



## ENABLING ENVIRONMENTS FOR PREPARING FUTURE GENERATIONS IN THE KNOWLEDGE SOCIETY

There is almost a consensus among Arab elites on adopting a comprehensive concept of the knowledge society and placing it within the overall framework of sustainable human development as a means and an end. The Second Arab Human Development Report in 2003 defined 'the knowledge society' as one mainly based on the efficient dissemination, production and utilisation of knowledge in all areas of societal activity: Economy and civil society, politics and private life, up to the steady promotion of the human condition, i.e., establishing human development. The Arab Knowledge Report 2009, advanced the search, and found its vision on the above efforts, adopting an 'integrated concept of knowledge' and 'knowledge society'. Based on the accumulation of knowledge developed in the first report, the Arab Knowledge Report, 2010/2011, continues with the previous crystallised Arab vision of 'the knowledge society' with an integrated tendency viewing knowledge as an integrated whole that is not limited to science and technology, but represents the sum of all human creations in science, technology, humanities, literature, art and the wider human experience. Through this integrated perspective, we can understand the knowledge society in all its broad connotations; it is a knowledge-intensive society whose members possess cognitive, behavioural and value characteristics interacting in socially, politically and culturally supportive environments which stimulate these characteristics and enhance them in a dialectical relationship, releasing

the energies of creativity and innovation among society's members in the use of available means and possession of the gains of development.

This broad vision encompassing the connotations of the knowledge society, and seeking to expand choices and opportunities for the progress of the Arab individual and the achievement of freedom and goals, enables us to view 'the preparation of the young for the knowledge society' as a set of continuous procedural operations involving two interacting factors: First, building and preparing the future Arab generations and equipping them with the skills and values required for the knowledge society in an enlightened cultural context; and second, building the necessary enabling environments in economics, sociology, politics and culture to enable the future Arab generations and Arabs in general, and stimulate them towards creativity, invention and production of knowledge. Hence, the triad of skills, values and enabling, which the report relied on, were adopted.

Based on this integrated vision of 'knowledge' and 'knowledge society,' and after having dealt with the preparation of the young in Chapter 2 (which dealt with the issue of education) and Chapter 3 (which dealt with the issue of upbringing in the family, media and cultural environment), this Chapter focuses on the identification of Arab enabling environments that prepare and empower the future generations to access the knowledge society. For as much as we succeed in building the institutions for the preparation and upbringing (e.g.

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education/training, family and media), and whatever the levels of cultural development may be in enhancing the system of values, promoting language, and renewing religious discourse, the matter necessarily needs key variables that reinforce the building of institutions and cultural development efforts, and support the impacts we aspire to achieve from all this. These are the variables which compose what we call 'enabling environments'. Thereafter, the elements of this chapter deal with governance and its suitability to the preparation of young people to acquire and produce knowledge, freedoms and political situations, women's enabling, economic and social environments and the underlying problems of poverty, unemployment and quality of life and prosperity, as well as knowledge environments relating to information and communications technology.

## **GOVERNANCE AND YOUTH PREPARATION**

The concept of 'good governance' or the exercise of power (political, economic or administrative) refers to the management of a state's affairs or the management of its national institutions, including the legislative and judicial bodies and civil society organisations, to determine needs and propose solutions for meeting them. There are three pillars usually considered the key components of the concept of governance, namely: accountability and transparency, participation, and the rule of law.<sup>14</sup>

Arab countries in general are represented by weak institutions which impede the progress of the Arabs, especially the youth, in their march towards the renaissance and knowledge society. That is, governments are poor performers in many aspects, as expressed by the 'Worldwide Governance Indicators'. These capture six key dimensions of governance: Representation and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption. The units

of these aggregate governance indicators will be those of a standard normal random variable, i.e. with zero mean, and ranging approximately from -2.5 to +2.5, with higher values indicating better outcomes. Based on these indicators, the report 'Development Challenges in the Arab States: A Human Development Approach,' issued by the League of Arab States and UNDP, stated that the governance quality indicator in the Arab countries as a group was -0.63 in 1996, indicating the low quality of institutions in the Arab region at the time, despite the significant differences among Arab countries. The situation did not change much in the following ten years as the governance quality indicator in the Arab states reached -0.61 in 2006, noting that all the Arab states recorded a fall in the quality of institutions with regard to 'Representation and Accountability' in the elements of governance (The League of Arab States and UNDP, 2009).

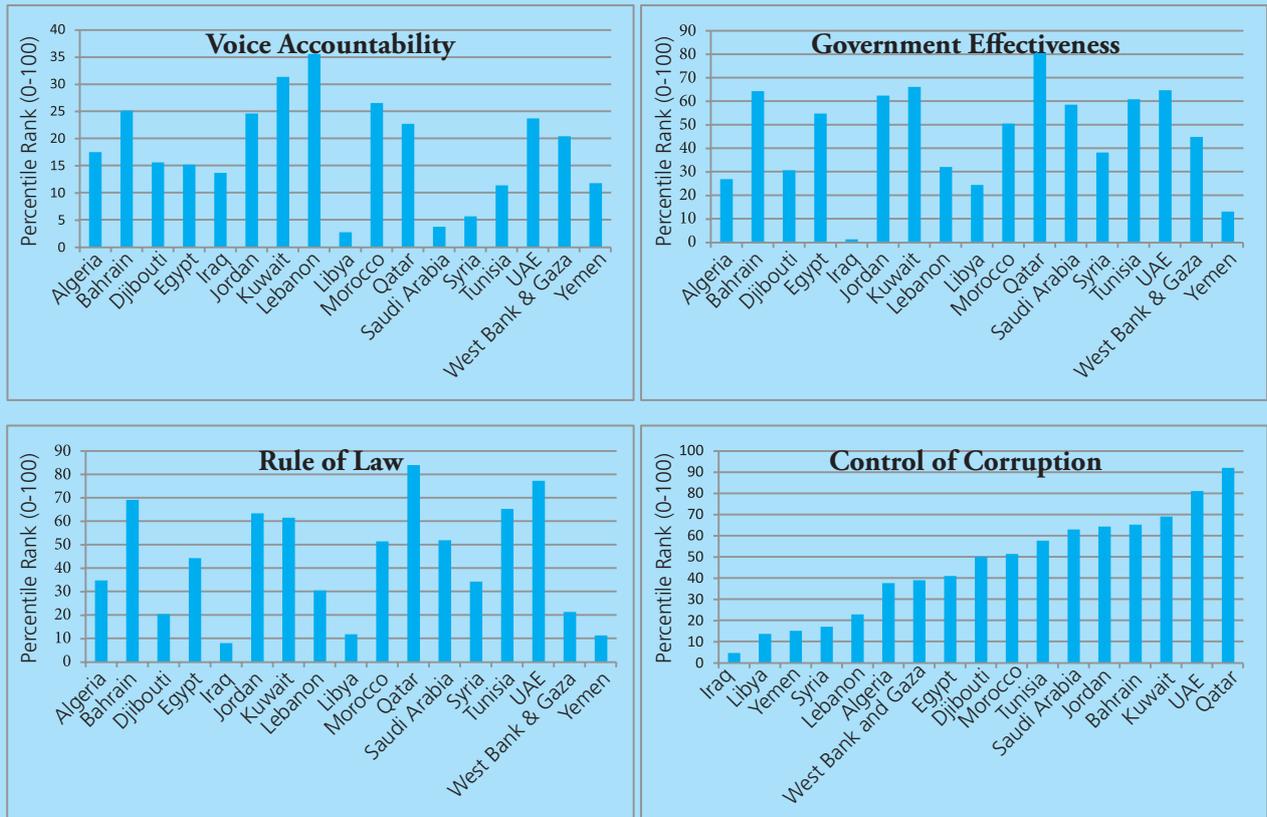
The latest relevant data published by the World Bank (Figure 4-1), based on a scale of 100 points (0 for the weakest performance and 100 for the highest performance), confirm the steps that should be taken by the Arab region as a whole, with the differences from one country to another, on the road to good governance, especially with respect to 'Representation and Accountability'. Actually, the low quality of governance in Arab countries is dangerous, because it has negative reflections on many aspects of development and the foundations of the desired knowledge society.

