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**DEMOGRAPHIC TRENDS OF AGEING
IN THE ARAB COUNTRIES**

UN ECONOMIC AND SOCIAL COMMISSION
FOR WESTERN ASIA

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by

Riad Tabbarah

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Demographic Trends of Ageing in the Arab Countries

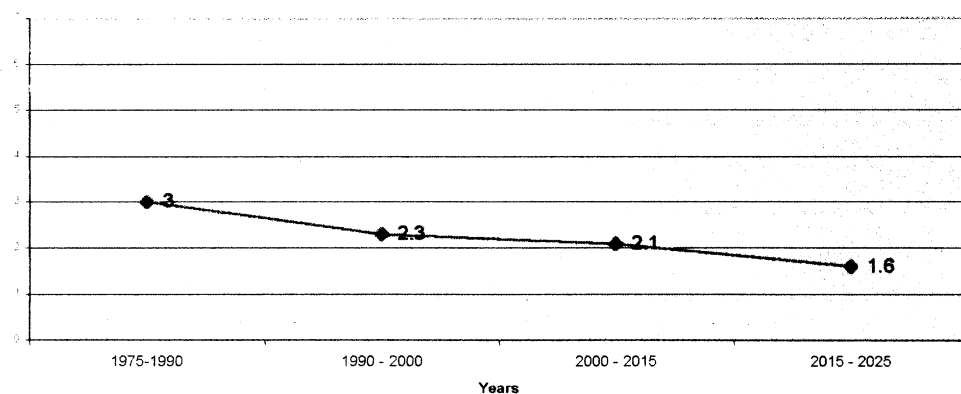
Riad Tabbarah*

I. Introduction: Fertility and Mortality.

The Population of the Arab countries¹ rose from an estimated 143 million persons in 1975 to some 285 million in the year 2000. According to United Nations projections (UN, 99)², this number will reach close to 455 million by the year 2025. As with all demographic parameters and indicators, the range is very wide: the least populous country, Qatar, had a population of 600,000 in the year 2000 and the largest, Egypt, had a population of over 68 million (Annex table 1).

In spite of this absolute increase in total population, the rate of population growth has been steadily declining. In the decade preceding 1990, the average rate of growth of the population of the Arab countries was around 3 per cent. In the following decade it averaged only 2.3 per cent. The United Nations estimates that, by 2025, the rate of population growth of the Arab countries would have fallen to 1.4 per cent (Annex table 2, Chart 1, text table 1).

Chart1: Population Growth Rates of the Arab Region (1975-90 to 2015-25)



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¹ All 22 members of the League of Arab States except Comoros islands for lack of data.

² This reference applies to all data presented in this Introduction.

Here again, differences among Arab countries are large but are narrowing down. The highest rates of population growth at present are to be found in Palestine (4.1 per cent) and Somalia (3.9 per cent) and the lowest in Lebanon and Tunisia (1.6 per cent each). In the Gulf countries, rates of natural increase, i.e. population growth exclusive of migration, are relatively low because of the existence of a large proportion of foreign workers without their families. The rates of natural increase among the national populations remain among the highest in the region (ESCWA, 2001).

The reason for the decline in rates of population growth is that the decline in fertility, as represented by the Crude Birth Rate (CBR) is greater, in absolute terms, than the decline in mortality, as represented by the Crude Death Rate (CDR). Between 1975 and 2000, for example, the CBR of the combined population of the Arab countries fell from 42.5 per thousand population to 29 per thousand. The crude death rates, on the other hand, fell from 11.4 per thousand to 5.8 per thousand. As a result, the rates of natural increase and of population growth,³ fell from 3.1 to 2.3 per cent (text table 1).

Table 1: Crude Birth Rates, Crude Death Rates and Natural Increase Rates for the Population of the Arab Countries, 1975, 2000 and 2025.

Year	CBR (per thousand)	CDR (per thousand)	Natural Increase (per cent)
1975	42.5	11.4	3.1
2000	29	5.8	2.3
2025	19.3	5.0	1.4

Source: UN, World Population Prospects, 99

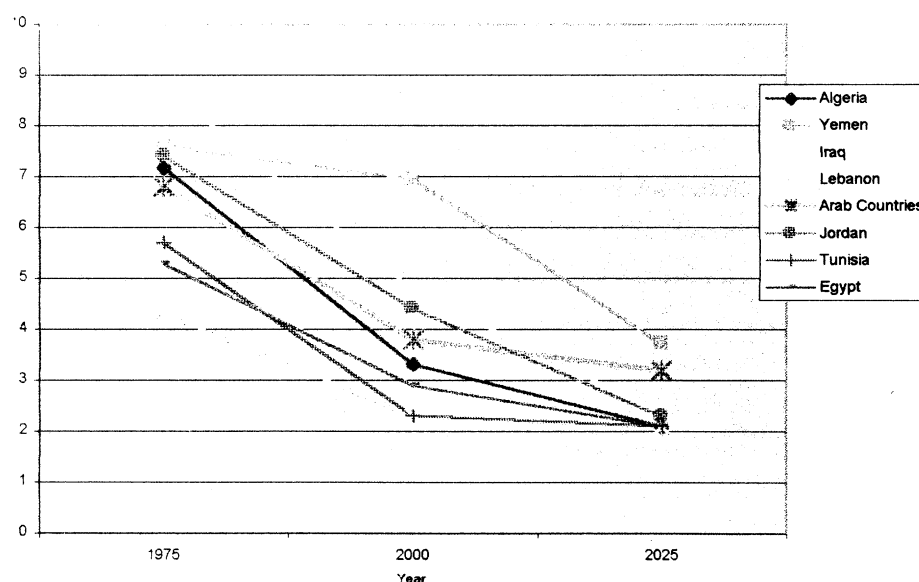
The decline in fertility of the population of the Arab countries has been pronounced over the past twenty-five years. The total fertility rate, that is, the average number of children expected to be obtained at the end of a woman's reproduction, was almost halved during the past twenty-five years as it fell from

³ Net migration to or from the region is not very significant compared to total population.

6.8 in 1975 to 3.7 in the year 2000. According to United Nations estimates, this number is expected to fall to 3.2 children in the next twenty-five years⁴.

