

**CHAPTER TWO**  
**ARAB KNOWLEDGE PERFORMANCE**  
**ENVIRONMENTS:**  
**EXPANDING FREEDOMS AND**  
**BUILDING INSTITUTIONS**





# ARAB KNOWLEDGE PERFORMANCE ENVIRONMENTS: EXPANDING FREEDOMS AND BUILDING INSTITUTIONS

## Introduction

*Knowledge is no longer the purely intellectual and contemplative issue it once was; today it is an economic, political, and social issue influenced by the regulatory environment, development policies, and the sum of political, economic, and social freedoms. It is influenced also by recent global developments that, due to the communications revolutions underway around the world, know no barriers.*

*The relationship of knowledge to a society and its culture and heritage is not a unilateral one; it is a multi-faceted interactive dialectic. Knowledge acts as a support to development, powerfully leveraging it and improving the quality of life. Thus, any positive progress in knowledge performance reflects on the totality of development performance.*

*Global knowledge environments have witnessed continuous activity, particularly with the emergence of the globalised economy, which does not recognise traditional borders and depends to a high degree on knowledge and intellectual capital. Ideas and information have emerged as the basic engine for economic development, or even for development in its broadest sense. This corroborates Endogenous Growth theory, wherein knowledge is both a fundamental underpinning for development and the result of steadily increasing dividends on investments in human and intellectual capital; as a result the “ideas gap,” considered a basic cause of the development gap, is closed (Romer, 1986, 1993). This theory is supported by actual events: developed countries and some in the developing world which have emerged as pioneering epistemological paradigms have succeeded in exploiting digital economic innovations so as to tie knowledge to development and realise*

*rapid economic growth through the provision of enabling environments. At the forefront of such environments are those that have provided a climate characterised by freedom of thought and expression and broad participation.*

*In the midst of this global activity, issues have emerged of paramount concern to developing nations, among them the Arab countries. The most pressing of these issues may perhaps be formulated as follows: What is the nature of the relationship between knowledge performance and freedom? Is knowledge a public good and to what extent can it be made more democratic, in the sense of being accessible to all? Debate has also ensued over intellectual property. What is its connection to the exercise of monopolies by trans-national corporations? How legitimate are the alternatives available to developing countries?*

*Sharp disagreement has also arisen over tariff barriers to knowledge exports and the role of a free media in a world of open satellite channels, the internet, and digital media. These are but a sample of the issues and questions on the table in a world teeming with the dynamics of knowledge, technological activity, and intellectual debate. These issues reflect fundamentally new tensions and contradictions, while also constituting what may be described as fuel for those enabling environments which come together to promote the establishment of a new society that might be broadly labelled a “knowledge society.”*

*This chapter cannot do justice to all the components of these enabling environments in the Arab world, which range from regulatory, legislative, institutional, and legal, to social, economic, and political. Nor will it list all the factors which stimulate or impede Arab knowledge advancement. Instead, it will focus*

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*Knowledge acts as a support to development, powerfully leveraging it and improving the quality of life*

Freedom is the basis of development. It contributes to a broadening of choices and individual possibilities in the various spheres of life

Arab environments, as a whole, still lack the most important mechanisms for empowerment based on knowledge

Achievements in public freedom, social and economic freedoms, and the freedom to create are modest in Arab countries, despite a degree of progress and some signs that give grounds for hope

on the enabling environments from a particular angle, that of freedoms, since they are the cornerstone of such environments. It will also make reference to the role of supporting institutions, given the important role their organisational structure plays in paving the way to a knowledge society.

This chapter takes as its starting point the fundamental premise that freedoms in their various forms are the most salient feature of those environments that stimulate knowledge. This premise has become a touchstone of the era and a guide to all experiments in the advancement of knowledge. Every enabling environment that fosters freedoms provides an appropriate framework for the establishment of a knowledge society. Knowledge and freedom are two sides of the same coin. Similarly, freedom, according to Amartya Sen, is the basis of development (Sen, 1999). It contributes to a broadening of choices and individual possibilities in the various spheres of life. As a consequence, freedoms, here, are both an end and a means to development, a cause and a result. A cluster of political, economic, and social freedoms constitutes the best environment for the production and optimal use of knowledge. It is the most important motivational tool for development in the broad, humanistic sense of the word—development, that is, that transcends mere economic growth and rises in average individual income to include the enrichment of individuals' lives, improvement in their living conditions, and the advancement of the active, contributing citizen. In this sense, freedoms constitute a fundamental axis of knowledge environments.

However, our concern with loosening the reins on freedoms does not mean overlooking the frameworks of responsibility which allow for the protection and investment of the fruits of freedom. These frameworks are comprised of the institutions that support and preserve everything that helps develop knowledge and brings a knowledge society into being. While the environments which enable knowledge are established thanks to a prevailing climate of freedom, they can only ensure continuity and efficacy through sponsoring institutions that organise systems for the production and propagation of knowledge. Furthermore, they

only bring about legitimacy and rationality through the agency of the arsenal of laws and legislation that guarantee that they will continue to thrive and develop.

## THE STATE OF KNOWLEDGE ENVIRONMENTS IN THE ARAB WORLD: CONSTRAINTS AND PRESSURES

We take this dependence of enabling environments on participation and freedom as our starting point. We may, however, ask ourselves: What is meant by knowledge environments? And do Arab environments stimulate or impede the production, use, and acquisition of knowledge? If we take as our premise that development is freedom and that knowledge is a human right as well as a basic component in the implementation and realisation of development, most indicators show that Arab environments, as a whole, still lack the most important mechanisms for empowerment based on knowledge. Political, social, and economic restrictions are the rule, freedoms the exception. Achievements in public freedom, social and economic freedoms, and the freedom to create are modest in Arab countries, despite a degree of progress and some signs that give grounds for hope. That freedoms in the Arab world are abused is no value judgment or prejudice but rather a fact corroborated by reports, statistics, and qualitative and quantitative indicators. It is true that there is considerable disparity in some of these data from one Arab country to another. This is because the state of freedoms experiences ups and downs, periods of progress, retreat, and instability according to external pressures and states' priorities, over and above the givens of any internal struggles. However, the general trend of freedoms in the Arab world is from bad to worse, not from good to better, despite some successful reform initiatives and despite the indicators of rapid economic growth in some Arab countries in recent years, previous to the aggravation of the

current economic crisis in the autumn of 2008.