One of the aspects of democracy is to help people to be more able to participate in the process of governance that affects their lives. Therefore, real human development is that which strongly guides governments towards designing economic and social policies to support citizen development, and managing public services according to the approach of democratic good governance in a way that fulfils their needs.

Transparency and accountability are two correlated concepts working together within the framework of participation

FIGURE 4-1

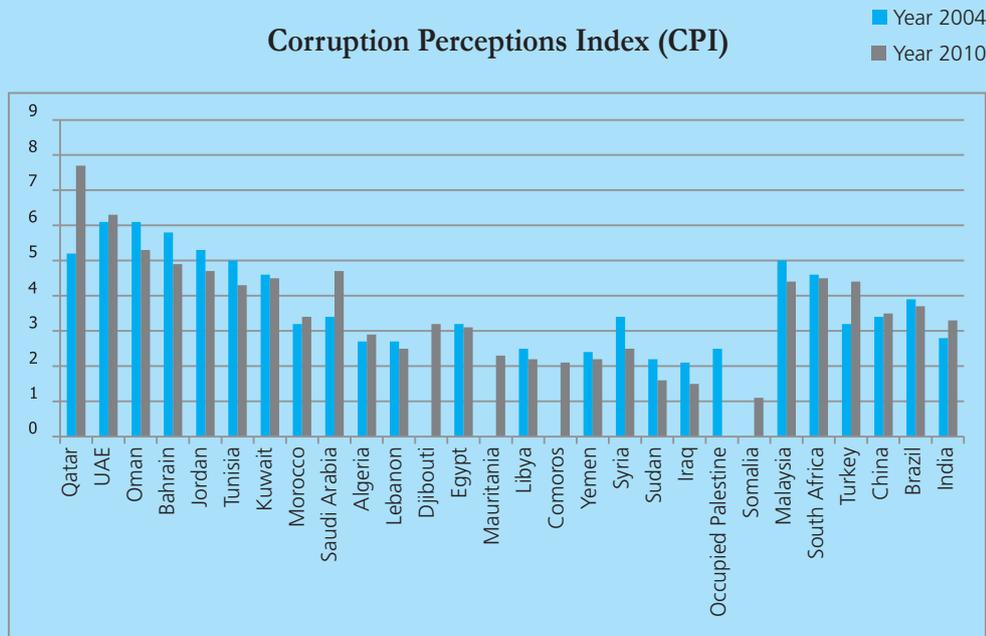
Governance Indicators in the Arab states



Source: World Bank's Database (based on the data in 2009) [http://info.worldbank.org/governance/wgi/mc\\_countries.asp](http://info.worldbank.org/governance/wgi/mc_countries.asp) on August 21, 2011

FIGURE 4-2

Corruption Perceptions Index (CPI)



Source: Transparency International, CPI, <http://www.transparency.org/2010> on 23 May, 2011

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and the rule of law, which guarantees the existence of good governance to achieve freedom, equality and social justice, and helps fight corruption. Figure (4-2) refers to the status of perception of corruption in the Arab countries according to Transparency International (TI). The figure shows that most Arab countries record a level of less than 5 points on a scale of 10 points, except for three countries, namely Qatar (7.7 points), the UAE (6.3 points), and Oman (5.3 points). Undoubtedly, the outcomes of the Corruption Perceptions Index (CPI) are really low, but they are fully consistent with the low outcomes we previously presented with regard to the quality of governance in Arab countries.

This index measures the degree of corruption perceived among public officials and politicians. According to the index, corruption is measured on a scale of 10 (less corrupted) to 0 (highly corrupt). The survey measures corruption in the public sector and abuse of public office for private gain. It also measures the corruption in local and national governments, but not the local and foreign companies operating in these countries. The CPI draws on 17 surveys carried out by 13 different independent institutions. For a country to be included in the index a minimum of three of the sources that TI uses must assess that country. These surveys measure the perceptions of local residents, expatriates, businessmen, academics and risk analysts.

## **GOVERNANCE AND CIVIL SOCIETY ORGANISATIONS**

Civil society occupies an intermediate place between the individual and the state. It includes organised and unorganised individuals or groups who interact on social, political and economic levels, and their relationships are regulated by formal and informal rules and laws. Organisations are links around and through which civil society voluntarily organises itself (Abdul-Hussein Shaaban, 2010, and Ali Leilah, in Arabic, 2007).

There is a strong relationship between the climate of freedom in society and the strength of its civil organisations. Wherever societies enjoy freedom, voluntary, free union or social pressure organisations spread. In contrast, the absence of freedom makes civil societies static or inactive. Similar to the independence of civil society from power, freedom is one of the basic values (Abdul-Hussein Shaaban, in Arabic, 2010). Considering this relationship, data reveals the weakness of civil society in Arab countries, where the aggregate ratings index for political rights and civil liberties which is issued by freedom house (Civil Liberties, <http://www.freedomhouse.org/2009> on May 23, 2011), indicates that most Arab countries are rated as “Party free” or “not free”, non of these countries was classified as a “free country”. The Freedom of the Press Index issued by the same organisation indicates that none of the Arab country enjoys a “free press” and that only five Arab countries enjoys “partial freedom” of the press. Under this freedom-suppressing climate which prevents the Arab individual from moving in civil environment, it is difficult to successfully advance towards preparing the young for the knowledge society, which should be based on a climate of freedom, transparency and participation.

To that end, the strengthening of civil society organisations would expand the opportunities for democracy and political freedoms, allowing the Arab youth to open up to the world around them through a healthy environment enabling them to exercise their historic role, leading to the establishment of the renaissance and the knowledge society under institutions operating according to the principles of good governance based on accountability and transparency, participation, and the rule of law.

## **FUNDAMENTAL FREEDOMS AND POLITICAL CONDITIONS**

Open, creative, initiatory and accomplishing knowledge requires a freedom-based climate

in its broad political, economic, scientific and cultural sense, considering freedom as the key to expanding the options, potentials and freedoms of individuals. Development can be regarded as a process of expanding real freedoms enjoyed by the people. In fact, development is meant to remove the sources of the lack of freedom, such as poverty, oppression, scarcity of economic opportunities, social deprivation, extremism, and negligence of public facilities (Amartya Sen, 2004). In this context, the First Arab Knowledge Report 2009, emphasised that the package of political, economic and social freedoms should be considered the best environment for the production and optimal use of knowledge, and the most important mechanism for stimulating development in its broad human sense which goes beyond economic growth and the rising of income per capita, to include enriching the lives of individuals, improving their living conditions, and enhancing the value of active citizens. In this sense, freedom represents a central focus in the knowledge environments (Mohammed Al-Maliki, background paper for the report).