Great differences existed in the levels of total fertility among Arab countries in 1975 and are still found to exist now. At present, for example, Palestine, Somalia and Yemen have total fertility rates of close to 7 children while these rates are 2.9 in Egypt and 2.3 in each of Lebanon and Tunisia. However, in most Arab countries, the decline in fertility has been spectacular and is expected to be so in the next twenty-five years. In Iraq, for example, where total fertility reached close to 9 children in 1975, the highest fertility level in the Arab world at the time, it has fallen to a present level of less than 5 children and is expected to reach near replacement in 2025. Similarly, total fertility in Algeria was 7.2 children in 1975 but is now around 3.3 children and is expected to reach replacement (or below) in the next twenty-five years (Annex table 3 and Chart 2).

Chart2: Total Fertility Rates in selecte Arab Countries (1975-2000-2025)



⁴ This is likely to be too high an estimate since the UN projections do not allow for below replacement levels (2.1 children) which may, indeed, be obtained in some Arab countries, particularly Egypt, Lebanon, Morocco and Tunisia, in the next 25 years.

Mortality in the Arab countries, on the other hand, declined dramatically during the past decades and is expected to continue to decline, if less rapidly, during the coming decades. The average expectation of life at birth for the Arab countries rose from 55 years in 1975 to 67 years in 2000. According to United Nations estimates, life expectancy will rise to more than 73 years by the year 2025. These averages, however, hide great differences among Arab countries. At present, Kuwait and the United Arab Emirates have the highest life expectancies (77 and 76 years, respectively) and Somalia and Djibouti have the lowest (49 and 52 years, respectively). Looking towards the future, 17 of the 21 countries included in this paper will have an expectation of life at birth of more than 70 years by 2025 (compared to 13 now) and the lowest level of life expectancy (Somalia) will be close to 60 years (Annex table 4).

II. Ageing

The decline in fertility and, to some extent, the fall in mortality (i.e., the rise in expectation of life at birth) have resulted in a major change in the age structure of the population of the Arab region: a reduction in the proportion of children in the population and a rise in the proportion of the elderly. This ageing process can be most succinctly described by data in text table 2. As is indicated, the proportion of children under 15 years of age in the Arab region fell from 42 per cent in 1975 to 38 per cent in 2000 and is expected to fall further to less than 29 per cent by the year 2025. On the other hand, the proportion of the population aged 65 years and over, rose slightly from 3.5 per cent in 1975 to 3.6 percent in the year 2000, but is expected to reach more than 6 per cent in the next 25 years. In this respect, it may also be useful to look at absolute numbers of elderly persons. In 1975 there were some 5 million elderly persons in the Arab region. By the year 2000, the number had reached 10.2 million although the percentage of elderly in the total population remained fairly stable. By the year 2025, the number of the elderly is expected to reach close to 28 million persons (Annex table 5). In Egypt alone, it is estimated that the number of the elderly population 60 years of age and over will reach 13 million by the year 2030 (Rachad and Khadr, 2001, p.5).

Table 2. Percent 0-4, 0-14 and 65 years and over for the World, More Developed Countries, Less Developed Countries and the Arab Region, 1975, 2000 and 2025.

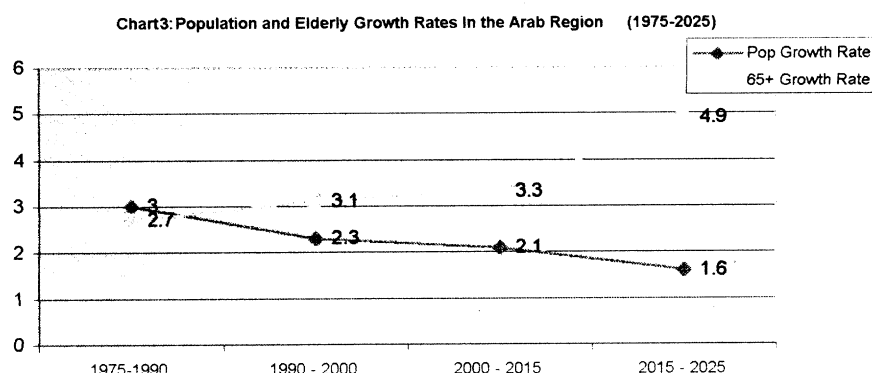
	World			MDC			LDC			Arab Region		
	'75	'00	'25	'75	'00	'25	'75	'00	'25	'75	'00	'25
0-4	13.4	10.0	7.8	7.7	5.5	5.1	15.3	11.1	8.3	16.5	13.8	9.7
0-14	36.9	29.7	23.9	24.2	18.2	15.7	41.3	32.5	24.9	42.1	38.2	28.8
65+	5.7	6.9	10.4	10.7	14.4	20.9	3.9	5.1	8.5	3.5	3.6	6.0

Source: UN, World Population Prospects, 99

Compared with data from other parts of the world, it is clear that the ageing process in the Arab region as a whole is still at an early stage due to the more recent onset of fertility decline. As text table 2 shows, the proportion of total population that is under 5 or under 15 years of age is higher in the Arab region than the average for the less developed countries. Thus, while the proportion of the population under 5 years of age in the Arab region in the year 2000 was 13.8 per cent, the corresponding value for the less developed countries was 11.1 per cent. For the more developed countries, it averaged 5.5 per cent only and for the world 10 per cent. Similarly, while the population aged less than 15 years in the Arab region in the year 2000 was 38.2 per cent of total population, the corresponding average for the less developed countries was only 32.5 per cent. For the more developed countries, it averaged 18.2 per cent and for the world 29.7 per cent. On the other hand, the proportion 65 years of age and over in the Arab world is, on average, lower than in all these other regions and is expected to remain so for the next 25 years at least. For the year 2000, for example, the proportion of total population aged 65 years and over was 3.6 per cent in the Arab region as against an average of 5.1 per cent in the less developed countries, 14.4 per cent in the more developed countries and 6.9 per cent in the world as a whole. In the more developed region, the proportion of the elderly is expected to reach around 21 per cent of total population by 2025, which will exceed the proportion under 5 years of age (5 per cent) and even the proportion under 15 years of age (16 per cent). In the Arab region, the proportion 65 years of age in 2025 will not exceed 6 per cent and will be less than the proportion under 5 (10 per cent) and

much less than the proportion under 15 years of age (29 per cent). Since fertility in the Arab region is falling and is expected to follow eventually the path of fertility decline in the more developed countries, the ageing situation in the latter countries may form the long-term expectation for our region.

Looking at the same thing differently, ageing takes place when the rate of growth of the elderly population exceeds the rate of growth of the total population (leading of course to a rise in the proportion of the elderly in total population)⁵. As chart 3 shows, the rate of growth of the population of the Arab region grew, and is expected to grow in future, at a *declining* rate while the population aged 65 years and over grew, and is expected to grow, at an *increasing* rate. Indeed, the rate of growth of the elderly population in the Arab region has already surpassed the rate of growth of total population and is expected to reach around 5 per cent in the period 2015-2025 as against 1.6 per cent for the total population.



