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**DEMOGRAPHIC TRANSITION IN THE ARAB COUNTRIES:
PREPARING FOR THE FUTURE***

* This Brief is based on a working paper prepared by Ms. Batool Shakoori, Chief of ESCWA's Population and Social Development Section, for the Arab Population Forum, held in Beirut on 19-21 November 2004, with updated data, analysis and findings.

Introduction

This Social Policy Brief was prepared by the Population and Social Development Section of the Economic and Social Commission for Western Asia (ESCWA) on the occasion of the 15th anniversary of the International Conference on Population and Development (ICPD) held in Cairo in 1994. That conference marked a shift towards a new approach stressing the interrelationships between population and development and the fulfilment of human needs as a right among other human rights, and considering people as both the end and the means of development. From this point onwards, population policies began to be viewed in a new ideological framework based on the principles of human rights, and the belief that the quality of life of the population, not its size, was the basis for formulating population policies. Based on these principles, the international community has agreed on a programme of action including policies aimed at improving people's quality of life and measures urging countries to adopt these policies and to integrate them into their social and cultural policy frameworks. The programme of action stressed the following: that population policies as currently understood should in no way involve reducing population numbers in pursuit of purely demographic goals, but rather as an integral part of the overall issue of development; that rising fertility rates were no longer a quantitative problem but had taken on a qualitative dimension related to the economic, social and educational status of women and men just as it was related to the level of human development and to the level of poverty; and that demographic changes bore a well-established reciprocal relationship to development, the reality of the demographic transition being both a quantitative and a qualitative process during which changes in fertility rates come about as a result of qualitative changes in the development process, leading to the occurrence of successive shifts in the age structure of the population.

ESCWA analysis shows that the age structure of the population is reconfigured through the process of demographic transition with an increase in the working-age population and a decrease in other population groups, mainly children. The occurrence of this process in parallel with the slow growth of the elderly population group means that a number of countries witness, at different but precise times, the onset of what is known as a demographic window. This quantitative shift, and the restructuring of the population pyramid that it dictates, have qualitative implications that demographic analysis is now able to interpret via the intricate relationship linking it to the human life cycle. Demographic analysis is no longer merely a measuring process confined to calculating the quantitative changes in the elements of population growth, such as fertility, mortality and migration rates; rather the concept behind it has expanded and its methodologies have been diversified to become more closely linked to the different stages of human life, adhering to the reality of economic, social and political changes in the development process. The current stage is the culmination of the previous one, though more important and calling for more intensive effort in the development planning process and in the formulation of integrated policies, as well as for a redoubling of effort in other essential areas, most importantly that of demographic analysis. The subject derives its importance from the fact that the relationship between population and development is a causal one operating in two directions: from demography to development and from development to demography.¹ This interaction between cause and effect is a dynamic process, for each change affects and is affected by another, yet the results of this interaction appear not simultaneously but only in subsequent time periods, sooner or later depending on the magnitude of the interventions.

One of the most important issues requiring attention from development professionals is that the feedback effect arising from the relationship between population and development first appeared in some countries of the region during the current decade. This took the form of a demographic shift which saw a rise in the growth of the working age population and a decline in the dependency ratio, thus paving the way for growth in savings and investment, especially in human capital, and increased per capita income. The expected drop in fertility, simultaneous with declining numbers of dependents, has led to a potential growth in income over a period perhaps as long as 25 years. Indeed, historical experience shows that when this

