table E3

## Egypt

Labor Force Participation Rates by Age, Sex and Year  
1965, 1970, and 1975

(rates in percent)

Age	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	28.27	52.07	4.12	27.96	51.50	4.06	28.01	51.32	4.27
10 to 14	15.43	23.96	6.55	13.51	21.77	4.89	11.47	18.17	4.50
15 to 19	35.48	62.25	7.69	33.51	59.20	6.76	31.72	55.44	6.94
20 to 24	45.69	82.50	7.66	45.12	81.00	7.99	45.02	79.98	8.67
25 to 44	51.27	96.63	5.30	51.47	96.36	5.80	51.69	96.20	6.18
45 to 54	50.62	97.71	5.10	50.87	97.50	5.49	50.99	97.13	5.70
55 to 64	44.99	89.88	4.10	44.45	88.03	4.72	43.87	86.49	4.75
65 Years Old and Over	28.99	61.63	2.14	25.97	55.14	1.99	23.85	50.57	1.87

Source: International Labour Organization, Geneva, 1977.

## Annex Table E4

## Egypt

## Projected Population by Age Sex and Year

1980, 1985, and 1990

(numbers in thousands)

Age	1980			1985			1990		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total - All Ages	42,144	21,297	20,846	47,191	23,881	23,311	52,640	26,665	25,975
0 to 9 Years Old	11,515	5,900	5,615	12,472	6,398	6,074	13,457	6,908	6,549
10 to 14	4,939	2,516	2,423	5,359	2,745	2,614	5,827	2,988	2,839
15 to 19	4,549	2,318	2,231	4,894	2,493	2,401	5,318	2,724	2,595
20 to 24	3,878	1,980	1,898	4,490	2,287	2,203	4,841	2,464	2,377
25 to 44	10,560	5,353	5,207	12,174	6,186	5,988	14,094	7,166	6,928
45 to 54	3,126	1,552	1,573	3,611	1,799	1,812	4,177	2,089	2,088
55 to 64	2,066	995	1,071	2,392	1,158	1,234	2,781	1,351	1,430
65 Years Old and Over	1,512	683	829	1,800	815	985	2,144	975	1,169

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

## Annex Table E5

## Egypt

Projected Labor Force by Age Sex and Year  
1980, 1985, and 1990.

(numbers in thousands)

Age	1980			1985			1990		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	11,865	10,929	935	13,381	12,268	1,112	15,005	13,697	1,308
10 to 14	466	366	99	421	324	97	364	269	95
15 to 19	1,357	1,198	159	1,370	1,194	176	1,398	1,201	197
20 to 24	1,741	1,564	177	2,009	1,782	227	2,162	1,894	268
25 to 44	5,482	5,141	342	6,357	5,933	424	7,390	6,864	527
45 to 54	1,595	1,502	93	1,846	1,734	112	2,141	2,007	134
55 to 64	896	845	51	1,023	963	59	1,169	1,100	69
65 Years Old and Over	329	314	14	355	339	16	380	362	18

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

## Annex Table E6

## Egypt

Projected Labor Force Participation Rates by Age, Sex and Year  
1980, 1985, and 1990

(rates in percent)

Age	1980			1985			1990		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	28.15	51.32	4.49	28.35	51.37	4.77	28.50	51.37	5.03
10 to 14	9.43	14.56	4.10	7.86	11.79	3.73	6.25	9.01	3.35
15 to 19	29.82	51.67	7.11	28.00	47.89	7.35	26.29	44.11	7.59
20 to 24	44.89	78.95	9.35	44.74	77.91	10.31	44.66	76.86	11.27
25 to 44	51.92	96.04	6.56	52.22	95.91	7.08	52.43	95.78	7.60
45 to 54	51.02	96.76	5.90	51.12	96.41	6.17	51.25	96.05	6.44
55 to 64	43.39	84.94	4.77	42.76	83.18	4.81	42.05	81.42	4.85
65 Years Old and Over	21.73	46.00	1.74	19.71	41.58	1.62	17.71	37.15	1.50

Source: International Labour Organization, Geneva, 1977.

Annex Table E7

## Egypt - Dynamics of Population and Labor Force

1965, 1970, and 1975

(numbers in thousands)

Characteristic	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Population	29,389	14,803	14,586	33,329	16,791	16,538	37,543	18,944	18,598
Annual Rate of Growth	2.51	-	-	2.52	-	-	2.38	-	-
No. of Years to Double	27.7	-	-	27.5	-	-	29.5	-	-
Median Age in Years	17.8	17.5	18.1	18.0	17.1	18.3	18.4	18.2	18.7
Dependency Ratio									
Age DR	83.3	-	-	82.0	-	-	78.8	-	-
Economic DR	253.7	-	-	257.6	-	-	257.0	-	-
Economic DR I	278.1	-	-	279.6	-	-	275.8	-	-
Labor Force	8,309	7,708	601	9,319	8,648	671	10,517	9,722	795
Participation Rate	28.27	52.07	4.12	27.96	51.50	4.06	28.01	51.32	4.27
Annual Rate of Growth	2.12	2.13	2.04	2.32	2.33	2.22	2.42	2.34	2.35
No. of Years to Double	32.7	32.5	34.0	29.9	29.7	31.2	28.6	28.8	29.5
Median Age in Years	31.2	31.8	22.8	31.6	31.9	24.9	31.9	32.3	25.3