The cluster of freedoms necessary for the knowledge-enabling environment is not limited to political freedom; it includes economic, social, intellectual, academic, and creative freedoms, all of them linked to the principles of equality and justice espoused in the principles of human rights. While human rights are considered an integral whole the Arab reality shows a clear disparity in the provision of some freedoms as opposed to others. Thus, a realistic analysis requires that we study the state of each facet of freedom on its own.

It is impossible to rely solely upon improvements in the domain of economic freedoms to bring about an Arab knowledge revival in development if there is a continued imposition of curbs on other freedoms, especially those of thought and expression. Relying on economic freedoms alone, in fact, leads to diminished development whose sustainability can not be guaranteed. In addition, hopes of achieving a fair distribution of development's social yields will also recede in the shadow of an undemocratic climate in which the people have no oversight and in which corruption burgeons.

Limiting political, social, and intellectual freedoms threatens to produce negative repercussions not only on Arab knowledge performance or development performance; it may bring harm to the body politic as a whole, especially in the midst of attempts to contain extremism and eliminate terrorism. As long as oppression, poverty, and social marginalisation remain, extremism and terrorism in all of their forms will abound, with negative impact on the establishment of the hoped-for knowledge society. Furthermore, in the absence of political freedom accompanied by transparency, accountability, and oversight by judicious governments whose goal is to realise structural reform linked to new vision, possibilities for responsible economic development will dwindle. Freedoms like

these can only flourish in the Arab region when they are linked to leaderships open to the outside world and intent on reform through investment in human capital and knowledge industries that rely on Arab human and physical potentials.

## **POLITICAL ENVIRONMENTS: THE PARADOX OF POLITICAL REFORM DISCOURSE AND THE DECLINE IN FREEDOMS**

### *EXPANDING POLITICAL PARTICIPATION: THE PATH TO KNOWLEDGE AND CREATIVITY*

Freedom of thought and expression is a principal component, along with political participation, of the enabling environment that contributes to the advancement of knowledge performance. Despite some improvement in some Arab countries in the realms of political participation, democratic reform, and human rights and freedoms, there has been palpable retreat in others. This is because the democratic opening up in the last decade did not achieve the desired results. Many freedoms of opinion, expression, and participation in Arab countries are bound by fetters both visible and invisible, some of which have turned into a reality that constrains knowledge and creativity.

Talk of reform is common in a number of Arab countries, but seems in most instances to be suspended in the air, unable to come to ground in the real world. Since the events of 11 September 2001, and perhaps before them, there has been serious—though also, at times, prevaricating—talk of the necessity of political reform and relaxation of constraints on freedoms, without even the least of these being accomplished. The Arab Human Development Report of 2004 on the state of freedoms concluded that the problem of freedom in the Arab world was increasing due to the spread of repression, the hegemony of censorship, and the proliferation of mechanisms that

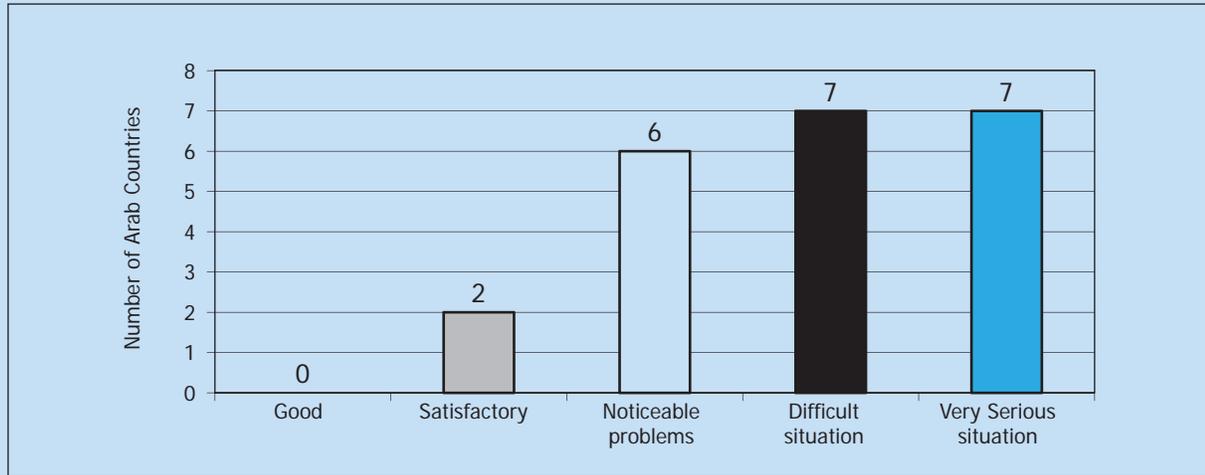
*The cluster of freedoms necessary for the knowledge-enabling environment includes economic, social, intellectual, academic, and creative freedoms*

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*Talk of reform is common in a number of Arab countries, but seems in most instances to be suspended in the air, unable to come to ground in the real world*