Still another way of looking at ageing is through the movement in the median age of the population. As can be seen from text table 3, the median age of the population in the Arab region has risen from 17.5 years in 1975 to 20.6 years in 2000. This increase is expected to accelerate in future and the median age is expected to reach more than 27 years in 2025. Consistent with the earlier findings, the Arab region will remain, nevertheless, less aged than other regions in the world for some time to come. In 2025, for example, while the median age of the

⁵ In fact, it is more accurate, though less conventional, to compare the rate of growth of the elderly population with that of the rest of the population and not that of the total population which contains the elderly.

population of the Arab region is expected to reach 27 years, it is expected to have reached an average of 31 years in the less developed countries and 44 years in the more developed countries. For the world as a whole, the median age would have reached close to 33 years.

So far, the Arab populations that have aged most are, understandably, those of countries where fertility has reached the lowest levels in the region, namely, Lebanon and Tunisia (Annex table 5). In these two countries the proportion of the population aged 65 years and over has reached little less than 6 per cent at present. This contrasts with proportions of 2.9 per cent in Palestine and 2.4 per cent in Yemen. In the next 25 years, the proportion of the population aged 65 years and over will reach between 7 and 8 per cent in Egypt, Lebanon and Morocco and is expected to reach close to 9 per cent in Tunisia. In Palestine and Yemen no changes are expected in these proportions during that period⁶.

Table 3: Median Age for the World, the More Developed, Less Developed and Arab Regions, 1975, 2000 and 2025.

Region\ Year	1975	2000	2025
World	21.9	26.6	32.7
MDC	30.9	37.5	43.6
LDC	19.3	24.4	30.9
Arab Region	17.5	20.6	27.1

Source: UN, World Population Prospects, 99

An important aspect of ageing arises from the fact that females outlive males so, with ageing, the ratio of females to males in the population, particularly in the older age groups, rises as the process intensifies. In Lebanon, for example, the proportion of the population aged 65 years and over is, at present, 5.4 per cent for males and 6.2 per cent for females (Annex table 6). By the year 2025, these

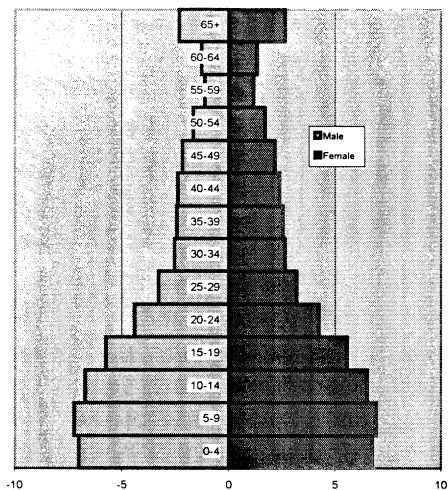
⁶ United Nations projections for the Gulf countries are quite misleading and are not used in this paper. The reason is that the UN projects the resident population including non-nationals. Since these non-nationals are concentrated in the working age groups, projections to 2025 show inflated proportions of persons aged 65 years and over since they assume that all the non-nationals will remain in the country while in reality they will either leave before reaching that age or be replaced by working age non-nationals.

proportions will be 6.2 and 9.4 per cent respectively. Looking at the same thing differently, the proportion of the female population among the elderly in 2000 was estimated at 55 per cent while in 2025 it was estimated to have reached 61 per cent. Similarly, in Tunisia, the share of females among the elderly is slightly above 50 per cent at present but is expected to rise to more than 54 per cent in 2025. This process of feminization of ageing does not yet appear in the data of countries at the beginning of the ageing process but will certainly become a feature as the ageing process intensifies.

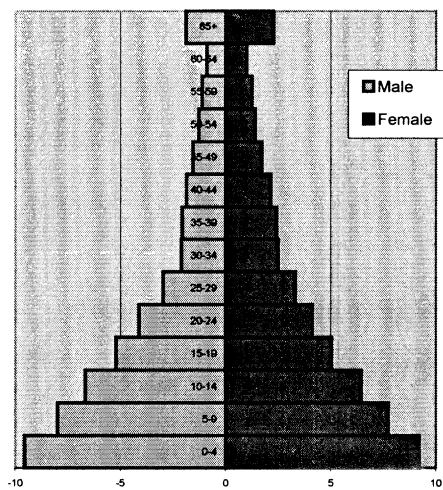
A visual presentation of the ageing process may be obtained from a time series presentation of sex-age pyramids. In chart 4 (A to G), the pyramids for Lebanon for the years 1975, 2000 and 2025 are first presented as an example of the ageing process in an Arab country where fertility has declined most. Following these, are presented the corresponding pyramids for Algeria where declining fertility has not yet gained great momentum. Finally, the present sex-age pyramid for France is presented as an indication of things to come.

A few remarks are in order. First, it is clear that, in 1975, the Algerian pyramid had a much broader base than the Lebanese pyramid indicating a higher fertility in the former country. Furthermore, it had a narrower top (for the age group 65 years and over) indicating an earlier stage in the ageing process. The same relationship holds true for the year 2000 although the base of both pyramids had obviously narrowed down and the top of the pyramid widened. This process continues with the 2025 pyramids that look more like square buildings than pyramids. This new shape is more pronounced in the case of Lebanon and is similar to the shape of the sex-age pyramid of France at present, that is, twenty-five years earlier. Second, it is clear for all three countries that, as the ageing process develops, the females aged 65 years and over become increasingly more numerous than males. In France at present, for example, close to 9.5 per cent of females are 65 years and over as against some 6.5 per cent of males.