Source: Calculated from data from the International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

## Annex Table J1

Jordan  
Population by Age Sex and Year  
1965, 1970, and 1975

(numbers in thousands)

Age	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total - All Ages	1,955	1,008	947	2,280	1,171	1,109	2,688	1,377	1,311
0 to 9 Years Old	642	329	312	774	394	380	913	465	448
10 to 14	234	123	112	270	141	129	337	172	166
15 to 19	212	113	99	230	121	109	267	139	128
20 to 24	177	92	85	205	110	95	226	118	107
25 to 44	436	222	214	521	268	253	621	324	296
45 to 54	107	54	53	128	62	66	155	76	79
55 to 64	76	39	37	82	41	41	93	45	48
65 Years Old and Over	71	36	35	71	36	35	76	37	39

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

## Annex Table J2

## Jordan

## Labor Force by Age Sex and Year

1965, 1970, and 1975

(numbers in thousands)

Age	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	492	466	26	565	534	32	652	612	39
10 to 14	17	15	2	16	14	2	17	14	2
15 to 19	65	61	5	68	63	5	74	68	6
20 to 24	85	78	6	101	93	8	108	99	9
25 to 44	223	213	10	270	257	13	326	310	16
45 to 54	53	51	2	61	58	3	75	71	4
55 to 64	32	31	1	33	32	1	36	35	1
65 Years Old and Over	18	17	<u>1/</u>	17	16	<u>1/</u>	16	15	<u>1/</u>

Source: International Labour Organization, Geneva, 1977.

1/ less than 500.

Note: Due to rounding, sums of individual components may not equal totals.

## Annex Table J3

## Jordan

## Labor Force Participation Rates by Age, Sex and Year

1965, 1970, and 1975

(rates in percent)

Age	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	25.19	46.21	2.80	24.80	45.56	2.87	24.24	44.45	3.01
10 to 14	7.17	12.09	1.75	6.08	10.28	1.50	4.90	8.34	1.34
15 to 19	30.92	54.01	4.74	29.64	52.26	4.64	27.66	48.70	4.75
20 to 24	47.81	85.10	7.38	49.19	84.80	7.98	48.09	83.72	8.80
25 to 44	51.11	95.81	4.70	51.74	95.68	5.05	52.60	95.60	5.47
45 to 54	49.15	93.38	4.07	47.55	93.01	4.57	48.00	92.75	4.79
55 to 64	42.54	80.50	2.48	40.67	79.28	2.63	38.88	77.56	2.64
65 Years Old and Over	24.84	47.74	1.26	23.54	45.84	1.17	20.69	41.26	1.07

Source: International Labour Organization, Geneva, 1977.

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Annex Table J4

Jordan

Projected Population by Age Sex and Year

1980, 1985, and 1990

(numbers in thousands)

Age	1980			1985			1990		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total - All Ages	3,177	1,624	1,553	3,752	1,915	1,837	4,397	2,241	2,156
0 to 9 Years Old	1,069	546	523	1,242	634	607	1,408	719	588
10 to 14	405	206	199	477	243	234	562	286	275
15 to 19	334	170	164	402	204	198	474	242	232
20 to 24	263	137	126	330	167	162	398	202	196
25 to 44	720	377	343	831	435	396	984	510	474
45 to 54	191	96	95	236	120	116	285	146	139
55 to 64	112	53	59	138	66	72	170	84	86
65 Years Old and Over	84	40	44	97	45	52	117	53	64

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

Annex Table J5

Jordan

Projected Labor Force by Age Sex and Year

1980, 1985, and 1990

(numbers in thousands)

Age	1980			1985			1990		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	756	707	49	888	826	63	1,046	967	79
10 to 14	16	13	2	15	13	2	14	12	3
15 to 19	85	77	8	96	86	10	107	95	12
20 to 24	125	113	12	154	137	17	185	163	22
25 to 44	380	360	20	440	415	25	519	487	32
45 to 54	94	89	5	117	111	6	142	134	8
55 to 64	42	40	2	51	49	2	63	61	2
65 Years Old and Over	15	15	<u>1/</u>	15	15	<u>1/</u>	16	16	<u>1/</u>

Source: International Labour Organization, Geneva, 1977.

1/ less than 500.

Note: Due to rounding, sums of individual components may not equal totals.