FIGURE 2-1

### Press freedom in the Arab countries, 2008



Source: Reporters without Borders, 2008

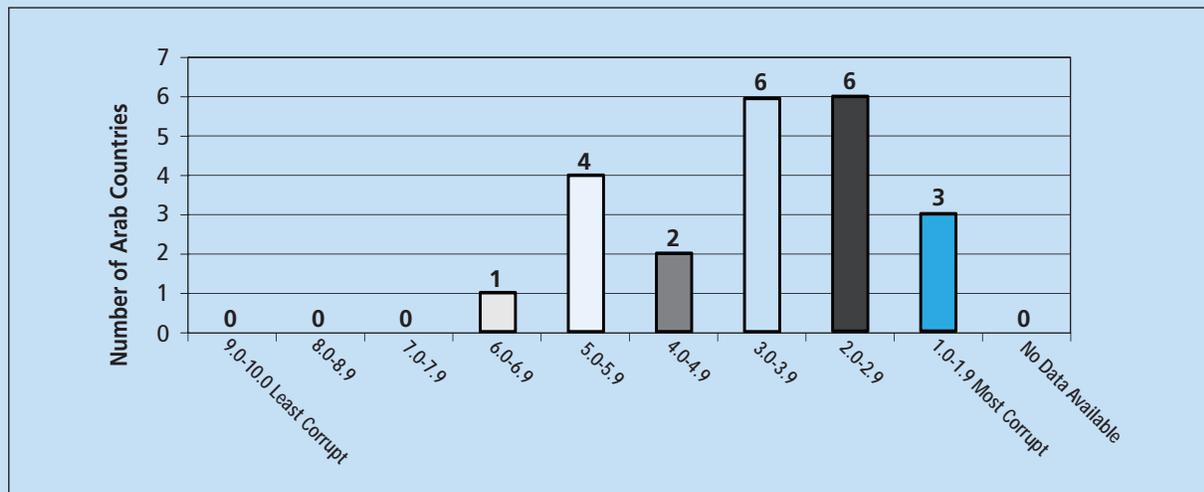
restrict freedoms. That diagnosis continues to apply, despite a few harbingers of change in some Arab countries (see the Preamble).

This perception finds support in numerous international statistics and studies, to which we must have recourse given the almost complete absence of authoritative and credible Arab scholarship in this field. The Freedom of the Press

index published by Reporters without Borders ranks all Arab countries among those which restrict the press, though to differing degrees. This index delineates the margin of freedom that both journalists and media organisations enjoy and the efforts they expend on behalf of press freedom. We find that the situation in the majority of Arab countries according to this index<sup>1</sup> falls between “very serious”

FIGURE 2-2

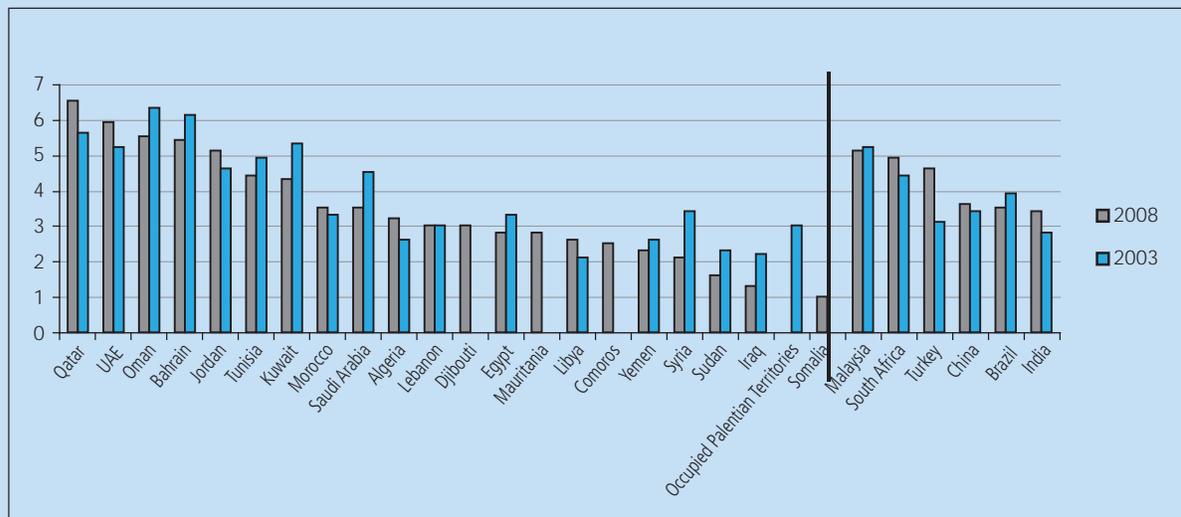
### Perceptions of corruption in the Arab World 2008



Source: Transparency International: Corruption Perception Index

FIGURE 2-3

### Perceptions of corruption 2003-2008



Source: Transparency International: Corruption Perception Index (May 11, 2009)

and “difficult” (Figure 2-1). We note too that in 2008, all but two Arab countries ranked at the very bottom of 173 countries studied.

In this context, it is possible to compare Arab countries to other areas of the world using the Democracy Index published by the Economic Investigations Unit of The Economist<sup>2</sup>. This index is based on sixty indicators which track performance in the following five areas: the electoral process and plurality, civil liberties, government performance, political participation, and political culture. Most Arab countries received rankings on this index that point to a lack of democracy, and only three—Iraq, Lebanon, and the Occupied Palestinian Territories—received relatively higher marks.

All Arab countries receive a low ranking compared to others such as Malaysia, India, Brazil, and South Africa. Sweden topped the list of 165 countries included in the 2008 study with an average of 9.88, while North Korea came last with 0.86<sup>3</sup>.

The other side of the coin is the performance of government itself. Here we refer to the Corruption Perception Index published by Transparency International, which assesses the magnitude

of corruption in 180 countries on the basis of experts’ evaluations and opinion polls. The index depends on statistics from thirteen independent sources in the public sector and the political sector. Evaluation is based on a normative scale running from zero to ten. Every step up on the scale indicates a fall in the average rate of corruption in the opinion of those surveyed. In seventeen of the twenty-two Arab countries studied, the level of perception of corruption was less than half the value of the scale, i.e., less than five (Figure 2-2), while Somalia came in last with a score of one. Iraq had the next lowest score, of 1.3. Thus, we find that the situation of Arab countries on the world map according to this index<sup>4</sup> is not much better than their situation on the map of freedoms. This implies a direct correlation between the decline in the levels of freedom and democracy, the spread of corruption, and the decline of government performance.

It should be pointed out that Qatar and the UAE recorded the best performance in combating corruption on the Arab front (Figure 2-3). The most important indication of this is that they maintained this good performance in the

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Corruption Perception Index from 2003-2008, in addition to achieving a marked improvement in the 2008 report. Jordan, Morocco, Algeria, and Libya also recorded improvement, while Lebanon maintained its status quo, and performance deteriorated in the remainder of the Arab world.