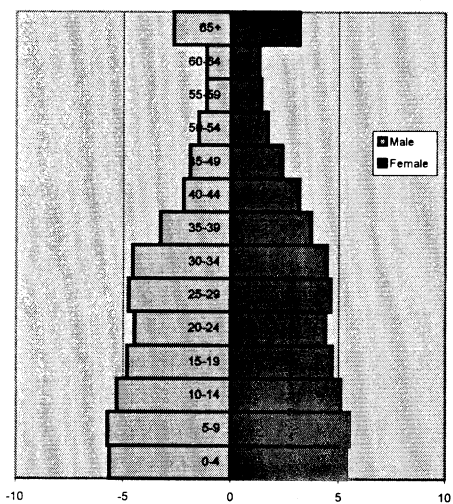
Population Pyramid : Lebanon 1975



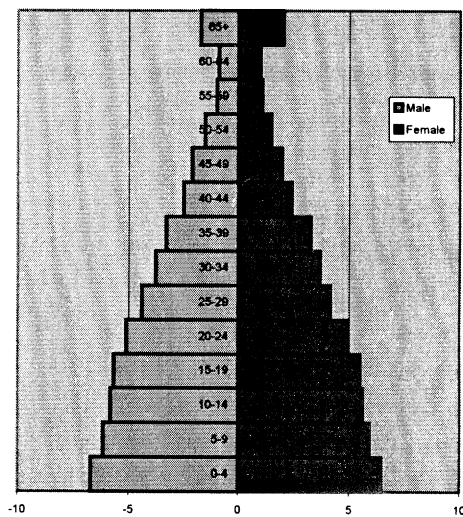
Population Pyramid: Algeria 1975



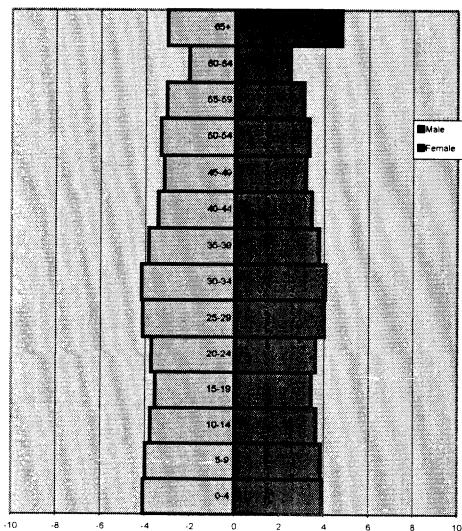
Population Pyramid : Lebanon 2000



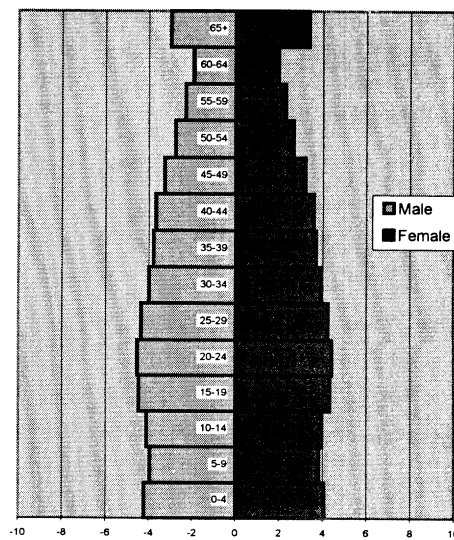
Population Pyramid -Algeria 2000



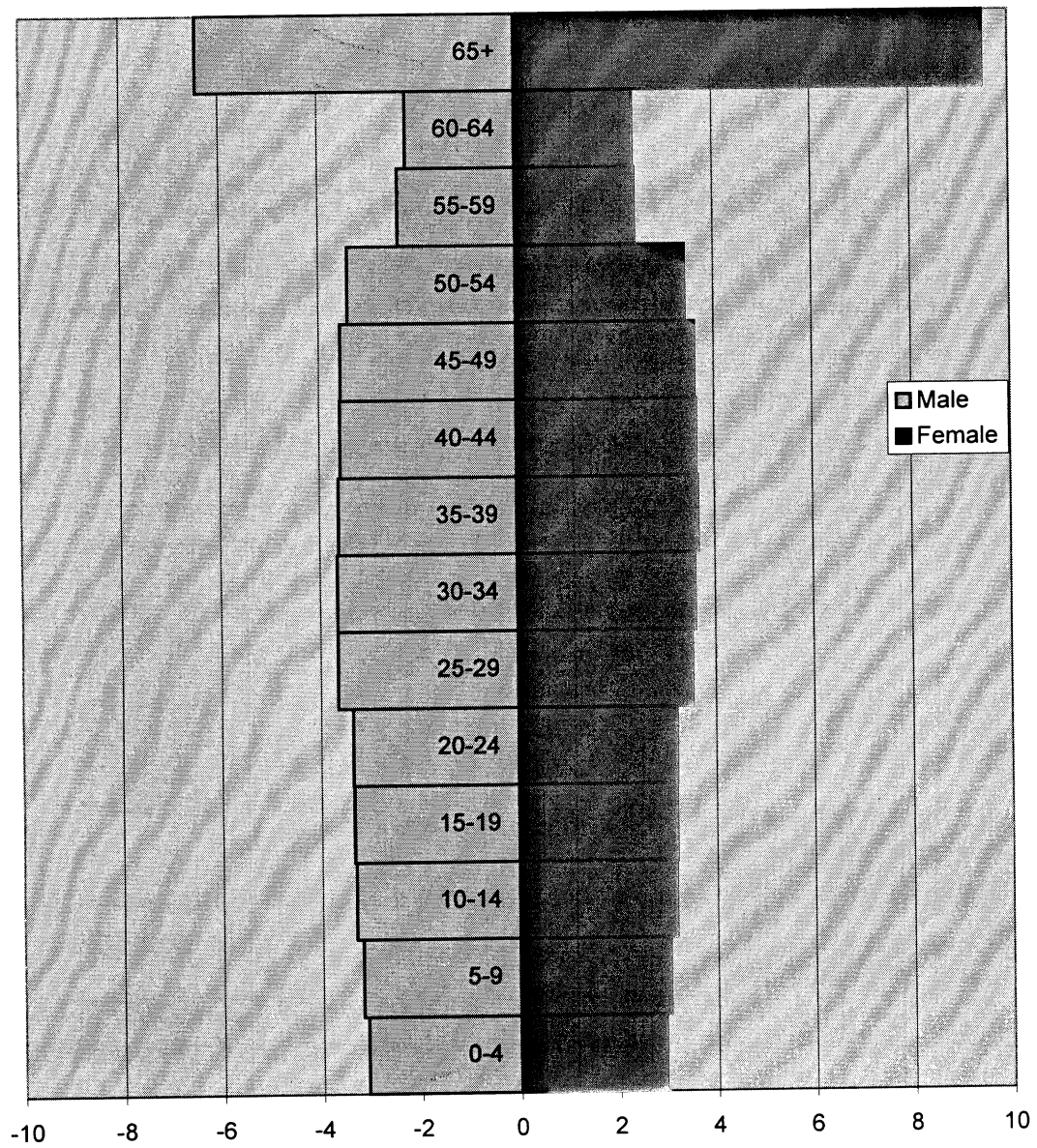
Population Pyramid: Lebanon 2025



Population Pyramid : Algeria 2025



Population Pyramid: France 2000



III. Demographic consequences

1. **Old-age dependency:** The most direct demographic consequence of ageing is an increase in the old-age dependency ratio (ODR), defined as the ratio of the elderly to the working-age population and calculated as the ratio of persons aged 65 years and over to persons aged 15-64. Text table 4 shows these dependency ratios for the world and its various regions for the years 1975, 2000, 2025 and 2050. It is clear that the Arab region at present has the lowest ODR (5 per cent), which is somewhat lower than the one obtained in Africa (6 per cent) and much lower than the world average (11 per cent) or the levels obtained in the other developing regions (9 per cent). It is, of course, very much lower than the average ratio for the OECD countries (21 per cent). Furthermore, the ODR for the Arab countries has not risen in the past 25 years (it has actually fallen slightly) indicating no ageing process during that period. However, it is expected to rise substantially from now on reaching 8 per cent in 2025 and 13 per cent in 2050. But even in that latter year, the ageing process in the Arab world will remain at an earlier stage than in other parts of the world (except Africa) meaning that it is expected to continue for a very long time. Finally, it must be noted that the nature of total dependency (i.e., young and old dependents) tends to change with the ageing process. Since this process is characterized by declining fertility and higher longevity, the burden on the work force shifts gradually from the support of children to the support of older individuals, for a longer period of time.

2. **Mortality:** There are, of course, a number of measures of mortality levels. Some, like the expectation of life at birth are not affected by age distribution of the population; others, like the Crude Death Rate (CDR), are affected by the age distribution. A comparison of these two measures is interesting for the study of ageing.

Table 4: Old-age Dependency Ratios for the World, the Arab Countries and other Regions, 1975, 2000, 2025, and 2050.

	Africa	Arab States	Asia and Pacific	Latin America	OECD	Other	World
1975	6	6	7	8	17	14	10
2000	6	5	9	9	21	17	11
2025	7	8	14	14	32	24	15
2050	12	13	25	27	42	34	24

Source: Golin, G et al, Social Security Pensions: Development Reform, 2000

Text table 5 undertakes this comparison for the more developed, less developed and the Arab regions. A number of salient factors need to be noted:

First, while life expectancy in the more developed region is substantially higher than in the less developed region, indicating lower mortality, the crude death rate in the less developed region is nevertheless significantly lower than in the more developed region. For the year 2000, for example, life expectancy in the MDC region was over 75 years compared to less than 64 years in the LDC region, but the crude death rate in the former region was 10.3 per thousand population as against 8.5 per thousand in the LDC region. In other words, in spite of the fact that general mortality levels (as indicated by life expectancy) were lower in the MDC than in the LDC region, the proportion of the population dying in a given year in relation to the population (CDR) is higher in the MDC region than in the LDC because of greater prevalence of older people. The contrast is even greater between the LDC region and the Arab region. In the year 2000, life expectancy in the Arab region (67 years) was significantly higher than in the LDC region (64 years) but the crude death rate in the Arab region (5.8 per thousand) was significantly lower than in the LDC region, not only because of lower mortality, but also because the population of the Arab region was younger.