## Annex Table J6

## Jordan

Projected Labor Force Participation Rates by Age, Sex and Year  
1980, 1985, and 1990

(rates in percent)

Age	1980			1985			1990		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	23.80	43.51	3.18	23.68	43.12	3.42	23.79	43.15	3.67
10 to 14	3.83	6.39	1.18	3.20	5.25	1.06	2.55	4.11	0.93
15 to 19	25.33	45.14	4.85	23.85	42.20	4.94	22.47	39.26	5.02
20 to 24	47.63	82.63	9.62	46.68	81.72	10.54	46.61	80.80	11.45
25 to 44	52.84	95.52	5.88	52.99	95.49	6.33	52.74	95.45	6.78
45 to 54	49.08	92.48	5.00	49.62	92.29	5.22	49.76	92.10	5.43
55 to 64	37.31	75.84	2.65	36.97	74.26	2.66	37.12	72.68	2.56
65 Years Old and Over	17.94	36.68	0.97	15.80	33.22	0.89	13.84	29.75	0.81

Source: International Labour Organization, Geneva, 1977.

Annex Table J7

## Jordan - Dynamics of Population and Labor Force

1965, 1970, and 1975

(numbers in thousands)

Characteristic	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Population	1,955	1,008	947	2,280	1,171	1,109	2,688	1,377	1,311
Annual Rate of Growth	2.85	-	-	3.08	-	-	3.29	-	-
No. of Years to Double	24.3	-	-	22.5	-	-	21.1	-	-
Median Age in Years	16.4	16.3	16.5	16.1	16.1	16.1	15.8	15.9	15.6
Dependency Ratio									
Age DR	93.9	-	-	95.7	-	-	97.4	-	-
Economic DR	297.4	-	-	303.5	-	-	312.3	-	-
Economic DR I	311.6	-	-	315.3	-	-	323.3	-	-
Labor Force	492	466	26	565	534	32	652	612	39
Participation Rate	25.19	46.21	2.80	24.80	45.56	2.87	24.24	44.45	3.01
Annual Rate of Growth	2.62	2.56	3.67	2.81	2.76	3.73	2.88	2.78	4.36
No. of Years to Double	26.5	27.1	18.9	24.7	25.1	18.6	24.1	24.9	15.9
Median Age in Years	30.7	31.0	24.0	30.9	31.2	25.5	31.4	31.7	27.0

Source: Calculated from data from the International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

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Annex Table M1

Morocco

Population by Age Sex and Year

1965, 1970, and 1975

(numbers in thousands)

Age	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total - All Ages	13,139	6,566	6,572	15,126	7,580	7,546	17,504	8,746	8,758
0 to 9 Years Old	4,456	2,272	2,184	5,222	2,656	2,565	5,842	2,970	2,873
10 to 14	1,576	796	780	1,974	1,038	936	2,388	1,215	1,173
15 to 19	1,230	602	628	1,471	746	725	1,938	1,019	919
20 to 24	1,055	499	557	1,057	503	555	1,427	720	707
25 to 44	2,997	1,468	1,528	3,229	1,491	1,739	3,479	1,585	1,894
45 to 54	811	421	390	934	495	439	1,120	559	561
55 to 64	559	278	280	607	316	291	668	357	311
65 Years Old and Over	455	230	225	632	336	297	642	322	320

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

## Annex Table M2

## Morocco

## Labor Force by Age Sex and Year

1965, 1970, and 1975

(numbers in thousands)

Age	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	3,654	3,214	440	3,987	3,424	563	4,572	3,881	691
10 to 14	216	158	59	225	159	66	233	157	76
15 to 19	473	392	81	563	448	116	725	574	150
20 to 24	504	447	57	503	432	72	710	611	98
25 to 44	1,567	1,421	146	1,626	1,437	189	1,744	1,525	219
45 to 54	453	399	54	536	463	72	617	521	96
55 to 64	280	252	29	312	281	31	345	312	33
65 Years Old and Over	160	146	14	221	204	18	198	180	18

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

## Annex Table M3

## Morocco

Labor Force Participation Rates by Age, Sex and Year  
1965, 1970, and 1975

(rates in percent)

Age	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	27.81	48.95	6.69	26.36	45.17	7.47	26.12	44.38	7.89
10 to 14	13.73	19.84	7.50	11.39	15.35	7.00	9.76	12.94	6.47
15 to 19	38.47	65.18	12.88	38.30	60.02	15.94	37.39	56.38	16.34
20 to 24	47.71	89.53	10.23	47.63	85.94	12.91	49.76	84.89	13.94
25 to 44	52.30	96.76	9.58	50.37	96.40	10.90	50.13	96.24	11.57
45 to 54	55.81	94.63	13.87	57.37	93.65	16.47	55.10	93.30	17.05
55 to 64	50.21	90.34	10.33	51.39	88.84	10.70	51.72	87.38	10.76
65 Years Old and Over	35.23	63.74	6.16	35.02	60.68	6.00	30.88	55.95	5.65

Source: International Labour Organization, Geneva, 1977.