The available international indicators agree that democracy in the Arab region in general is in a negative position (though perhaps with a few exceptions that may vary from one index to another). Among the bodies that issue such indicators include the Centre for International Development and Conflict Management at the University of Maryland, Economist Intelligent Unit, Transparency International, Freedom House, and the Programme on Governance in the Arab Region POGAR/UNDP. Whereas the climate of freedoms in Arab countries, according to these indicators, is gloomy, the Arab scene is now experiencing feverish activity towards freedom, more democracy, and governance reform. Hopefully reform will take place, which in turn can create the environments that prepare new generations for accessing the knowledge society and achieving the renaissance.

It should be noted that the presence of freedom in the political sphere will contribute

to creating a climate of trust between the state and society, and between the various components of society, thus allowing dialogue, consultation and consensus on policies and major choices. Therefore, the weakness of trust, and consequently, the limited, or sometimes absent, opportunities for dialogue and consensus on major issues, development policies and the renaissance project to enter the knowledge society, all have played prominent roles in the failure of its policies and strategies. The weakest point in Arab knowledge performance is still related to the launch of freedom of thought and expression, academic freedoms, and freedom of access to information, which are considered a human right and the key element guaranteeing all types of freedoms (Human Development Report, 2003, and the Arab Knowledge Report, 2009).

The expansion of freedom, with its different and diverse content, is one of the necessary keys to provide the enabling environment needed to let the Arab youth access the knowledge society. That is, when an individual feels, from a young age, a clear space of responsible freedom in his/her relation with the sponsoring institutions, bodies and frames, he/she can express his/her abilities and aspirations, and merge smoothly and effectively in the environments which enable him/her communicate with the knowledge society.

## WOMEN'S ENABLING

Women's enabling correlates with integrated freedoms and guarantees of human rights for all, such as the rights to freedom, a decent life and social justice for a marginalised group in Arab societies. Women, alongside men, are key in the process of raising and preparing generations. Thus, if women's status is good, they will be a strong, leveraging factor in the formation of the characters and minds of young people, and society's culture as a whole, to achieve the desired renaissance in the knowledge age.

There have been historic achievements in Arab women's participation in public

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life and in realising their rights since the 1950s, and even before that. In this respect, we can observe setbacks and successes as well. In recent years, some countries have taken bold steps towards strengthening women's citizenship, and increasing their participation in the structures of governance, such as parliament and councils of ministers. It is also noted that there are high rates of Arab women's enrolment in universities, compared to the past. Although women still focus on social and human sciences, they also enter other disciplines, such as engineering, medicine and mathematics. According to the Arab Human Development Report, 2009, the percentage of women's enrolment in universities in some Arab countries ranges between 40% to 50%. However, the numbers of women enrolled in universities in Kuwait, Qatar and the UAE exceeded the number of men in recent years (Valentine, Moghadam, in Arabic, 2007).

One of the obvious phenomena in most Arab countries is that women have had superior and high participation in education. This may be attributed to the fact that education is almost the only open path in most Arab countries for women to break the restrictions imposed on them. Moreover, education for Arab women has become a goal and a way to prove themselves and start enjoying a bit of freedom.

Despite these achievements made through the historical developments experienced by the Arab region since independence, international and regional reports, and gender-related indicators, shed a light on the low levels of women's participation in public and civil life, as well as in official life, and other political decision-making institutions, in addition to women's quota in paid employment, ownership of private business, and participation in the judiciary and cultural institutions. According to the statistics in 2007, the illiteracy rate among adults (above 15 years) in the Arab region was 29%, of which 65% were females. The largest percentages of female illiteracy are

in Iraq 69%, Sudan 63%, Egypt 63%, and Yemen 72% (UNESCO, 2010b).

In the economy, women's participation in the labour force in the Arab region reached 22%, which is a modest percentage compared to other parts of the world. Arab women's participation in property ownership is limited to about 8% of the companies in the Middle East and North Africa, compared to 50% of companies in East Asia and the Pacific. Moreover, women's participation in Arab parliaments is weak, as it has not yet exceeded 10% in two-thirds of Arab states. Some states, such as Jordan, Tunisia, Egypt and the Palestinian occupied territories, have taken special measures to ensure better participation of Arab women. The new law in Kuwait has supported the participation of women in parliament by allowing five women into the parliament for the first time. Contrarily, there are Arab states that do not have female representatives in parliament (Millennium Development Goals, 2010).

Arab women are still affected by many issues that limit their ability to interact positively in the processes of establishing the knowledge society. Such issues include the phenomenon of the feminisation of poverty in the Arab society, crimes of honour, violence against women, early marriage (marriage of minor girls), in addition to the problems faced by rural women such as the provision of appropriate health care and reproductive health. Such problems diminish the role of women in contributing to building the knowledge society and preparing future generations. There are five correlated challenges that form environments which constrain and abort all efforts to empower and liberate women and promote their participation in public, political and economic life, thus preventing the activation of all society's energies to accomplish the renaissance project to access the knowledge society. The five major challenges are presented as follows: **First**, the crisis of political freedoms and democracy in the region; **second**, the legal frameworks that regulate

### Integration of women: in which development?

When we talk about the desired integration of women into development we, in fact, mean their integration into a project of civilisational change. We want to integrate women into development to achieve an independent movement of decisions and pathways; self-development which efficiently mobilises its material resources and available economic surplus, as well as its human and spiritual energies, to meet the human needs of citizens and not to serve the global capital market.

Indeed, we want to integrate women into a type of development in which increased production integrates with the justice of distribution, and in

which human development, through preparation, employment and productivity, becomes a main, and not secondary, objective; all this should be done through frames of effective popular participation. Thus, the purpose of integrating women into development is that it should be carried out through a vision for civilisational development, with its economic, social and cultural dimensions. This development should adopt the strategies that ensure its progress under the guidance of its objectives and needs, through the identification of citizens' rights and duties, and through social action of both men and women in society.

Source: Ammar, Hamed, 2008.

the status of woman as a second class citizen, such as family laws that treat women as dependent members of the family, and nationality laws which deny women's right to transfer their nationality to their children; **third**, the cultural heritage, which produces an obsolete system of customs and traditions viewing women as a second-class citizen created for a sole role 'to take care of men and rear children,' a cultural legacy which permeates in all aspects of our lives and causes Arab women to become prey to all types of social, economic and political inequity; **fourth**, the misconception of religion, the misinterpretation of religious texts, and extremist discourse; and **fifth**, the prevalence of distorted patterns of development which focus on financial, non-productive investments, the results of which indicate that the realised growth rates do not reflect positively on the fight against poverty, the reduction of unemployment, and the creation of life opportunities for new generations. Due to the fragility of their social and cultural position, women become the first victims of all outcomes of such distorted development.