*Stringent legislative and institutional restrictions in numerous Arab countries prevent the expansion of the public sphere and the consolidation of opportunities for the political participation*

#### *CONTINUED CURBING OF PUBLIC FREEDOMS*

In the realm of public freedoms, Arab countries as a whole failed to realise tangible gains in terms of freedom of thought and expression. With the exception of the spread of Arab satellite channels and internet blogs, which have provided a very active outlet for youth in the region, the dossier on freedom of thought and expression continues to make depressing reading. Arab states have imposed additional restrictions on Arab satellite channels and issued additional regulations and laws that have tightened their grasp on the media, journalism, journalists, blogs, bloggers, and even on intellectuals: many Arab dissenters and innovators are targets of investigations, exposed to various forms of restriction on their ability to earn a living or travel, to surveillance and possible arrest. Arab countries lead the world in arrests of bloggers, imposing on them fines and prison sentences. Books have been impounded, newspapers and internet sites closed, and some opposition authors or those who have promulgated views deemed indecent have even been declared infidels. Most news media and outlets of knowledge dissemination in the Arab world are still state-owned, though a limited number of large news and entertainment media companies are operational in the region, most operating out of the Gulf, or even from outside the Arab region.

Stringent legislative and institutional restrictions in numerous Arab countries prevent the expansion of the public sphere and the consolidation of opportunities for the political participation of the

citizenry in choosing their representatives in elected representative bodies on a sound democratic basis. The restrictions imposed on public freedoms, alongside a rise in levels of poverty, and poor income distribution, in some Arab countries, have led to an increase in marginalisation of the poor and further distanced them from obtaining their basic rights to housing, education, and employment, contributing to the further decline of social freedoms. Given this climate, it is only natural that rigid social ideas which reject 'the other' should spread and take root, and that discrimination against women and minorities should be practiced, with all the negative corollaries for knowledge and development performance in Arab countries.

#### *FREEDOM OF OPINION AND EXPRESSION: ADDITIONAL RESTRICTIONS*

While Arab countries announce their determination to guarantee public freedoms and political reform and to expand and actualize participation of the citizenry, they actually provide little scope for freedom of opinion and political and trade union activities, thus widening the gap between word and deed. Publicised discourse, especially when addressing major powers or world opinion, is reformist and distinctly democratic, but actual practice on the ground differs from or even contradicts it. And while most Arab constitutions stipulate human rights and freedoms, martial laws such as anti-terrorism laws serve to limit these in practice, leaving the door wide open to the authorities to interpret what is unclear in the legal texts. Some Arab states acknowledge the principle of a plurality of political parties while practicing repression in the name of security and on occasion throwing leaders of opposition parties into prison.

In addition, we note that at the same time that lavish investments are being made in upgrading information

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technology infrastructure, blogs are closed down and young bloggers repressed, as if a distinction could be made between knowledge dissemination mechanisms and their knowledge content, even though it is the latter that is more deserving of patronage, protection, and concern. This is closely tied to academic and literary freedoms, for Arab writers and scholars risk being declared infidels or legally interrogated on the opinions they espouse or the books and creative works they publish which express opposition, innovation, or criticism. This can be partially explained by cultural seclusion and the outward adherence to constants that this entails. In some instances, unfortunately, this seclusion is actually promoted to isolation from the world and its latest cultural innovations and intellectual developments (al-Tahir Labib, background paper for the Report, in Arabic).

Digital content and the internet in the Arab world have not escaped censorship and government interference in recent years. More and more cases of censorship and internet site prohibition have been recorded; these are a straightforward violation of a citizen's right to privacy and access to information (al-Tahir Labib, background paper for the Report, in Arabic). In one Arab country, a decree was issued requiring internet site owners to record the personal data of writers of articles and comments published on the sites. In another, a blank page appears instead of the banned site. And in a third, a message appears saying that the site has been blocked for 'political, moral, and religious' reasons. One Arab government obliges companies providing internet service to implement systems that permit the blocking of internet sites on a religious and moral basis. And finally, internet cafes in at least two Arab countries are subject to the possibility of inspection and surveillance, and the owners of these cafes are required to submit information on those who use them (Naomi Saqr, background paper for the Report).

Nor have bloggers and activists escaped security surveillance or even arrest. In one Arab country, an editor of electronic sites belonging to one of the country's minorities was arrested and brought before a military tribunal on the charge of 'maligned the president, disparaging the government, and inciting ethnic unrest.' In another country, a blogger was imprisoned for four and a half months for writing on religious subjects. In a third country, three participants in an electronic chat room were arrested in 2005 for messages 'inciting hatred of the government,' and the government obliged everyone with an internet site to register it with the ministry of information or risk legal proceedings.

It is thus not surprising that the list of the fifteen most internet-hostile countries in the world should include four Arab countries. Five Arab countries appear on another list of ten so-called 'countries under observation' (Naomi Saqr, background paper for the Report).

#### *ARAB MEDIA AND GOVERNMENT HEGEMONY<sup>5</sup>*

The Arab media have been established and continue to develop under the hegemony of Arab governments or large multimedia companies operating on the Arab regional level. The alliances and interaction between these are no secret, with the two parties between them owning most of the media outlets, which are put to work for their mutual interests. Thus, content proffered in the newspapers, radio, television, and satellite channels is characterised to a large degree by its superficiality, the predominance of shallow entertainment pieces, and diminishing knowledge content, along with a political discourse characterised by loyalty to governments and praise of their achievements. All of this confirms the need for some sort of separation between knowledge and politics, or more precisely, an end to the dependency of knowledge on politics.

In the Arab region, knowledge content is subject to a number of restrictions

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*Arab creative production, especially in the literary and artistic fields, collides not only with laws restricting freedom of opinion and expression but also with administrative impediments*

*The production, publication, and distribution of books in Arabic suffer restrictions that limit the diffusion of printed Arab knowledge content*

*With the continuing restrictions on freedom of thought and expression in many parts of the region, it is difficult to foresee an upsurge in Arab knowledge*

exercised through a chain of official oversight on more than one level and according to more than one law. Among these restrictions are the penal code, the press law, laws governing the content of films, censorship laws for books, theatre, and cinema production, and even, at times, emergency and counterterrorism laws. The concept of censorship of knowledge content has also been broadened to include other restrictions, such as those that impinge on political party activity and the holding of elections, the granting of licenses to civil society institutions, and constraints on volunteers who work in the field of human rights and companies working in so-called “free zones.”