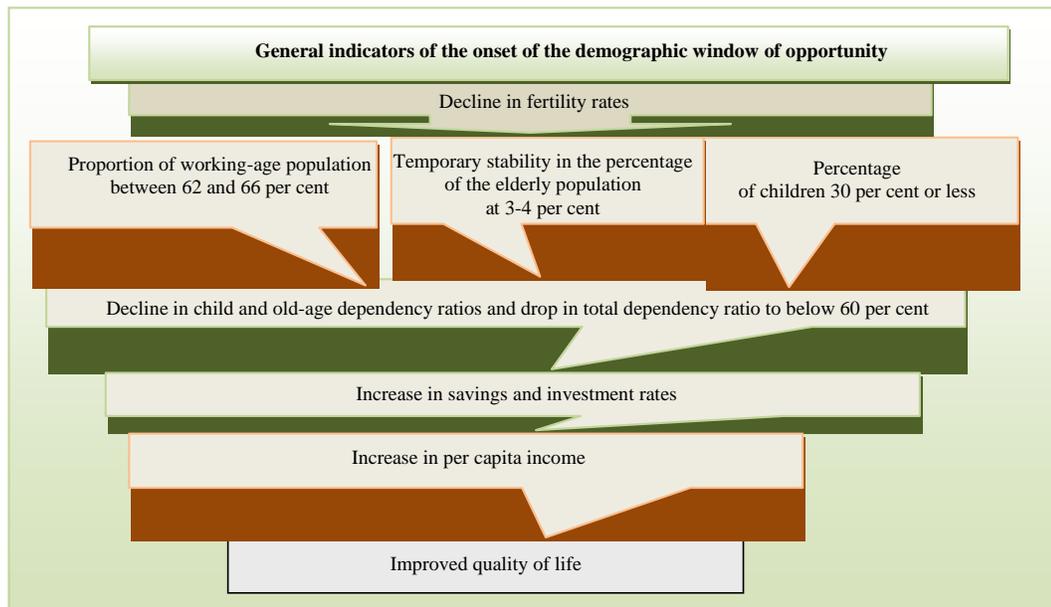
¹ Bloom David and David Canning (2003). "Cumulative Causality, Economic Growth and the Demographic Transition", in *Population Matters: Demographic Change, Economic Growth and Poverty in the Developing World*. Oxford University Press, New York.

process occurs in parallel with slow growth in the elderly population, it positions many countries to witness, at different but specific periods, the onset of the demographic dividend.

I. INDICATORS OF THE ONSET OF THE DEMOGRAPHIC WINDOW OF OPPORTUNITY

With the spread of vaccination programmes and improvements in nutrition and freshwater supply, the mortality rate decreases – including child mortality. With the decline in child mortality comes a rise in life expectancy. These demographic changes occur at a lower cost and at modest levels of per capita income due to pressure on Governments to offer social and health services and to the commitment of international organizations to provide health services, sometimes free of charge.

The reduction in the birth rate, on the other hand, related as it is to age at first marriage and social norms, is more closely linked to the level of human development and the empowerment of women (through education and the availability of employment opportunities), which leads to a decline in family size. On this basis, the decline in fertility is usually delayed compared with the decline in mortality, leading to a delay in the appearance of the demographic window. When fertility rates begin to fall in association with the fall in mortality rates, a new stage begins which changes the population age pyramid accordingly from a broad-based pyramid to another shape, bulging more at the middle. This change is by its very nature gradual and cumulative and depends to a large extent on the pace of decline in fertility rates (fast, medium or slow). The process of declining fertility rates involves continuous changes in the age structure of the population. When fertility rates are high, the under-15 age group (0-14) makes up a large proportion of the population compared with those who have reached the age of economic activity. When fertility rates drop, the proportion of the population in the 15-64 age group rises.



The new element that demographic analysis and its link to development have added is the retroactive effect of the demographic dimension and the speed at which it occurs. This is shown by the fact that a drop in the number of dependents leads to an increase in savings and investment, especially in health and education. This leads in turn to declining fertility. What was once a cause now becomes an effect, through the action of the retroactive effect. With a rise in the working-age population growth rate and a drop in dependency ratios, the positive effect of declining fertility can be clearly seen, represented by the increase in per capita gross domestic product (GDP) and a consequent rise in per capita income. At any given time, the

effect is positive or negative according to the relationship between the growth of the working age population and the growth of the dependent population. In the case of a rise in the dependent population, the negative effect clearly appears as a decline in saving rates owing to the high number of dependents. At a time of a widening gap between the growth of the working-age population and that of the dependent population, the positive effect of declining fertility will be translated into an increase in savings and investment.

II. THE DEMOGRAPHIC WINDOW IN THE ARAB COUNTRIES

A. TRENDS IN THE AGE STRUCTURE OF THE POPULATION

The Arab countries, characterized by their broad-based population pyramid, are approaching a major shift in the age structure of the population, whereby the previously dominant 0-14 age group begins to shrink while another group, that of youth and working age population, will be expanding. Analysis of fertility trends and of the population age structure indicates that signs of these changes first appeared in the early 1980s, whereby the fertility rate for the Arab region fell from 6.2 live births per woman in the period 1980-1985 to 4.1 in 2000-2005. This led to gradual changes in the age structure whose dimensions began to appear in the following decades. If we divide the Arab countries into two groups, the countries whose fertility rates have dropped to less than five live births per woman and those still recording rates of five or more, we can summarize the results over four decades as shown in table 1.