Facing these situations and challenges which constrain the integration of women in development in the Arab region requires us to formulate a political will to enhance the status of Arab women at the political, legislative, economic, and social levels. Also, the educational systems and media

should play an enlightened, effective role in re-building an Arab culture which provides women with the triad of skills, values and enabling, for them to interact actively and constructively in the Arab renaissance, and contribute effectively to the building of the knowledge society.

### ECONOMIC AND SOCIAL ENVIRONMENTS

The process of preparing the young for the knowledge society requires a stimulating economic environment which fosters a package of freedoms, such as freedom of business and investment, encourages competition and trade, controls monopolistic practices in the market by large companies, and encourages communication with the outside world. Most Arab countries have achieved progress in economic freedoms, and the Gulf countries have achieved the highest relative rate of economic freedom thanks to the policy of economic openness, attraction of foreign investments, and modernisation of infrastructure.

Despite what has been achieved in this area, there are still some gaps and fluctuations, as happened during the last global economic crisis, which left many negative effects such as inequality in income distribution, poverty and unemployment, which have adversely impacted Arab societies and efforts in preparing the young.

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## ECONOMIC REFORM POLICIES AND THEIR IMPACTS

## INEQUALITY IN INCOME DISTRIBUTION

According to 'neoliberal' economic policy trends, most Arab governments have reduced subsidies, decreased public expenditure and reformed exchange rate regimes. Economic reforms also included privatisation of state-owned enterprises, fiscal reform and trade liberalisation, deregulation, and strengthening the institutional foundations of a market-led economy. Accumulating evidence over the past decades, however, shows that a large number of countries that adopted these policies did not see growth. On the contrary, the most sustained result of such policies was a noticeable negative impact on the social dimension in education, health, nutrition, employment, and distribution of income (UNDP and the League of Arab States, 2009).

The major financial crisis that afflicted the global financial system in late 2008 had an impact on economic and social development in the Arab region, resulting in high levels of unemployment, low wages, a reduction in savings, and negatively impacting the financing of development programmes which, in turn, affected the building of the knowledge society. Today, data indicate that some Arab countries have started to recover from the adverse effects of the global financial crisis. In this regard, regional economic integration is an important requirement.

There are sharp disparities between Arab countries with regard to the levels of economic and human development and GDP per capita. While the average GDP for the Arab region as a whole is \$6,700 per capita, it has increased in the Gulf oil states, which represent 13% of the Arab population and 45.9% of GDP, to between \$15,600 and \$27,700. On the other hand, it has not exceeded \$2,200 in any of the raw material-exporting countries, which constitute 22% of the population (Arab Human Development Report, 2009, and the Millennium Development Goals Report, 2010). This sharp disparity in income between different Arab countries inevitably leads to disparity in competences, and, consequently, programmes targeting the preparation of the young. We are not dealing with homogeneous economies, which allow generalisation in this respect. Undoubtedly, low income in many Arab countries is a major obstacle to the adoption of programmes aimed at successfully and quickly preparing young people to access the knowledge society. For a deeper understanding of inequality in income distribution, we look at each country from the inside. The 'Gini coefficient' helps us measure the justice in income distribution (the degree of wealth concentration), on a scale ranging from 0 (complete justice in distribution) and 100 (total absence of

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BOX 4-2

### The failure of economic reform policies

The 'Development Challenges in the Arab States: The Human Development Approach' report confirms that, the 'neoliberal' economic policies, as defined by the World Bank and the International Monetary Fund, do not have any statistically significant benefits in reducing poverty. The situation is different however, for the 'investment rate', which is defined as the ratio of investment to GDP. A number of researchers have found this to be a statistically significant determinant of the

growth rate. Accordingly, if Arab governments want to use growth as a channel for poverty reduction, they should focus on investment, including public investment. The implication is that without macroeconomic policies that create (or restore) the fiscal space required to enlarge development expenditure, many developing countries, including Arab countries, will not be able to attain human development goals such as the MDGs.

Source: League of Arab States and UNDP, 2009.

Table 4-1

**Gini Coefficient in some Arab countries according to the latest available data**

Country	Year	Gini Coefficient
Syria	2004	35.78
Morocco	2007	40.88
Comoros	2004	64.30
Djibouti	2002	39.96
Egypt	2004	32.14
Jordan	2006	37.72

Source: World Bank and UNDP  
 world bank povcal <http://research.worldbank.org/PovcalNet/povcalSvy.html>  
<http://hdr.undp.org/en/statistics/May 2011>.

justice). Hence, the lower the points the better the result in comparison. Using this coefficient, shown in Table 4-1, we note that the proportion of Arab countries for which data are available ranges between 32.14 in Egypt and 64.30 in the Comoros. These indicators, in general, are different from their corresponding indicators in developed countries, such as Sweden (25),

Norway (25.8), Japan (24.9) and Germany (28.3).<sup>15</sup>

**POVERTY AND HUNGER**

Data from the Third Arab Report on the Millennium Development Goals 2010 indicate that the region has made some progress in reducing the proportion of

Table 4-2

**Poverty rates according to national poverty lines**

Country	Year of survey	Poverty Incidence (%)	Number of poor people in 1995 (in million)	Year of survey	Poverty Incidence (%)	Number of poor people in 2005 (in million)	Annual change in poverty rate (%)	Annual change in individual's actual income (%)
<b>Lebanon</b>	1997	10	0.4	2005	8	0.3	2.8	0.2
<b>Egypt</b>	1990	24.1	15.3	2009	21.6	16.6	0.6	2.3
<b>Jordan</b>	1990	15	0.6	2006	13	0.7	0.8	4.3
<b>Syria</b>	1997	14.3	2.1	2007	12.3	2.3	1.5-	1.2
<b>Occupied Palestinian Territories</b>	1998	20.3	0.6	2007	34.5	1.2	4.1	2.3-
<b>Arab Mashreq States</b>		21.4	18.9		19.4	21.2	0.7-	1.9
<b>Algeria</b>	1994	14.1	4.1	2006	5.6	1.8	7.4-	1
<b>Morocco</b>	1990	13.1	3.5	2007	9	2.7	2.2-	1.5
<b>Tunisia</b>	1990	7	0.7	2005	3.8	0.4	2.0-	3.8
<b>Arab Maghreb States</b>		12.7	8.3		6.8	4.9	4.8-	1.6
<b>Mauritania</b>	1996	50	1.1	2004	26.7	1.4	0.8-	0.1
<b>Yemen</b>	1998	40	6.2	2006	34.8	7.3	1.7-	1.9
<b>Djibouti</b>	1996	34.5	0.2	2002	42.2	0.3	3.4	5.8
<b>Comoros</b>	1995	47.2	0.2	2004	37	1.2	2.6-	1.8
<b>Least developed countries (LDC)</b>		41.2	7.3		36.4	9.3	1.5-	1.8
<b>Arab Region</b>		20.3	34.9		17.1	35.4	2.2-	1.8

Source: Third Arab Report on the Millennium Development Goals, 2010.

### Conditions of real development

If poverty, unemployment and economic inequality decrease to levels lower than their previous condition in a society, that society is undoubtedly going through an era of genuine development. However, if one or two of these cases become worse

than before, and particularly if they all get worse, it would be absurd to speak of development, even if the average income of the individual in society has doubled or significantly increased.