Some governments have announced guidelines and instructions prohibiting the arrest of journalists, but the latter are still subject to imprisonment and criminal proceedings under the penal code rather than the press law. Publishing a newspaper requires a government license, which is granted primarily on a political basis. In addition, a huge sum of money must be paid in advance as collateral or the like (Naomi Saqr, background paper for the Report). These conditions constitute additional restrictions on the freedom of the press and on the right to publish newspapers, freedoms and rights that are considered among the most important pillars of freedom of opinion and expression.

Arab creative production, especially in the literary and artistic fields, collides not only with laws restricting freedom of opinion and expression but also with administrative impediments, foremost of which is the need for licenses, which may be withdrawn at any time. Forms of discrimination on the basis of specialization, profession, and nationality are also practiced. The greater the number of administrative and security restrictions, the greater the possibility for being turned down. For example, a certain director was asked to ‘tone down’ some scenes in one of his films that were deemed demeaning to the police. In another Arab country,

security services prohibited production of a documentary film despite its having obtained permission from the country with which it dealt. Films, by a number of different directors, have been repeatedly banned, and this may lead Arab film makers to produce their works outside the Arab world, adding one more form of brain drain to the haemorrhaging of intellect from the region.

The production, publication, and distribution of books in Arabic suffer from similar restrictions, and these limit the diffusion of printed Arab knowledge content. For example, the authorities of a certain Arab country prohibited the publication of seventy-three books for reasons associated with ‘moral principles, derision of religions, the public interest, and issues affecting specific individuals.’ In another country, books are reviewed before publication by religious authorities and security bodies, and ten to fifteen books are turned down every year. Censorship and surveillance are not confined to the pre-publishing phase; books may be impounded, sometimes a number of years after their publication. Among recent examples is the impounding of a work by a female writer on the grounds that it offends religion. A book may be exhibited in the book fairs of one country and prohibited in those of another. The phenomenon of multiple standards for permission to circulate books has sometimes led to reviewing the books and editing the original text so that they might be put on sale in those Arab countries which impose stricter standards. Such revisions constitute self-censorship, which is destructive of innovation and bold endeavours (Naomi Saqr, background paper for the Report).

In view of the above, and with the continuing restrictions on freedom of thought and expression in many parts of the region, it is difficult to foresee an upsurge in Arab knowledge. Accomplishments in this field will, therefore, remain quite limited, especially so long as the Arab

nations continue to occupy their present position on the world map of freedoms and democracy. No distinction can be drawn between democracy in the broad meaning of the word and the democratization of knowledge, with all the latter carries in terms of opportunities for political participation and, in particular, communicativeness, since the latter can not be achieved in isolation from the first.

### **ECONOMIC ENVIRONMENTS: TOWARDS RESPONSIBLE FREEDOM AND A BALANCED ECONOMY**

The economic environment which stimulates the production and spread of knowledge is based on a cluster of freedoms, such as free enterprise, the freedom to invest, the encouragement of competition, and fair trade. These are practiced through the agency of a judicious and responsible administration that imposes transparency and accountability. The existence of such a cluster leads to the creation of the proper climate for advancement in knowledge performance and for connectedness with a rapidly evolving world which is growing ever more open and interdependent.

There is no doubt that the global economic crisis has put the subject of economic freedom on the docket for review and has produced doubts about the credibility and effectiveness of this freedom as a matter of principle. Some have even gone so far as to call for the abolition, or restriction, of economic freedoms. This logic is, to a great extent, fallacious. It is not reasonable to demand that freedoms be abolished simply because they have been abused by an irresponsible minority. In this context, as with all other freedoms, we differentiate between responsible and irresponsible uses of economic freedom. We look at economic freedom as an enabling tool for the proper exploitation of resources, which includes catalyzing a healthy business sector and promoting a varied and vibrant economy.

We cite the outstanding economic performance built over the course of several decades on economic freedom in industrialised countries and even in those of recent growth, like South Korea, which have realised the greatest benefit from economic freedoms by focussing on development, which has led to outstanding economic performance derived largely from knowledge industries of advanced technical content.

Those countries most open and most committed to the cluster of responsible economic freedoms record high averages of success in participating in and benefiting from the global knowledge reserve. This confirms the assertion that economic freedom and the encouragement of competition within a stimulating economic environment are elements of success in connecting with the world on the basis of knowledge. This is particularly so in light of international entanglements and the appearance of new business models in the global economy which depend principally upon technology and ideas, and in which knowledge performance plays an important role in promoting development.

On the economic front, competitive markets and open economies stimulate competition for domestic and foreign markets among companies in any given country. As a consequence, the relative growth of open economies depends on the ability to innovate and acquire market share among consumers. Knowledge plays a fundamental role in penetrating these markets by virtue of its role in the production and development of competitive products. On the other hand, knowledge itself is regenerated as a result of this competitive process through new, 'dynamic and sequential,' models and the economy moves 'from one temporary equilibrium to another.' According to economist Paul Romer's theory of endogenous growth, up-to-date knowledge is an essential element of the development process; this differs from neo-classical theory, which focuses on

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*Economic freedom and the encouragement of competition within a stimulating economic environment are elements of success in connecting with the world on the basis of knowledge*

*The relative growth of open economies depends on the ability to innovate and acquire market share among consumers*

*The Arab countries most prepared to produce and put knowledge to use are those that observe the largest number of the cluster of responsible economic freedoms encouraging local competition*

closed economies and considers technical change an external factor, not determined by the will of the local economy and the internal knowledge and technological development policies (‘Atif Qubrusi, background paper for the Report, in Arabic).

In view of the above, the Arab countries most prepared to produce and put knowledge to use, especially business-related knowledge, are those that observe the largest number of the cluster of responsible economic freedoms while encouraging local competition. They also limit monopolistic practices and the hegemony of mega-corporations over the market. Although most Arab countries have passed laws which encourage competition, the challenge lies in actual compliance with these laws. In addition, the creation of a balance between the interests of consumers and foreign companies on the one hand, and local heads of business on the other, is also a challenge, especially in that many of the latter participate, under other guises, in the game of politics and decision-making in the Arab world.