## Annex Table M4

## Morocco

Projected Population by Age Sex and Year  
1980, 1985, and 1990

(numbers in thousands)

Age	1980			1985			1990		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total - All Ages	20,384	10,179	10,206	23,788	11,879	11,909	27,633	13,807	13,826
0 to 9 Years Old	6,703	3,407	3,296	7,671	3,900	3,771	8,642	4,395	4,247
10 to 14	2,607	1,324	1,283	3,024	1,535	1,489	3,481	1,767	1,714
15 to 19	2,356	1,198	1,158	2,579	1,309	1,270	2,998	1,521	1,477
20 to 24	1,898	995	903	2,317	1,176	1,142	2,544	1,289	1,255
25 to 44	4,026	1,880	2,146	5,015	2,458	2,557	6,378	3,204	3,175
45 to 54	1,346	636	710	1,473	661	812	1,551	668	883
55 to 64	810	419	391	987	480	507	1,199	552	647
65 Years Old and Over	637	318	318	722	360	362	839	411	428

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

## Annex Table M5

## Morocco

Projected Labor Force by Age Sex and Year  
1980, 1985, and 1990

(numbers in thousands)

Age	1980			1985			1990		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	5,378	4,526	852	6,334	5,288	1,046	7,447	6,169	1,278
10 to 14	216	139	76	213	132	81	202	118	84
15 to 19	826	632	194	861	641	219	951	688	263
20 to 24	969	834	135	1,160	973	187	1,277	1,052	224
25 to 44	2,069	1,806	263	2,694	2,358	336	3,515	3,069	446
45 to 54	716	591	125	762	612	149	785	616	169
55 to 64	402	360	42	459	404	55	526	455	71
65 Years Old and Over	180	163	17	185	168	18	192	172	20

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

Annex Table M6

Morocco

Projected Labor Force Participation Rates by Age, Sex and Year  
1980, 1985, and 1990

(rates in percent)

Age	1980			1985			1990		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	26.38	44.47	8.35	26.63	44.51	8.79	26.95	44.68	9.24
10 to 14	8.27	10.53	5.94	7.04	8.60	5.43	5.80	6.66	4.91
15 to 19	35.04	52.74	16.73	33.37	48.98	17.28	31.71	45.21	17.82
20 to 24	51.08	83.83	14.96	50.06	82.73	16.42	50.18	81.63	17.88
25 to 44	51.38	96.07	12.24	53.73	95.93	13.15	55.11	95.78	14.06
45 to 54	53.21	92.94	17.63	51.70	92.59	18.39	50.61	92.23	19.14
55 to 64	49.64	85.91	10.81	46.55	84.22	10.90	43.90	82.52	10.98
65 Years Old and Over	28.27	51.22	5.30	25.67	46.51	4.95	22.83	41.80	4.60

Source: International Labour Organization, Geneva, 1977.

Annex Table M7

## Morocco - Dynamics of Population and Labor Force

1965, 1970, and 1975

(numbers in thousands)

Characteristic	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Population	13,139	6,566	6,572	15,126	7,580	7,546	17,504	8,746	8,758
Annual Rate of Growth	2.42	-	-	2.82	-	-	2.92	-	-
No. of Years to Double	28.6	-	-	24.6	-	-	23.7	-	-
Median Age in Years	16.2	15.8	16.6	15.2	14.6	15.9	15.3	14.9	15.8
Dependency Ratio									
Age DR	97.5	-	-	107.3	-	-	102.8	-	-
Economic DR	259.6	-	-	279.4	-	-	282.9	-	-
Economic DR I	282.2	-	-	302.1	-	-	303.4	-	-
Labor Force	3,654	3,214	440	3,987	3,424	563	4,572	3,881	691
Participation Rate	27.81	48.95	6.69	26.36	45.17	7.47	26.12	44.38	7.89
Annual Rate of Growth	1.60	1.17	5.18	1.76	1.27	5.08	2.74	2.51	4.10
No. of Years to Double	43.3	59.2	13.4	39.4	54.6	13.6	25.3	27.6	16.9
Median Age in Years	30.5	32.2	27.0	32.2	32.9	26.8	30.7	31.5	25.9

Source: Calculated from data from the International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

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Annex Table S1

Syria  
Population by Age Sex and Year  
1965, 1970, and 1975

(numbers in thousands)