Source: Seers, 1973, and Wilbur 1992 in English.

*Unemployment is a serious challenge to development and the preparation of future generations to engage in the knowledge society, as it limits and obstructs a human's ability to work and develop*

to this data, the poverty rate in Arab countries was less than 4% before the financial crisis, a very low rate compared to other developing areas of the world. Arab countries achieved significant reductions in the proportion of the population facing hunger since the 1970s. Judged from the baseline of 1990, however, the region is off-track with respect to the target of halving food deprivation by 2015. As in the case of income poverty, the least developed Arab countries (LDCs) continue to suffer quite disproportionately. In these countries, under-nourished people amounted to 25% of the total population in 2005. The same report indicates that the Arab region has had some success in reducing the proportion of 'the poorest of the poor'; however, this is dependent on the poverty measure. When using a higher poverty base line consistent with the national lines (which are above the \$1.25 line in most Arab countries), the region's poverty rate increases dramatically from 4% to 17%. This indicates that in the Arab region a significantly higher proportion of the population is clustered not far above the \$1.25 line, making it more vulnerable to economic shocks and other crises (Third Arab Report on the Millennium Development Goals 2010).

According to several studies, including those by the United Nations, the high rates of poverty in rural areas across Arab countries indicate that the economic reforms in these countries have had a limited effect, or even an adverse one in many cases, on the populations of rural areas. This demands re-evaluation of development experiences in many Arab countries, to ensure a balance between

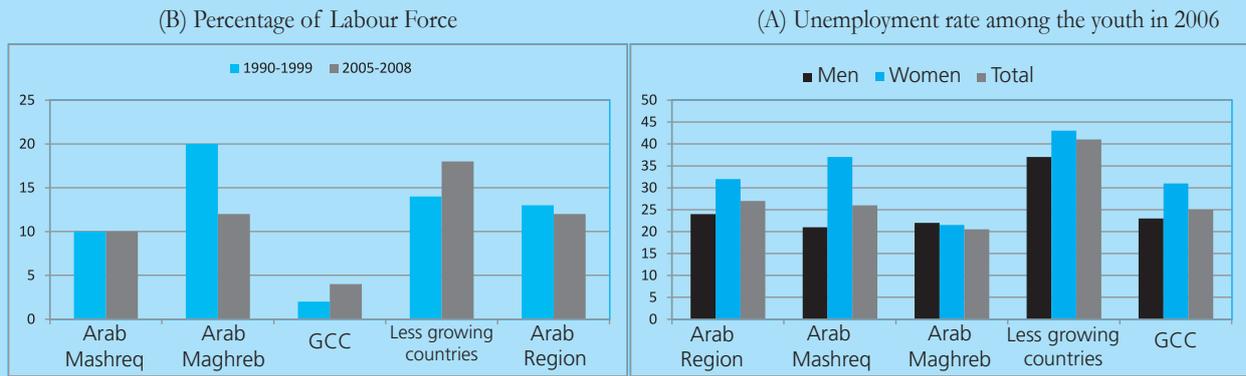
### UNEMPLOYMENT

Unemployment is a serious challenge to development and the preparation of future generations to engage in the knowledge society, as it limits and obstructs a human's ability to work and develop; it kills creativity, and hampers interaction and contribution to the building of the renaissance. Youth unemployment is still of concern in all Arab countries. The labour market, which increasingly depends on technology, requires skills not possessed by a lot of young people. The dangerous effects of unemployment are not restricted to the youth alone, in terms of missed opportunities, but they also include lost opportunities for the Arab societies themselves, which should mobilise all their resources to access the knowledge society. Hence, the provision of employment opportunities for the youth, especially in business sectors based on advanced technologies, and equipping them with the required skills, represents the most significant development challenge facing Arab countries over the next two decades.

Available indicators show that the Arab region falls behind all other regions in indicators of full, productive and decent employment, particularly for women and youth. Gains in female education have not translated into rapid improvement in the female labour market participation. However, indicators also show that, among the youth unemployment is growing (Millennium Development Goals Report, 2010). The average unemployment rate for the Arab countries was about 12% of the labour force, which is marginally lower than what it was during the 1990s, and still nearly twice the world average in both

FIGURE 4-3

Youth unemployment rate and percentage of labour force



Source: ILO KILM online dataset for total unemployment and ILO online datasets for youth unemployment.  
 Note: Average total unemployment rates for Mauritania and WB&G in the 1990s are for 2000 as well.  
 Source: Millennium Development Goals 2010

periods. Not surprisingly, unemployment in Arab countries is essentially a youth-centred phenomenon (the share of youth among the unemployed exceeded 50% for most Arab countries in 2006). The Middle East and North Africa have the highest unemployment rates among young people, with one-fifth of the total unemployed (Millennium Development Goals 2010, and UNESCO, 2010). There is also a weakness in the relationship between actual growth in GDP and available employment in the region, due to economic policies which do not support employment and social justice.

It is notable that unemployment rates in the Arab countries have a clear social gender-related dimension, as the unemployment rates among females are higher than those of males. According to World Bank data for the year 2007, the unemployment rate reached 21.3% among females and 19.8% among males in Algeria. In Egypt, the unemployment rate was 18.6% for females and 4.7% for males; in Jordan, 25.9% for females and 12.8% for males; in Morocco, 24.8% for females and 16.3% for males; and in Syria, 28.3% for females and 9% for males (World Bank, 2007).

The inadequacy of the educational systems to the needs of the labour markets in the region may be one of the causes

behind such high unemployment rates. UNESCO in its report confirms that memorisation-based learning, which is necessary to succeed in admissions exams for universities (whose certificates are the key to getting a job) has a negative impact because millions of people graduate from universities lacking the skills necessary for employment (UNESCO, 2010).

However, this explanation hides an important fact, namely the high unemployment rate among young people, as evident in international reports, which is something that goes beyond the failure of education systems. To illustrate, economic growth and the efforts of the labour markets are slow, not to mention the gender-based discrimination and deficient development policies that do not focus on providing employment opportunities for the youth or achieving justice and equality; all are interrelated factors that impede the efforts to eradicate unemployment. There is a significant dialectical interaction that cannot be ignored between development policies and education policies. The solution to this dialectical issue can be reached through comprehensive development and by following macroeconomic prescriptions, which concentrate on achieving a balance between economic freedom and human development.

*The labour market, which increasingly depends on technology, requires skills not possessed by a lot of young people*

## THE CHALLENGES OF POPULATION PRESSURES AND YOUTHFULNESS

Arab countries have population growth rates considered to be among the highest in the world. The Arab Human Development Report 2009 (UNDP, 2009) indicated that if current growth rates continued, the number of people in Arab countries would reach 385 million by 2015, which would pose enormous pressures on resources. The biggest challenge in the demographic picture of the Arab region lies in the high proportion of young people; about 60% of the population does not exceed twenty-five years of age, making the region one of the most youthful in the world.