#### *MEASURING ECONOMIC FREEDOMS*

The best method to measure economic freedoms might be that which focuses on opportunities to produce knowledge from the inside and fend off the advance of knowledge products coming in from developed countries and giant multinational corporations. Based on that method, an Arab index could be constructed, focusing on the competitiveness of knowledge output, the free flow of knowledge products, and the extent of Arab participation as equal, and not simply dependent, partners in global knowledge industries (see the sections devoted to a proposed Arab index in Chapters 2 and 6).

The absence of such an Arab index makes it necessary to rely on available international indicators. Here we present two indices fundamental for tracking

economic freedom. The first is the Heritage Foundation’s Index of the Economic Freedom.<sup>6</sup> The second is the Economic Freedom Index published by the Fraser Institute for International Research, which consists of five indicators.<sup>7</sup> In addition, we have used the Competitiveness Report published by the World Economic Forum,<sup>8</sup> as well as the World Bank’s Doing Business indicators.<sup>9</sup>

#### *TOWARD EXPANDING ECONOMIC FREEDOMS*

In the Economic Freedom Index of the Heritage Foundation, performance is evaluated using ten components of equal weight.<sup>10</sup> Each of the ten freedoms is evaluated on a scale of 1-100, where 100 represents the maximum in freedom. In evaluating the ten freedoms, the authors depended on reliable, internationally recognised sources. The index for 2009 includes data from the second half of 2007 through the second half of 2008.<sup>11</sup> Hong Kong led the list of 183 countries studied with a total of 90.0, while North Korea came in last with a balance of two points.

The average of economic freedom for the Arab countries studied<sup>12</sup> was below the international average on the basis of the Heritage Index. This places them among those countries that are ‘mostly unfree’. In addition, no Arab country is found amongst those designated as ‘free’ (Figure 2-4). However, nine of the seventeen Arab countries studied rank among those described as ‘largely unfree,’ and six are amongst those designated ‘moderately free.’

By measuring the chronological performance of the Arab countries studied, it becomes clear that the predominant trend for the average of economic freedoms since 2003 is one of decline followed by recovery, despite the realisation of some progress in the field, most of it in the form a slight increase in the last three years, 2006-2009 (Figure 2-5). This slight increase may be linked

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to the third oil boom, which reached its climax between 2006 and 2008, propelling freedoms to the increase shown over their 1999 values.

Arab countries included in the study recorded a noteworthy superiority in one category of the Heritage Index, and that is fiscal freedom. This is attributable to the low rate of taxation, and indeed its absence in a number of Arab countries, particularly those of the Gulf (World Bank and International Finance Corporation,

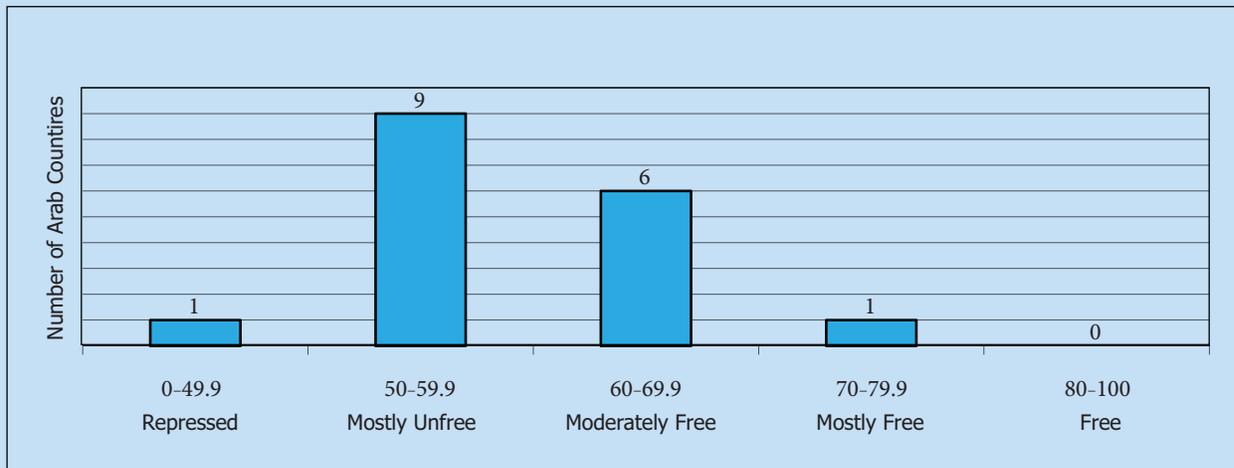
2007). The lowest levels of freedoms in this index for Arab countries overall are in the categories of property rights and freedom from corruption, both of which play a vital role in the promotion of business and competitiveness and, as a result, the enrichment of the knowledge society.

In addition to the low rate of taxation, fiscal freedom, and the stability of the monetary system, there were some other successes in the business environment in

Egypt came among the top ten countries enacting reforms for the third time in four years, particularly in terms of the tax system and the field of business start-up