Age	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total - All Ages	5,320	2,733	2,588	6,247	3,204	3,044	7,259	3,710	3,549
0 to 9 Years Old	1,767	909	858	2,055	1,049	1,006	2,396	1,223	1,173
10 to 14	651	337	314	771	397	374	905	462	444
15 to 19	510	266	244	645	334	311	762	393	369
20 to 24	406	204	202	494	260	234	634	328	306
25 to 44	1,204	616	588	1,342	675	667	1,518	766	753
45 to 54	319	165	155	382	202	180	480	255	226
55 to 64	235	118	117	264	136	128	267	139	129
65 Years Old and Over	228	118	110	295	150	144	296	145	150

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

## Annex Table S2

## Syria

## Labor Force by Age Sex and Year

1965, 1970, and 1975

(numbers in thousands)

Age	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	1,441	1,298	143	1,659	1,484	174	1,890	1,678	212
10 to 14	90	65	25	105	74	31	104	70	34
15 to 19	187	159	28	217	181	36	242	199	44
20 to 24	193	173	20	235	211	24	298	263	34
25 to 44	648	597	50	712	655	58	811	741	70
45 to 54	166	156	11	205	191	14	258	239	18
55 to 64	106	100	6	121	114	7	121	114	7
65 Years Old and Over	50	48	2	63	59	4	56	51	4

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

## Annex Table S3

## Syria

Labor Force Participation Rates by Age, Sex and Year  
1965, 1970, and 1975

(rates in percent)

Age	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	27.08	47.49	5.52	26.55	46.33	5.73	26.03	45.23	5.97
10 to 14	13.77	19.21	7.94	13.62	18.61	8.32	11.48	15.25	7.56
15 to 19	36.71	59.82	11.53	33.66	54.27	11.52	31.80	50.58	11.84
20 to 24	47.56	84.75	10.10	47.67	81.37	10.17	46.93	80.30	11.15
25 to 44	53.80	97.00	8.57	53.07	96.92	8.68	53.42	96.78	9.33
45 to 54	52.14	94.51	7.03	53.53	94.30	7.80	53.64	93.96	8.13
55 to 64	45.09	84.69	4.84	45.98	83.96	5.76	45.46	82.31	5.80
65 Years Old and Over	22.20	40.89	2.19	21.40	38.94	3.11	18.87	35.36	2.89

Source: International Labour Organization, Geneva, 1977.

Annex Table S4

Syria

Projected Population by Age Sex and Year  
1980, 1985, and 1990

(numbers in thousands)

Age	1980			1985			1990		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total - All Ages	8,536	4,353	4,183	10,081	5,132	4,949	11,823	6,012	5,811
0 to 9 Years Old	2,829	1,445	1,384	3,353	1,713	1,640	3,828	1,956	1,871
10 to 14	1,072	547	525	1,249	637	612	1,506	768	738
15 to 19	896	457	439	1,063	542	521	1,241	632	608
20 to 24	751	387	365	886	451	435	1,052	536	517
25 to 44	1,787	907	880	2,173	1,112	1,061	2,667	1,370	1,297
45 to 54	580	298	282	626	308	318	652	314	338
55 to 64	335	173	162	425	220	205	518	260	259
65 Years Old and Over	285	139	145	305	148	158	359	175	184

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

## Annex Table S5

## Syria

Projected Labor Force by Age Sex and Year  
1980, 1985, and 1990

(numbers in thousands)

Age	1980			1985			1990		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	2,183	1,925	258	2,547	2,227	320	2,977	2,580	397
10 to 14	101	65	36	98	55	40	104	70	34
15 to 19	268	214	53	301	235	65	332	253	79
20 to 24	351	306	44	411	353	58	490	414	76
25 to 44	964	877	88	1,189	1,074	115	1,473	1,322	151
45 to 54	303	279	24	316	288	28	323	292	31
55 to 64	149	140	9	186	174	12	216	200	15
65 Years Old and Over	48	44	4	46	42	4	48	44	4

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

## Annex Table S6

## Syria

Projected Labor Force Participation Rates by Age, Sex and Year  
1980, 1985, and 1990

(rates in percent)

Age	1980			1985			1990		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	25.58	44.23	6.17	25.27	43.39	6.47	25.18	42.92	6.83
10 to 14	9.40	11.89	6.80	7.86	9.54	6.12	6.33	7.18	5.44
15 to 19	29.87	46.89	12.16	28.31	43.45	12.56	26.74	40.00	12.96
20 to 24	46.65	79.23	12.12	46.43	78.22	13.44	46.56	77.20	14.76
25 to 44	53.97	96.64	9.97	54.70	96.55	10.81	55.21	96.45	11.65
45 to 54	52.17	93.61	8.46	50.44	93.32	8.87	49.64	93.02	9.27
55 to 64	44.48	80.66	5.83	43.70	78.88	5.87	41.58	77.10	5.91
65 Years Old and Over	16.91	31.78	2.67	15.10	28.55	2.47	13.49	25.32	2.26

Source: International Labour Organization, Geneva, 1977.