Second. Because the gain in life expectancy in the MDC region during the next 25 years (being relatively limited because life expectancy has already reached very high levels), could not compensate for the ageing of the population, crude death rates are expected to rise, if only slightly, during this period. In the LDC region, on the other hand, the decline in mortality indicated by the substantial rise in life expectancy, will more than compensate for the ageing of the population resulting in a decline in crude death rates. The same is somewhat true for the Arab region, although the decline in the crude death rate is expected to be much more modest because of more rapid ageing of a very young population.

Table 5 Life Expectancies and Crude Death Rates for the More Developed, Less Developed and Arab Regions, 2000 and 2025.

Life expectancy	MDC region	LDC region	Arab region
2000	75.3	63.9	67.1
2025	78.9	71.3	73.5
CDR			
2000	10.3	8.5	5.8
2025	11.8	7.7	5.0

Source: UN, World Population Prospects, 1999

It should be noted that, for all Arab countries, the next 50 years will see a rise in crude death rates as ageing accelerates and the improvement in general mortality gets closer to saturation. For some, like Egypt, Lebanon Morocco and Tunisia, the rise in crude death rates will begin in the next 25 years while in others, like Yemen and Somalia, the rise in death rates will not probably come before 40 or 50 years.

3. Morbidity: Clearly, the ageing process is accompanied by major changes in the demands of the health sector. A gradual shift in general morbidity and causes of death tends to take place from factors that affect the young (e.g. measles, car accidents, etc.) to those that affect the old (degenerative diseases such as cancer, Alzheimer, diabetes and hypertensive diseases). The need for old peoples' homes

and for doctors and other medical personnel specialized in geriatrics increases with the ageing of the population.

4. Widowhood: Because women live longer than men, the proportion of women among the widowed elderly persons is universally quite high. In Lebanon in 1996, for example, more than 84 per cent of widowed persons aged 60 and over were women and only 16 per cent were men (Lebanon, 98). Furthermore, the proportion widowed of each sex rises, of course, with age but until the age 50 at least, it rises more sharply for women than men partly because men remarry more than women. In Lebanon again the proportion of men who are widowed remains below 0.5 per cent until the age group 45-49 years, while that of women rises steadily to more than 8 per cent for that age group. For the age group 60 years and over the percentage of widows among women is 45 while the corresponding percentage for men is 8.6. In the UAE the corresponding percentages are 55.1 and 6.4 (GCC, 99). This seems to be in line with data obtained for Asian as well as Western countries (Knodel, 2001).

5. Socio-economic consequences: Although outside the scope of this paper, it should be briefly mentioned that ageing has a number of social and economic consequences that need to be addressed by both the private and public sectors. People not only live longer but also live generally healthier lives at old age. A person 60 years of age, for example, is generally still at a very productive stage of his life. Yet, of the 15 Arab countries for which data could be obtained,⁷ 12 had a "normal retirement age" of 60 years and one (Kuwait) of 50 years. Only two had a higher retirement age: Lebanon (64-68 years) and Libya (65 years). In addition, 6 countries (Bahrain, Iraq, Jordan, Mauritania, Morocco and Yemen) had a separate retirement age for women, set at 55 years⁸ (Golin et al, 2000 and Mallat, 1999). A serious look at this issue needs to be undertaken that would take into account the right to work of the elderly and the need to find employment for the young.