FIGURE 2-4

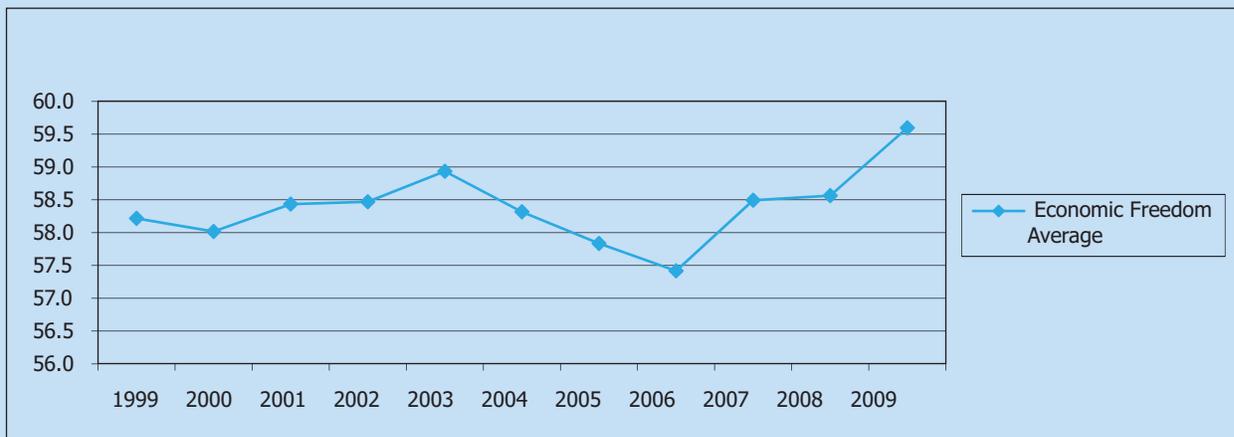
### Distribution of Economic Freedom in Arab Countries, 2009



Source: Heritage Foundation, 2009

FIGURE 2-5

### Average economic freedom index for seventeen Arab countries



The Heritage Foundation, 2009

TABLE 2-1

### Arab Countries that realised positive reforms in the field of business, 2007-2008

Starting a business	Dealing with construction permits	Employing workers*	Registering property	Getting credit	Protecting Investors	Paying Taxes	Trading across borders	Enforcing contracts*	Closing a business
Egypt	Egypt		Egypt	Egypt	Egypt	Morocco	Egypt		Saudi Arabia
Jordan	Mauritania		UAE	Morocco	Saudi Arabia	Tunisia	Djibouti		
Lebanon				Tunisia	Tunisia		Morocco		
Mauritania				UAE			Syria		
Oman				Occupied					
Saudi Arabia				Palestinian					
Syria				Territories					
Tunisia									
Occupied									
Palestinian									
Territories									
Yemen									

\* No Arab country undertook positive reforms in the business domains of employment contracts enforcement.

Source: World Bank and IFC (International Finance Corporation), 2007

GCC countries were able to realise cash surpluses thanks to a rise in petroleum revenues

According to some reports, there is no positive conditional relationship between increased oil and gas revenues and support for economic freedoms

some Arab countries. This was the case in Egypt, which came among the top ten countries enacting reforms for the third time in four years, particularly in terms of the tax system and the field of business start-up, as well as in dealing with building permits and property registration, obtaining funding, and protecting investors. Similarly, positive reforms in the field of business start-up were carried out in Tunisia and Yemen, where the minimum for capital required for that purpose was cancelled, and in Jordan, where it was lowered. It is worth mentioning that Saudi Arabia made progress in reforms in the field of business closure, a category which included no Arab countries between 2003 and 2007. These reforms include the introduction of declaration of bankruptcy as a means of liquidation and a market exit device, as well as a reduction in the role of the courts, setting of time frames, and the maintenance of transparency through use of the internet (World Bank, IFC, 2007).

### *THE OIL BOOM DID NOT FOSTER ECONOMIC FREEDOM AS HOPED*

The Heritage Index for 2009 shows that the Arab Gulf countries realised the highest relative average for economic freedoms among Arab countries, and that this happened thanks to the policy of economic openness, the attraction of foreign investments, and the modernisation of the infrastructure. In addition, initiatives were undertaken that gave the private sector a larger, wider role in the production process. Member countries of the Gulf Cooperation Council were able to realise cash surpluses thanks to a rise in petroleum revenues (Fraser Institute, 2008). However, with the exception of Qatar and Bahrain, per capita income 'averages' witnessed a decline as a result of the swelling demand for imports. This resulted in the depletion of resources that would have been better invested locally (World Bank, 2009).

Since 2003, certain Arab oil-producing countries (Saudi Arabia, Libya, and Oman)

have realised a degree of progress with regard to economic freedoms as compared with five non-oil-producing countries (Egypt, Lebanon, Yemen, Syria, and Jordan) (Figure 2-6). The figure also makes clear the absence of any positive conditional relationship between increased oil and gas revenues and support for economic freedoms. Some Arab countries depend on oil economically and have benefited from the third oil boom, yet have recorded no improvement on the Heritage economic freedom index. In contrast, certain non-oil-producing Arab countries enjoy more economic freedoms than the oil-producing countries when freedom is measured against size of population, and in addition may enjoy lower rates of inflation and slightly better rates of both employment and income (Heritage Foundation, 2009).

The index of the Fraser Institute for International Research points out that most Arab countries studied, whether non-petroleum producers, such as Egypt, Tunisia, Jordan, Algeria, and Syria, or petroleum producers, like Kuwait,<sup>15</sup> Oman, and the UAE, made acceptable progress in economic freedoms between 2003 and

2006 (Figure 2-7). This index relies on forty-two variables in five areas of economic freedom: size of government (spending, taxes, and commercial enterprises); legal structure and security of property rights; access to sound money; freedom to trade internationally, and the regulation of credit, labor, and business. Overall evaluation is based on the combined average of the five categories on a scale of 0-10 (Mu'assasat al-Buhuth al-Dawliyya, 2005, in Arabic).<sup>14</sup>