TABLE 1. TRENDS IN POPULATION AGE STRUCTURE WITH PATTERNS OF DECLINING FERTILITY RATES IN THE ARAB COUNTRIES (AVERAGE ONSET OF FERTILITY DECLINE IS FIVE LIVE BIRTHS PER WOMAN)

Period of declining fertility	1980	2000	2020
Countries	Percentage of population aged 0-14		
Before onset of fertility decline	44.5	47.2	46.8
After onset of fertility decline	41.1	36.8	29.8
	Percentage of population aged 15-64		
Before onset of fertility decline	52.2	50.3	50.9
After onset of fertility decline	55.1	59.4	64.9
	Percentage of population aged 65+		
Before onset of fertility decline	3.3	2.6	2.3
After onset of fertility decline	3.8	3.8	5.3

Table 2 shows that 18 Arab countries had fertility rates exceeding five live births per woman in 1980-1985, while four countries, Bahrain, Tunisia, Kuwait and Lebanon, had rates below five. In the period 2000-2005, 19 Arab countries saw their fertility rates drop below five live births per woman. In those countries, fertility rates range from 2.04 in Tunisia to 4.89 in the Comoros. The countries which have retained their high (5+) fertility rates are Somalia (6.43), Yemen (6.02) and Palestine (5.63). Estimates for 2015-2020 indicate that fertility rates will drop in that period in all Arab countries (not counting Somalia) to below five live births per woman.

TABLE 2. TOTAL FERTILITY RATES IN ARAB COUNTRIES (1980-2020)

1980-1985	1990-1995	2000-2005	2010-2015	2015-2020
Yemen	Yemen	Somalia	Somalia	Somalia
Oman	Somalia	Yemen	Yemen	Yemen
Somalia	Palestine	Palestine	Palestine	Palestine
Libyan Arab Jamahiriya	Oman	Comoros	Mauritania	Mauritania
Syrian Arab Republic	Djibouti	Iraq	Comoros	Comoros
Comoros	The Sudan	Mauritania	Iraq	Iraq
Saudi Arabia	Comoros	The Sudan	The Sudan	The Sudan
Palestine	Iraq	Djibouti	Djibouti	Djibouti

TABLE 2 (continued)

1980-1985	1990-1995	2000-2005	2010-2015	2015-2020
Jordan	Mauritania	Saudi Arabia	Saudi Arabia	Saudi Arabia
Djibouti	Saudi Arabia	Oman	Jordan	Oman
Algeria	Jordan	Jordan	Syrian Arab Republic	Jordan
Iraq	Syrian Arab Republic	Syrian Arab Republic	Oman	Syrian Arab Republic
The Sudan	Algeria	Egypt	Egypt	Egypt
Mauritania	Libyan Arab Jamahiriya	Libyan Arab Jamahiriya	Qatar	Qatar
Qatar	Qatar	Qatar	Libyan Arab Jamahiriya	Libyan Arab Jamahiriya
Morocco	Egypt	Morocco	Algeria	Algeria
Egypt	United Arab Emirates	Algeria	Morocco	Morocco
United Arab Emirates	Morocco	United Arab Emirates	United Arab Emirates	United Arab Emirates
Tunisia	Bahrain	Bahrain	Lebanon	Lebanon
Kuwait	Kuwait	Lebanon	Bahrain	Kuwait
Bahrain	Tunisia	Kuwait	Kuwait	Bahrain
Lebanon	Lebanon	Tunisia	Tunisia	Tunisia

Note: Countries have been classified based on *World Population Prospects: The 2006 Revision*, published by the United Nations.

- Before onset of fertility decline: total fertility rate above five live births per woman.
 After onset of fertility decline: total fertility rate below five live births per woman.