⁷ Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Oman, Saudi Arabia, Sudan, Syria, Tunisia and Yemen.

⁸ Even the United Nations has a mandatory retirement age of 60 years, although most Assistant and Under-Secretaries (who are exempted from it), and even the Secretary-General, are beyond this retirement age.

A study by the United Nations (1994, p.8) indicates that “demographic ageing trends are currently associated with decreasing economic potential, in terms of such variables as growing age-dependency rates, government expenditures for social security, tax rates for the economically active, reduced labour productivity and increased need for government support of families caring for the ageing” (UN, 1994). The private sector needs also to be advised of the ageing process. Since the needs of the aged are, in many ways, different from those of the young or even the middle aged, goods and services produced or imported need to be adapted continuously. With declining fertility, there is a ripple effect on the educational system, starting from demand for pre-school education and ending with higher education. Economic production will also need to respond by adjusting its production to the new and nascent demand (“producing more canes and less diapers”).

One of the most important adjustments will have to come in the area of old age pension. “Growing recognition of the potential consequences of population aging has prompted widespread discussion of the problems and of what to do about them.” (Chand and Jaeger, 1996, p. 1).⁹ A study by the World Bank (1994) advocates “a three-pillar system for providing old age security: a mandatory publicly managed pillar with limited goal of reducing poverty; a mandatory privately managed pillar providing fully funded pensions; and a voluntary savings pillar.” Old age pension schemes in the Arab countries are widespread but need to be reviewed in the face of the onset of the ageing process (Mallat, 1999). The guiding principle of such systems should be “to meet the individual needs of the elderly, to the greatest degree possible, within the context of the family and community which have so far provided the main support. Development of State-based schemes [may be] considered appropriate only for those sectors of the elderly population which have lost their family support ...” (United Nations, 1994, p.19)

⁹ See also pp.38-39

IV. Conclusion

Fertility is declining throughout the Arab region. In some countries, such as Egypt, Lebanon, Morocco and Tunisia, the decline in fertility started some twenty years ago while in others the decline is of a more recent nature. The proportion of the population considered elderly (65 years of age and over in this study), has been slowly increasing in the former countries, and have begun to do so in the latter countries. For the Arab region as a whole, this ageing process is still at its early stages compared with other regions in the world, except perhaps Africa.

This change in the age structure of the population of the Arab region towards the older age groups has a number of demographic consequences. The fact that people are living longer, as indicated by the steady increase in the expectation of life at birth data, means that the ageing process is reflected not only in a greater proportion of older persons in the population, but also that this group lives longer. Old age dependency ratios (the ratio of persons aged 65 years and over to persons 15-64 years of age) are increasing and are expected to continue to do so in the foreseeable future. With ageing, it is also expected that crude death rates, which have reached extremely low levels in most Arab countries due to low mortality (high life expectancy) and high fertility, will rise in future in spite of expected gains in health levels. Furthermore, with the increasing proportion of the aged and the fact that they will live progressively longer lives, the level of widowhood will increase in future as the ageing process progresses. It should be noted in this respect that the proportion of women among widowed persons is very high because they typically live longer than men.

There are also important socio-economic consequences that need to be addressed by both the private and public sectors. Declining fertility has a ripple effect on the educational system starting with potentially lower demand on educational services at the primary levels and ending with the level of the university. The health system needs to be adjusted in terms of a changing disease structure due to ageing and in terms of the health personnel and institutions. Production needs also to make similar adjustments. As important, perhaps, are the

changing requirements of the social insurance system, which has to gradually support greater numbers of the aged relative to the working population.

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Annexes

**Annex table1: Total Arab Population (in thousands),
1975, 2000 and 2025**

Country			Country		
		Total pop			Total pop
Algeria	1975	16018	Lebanon	1975	2767.00
	2000	31471		2000	3282.00
	2025	46611		2025	4400.00
Bahrain	1975	272	Lybian Arab Jamahiriya	1975	2446
	2000	617		2000	5605.00
	2025	858		2025	8647.00
Djibouti	1975	205	Mauritania	1975	1371.00
	2000	638		2000	2670.00
	2025	1026		2025	4766.00
Egypt	1975	38841	Morocco	1975	17305.00
	2000	68470		2000	28351.00
	2025	95615		2025	38670.00
Iraq	1975	11020	Oman	1975	880.00
	2000	23115		2000	2542.00
	2025	41014		2025	5352.00
Jordan	1975	2600	Palestine	1975	393.00
	2000	6669		2000	1120.00
	2025	12063		2025	2782.00
Kuwait	1975	1007	Qatar	1975	171.00
	2000	1972		2000	599.00
	2025	2974		2025	779.00
Saudi Arabia	1975	7251			
	2000	21607	Arab Pop	1975	143295.00
	2025	39965		2000	284579.00
Somalia	1975	4134		2025	454401.00
	2000	10097			
	2025	21211			
Sudan	1975	16012			
	2000	29490			
	2025	46264			
Syria	1975	7438			
	2000	16125			
	2025	26292			
Tunisia	1975	5668			
	2000	9586			
	2025	12843			
UAE	1975	505			
	2000	2441			
	2025	3284			
Yemen	1975	6991			
	2000	18112			
	2025	38985			

Source: UN, World Population Prospects, 99.

Annex table 2: Growth Rates, Arab Countries, 1975-1980 to 2020-2025.

	Algeria	Bahrain	Djibouti	Egypt	Iraq	Jordan	Kuwait	Lebanon	Libya	Mauritania
75-80	3.14	4.87	6.33	2.38	3.32	2.34	6.24	-0.72	4.37	2.46
80-85	3.1	3.51	6.59	2.57	3.27	6.88	4.48	-0.1	4.37	2.6
85-90	2.61	3.39	5.58	2.49	3.32	2.29	4.4	-0.86	3.08	2.75
90-95	2.36	2.59	3	2.01	2.12	4.32	-4.76	3.27	2.35	2.79
95-00	2.3	2.03	1.19	1.89	2.8	3.02	3.09	1.74	2.42	2.73
00-05	2.11	1.54	2.11	1.7	2.85	2.89	2.26	1.37	2.33	2.67
2005-10	1.82	1.34	2.05	1.43	2.59	2.65	1.83	1.16	2.06	2.5
2010-2015	1.46	1.33	1.96	1.25	2.32	2.38	1.61	1.14	1.63	2.34
2015-2020	1.25	1.27	1.81	1.2	2.01	2.11	1.41	1.14	1.35	2.16
2020-2025	1.22	1.11	1.59	1.1	1.7	1.83	1.11	1.06	1.3	1.93