Annex Table S7

## Syria - Dynamics of Population and Labor Force

1965, 1970, and 1975

(numbers in thousands)

Characteristic	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Population	5,320	2,733	2,588	6,247	3,204	3,044	7,259	3,710	3,549
Annual Rate of Growth	3.08	-	-	3.21	-	-	3.00	-	-
No. of Years to Double	22.5	-	-	21.6	-	-	23.1	-	-
Median Age in Years	16.4	16.3	16.5	16.3	16.3	16.3	16.2	16.2	16.1
Dependency Ratio									
Age DR	99.0	-	-	99.8	-	-	98.2	-	-
Economic DR	269.2	-	-	276.6	-	-	284.1	-	-
Economic DR I	293.8	-	-	302.0	-	-	306.4	-	-
Labor Force	1,441	1,298	143	1,659	1,484	174	1,890	1,678	212
Participation Rate	27.08	47.49	5.52	26.55	46.33	5.73	26.03	45.23	5.97
Annual Rate of Growth	2.43	2.31	3.49	2.86	2.72	4.08	2.64	2.48	3.95
No. of Years to Double	28.5	30.0	19.9	24.2	25.5	17.0	26.3	27.9	17.5
Median Age in Years	31.3	32.0	23.6	31.3	32.0	23.2	31.1	31.9	23.1

Source: Calculated from data from the International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

Annex Table T1

Tunisia

Population by Age Sex and Year  
1965, 1970, and 1975

(numbers in thousands)

Age	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total - All Ages	4,620	2,359	2,261	5,137	2,542	2,595	5,747	2,836	2,912
0 to 9 Years Old	1,558	800	758	1,689	859	830	1,755	893	862
10 to 14	532	305	277	687	349	338	796	404	392
15 to 19	388	196	192	544	270	274	669	339	330
20 to 24	299	145	154	362	177	185	518	254	264
25 to 44	1,067	525	542	1,023	482	541	1,073	495	578
45 to 54	337	178	158	364	182	182	410	199	211
55 to 64	226	122	104	276	137	139	295	146	149
65 Years Old and Over	164	88	76	193	87	106	232	106	125

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

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## Annex Table T2

## Tunisia

Labor Force by Age Sex and Year  
1965, 1970, and 1975

(numbers in thousands)

Age	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	1,180	1,105	76	1,218	1,124	94	1,364	1,248	116
10 to 14	55	46	9	52	43	9	50	41	10
15 to 19	122	105	17	161	136	26	191	159	32
20 to 24	144	130	13	175	157	17	250	223	27
25 to 44	531	506	25	490	464	26	506	476	30
45 to 54	173	166	7	177	169	8	194	184	10
55 to 64	106	102	4	117	112	5	123	117	6
65 Years Old and Over	50	48	1	45	43	2	50	48	2

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

## Annex Table T3

## Tunisia

Labor Force Participation Rates by Age, Sex and Year  
1965, 1970, and 1975

(rates in percent)

Age	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	25.55	46.83	3.34	23.70	44.21	3.62	23.73	44.00	3.99
10 to 14	9.39	15.10	3.09	7.51	12.20	2.67	6.32	10.09	2.44
15 to 19	31.43	53.84	8.63	29.66	50.25	9.40	28.54	46.94	9.66
20 to 24	48.04	89.96	8.54	48.27	88.83	9.32	48.19	87.68	10.16
25 to 44	49.79	96.41	4.59	47.94	96.35	4.86	47.14	96.20	5.20
45 to 54	51.54	93.36	4.52	48.74	92.79	4.67	47.38	92.44	4.86
55 to 64	46.76	83.46	3.63	42.50	81.98	3.68	41.68	80.46	3.70
65 Years Old and Over	30.32	54.84	1.96	23.38	49.70	1.87	21.77	45.37	1.75

Source: International Labour Organization, Geneva, 1977.

Annex Table T4

Tunisia

Projected Population by Age Sex and Year  
1980, 1985, and 1990

(numbers in thousands)

Age	1980			1985			1990		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total - All Ages	6,561	3,238	3,323	7,537	3,724	3,813	8,629	4,271	4,358
0 to 9 Years Old	1,983	1,008	975	2,318	1,178	1,139	2,595	1,320	1,275
10 to 14	816	416	400	876	444	431	1,047	532	516
15 to 19	782	396	386	804	409	395	866	439	427
20 to 24	649	327	322	765	386	379	790	401	389
25 to 44	1,286	598	688	1,649	792	857	2,143	1,049	1,094
45 to 54	457	213	244	457	201	256	434	187	247
55 to 64	316	154	162	361	171	191	407	185	222
65 Years Old and Over	272	126	146	308	143	165	346	158	188

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

## Annex Table T5

## Tunisia

Projected Labor Force by Age Sex and Year  
1980, 1985, and 1990

(numbers in thousands)