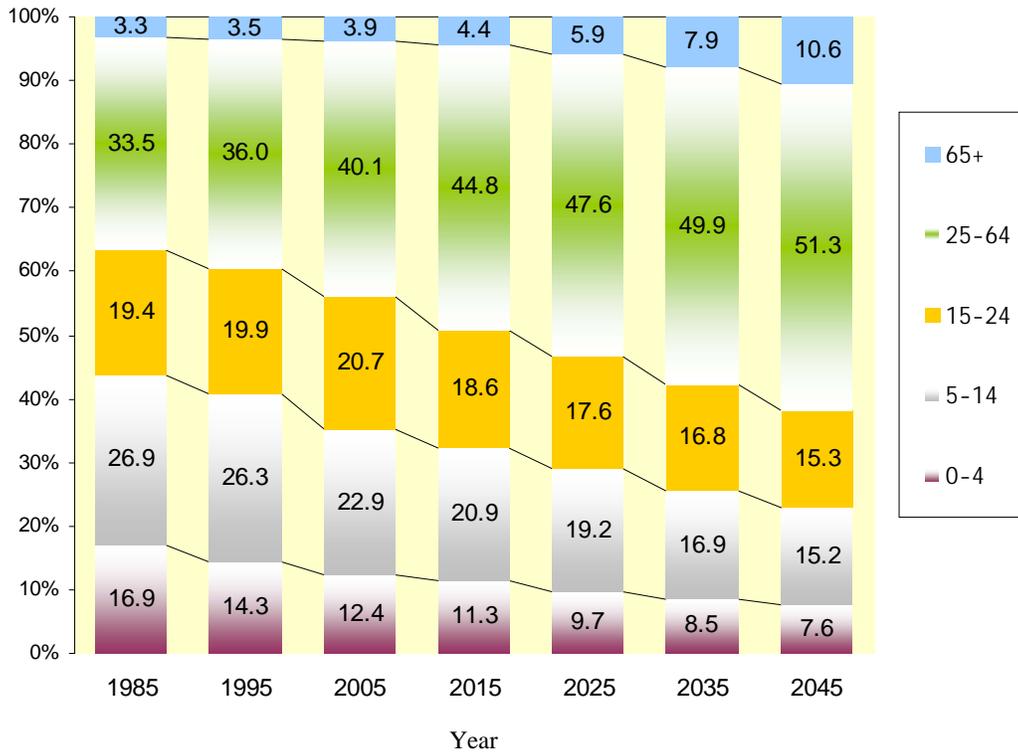
Demographic analysis indicates that in the near future the Arab countries will fall into two groups. The first group will consist of those countries enjoying a demographic dividend from the increased supply of jobs, the fall in the dependency ratio and the resultant increase in savings: Algeria, Morocco, Tunisia, Egypt, Lebanon, Jordan, the Syrian Arab Republic and the Libyan Arab Jamahiriya. The second group will comprise those countries enjoying a demographic return but one whose onset was too late to fall within the time frame set by the programme of action of the 1994 International Conference on Population and Development and the United Nations' Millennium Declaration of 2000. Both groups will face major challenges and both need to formulate appropriate policies. The first group could face multiple challenges, so it must not miss this opportunity and must make an effort to seize it, especially as it will help these countries carry out their commitments to eradicate poverty and improve the quality of human life. The countries in the second group need to work to accelerate the onset of the demographic dividend by developing population policies that will accelerate fertility reduction and develop human capital. These countries may not manage to halve the material poverty rate by 2015, but they may be able to reduce human poverty. They could do this by directing their policies towards human welfare, especially in the countries that suffer from human poverty in addition to the poverty of income.

It should be noted that with fertility declines to below five live births per woman, the population age structure will gradually change such that the working age proportion of the population will rise from 52 per cent in 1980 to 65 per cent in 2020. In Somalia, where the fertility rate is above five, children aged 0-14 constitute about half the population. This means that Somalia is far from experiencing demographic changes and the dividend. The reason will be the sharp rise in the dependency ratio and its cost in terms of economic growth. In some of the countries, such as Yemen, Palestine, Mauritania, Comoros, Iraq, the Sudan and Djibouti, that will not see a decline in fertility to below five until 2020, the demographic window will open only in the medium to long term.

Despite the increase in the absolute size of the population aged 0-14 from 75 million in 1980 to 109 million in 2000 – and it is expected to increase to around 138 million in 2020 – this group as a percentage of the total population has fallen from 43.8 per cent in 1985 to 35.3 per cent in 2005, and is expected to reach 32.2 per cent in 2015 and 22.8 per cent in 2045. It appears that the population aged 65+ will be relatively stable up until 2015, then begin to rise gradually.

As a result of these changes, some Arab countries will soon be experiencing a new and historic opportunity the key to which will be demographic changes whereby the relative size of the working age population is set to rise and the dependency ratio to decline such that the disparity between their growth rates in the period 2000-2020 will widen. In fact, estimates indicate that the growth of the working age population will reach 2.7 per cent at a time when the growth of the dependent population will hit 1.4 per cent, meaning that the disparity in the two growth rates will widen to 1.3 per cent, allowing scope for an increase in savings and investment on the one hand, and bridging the gap between per capita income and output per worker, on the other. This demographic opportunity will coincide with the Millennium Development Goals (MDGs) targets and goals for reducing poverty and unemployment rates by 2015.