	Morocco	Oman	Palestine	Qatar	KSA	Somalia	Sudan	Syria	Tunisia	UAE	Yemen
75-80	2.27	4.29	2.73	5.84	5.62	6.96	3.08	3.14	2.58	13.97	3.24
80-85	2.21	4.64	3.13	8.9	5.51	2.24	2.77	3.55	2.58	8.49	3.31
85-90	2.01	4.5	3.97	6.1	4.76	3.43	2.29	3.5	2.12	4.26	3.56
90-95	1.63	3.77	6.85	2.43	2.58	1.07	2.02	2.73	1.84	2.81	5.19
95-00	1.76	3.3	4.27	1.78	3.37	4.16	2.05	2.54	1.39	1.99	3.74
00-05	1.57	3.27	4.01	1.53	2.27	3.6	2.1	2.46	1.34	1.65	3.47
2005-10	1.35	3.23	3.8	1.36	2.76	3.12	2.03	2.31	1.29	1.45	3.27
2010-2015	1.16	3.08	3.65	1.13	2.51	2.92	1.87	2.03	1.2	1.19	3.08
2015-2020	1.1	2.8	3.49	0.76	2.2	2.73	1.63	1.62	1.09	0.93	2.89
2020-2025	1.02	2.52	3.24	0.47	1.86	2.48	1.037	1.37	0.94	0.71	2.63

Region	1975-1990	1990 - 2000	2000 - 2015	2015-2025
Pop Growth Rate	3	2.3	2.1	1.6
65+ Growth Rate	2.7	3.1	3.2	6

Source: UN, World Population Prospects, 99.

**Annex table 3: Total Fertility Rates, Arab Countries,
1975, 2000 and 2025**

Country			Country											
		TFR			TFR									
Algeria	1975	7.18	Lebanon	1975	4.31									
	2000	3.32		2000	2.3									
	2025	2.1		2025	2.1									
Bahrain	1975	5.23	Libyan Arab Jamahiriya	1975	7.38									
	2000	2.37		2000	3.32									
	2025	2.1		2025	2.1									
Djibouti	1975	6.65	Mauritania	1975	6.5									
	2000	4.87		2000	5.11									
	2025	2.74		2025	2.78									
Egypt	1975	5.27	Morocco	1975	5.9									
	2000	2.88		2000	2.55									
	2025	2.1		2025	2.1									
Iraq	1975	8.8	Oman	1975	7.2									
	2000	4.77		2000	5.41									
	2025	2.34		2025	3.21									
Jordan	1975	7.38	Palestine	1975	7.4									
	2000	4.44		2000	6.75									
	2025	2.31		2025	4.02									
Kuwait	1975	5.89	Qatar	1975	6.11									
	2000	2.57		2000	3.37									
	2025	2.1		2025	2.1									
Saudi Arabia	1975	7.28	Tunisia	1975	5.69									
	2000	5.23		2000	2.3									
	2025	2.38		2025	2.1									
Somalia	1975	7.25	UAE	1975	5.66									
	2000	6.93		2000	3.04									
	2025	3.71		2025	2.1									
Sudan	1975	6.67	Yemen	1975	7.61									
	2000	4.23		2000	6.95									
	2025	2.29		2025	3.72									
Syria	1975	7.44	<table><tr><td>Region</td><td>1975</td><td>6.8</td></tr><tr><td></td><td>2000</td><td>3.79</td></tr><tr><td></td><td>2025</td><td>3.22</td></tr></table>			Region	1975	6.8		2000	3.79		2025	3.22
	Region	1975				6.8								
		2000				3.79								
	2025	3.22												
	2000	3.58												
	2025	2.1												

Source: UN, World Population Prospects, 99

**Annex table 4: Total Fertility Rates- Crude Birth Rates- Crude Death Rates- National Increase
and Life Expectancy
Arab Countries, 1975, 2000 and 2025.**

Country		TFR	CBR	CDR	NI	LE
Algeria	1975	7.18	45	13.4	31.6	57.5
	2000	3.32	26.5	5.1	21.4	70.2
	2025	2.1	17.1	5.1	12	75.7
Bahrain	1975	5.23	34.4	6.3	28.1	65.9
	2000	2.37	16.1	3.8	12.3	73.8
	2025	2.1	13.7	7.4	6.3	77.8
Djibouti	1975	6.65	45.6	20.7	24.9	43
	2000	4.87	34.7	13.6	21.1	52.4
	2025	2.74	22.4	8.8	13.6	62.9
Egypt	1975	5.27	38.9	14.2	24.7	54.1
	2000	2.88	23.5	6.1	17.4	68.3
	2025	2.1	16.3	6.3	10	74.7
Iraq	1975	8.8	41.9	6.56	35.34	61.1
	2000	4.77	33.8	5.3	28.5	69.4
	2025	2.34	18.3	4.6	13.7	75.1
Jordan	1975	7.38	45	9.6	35.4	61.2
	2000	4.44	33	4.1	28.9	71.5
	2025	2.31	19	3.8	15.2	76.4
Kuwait	1975	5.89	40.1	4.2	35.9	69.6
	2000	2.57	20.2	2.4	17.8	76.7
	2025	2.1	14.7	5.5	9.2	79.7
Lebanon	1975	4.31	30.1	8.7	21.4	65
	2000	2.3	19.8	6.1	13.7	71
	2025	2.1	15.5	6.4	9.1	75.7
Libyan Arab Jamahiriya	1975	7.38	37.3	12.7	24.6	57.7
	2000	3.32	27.8	4.6	23.2	70.9
	2025	2.1	17.3	4.9	12.4	76.6
Mauritania	1975	6.5	44.7	20	24.7	45.5
	2000	5.11	38.6	12	26.6	55.5
	2025	2.78	23.9	7.3	16.6	65.5
Morocco	1975	5.9	39.4	13	26.4	55.8
	2000	2.55	22.8	6.1	16.7	68.7
	2025	2.1	15.9	6.4	9.5	74.8
Oman	1975	7.2	46.1	12.4	33.7	54.8
	2000	5.41	35.8	3.9	31.9	72
	2025	3.21	26.3	3.6	22.7	76.6
Palestine	1975	7.4	48	11.6	36.4	60
	2000	6.75	43.8	3.8	40	72.6
	2025	4.02	31.3	2.4	28.9	77.2
Qatar	1975	6.11	29.9	9.4	20.5	65.6
	2000	3.37	18.1	4.4	13.7	72.6
	2025	2.1	14.4	10.6	3.8	76.8