This large number of young people will require extensive health, educational and other services before becoming economically productive, especially if they remain unemployed for long periods, which could, and perhaps would, lead to social unrest posing a negative impact on development. However, these numbers might be an opportunity for development if Arab countries adopt the right policies and programmes appropriate for investing in their human capital and meeting the needs of young people, and provide production institutions to expand employment opportunities. That is, good investment in childhood and youth can lead to huge gains in the future, so it is

worth it even if the costs are high. As for the lack of skills, it reduces the expected return from educational investments (World Bank, 2007).

## HEALTH SECURITY CHALLENGES

In recent decades, Arab countries have achieved progress in increasing life expectancy and lowering the infant mortality rate, with a clear disparity in levels of health care and funding from one Arab country to another, and even within the same country according to social classes and geographical areas. Health is not guaranteed for all Arab citizens, and the health status of the Arab citizen occupies a low rank compared to industrialised countries. Women suffer more than men from negligence as well as the traditions based on bias in treating males and females.

## PROSPERITY INDEX<sup>16</sup>

This Index adopts eight indicators: Economy, Entrepreneurship and Opportunity (E&O), Governance, Education, Health, Safety and Security, Personal Freedom, and Social Capital. Reports show no Arab country enjoys a strong ranking on the Prosperity Index, with all of them ranking between poor and middle levels. Table (4-3) shows the ranking of countries in the Arab world on the evidence of prosperity. While the

*Health is not guaranteed for all Arab citizens, and the health status of the Arab citizen occupies a low rank compared to industrialised countries*

BOX 4-4

### Overview of Millennium Development Goals achieved in the Arab region

Since adopting the MDGs, the Arab region has achieved progress in many MDG areas, including significant strides in health and education. To sum up, three main conclusions can be derived: First, Arab countries can be classified into three main groups: countries that are likely to achieve MDGs targets (mainly GCC countries), countries that are not likely to achieve MDGs targets (mainly LDCs; Comoros, Djibouti, Somalia, Sudan, Mauritania, and Yemen); and countries with mixed progress and mixed opportunities, which constitute the bulk

of Arab middle-income countries (MICs) in the Arab Mashreq and the Maghreb. Second, many Arab countries lag significantly behind others in achieving the first developmental goal (eradicating extreme poverty and hunger), as well as the fifth goal in particular (improving maternal health). Third, security issues pose a serious threat to the achievement of MDGs in the conflict countries namely Iraq, the Occupied Palestinian Territory, Somalia, and Sudan.

Source: Third Arab Report on the Millennium Development Goals, 2010.

TABLE 4-3

## Prosperity Index for Arab countries

Country	Country Ranking on Prosperity Index (of 110 countries)	Economy	Entrepreneurship & Opportunity (E&O)	Governance	Education	Health	Safety & Security	Personal Freedom	Social Capital
UAE	30	30	24	38	34	35	24	54	36
Kuwait	31	20	31	36	55	36	29	34	28
Tunisia	48	49	45	50	41	50	44	91	69
KSA	49	28	48	49	65	49	71	103	18
Morocco	62	35	68	63	93	70	69	100	13
Jordan	74	93	70	42	42	51	65	105	83
Algeria	79	45	79	90	72	67	93	101	74
Syria	83	71	92	79	74	52	86	99	75
Lebanon	84	70	83	92	51	79	89	82	99
Egypt	89	72	84	78	63	69	77	109	95
Sudan	100	83	91	109	107	92	108	92	21
Yemen	105	99	106	103	102	94	96	107	79

Source: <http://www.prosperity.com>, on May 23, 2011

UAE and Kuwait topped the Arab States, they ranked 30th and 31st, respectively, among (115) countries worldwide. The Sudan and Yemen came in next to last and last, respectively, among 12 Arab countries, and 89th and 100th, respectively, internationally. Egypt and Lebanon came in 9th and 15th, respectively, among Arab countries, and 84th and 89th, respectively, internationally.

The Prosperity Index (Table 4-3) illustrates the failure of economic reform policies in most Arab countries, and the weakness of enabling environments to provide education, security and safety, health services, social capital, and democratic governance and institutions. It consequently shows the lack of opportunities for new generations to acquire the required knowledge, skills and values.

## ARAB COUNTRIES IN DIFFICULT CIRCUMSTANCES

Difficult circumstances are understood to mean circumstances that disrupt the growth of knowledge and stop human development. A country that experiences deterioration in human development and suffers from wars,

occupation or internal conflict is in fact a country living in a catastrophic condition that kills human energies and limits their potential. They represent the factors that destroy the whole of society and crush the infrastructure of knowledge and life, resulting in the neglect of education, fading knowledge, and the spread of poverty and unemployment, and thus people suffer from delayed development in areas such as Palestine, Somalia, Iraq, and large parts of Sudan.

The Palestinian people live under the burden of occupation which practices different kinds of intransigence, arrogance and armed violence, threatening the lives of men, women, children and the elderly, and halting normal life and work, as well as progress and development. Knowledge and its construction is a victim of the occupation; for example, the education system has suffered largely as a result of the inability of many teachers and students to go to schools for long periods of time. In many cases, occupation forces ban computers at schools, and they have allowed only a 'trickle' of sources of education, such as books and tools. This is in addition to continuing human suffering of the Palestinian people,

*Difficult circumstances are understood to mean circumstances that disrupt the growth of knowledge and stop human development*

*No Arab country enjoys a strong ranking on the Prosperity Index, with all of them ranking between poor and middle levels*

as several areas, especially in Gaza and Khan Yunis, suffer from a lack of medicine. It happens that many women gave birth at security checkpoints, and thus mothers and babies suffer from the absence of medical care, and the consequent deterioration in their health and psychological conditions which may affect the newborns throughout their lives.<sup>17</sup>

Poverty rates are high by any standards, as 47% of the total population in the occupied Palestinian territories suffer from poverty (earning less than two dollars a day). Poverty rates range from 37% in the West Bank to 64% in Gaza (Btselem, 2003). The unemployment rate is above 50% in Palestinian society because of the blockade or barriers that have resulted in people losing their jobs, whether inside Israel or in the Palestinian domestic economy. Despite what Palestinian people suffer from with aggression and the destruction of its knowledge and enabling environments, it still insists on educating its children and equipping them with knowledge and skills. It has even realised remarkable achievements exceeding those of many countries inside and outside the Arab region. According to the UNESCO report 2010, the literacy rate of adults reached 94% (97% males and 90% females), and the total enrolment rate in primary education reached 80% for males and 79% for females in 2007, secondary education reached 92% (90% males and 95% females), and higher education reached 46%. However, these achievements do not negate the decline in the basic indicators of the youth's preparation for the knowledge society; net enrolment rates in primary education in the Palestinian territories dropped from 97% in 1999 to 73% in 2007 because of conflicts, military interventions and restricted movement of people and goods (UNESCO, 2010 b).