Figure I. Trends in the age structure of the population in the Arab countries (1985-2045)



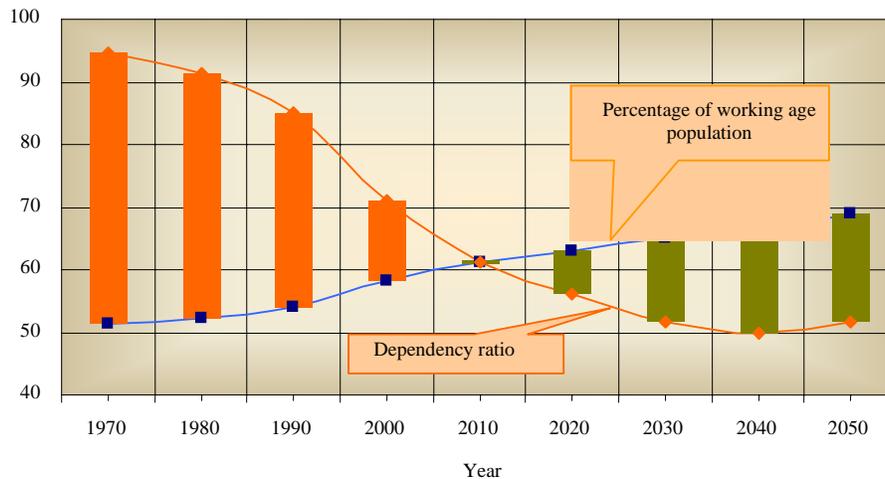
B. TRENDS IN THE DEPENDENCY RATIO

In the Arab region as a whole, the total dependency ratio² decreased over the period 1980-2000 from 90.9 per cent to 71.5 per cent and is expected to decrease further to 58.4 per cent by 2020. Moreover, the child dependency ratio in the Arab region decreased markedly over the same period from 84.5 per cent to

² The dependency ratio is the ratio of dependent population (under 15 years of age and 65 years and over) to working age population (15-64). It should be noted that some people of working age are not actually employed.

65.3 per cent and is expected to reach 50.6 per cent by 2020. This trend applies for all Arab countries. In contrast to this decrease in total and child dependency ratios, there appears to be relative stability in the old-age dependency ratio in the Arab world as a whole over the same period. It takes some time before the decline in the fertility rate is reflected as an increase in the proportion of elderly people and in the corresponding dependency ratio. When reviewing the working age population percentages, one notes that they will increase from 51.4 per cent in 1970 to 63.1 in 2020 and 64.9 in 2030. This gradual increase in the working age population occurs simultaneously with a gradual decrease in the dependency ratio, while their respective chart lines are expected to intersect at some point between 2010 and 2015 and then diverge once again.

Figure II. Trends in working age population and dependency ratio



The Arab countries are witnessing population growth affecting different age groups such that the first group (0-14) is shrinking, the second group (15-64) is expanding and the last group (65+) is growing only negligibly. With the adoption of appropriate policies, this change in the population age structure can create an opportunity for economic development in some Arab countries in the short and medium terms. Since human behaviour and needs vary with different stages of life, this implies that when the fertility rate is high, the base of the population age pyramid wide and the number of children between zero and 14 years of age very large, a high proportion of income goes towards spending. Whenever the base of the population age pyramid widens, the dependency ratio increases and consumption rises at the expense of savings. In countries with high fertility rates, the dependency ratio is estimated to be 95 dependents for every 100 persons of working age, while in countries with low fertility rates the figure is only 65 dependents for every 100 persons of working age. Moreover, the growth of average per capita income is usually slow when the difference between the growth of the working-age population and that of the total population is insignificant. Economic growth improves only when the growth of the working-age population is almost double that of the total population. This improvement is due to the contribution the demographic dividend makes to increasing output per worker thereby increasing per capita GDP. In conditions of full employment, labour's share of GDP and per capita GDP may reach parity. On the social level, the decline in the dependency ratio reduces the poverty level and enhances both the quality of human resources and women's empowerment, since it makes possible the distribution of the extra income generated by savings and investment across a wider segment of the population. When the fertility rate drops, the working age population as a percentage of total population increases and the dependency ratio declines over a few decades or perhaps over just one generation.