Age	1980			1985			1990		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	1,574	1,433	141	1,822	1,652	170	2,096	1,895	201
10 to 14	42	33	9	37	29	9	35	26	9
15 to 19	211	173	38	206	165	40	208	163	45
20 to 24	318	283	35	376	329	46	390	338	52
25 to 44	613	574	38	811	759	51	1,076	1,005	70
45 to 54	209	196	12	198	185	14	185	171	14
55 to 64	127	121	6	139	132	7	148	140	8
65 Years Old and Over	54	52	2	55	53	2	55	52	3

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

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Annex Table T6

Tunisia

Projected Labor Force Participation Rates by Age, Sex and Year  
1980, 1985, and 1990

(rates in percent)

Age	1980			1985			1990		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	23.99	44.25	4.25	24.17	44.36	4.45	24.29	44.36	4.62
10 to 14	5.15	7.98	2.21	4.24	6.42	2.00	3.35	4.86	1.79
15 to 19	26.99	43.62	9.91	25.59	40.40	10.25	24.07	37.18	10.58
20 to 24	49.05	86.53	11.00	49.12	85.40	12.18	49.32	84.26	13.35
25 to 44	47.64	96.05	5.54	49.17	95.94	5.99	50.18	95.82	6.44
45 to 54	45.68	92.09	5.04	43.37	91.78	5.28	42.60	91.46	5.51
55 to 64	40.33	78.94	3.72	38.49	77.25	3.75	36.38	75.55	3.78
65 Years Old and Over	19.89	41.03	1.62	17.93	36.96	1.50	15.79	32.88	1.30

Source: International Labour Organization, Geneva, 1977.

Annex Table T7

## Tunisia - Dynamics of Population and Labor Force

1965, 1970, and 1975

(numbers in thousands)

Characteristic	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Population	4,620	2,359	2,261	5,137	2,542	2,595	5,747	2,836	2,912
Annual Rate of Growth	1.8	-	-	2.1	-	-	2.2	-	-
No. of Years to Double	38.5	-	-	33.0	-	-	31.5	-	-
Median Age in Years	16.2	15.9	16.5	15.8	15.2	16.4	16.4	15.8	17.1
Dependency Ratio									
Age DR	99.5	-	-	100.0	-	-	93.9	-	-
Economic DR	291.5	-	-	321.8	-	-	321.3	-	-
Economic DR I	310.7	-	-	340.6	-	-	337.4	-	-
Labor Force	1,180	1,105	76	1,218	1,124	94	1,364	1,248	116
Participation Rate	25.55	46.83	3.34	23.70	44.21	3.62	23.73	44.00	3.99
Annual Rate of Growth	0.72	0.64	1.87	0.63	0.34	4.43	2.30	2.12	4.37
No. of Years to Double	96.3	108.3	37.1	110.0	203.9	15.6	30.1	32.7	15.9
Median Age in Years	33.6	34.2	23.6	32.6	33.3	22.5	31.2	32.0	22.0

Source: Calculated from data from the International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

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Annex Table Y1

Yemen

Population by Age Sex and Year

1965, 1970, and 1975

(numbers in thousands)

Age	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total - All Ages	5,016	2,539	2,477	5,767	2,919	2,849	6,668	3,372	3,295
0 to 9 Years Old	1,600	812	787	1,856	942	914	2,184	1,109	1,075
10 to 14	601	306	295	687	349	338	794	403	391
15 to 19	517	264	254	591	301	290	674	343	331
20 to 24	441	225	216	504	257	247	575	293	282
25 to 44	1,175	597	578	1,344	684	661	1,538	782	756
45 to 54	336	168	167	384	193	191	440	220	220
55 to 64	213	104	109	244	119	125	281	137	144
65 Years Old and Over	135	64	71	156	74	82	182	85	97

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

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Annex Table Y2

Yemen

Labor Force by Age Sex and Year  
1965, 1970, and 1975

(numbers in thousands)

Age	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	1,477	1,419	58	1,676	1,606	69	1,888	1,807	81
10 to 14	129	123	6	138	132	6	145	138	7
15 to 19	210	200	10	235	224	11	258	246	12
20 to 24	216	206	9	246	235	12	279	265	14
25 to 44	601	581	20	689	664	25	788	759	29
45 to 54	170	163	7	196	187	9	223	212	11
55 to 64	101	97	4	116	111	5	133	127	6
65 Years Old and Over	49	48	2	56	54	2	62	60	2

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

## Annex Table Y3

## Yemen

Labor Force Participation Rates by Age, Sex and Year  
1965, 1970, and 1975

(rates in percent)

Age	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	29.45	55.89	2.34	29.06	55.05	2.43	28.32	53.59	2.45
10 to 14	21.51	40.21	2.14	20.09	37.73	1.85	18.25	34.21	1.78
15 to 19	40.59	76.00	3.75	39.69	74.35	3.66	38.33	71.75	3.71
20 to 24	49.00	91.96	4.35	48.87	91.38	4.72	48.58	90.65	4.92
25 to 44	51.19	97.29	3.50	51.26	97.16	3.77	51.25	97.02	3.89
45 to 54	50.68	96.99	4.12	50.93	96.81	4.69	50.67	96.54	4.78
55 to 64	47.70	93.78	3.70	47.50	93.30	3.96	47.21	92.46	3.98
65 Years Old and Over	36.49	74.81	2.36	35.94	73.54	2.19	34.08	70.31	2.12

Source: International Labour Organization, Geneva, 1977.