Since 2003, Iraq has been suffering from foreign intervention, continued political and military violence, and sectarianism,

which sometimes fades for a short period of time but then returns to cast its gloomy shadow over the country. This has resulted in severe damage to the infrastructure and knowledge structure, curbing Iraq's march towards the knowledge society after it had been a pioneer in the Arab region in many fields. Also, the fostering and enabling environments have deteriorated, making room for the unemployment rate to rise in Iraq after it had long been a destination for job seekers; the unemployment rate reached 17.5% in 2006, and the youth unemployment rate reached 50.5% among the total of unemployed. Moreover, more than 95% of the unemployed are in the age category of 44 years or less, which is supposed to be the most active and productive category that supports development and knowledge building.<sup>18</sup>

In 2007, about half a million children (508,000) were out of school (UNESCO, 2010). In its last survey on the status of education in Iraq, the Ministry of Planning and Development Cooperation in Baghdad confirmed the presence of an abnormal increase in the number of students who left school early, especially primary school. It also indicated that the percentage of those enrolled in education are only 55% of the total eligible population, while the enrolment rate of the total number of children aged 6 years is only 59%. In other words, there is a percentage of non-enrolment of up to 41% among children, which rises to more than 56% among those at the age of 12, and then decreases among older children.<sup>19</sup> UNESCO statistics indicate that the illiteracy rate among adults was 26% in the period 2000-2007, and the gross enrolment rate was 99% in primary education and 45% in secondary education. Further, the gap in education between males and females narrowed. Surprisingly, this did not reflect an improvement in the level of the females, but rather a decline in the level of the males as a result of the difficult economic conditions experienced by Iraq and the deteriorating standard of living in families, which existed after the foreign

intervention, in addition to the deteriorating security situation and the displacement of millions of Iraqis, prompting many children from poor families to leave school in search of work. This also raised the high dependency rates, forcing many students to postpone or abandon their study to search for work. All the reported examples of the Iraqi situation clearly demonstrate it is struggling to move towards preparing the young for the knowledge society. However, there are many signs that show improvement. Many indicators point to a praiseworthy improvement in Iraq in recent times, as the gross enrolment rate in primary education, for example, rose to 99% in 2007 (UNESCO, 2010).

On the edge of the Horn of Africa, Somalia is characterised by conflict and rivalry, suffering from the effects of civil war for more than two decades. Somalis live under discord and division, the destruction of cities, villages and the environment, and the transfer of government buildings, schools and universities to refugee camps as those who lost their homes were forced to leave. As a result, Somalia has become one of the poorest countries in the world.

Under these conditions, Somalia suffers severe unemployment, with an unemployment rate of 47% of the total population. Unemployment increases in urban areas (66%) compared to rural areas (41%), which has one of the highest rates in the world.<sup>20</sup>

The loss of jobs and extreme poverty have weakened the human capacity of the Somali people, as the proportion of poor people who live under the poverty line, with less than one dollar a day, is 43% (i.e. less than \$365 per year). Reports indicate that Somalia is not expected to achieve any of the Millennium Development Goals, including universal primary education or gender equality.

There are about 3.6 million people living in a state of humanitarian emergency and more than 1.3 million displaced people. Moreover, Somalia is burdened by violence and instability, extreme poverty, food

insecurity, and a high prevalence of child protection violations. As of August 2009, 19% of children under five in Somalia were reported to be acutely malnourished, with acute malnutrition rates in some displaced settlement areas reaching as high as 27%. As more and more schools close as a result of the conflict, especially in Mogadishu, children's education is suffering; of the population in need of urgent humanitarian assistance, 75% are located in central and southern parts of Somalia, which are largely inaccessible due to recent escalations in violence.<sup>21</sup> By the completion of our report, around May 2011, the situation had worsened in Somalia as it is suffering from real famine which has spread to affect all people, especially children.

In Sudan,<sup>22</sup> the Darfur region suffers from the ravages of civil war, particularly children. Of the four million people affected by the conflict, there were 1.8 million children under the age of 18. A generation of children in Darfur lives in extreme fear and disorder. This disastrous situation has affected the status of education in schools, which was already poor. The war has affected all life in Darfur, and there are now groups of refugees and displaced persons. Schools and all sections of life have fallen very far from accessing the knowledge society. Of course the wars and the situation in Darfur have been reflected across all of Sudan. The internal conflicts ended with the separation of Southern Sudan, which was declared an independent country. The World Bank database shows that the Knowledge Index in Sudan was about 1.6 in 2005, indicating a severe lack of Sudan's capacity to produce, instil and disseminate knowledge in the three dimensions measured by the Index (Education, Innovation, and Information and Communications Technologies), compared to 3.3 in Africa in the same year (2005).<sup>23</sup>

UNESCO's report shows modest achievements of the Sudan in the preparation of youth for the knowledge society. It shows that illiteracy in Sudan

*The loss of jobs and extreme poverty have weakened the human capacity of the Somali people, as the proportion of poor people who live under the poverty line, with less than one dollar a day, is 43%*

*The World Bank scheme for appraising the knowledge economy covers four areas: Economic Incentives and Institutional Systems, Education and Human Resources, Innovation, and Information and Communications Technology*

reached 39% among adults, 48% among females, and 23% among the youth, and that the gross enrolment was 66% in primary education and 33% in secondary education (UNESCO, 2010).

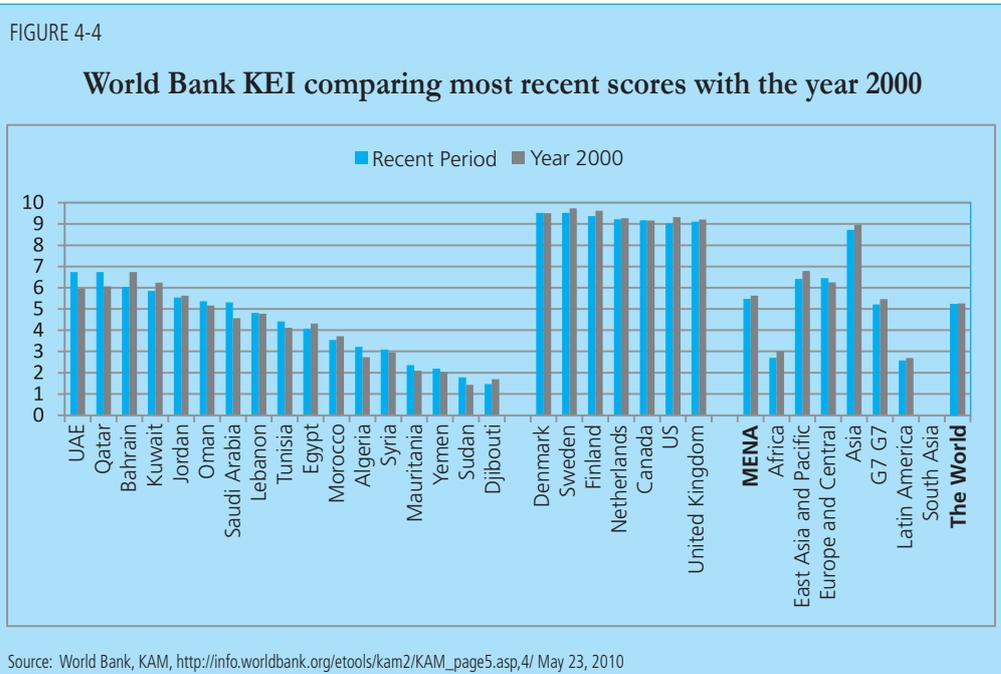
When following all these difficult conditions in these countries across the Arab region, one clearly sees great struggle in their march towards the preparation of future generations for the knowledge society and towards human development. We hope that the events experienced by the Arab region now may not have negative impacts on children and the youth, hindering their sound upbringing and preparation for a better future. Security and safety, as well as freedom and stability, are basic, indispensable requirements for accessing the knowledge society.