The relationship between population and economic development is such that the expansion of the working age (economically active) population takes on a marked significance. The expansion of this age

group, occurring simultaneously with low dependency ratios, implies rapid economic growth at the macro level. The decline in fertility, expected to coincide with the shrinking of the dependent population, can give way to potential economic growth liable to continue for 25 years. This is backed up by historical experience, which shows the occurrence of such a process, accompanied by the slow growth of the 65+ age group, providing an opportunity for several Arab countries to benefit from the demographic dividend,³ at different times but for a distinct period, by giving rise to increased individual savings and investments. By 2015, the working-age population will constitute 62 per cent of the total population, growing at an average annual rate of 4.7 per cent and representing between 2000 and 2020 an absolute increase of 105 million people. This opportunity will mean a decrease in the total dependency ratio since the child dependency ratio will decline faster than the old-age dependency ratio rises. This particular situation will reduce both the child and the old-age dependency burdens, thus making possible additional investment in economic and social development. In general, the regional averages indicate that demographic changes in the Arab world should manifest themselves clearly between 2010 and 2015.

There are two kinds of demographic dividend: the simple one and the augmented one. The simple demographic dividend is simply the difference between the growth rate of the working-age population and that of the dependent population. The larger this disparity, the greater the contribution of the demographic dividend to GDP and to per capita GDP. The augmented demographic dividend, on the other hand, is seen in the difference between the growth rate of the working-age population and that of the total population. It is called augmented because it includes both the growth of the working-age population and a halving of the numbers of unemployed. The simple demographic is expected to contribute to an annual increase in per capita GDP in the Arab countries of 1.1 per cent over the period 2000-2015. At the same time, the augmented demographic dividend which, adding in the growth of the working-age population, assumes a four per cent growth in employment – enough to absorb half the unemployed – is expected to contribute to an annual increase in per capita GDP of 2.7 per cent over the same period. Based on the growth in the dependency ratio and population, the demographic dividend could appear in countries such as Algeria, Egypt, Lebanon, Morocco and Tunisia. (Oil economies were excluded due to their distorted age structures and the fact that their economic growth is conditioned by international oil prices).

III. GENERAL FRAMEWORK FOR BENEFITING FROM THE DEMOGRAPHIC DIVIDEND

As far as policies are concerned, it should be recognized that the “demographic dividends” are not inevitable but rather should be actively pursued through the creation of conditions that will help take advantage of the demographic opportunity. This means improving the decision-making process by linking it to research centres, in a way that ensures the adoption of sound economic and social policies to help convert savings into investments, as well as other complementary strategies to determine the appropriate technological level (capital-intensive or labour-intensive technologies) depending on local and international conditions. All this should be accompanied by education and health policies which take care of peoples’ quality of life and which focus especially on enabling people to acquire the skills and knowledge necessary for them to join the labour market and find employment.

A. INTEGRATING QUANTITATIVE AND QUALITATIVE POPULATION CHANGES AND ENSURING POLITICAL COMMITMENT

Ensuring political support is essential since the demographic dividend could be used as a development project that helps eradicate poverty and ensure a more equitable distribution of income. This development project reflects the overriding importance of the population factor in achieving GDP and eradicating poverty by ensuring full employment, increased productivity and improved human capital. In other words, political support for this demographic opportunity will help both Governments and international organizations attain

³ Merrick, Thomas (2003). “Population and Poverty in Households: A Review of Reviews”, in *Population Matters: Demographic Change, Economic Growth and Poverty in the Developing World*. OXFORD University Press, New York.

the goals adopted by the 1994 International Conference on Population and Development, as well as the development goals stipulated later in the United Nations Millennium Declaration. This is because such an approach makes use of demographic changes to improve economic efficiency while ensuring greater social justice. The formulation of integrated development policies has direct and indirect effects on the timing, speed and duration of the demographic transition. Accelerating the demographic transition may help to rescue the economy from poverty and direct it towards sustainable growth.

Based on the foregoing, the Arab countries should, within the framework of good governance, work on enhancing their institutions to formulate policies and specify goals and measures aimed at improving the quality of human life. Today's conception of population policies does not see their aim as reducing the population in pursuit of quantitative demographic goals, but rather as an integral part of the whole development issue. According to this new approach towards population issues, other policies – such as those aiming at women's empowerment and at bridging the social and historical gap between men and women, policies aiming at eradicating poverty and improving reproductive health – have become tools that help to accelerate demographic change by enhancing people's capabilities and enabling them to make rational choices about various aspects of their lives, including their reproductive behaviour and the number of children they wish to have.