Country		TFR	CBR	CDR	NI	LE
Saudi Arabia	1975	7.28	45.9	10.7	35.2	58.8
	2000	5.23	32.2	3.8	28.4	72.9
	2025	2.38	18.1	4.2	13.9	77.7
Somalia	1975	7.25	51.7	22.9	28.8	42
	2000	6.93	49.9	16.7	33.2	49
	2025	3.71	31.3	9.3	22	59
Sudan	1975	6.67	47.1	17.8	29.3	46.7
	2000	4.23	31.6	10.7	20.9	57
	2025	2.29	18.7	7.4	11.3	67.1
Syria	1975	7.44	46	8.9	37.1	60.1
	2000	3.58	29.2	4.5	24.7	70.2
	2025	2.1	17.4	4.3	13.1	75.7
Tunisia	1975	5.69	36.4	10	26.4	60
	2000	2.3	19.7	6.4	13.3	70.9
	2025	2.1	14.6	6.4	8.2	76.2
UAE	1975	5.66	30.5	7.4	23.1	66.8
	2000	3.04	17.9	3.3	14.6	75.8
	2025	2.1	14	8.5	5.5	79.4
Yemen	1975	7.61	53.7	20.7	33	44.1
	2000	6.95	43.3	8.7	34.6	60.5
	2025	3.72	27.3	4.3	23	70.6

		CBR	CDR	LE
Region	1975	42.5	11.4	55
	2000	29	5.8	67
	2025	19.3	5	73

Source: UN, World Population Prospects, 99.

Annex table 5: Total Arab Population, Total 65+ (in thousands) and Percent 65+ 1975, 2000 and 2025.

Country					Country				
		Total pop	Total 65+	Percent			Total pop	Total 65+	Percent
Algeria	1975	16018	669.00	4.2%	Lebanon	1975	2767.00	137.00	5.0%
	2000	31471	1186.00	3.8%		2000	3282.00	191.00	5.8%
	2025	46611	2968.00	6.4%		2025	4400.00	343.00	7.8%
Bahrain	1975	272	7.00	2.6%	Libyan Arab Jamahiriya	1975	2446	55.00	2.2%
	2000	617	18.00	2.9%		2000	5605.00	178.00	3.2%
	2025	858	113.00	13.2%		2025	8647.00	542.00	6.3%
Djibouti	1975	205	4.00	2.0%	Mauritania	1975	1371.00	40.00	2.9%
	2000	638	22.00	3.4%		2000	2670.00	87.00	3.3%
	2025	1026	48.00	4.7%		2025	4766.00	198.00	4.2%
Egypt	1975	38841	1646.00	4.2%	Morocco	1975	17305.00	633.00	3.7%
	2000	68470	2814.00	4.1%		2000	28351.00	1245.00	4.4%
	2025	95615	7330.00	7.7%		2025	38670.00	3001.00	7.8%
Iraq	1975	11020	273.00	2.5%	Oman	1975	880.00	24.00	2.7%
	2000	23115	725.00	3.1%		2000	2542.00	63.00	2.5%
	2025	41014	2072.00	5.1%		2025	5352.00	253.00	4.7%
Jordan	1975	2600	74.00	2.8%	Palestine	1975	393.00	10.00	2.5%
	2000	6669	194.00	2.9%		2000	1120.00	33.00	2.9%
	2025	12063	510.00	4.2%		2025	2782.00	70.00	2.5%
Kuwait	1975	1007	16.00	1.6%	Qatar	1975	171.00	4.00	2.3%
	2000	1972	40.00	2.0%		2000	599.00	12.00	2.0%
	2025	2974	307.00	10.3%		2025	779.00	144.00	18.5%
Saudi Arabia	1975	7251	218.00	3.0%	Tunisia	1975	5668	197	3.5%
	2000	21607	625.00	2.9%		2000	9586	557	5.8%
	2025	39965	2640.00	6.6%		2025	12843	1108	8.6%
Somalia	1975	4134	122	3.0%	UAE	1975	505	10	2.0%
	2000	10097	242	2.4%		2000	2441	60	2.5%
	2025	21211	587	2.8%		2025	3284	582	17.7%
Sudan	1975	16012	434	2.7%	Yemen	1975	6991	182	2.6%
	2000	29490	949	3.2%		2000	18112	430	2.4%
	2025	46264	2392	5.2%		2025	38985	974	2.5%
Syria	1975	7438	275	3.7%	Region	1975	361442.00	21835.00	6.0%
	2000	16125	498	3.1%		2000	138767.00	4820.00	3.5%
	2025	26292	1239	4.7%		2025	268577.00	10213.00	3.8%

Source: UN, World Population Prospects, 99.

Annex table 6: Percent 65+ by sex, Arab Countries, 2000 and 2025

Country		% of Women	% of men
		65+	65+
Algeria	2000	4.11	3.25
	2025	6.81	5.94
Bahrain	2000	3.38	2.85
	2025	10.85	14.83
Djibouti	2000	3.37	3.21
	2025	5	4.34
Egypt	2000	4.67	3.56
	2025	8.49	6.85
Iraq	2000	3.42	2.87
	2025	5.45	4.52
Jordan	2000	3.1	2.73
	2025	4.63	3.87
Kuwait	2000	1.82	2.12
	2025	10.24	10.4
Lebanon	2000	6.21	5.42
	2025	9.45	6.11
Libya	2000	3.14	3.2
	2025	6.59	5.96
Mauritania	2000	3.7	2.87
	2025	4.39	3.83
Morocco	2000	4.77	4.01
	2025	8.56	6.97
Oman	2000	2.59	2.3
	2025	4.11	5.31
Palestine	2000	3.24	2.83
	2025	2.99	2.19
Qatar	2000	1.91	2.4
	2025	11.55	23.61
Saudi Arabia	2000	3.2	2.7
	2025	4.96	8.1
Somalia	2000	2.58	2.2
	2025	3	2.5
Sudan	2000	3.34	3.1
	2025	5.58	4.8
Syria	2000	3.31	2.9
	2025	5.3	4.2
Tunisia	2000	5.88	5.7
	2025	9.43	7.8
UAE	2000	2.23	2.7
	2025	10.66	22.9
Yemen	2000	2.69	2.1
	2025	3.17	1.9
Region	2000	3.99	3.24
	2025	6.53	5.63

Source: UN, World Population Prospects, 99