### KNOWLEDGE ENABLING ENVIRONMENTS (KNOWLEDGE ECONOMY INDEX)

The World Bank's Knowledge Economy Index (KEI) demonstrates low levels of knowledge economy in Arab countries. The World Bank scheme for appraising the knowledge economy covers four areas:

Economic Incentives and Institutional Systems, Education and Human Resources, Innovation, and Information and Communications Technology. KEI scores are presented on a scale of 1 to 10, wherein the highest value is the best.

It is clear from Figure 4-4 that only two of the seventeen Arab countries for which statistics are available, namely UAE and Qatar, achieved significant progress compared to 2000. The figure also indicates a considerable disparity between Arab states, with values ranging between 6.73 in the UAE and 1.47 in Djibouti. When dividing the world into four equal groups according to the KEI value, it is noted that no Arab country ranks among the top 25% of the world, nor even in the top 35% whose KEI value is 7 or more. Seven Arab countries are found in the second highest 25% of the world, covering the countries whose KEI values range between 5 and 7.5, namely the six GCC countries and Jordan. Six Arab countries rank in the third highest 25% of the world, covering countries whose KEI values range between 2.5 and 5; they include Lebanon, Tunisia, Egypt, Morocco, Algeria and Syria. The rest of the Arab countries come within the lowest 25% of the world whose KEI value is less than 2.5, including



### Localisation of Science and technology in Japan

Japan has been able to translate its vision of accessing the knowledge society by establishing and implementing three national plans for science and technology: the first plan 1996-2001, the second plan 2001-2006, and the third five year-plan which started in 2006. These plans have systematically worked to establish scientific and technological infrastructure leading to sustainable social and economic development. Key scientific fields were addressed including health, information technology, agriculture and bio-technology, nanotechnology, new manufacturing technologies,

climate change and environment, planning and transport, space science, security, and last but not least, social, economic and human sciences. The success of these plans did not only depend on the funding capacity, but also on the ability of Japan to build enabling environments that facilitate the production, management, dissemination and utilisation of knowledge, and promote the culture of innovation and openness to local and global societies through positive interaction with globalism.

Source: McGary et al. 2006 and Rieu, Alain-Marc 2006

Mauritania, Yemen, Sudan and Djibouti.

Although seven Arab countries possess higher values than the world average, the average value of the group of Arab countries shown in the Figure, (4.26) was lower than the world average (5.21). Indicators for the Arab region are too incongruent to be compared to those countries whose KEI values range between 9.52 and 9.10, namely, Denmark, Sweden, Finland, the

Netherlands, Canada, the United States and the United Kingdom, respectively. Moreover, the KEI value of the Arab region as a whole is lower than six regions of eight geographical regions globally. The Arab region index only exceeds two regions, Africa (2.71) and South Asia (2.58).

Other important indicators derived from World Bank data concern spending on scientific research and development, as

TABLE 4-4

#### Access to information and communications technology

Level of Human Development	HDI Rank	Mobile and	% Population	Internet	Subscribers -	PC
		fixed-line phone subscriptions (per 100 persons)	covered by mobile phone network	(per 100 persons)	Broadband subscriptions (per 100 persons)	(per 100 persons)
Very High Human Development	32 UAE	242	100	65.2	12.4	33.1
	38 Qatar	152	100	34.0	8.1	15.7
	39 Bahrain	214	100	51.9	14.2	74.6
High Human Development	47 Kuwait	126	100	36.7	1.4	--
	53 Libya	93	71	5.1	0.2	--
	55 KSA	163	98	31.5	4.2	68.3
	81 Tunisia	95	100	27.1	2.2	9.8
	82 Jordan	99	99	27.0	2.2	7.2
Medium Human Development	101 Egypt	65	95	16.6	0.9	3.9
	111 Syria	52	96	17.3	0.1	8.8
	114 Morocco	82	98	33	1.5	5.7
Low Human Development	133 Yemen	21	68	1.6	0.0	2.8
	147 Djibouti	15	85	2.3	0.3	3.8
	154 Sudan	30	66	10.2	0.1	10.7

Source: UNDP, Human Development Report, 2010

### The weakness of Arab enabling environments

The weakness of the social, economic and knowledge enabling environments in most Arab countries is attributable to several factors, the most important of which is that the Arab region lacks an institutional outlook on knowledge and its requirements, such as legislation. It can be argued that Arab laws and legislation are still, for the most part, not qualified to address the issues posed by the knowledge society. The protection of knowledge ownership, for example, is not

clearly delineated and in some cases needs certain controls to ensure its continuity and development. According to International Privacy report, 'Arab countries' ratings vary greatly with regards to laws and legislation concerning freedom of information issued by PI. Some of these countries demonstrate low levels of laws guaranteeing the freedom of information, while a large number of them are on the list of countries that have not issued laws on the circulation of information'.

Source: Bin Fatima, Mohammad, background paper of the report.

*International studies and reports show that the countries which seek to generate a renaissance in establishing a knowledge society spend an average of 3% of GDP on research and development*

well as on advanced technology exports in Arab countries. The scientific research and development spending indicator refers to expenses related to research and development in the public and private sectors, especially on creative works done in a systematic manner for the purpose of promoting knowledge, including human, cultural and societal knowledge, and using knowledge in new applications. The indicators in 2008 show a decline in Arab countries' spending on research and development as a percentage of GDP. According to available data, spending reached 0.09% in Kuwait and 0.23% in Egypt. This is in stark contrast with some countries with much higher spending such as 3.46% in Finland, 2.52% in Singapore, 2.72% in Denmark, 3.21% in South Korea, 4.86% in Israel, and 1.34% in Spain. International studies and reports show that the countries which seek to generate a renaissance in establishing a knowledge society spend an average of 3% of GDP on research and development. As for the second index on high-technology exports as a percentage of manufactured exports, the Arab region as a whole occupies a very low rank, with many disparities between Arab countries, where we find the highest in Morocco (9%), followed by 5% in Tunisia, down to 0% in some Arab countries. On the other hand, the global average is 20%,

with 32% in East Asia countries, 17% in the European Union, and 19% in sub-Saharan African countries.<sup>24</sup>

Malaysia's success in building an electronics manufacturing and export industry is attributable to its success in managing foreign investments and distinct production environments (i.e. industrial free zones). A large number of foreign investors found a fertile environment for work, a suitable infrastructure, and skilled, educated and trained labour. International foreign investment was one of the important factors for Malaysia's success. It created employment opportunities for the transfer of modern technology and established a global market. Since innovation and creativity must be national while content must be local, with investment serving the development of local communities, partnerships between Malaysian and foreign companies have been encouraged.

Evers Hans-Dieter, 2001

Table 4-4 refers to the data for the access of the Arab region's population to ICT, specifically mobile phone networks, web and internet, and computers. The table shows a large numerical gap between Arab countries. Also, the comparison between Arab countries with 'very high' and 'high' human development and other developed countries shows that Arab states must pay attention to providing a strong information infrastructure to enable engagement in the knowledge society.