B. IMPROVING THE LABOUR AND FINANCIAL MARKET ENVIRONMENTS

Economic openness to international markets and trade liberalization helps to boost economic growth by ensuring that export-led production has access to international markets, by adjusting the structural defects of the production sectors and by financing small enterprises locally. However, under conditions of low productivity and low investment efficiency, it becomes difficult to compete with international products and impossible to benefit from open market opportunities. The same thing applies to benefiting from the demographic dividend, which requires highly flexible labour markets to respond to the growth in the working-age population. Such flexibility means the ability of employers to rapidly expand and contract, reassign jobs and reduce wages according to market conditions. Employers can develop the quality of their businesses by transferring employees from one job to another, provided that the labour force can quickly and smoothly adapt to the new requirements, without a negative impact on the production process, and that social safety nets are available to support the low-skilled workers whose interests may be hurt.

Moreover, labour market flexibility means the ability to control wages easily and quickly in a manner that reflects the targeted total factor productivity (TFP). To tie in with previous analyses, a country such as Algeria should raise TFP from -4.3 to +0.2 per cent over the period 2000-2015, while decreasing the incremental capital output ratio (ICOR) from 12.5 to 4.3 per cent to allow an effective wage increase of 1.5 per cent per year.⁴ Therefore, minimum-wage-related policies should be designed carefully so that Arab countries can avoid the mistakes made by other countries. When Brazil raised real wages to a level higher than required by the market, unskilled workers moved to higher-paying sectors, causing productivity to decline.⁵

From another angle, both local and foreign investment should be encouraged, and the advantages granted to foreign investment should be granted also to local investment. In this situation, tax exemptions are not enough by themselves to encourage investment. A basic infrastructure of roads, harbours, transport, communications and suitable living conditions should be made available. There should also be a clear, straightforward legal system, which recognizes and protects rights, and an effective, fair and responsive judicial system. Moreover, up-to-date, sound, detailed information and statistics should be widely available and stable financial and monetary policies developed with a low "risk" factor, given the key importance of

⁴ IMF (2000). *Demographic Transition in the Middle East: Implications for Growth, Employment and Housing*. Pierre Dhonte, Rina Bhattacharya, and Tarik Yousef. (WP/00/41) p. 21, table 5.

⁵ UN-DESA, Population Division (1999). "Population Growth and Demographic Structure", p. 141. United Nations publication, New York.

political stability and social security. While these political, legal and economic institutions are necessary, there is also a need for an efficient, corruption-free Government administration.

Absorbing the growing labour force into productive jobs will take more than a flexible labour market; it will also require increased investment, coming from Governments, business institutions, individual savings, and foreign direct investment (FDI). Most important are individual and household savings, as the example of East Asia demonstrates. These savings depend directly on demographic changes and on life expectancy. Promoting these savings and channelling them into investment are among the challenges Arab countries face. These countries, whose economies are still dominated by public sector investment, are characterized by low investment returns. These low returns extend to the private sector as well. Private investment is inefficient and insufficient because savings are not properly channelled by the financial sector towards productive projects due to state domination of this sector through the banks. Investment efficiency expressed in terms of TFP has been negative in most Arab countries. This may be attributed to the poor quality of human capital and to maladministration, especially in public sector institutions.

It has become necessary to introduce reforms in macroeconomic policy and in financial institutions to encourage individuals to save and invest. Despite the structural reforms they have undergone, Arab economies are still unable to attract a good share of foreign investment. They take up no more than one per cent of foreign investment at the international level and about two per cent of the developing country share. The future investment scene will be determined by the results of continuing the process of privatization and economy liberalization and especially of bringing down the costs of capital and energy relative to the cost of labour.