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Annex Table Y4

Yemen

Projected Population by Age Sex and Year

1980, 1985, and 1990

(numbers in thousands)

Age	1980			1985			1990		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total - All Ages	7,741	3,913	3,828	9,000	4,548	4,453	10,445	5,275	5,170
0 to 9 Years Old	2,556	1,298	1,258	2,950	1,499	1,451	3,359	1,707	1,652
10 to 14	937	476	462	1,119	568	551	1,309	665	645
15 to 19	781	397	384	924	469	455	1,105	561	544
20 to 24	658	334	324	765	388	377	907	460	447
25 to 44	1,764	896	868	2,029	1,030	999	2,349	1,190	1,159
45 to 54	506	253	253	583	293	291	675	339	336
55 to 64	323	158	165	375	183	192	436	213	223
65 Years Old and Over	215	100	115	256	119	137	305	141	164

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

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Annex Table Y5

Yemen

Projected Labor Force by Age Sex and Year

1980, 1985, and 1990

(numbers in thousands)

Age	1980			1985			1990		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	2,140	2,045	95	2,442	2,328	113	2,802	2,666	136
10 to 14	154	146	8	164	155	9	168	158	10
15 to 19	289	274	14	328	310	17	375	354	21
20 to 24	317	301	17	366	346	20	431	406	25
25 to 44	903	868	35	1,038	996	42	1,200	1,149	50
45 to 54	256	244	12	295	281	14	341	324	17
55 to 64	152	145	7	173	165	8	200	191	9
65 Years Old and Over	70	67	2	78	76	3	88	85	3

Source: International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.

Annex Table Y6

Yemen

Projected Labor Force Participation Rates by Age, Sex and Year  
1980, 1985, and 1990

(rates in percent)

Age	1980			1985			1990		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
10 Years Old and Over	27.65	52.27	2.48	27.13	51.20	2.54	26.83	50.55	2.63
10 to 14	16.42	30.69	1.70	14.63	27.24	1.62	12.83	23.78	1.53
15 to 19	36.97	69.14	3.76	35.47	66.15	3.83	33.98	63.16	3.90
20 to 24	48.23	89.92	5.12	47.85	89.08	5.39	47.53	88.23	5.65
25 to 44	51.20	96.88	4.01	51.14	96.72	4.18	51.06	96.56	4.34
45 to 54	50.64	96.26	4.87	50.63	95.94	4.98	50.51	95.62	5.09
55 to 64	46.84	91.61	3.99	46.21	90.60	4.01	45.80	89.59	4.02
65 Years Old and Over	32.30	67.07	2.05	30.57	63.50	1.98	28.77	59.93	1.90

Source: International Labour Organization, Geneva, 1977.

Annex Table Y7

## Yemen - Dynamics of Population and Labor Force

1965, 1970, and 1975

(numbers in thousands)

Characteristic	1965			1970			1975		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Population	5,016	2,539	2,477	5,767	2,919	2,849	6,668	3,372	3,295
Annual Rate of Growth	2.49	-	-	2.79	-	-	2.90	-	-
No. of Years to Double	27.8	-	-	24.8	-	-	23.9	-	-
Median Age in Years	17.0	16.9	17.1	16.9	16.8	17.0	16.6	16.5	16.7
Dependency Ratio									
Age DR	87.2	-	-	88.0	-	-	90.1	-	-
Economic DR	239.6	-	-	244.1	-	-	253.2	-	-
Economic DR I	272.1	-	-	275.0	-	-	282.6	-	-
Labor Force	1,477	1,419	58	1,676	1,606	69	1,888	1,807	81
Participation Rate	25.55	46.83	3.34	23.70	44.21	3.62	23.73	44.00	3.99
Annual Rate of Growth	2.14	2.10	3.24	2.55	2.51	3.57	2.42	2.38	3.16
No. of Years to Double	32.4	33.0	21.4	27.2	27.6	19.4	28.6	29.1	21.9
Median Age in Years	29.8	29.9	27.8	30.0	30.1	28.2	30.3	30.4	28.9

Source: Calculated from data from the International Labour Organization, Geneva, 1977.

Note: Due to rounding, sums of individual components may not equal totals.