The different economic sectors should be developed so that they can absorb more manpower, especially the increasing workforce arising from demographic changes (labour supply) and should employ other supportive measures such as improving production efficiency to overcome low productivity, especially in the agriculture and service sectors. As for the industrial sector, Governments should encourage employment growth to attract more skilled labour in order to build up a stock of human capital able to compete successfully at the regional and international levels and to ensure for this workforce structural and sectoral balance. This can bolster total industrial sector product by increasing exports, thereby attracting more financing and investment in technology. Several studies have shown that residential construction is the sector Arab economies should rely on to take advantage of the demographic window and create added value growth of five or six per cent per year on average and employment growth of 4.3 per cent per year. This sector is labour-intensive by its nature, since it substitutes labour for technology in the creation of added value. Moreover, housing demand will increase due to increasing numbers of young people reaching marriage age and wanting to start families.⁶

C. ADDRESSING HUMAN RESOURCES

Whatever the size of the working age population, its members will, if offered higher education, good health and jobs, contribute to increased productivity and improved economic performance. Improved public health is crucial to accelerating the demographic transition and boosting economic growth. Improving the health environment through wide-reaching programmes of vaccination and family planning education is one of the actions that lead to reduced infant and child mortality rates, bring down fertility rates, increase life expectancy and reduce social exclusion and poverty. If health is to play a positive role in helping the Arab countries seize the demographic window of opportunity, they should pay due attention to health policies, especially those aimed at providing effective infant healthcare, because of the positive role such policies play in improving the likelihood that children will survive and bringing down fertility rates. Then the family can concentrate on ensuring a good education for a smaller number of children. By the same token, maternal health care is important since women's access to reproductive health services ensures that they will have a family of the desired size and a better standard of living for that family. Attending to and improving

⁶ IMF (2000). Demographic Transition in the Middle East: Implications for Growth, Employment and Housing. Pierre Dhonte, Rina Bhattacharya, and Tarik Yousef. (WP/00/41).

children's health and nutrition ensures better scholastic performance and reduces dropout rates. Paying heed to the healthcare situation as a whole may also be important in reducing social exclusion and poverty. The World Bank has asserted that the main reasons for household poverty are morbidity, injury and death.

The creation of human capital is defined as "attracting increasing numbers of individuals who have the skills, knowledge and expertise necessary for economic and political development".⁷ It goes hand in hand with investment in and development of human capital, being at the same time the end and the means of increased production. Besides being subject to social demand, the educational process in Arab countries suffers from its weak linkage to the needs of the labour market. This situation, often the result of incompatibility between the outputs of the educational system and the trades and skills needed by the labour market, has widened the gap between the supply and demand for labour. To remedy this, attention must be given to education in both quantitative and qualitative terms. With the decline in fertility and dependency ratios, the demand for higher education outputs is increasing. On the qualitative level, school curricula should be linked to present and future prospects for social and economic development. Education is an effective tool for spurring economic growth and eradicating poverty on both the national and household levels. While education, especially of females, enhances the individual's contribution to the production process as a whole, it also contributes to reducing maternal and child mortality and enables women to join the labour market.

The educational system needs to be adapted so it can be integrated into development planning and the development process, in both its economic and social dimensions. For this to happen, the goals of the system need to be formulated in line with society's needs. Education is a system of inputs and outputs which interact with the economic and social development process, especially as relates to the needs of the labour market, since the educational system represents the main pillar supporting human resources. The most important thing may be working to reform the educational system to make it a flexible tool in the service of the development process rather than of the self-perpetuating goals of education. Rather than being a mirror that reproduces the status quo in the wider society, the educational system should be transformed into a tool for progress and development. It is well known that traditional educational systems are selective and play the role, through their various channels and instruments, of a filter that selectively encourages the best students to continue their education while leading the rest to drop out at various educational stages, so that only a privileged minority goes on to higher levels.

It is therefore crucially important to pay heed to modern teaching and training methods which focus on developing existing skills and acquiring new ones. It is also important to deal with existing low employment caused by the lack of technological know-how by developing training policies to enhance the competitiveness of the labour force and hence that of exports.

The challenges facing the two groups of countries should thus be broken down into financial challenges and human resource challenges. Faced with these challenges, the Arab countries move in several directions. The first group of countries (those enjoying the demographic dividend) should develop policies and strategies that turn the demographic opportunity into a developmental approach to achieving high economic growth rates. This can be done by concentrating on human capital and the labour market, encouraging savings, adopting a strategy of integrating quantitative and qualitative population changes and developing integrated policies. Meanwhile, the second group of countries will try to hasten the onset of the demographic window; to benefit gradually and cumulatively from their falling dependency ratios and use the resources freed up by this decrease to improve their investment in people; and to rely on programmes implemented at the individual and household levels, such as reproductive health programmes and other programmes related to human resource development, especially those pertaining to women's empowerment, since all have a positive impact on the eradication of poverty.

⁷ Harbison, Frederick (1970). "The Need of Developing Human Resources" in *Economic Development - Challenge and Promise*, Prentice-Hall, New Jersey, p. 116.