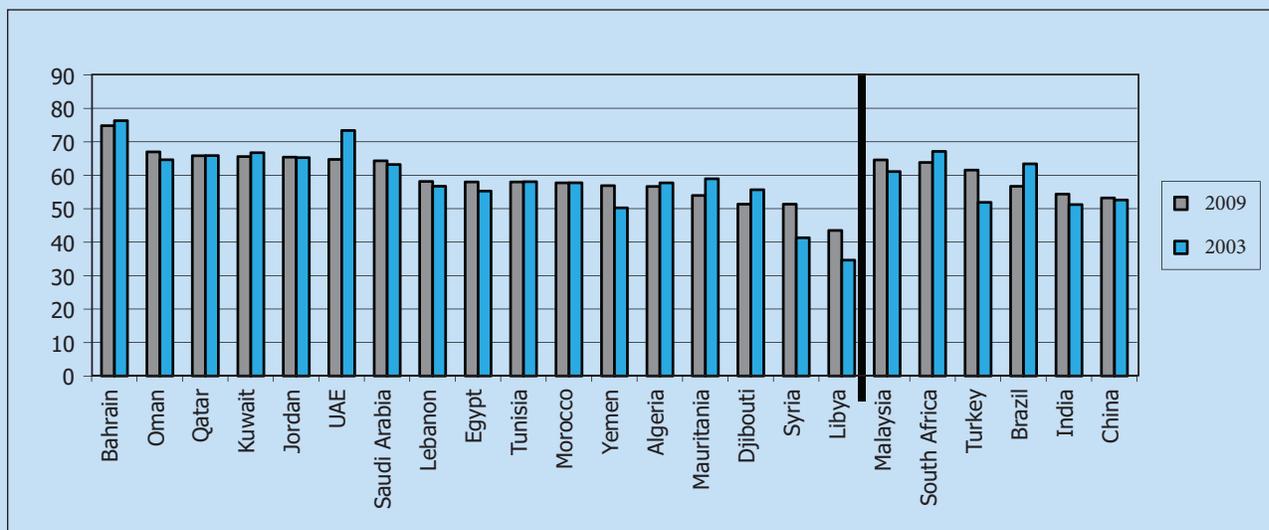
According to the competitiveness index published by the World Economic Forum, the countries of the Arab Gulf, and in particular Qatar, Saudi Arabia, the UAE, and Kuwait, lead Arab countries and occupy a leading position among countries around the world (Figure 2-8). This index is constructed on the basis of twelve critical pillars of competitiveness and presents a comprehensive picture of the competitive arena in the various countries at all phases of development. These pillars include institutions, infrastructure, macroeconomic stability, health, primary education, higher education and training, goods market efficiency, labor market efficiency, financial market sophistication, technological readiness, market size,

Certain non-oil-producing Arab countries enjoy more economic freedoms than the oil-producing countries when freedom is measured against size of population

Most Arab countries studied made acceptable progress in economic freedoms between 2003 and 2006

FIGURE 2-6

### Heritage economic freedom index for 2009, Arab countries-comparison countries



On a scale of 0 (least free) to 100 (most free)  
Source: Heritage Foundation, 2009

### The Contradictory Nature of Economic Freedom Indicators

The evident contradiction among the data produced mostly by western international institutions forcefully indicates the need for careful deliberation before issuing judgements based on them. This points to the pressing need for Arab society to become more deeply involved in the relevant global discourses and the production of relevant data and reliable indicators. The absence in the Arab sphere of institutions capable of producing and publishing authenticated indicators leaves the Arab researcher and planner before a particular selection of information and indicators which may

contradict each other—as demonstrated above—or lack the legitimacy and authority which accuracy would confer. This is a powerful indication of the urgent need to draft Arab indices for knowledge environments and their antecedents, indices that should spring from the actuality of the Arab world. This would lend them credibility and respect, and as a result, authority, whether on the front of Arab society, in both its formal and civil sectors, or amongst specialised bodies at the local, regional, and international levels.

relatively favourable rating *vis-à-vis* Arab petroleum exporters when compared to their peers in other countries of the same group. The competitiveness report attributes this to the modest score in innovation and business sophistication in petroleum countries and the negative effect of this in terms of their overall economic stability and improvement in the institutional environment (World Economic Forum, 2007).

The composite business environment index published by the World Economic Forum describes an outstanding performance by a number of Arab countries, such as Tunisia, the UAE, and Jordan, with regard to its various components, namely effectiveness of anti-trust policy, intensity of local competitiveness, and degree of market dominance.<sup>16</sup> This may afford promising signs, however provisional, of the existence of enabling environments for knowledge industries in both some petroleum and some non-petroleum Arab countries.

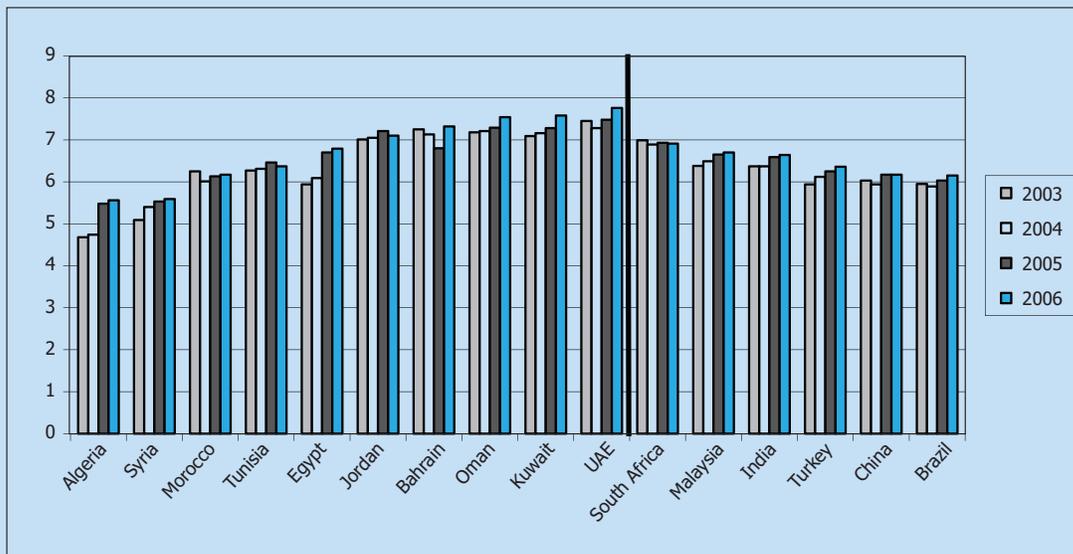
In summary, the Arab region witnessed, up to the onset of the global economic crisis in the autumn of 2008, two principal changes. First was the third petroleum

business sophistication, and innovation. The report also includes comprehensive lists of the most significant strengths and weaknesses of the countries included in the study. The index is on a scale of 0 to 7, where seven indicates the greatest competitiveness. Qatar, Bahrain, and the UAE were all among the list of the world's forty most competitive countries (World Economic Forum, 2008b).<sup>15</sup>

According to this index, non-petroleum exporting Arab countries received a

FIGURE 2-7

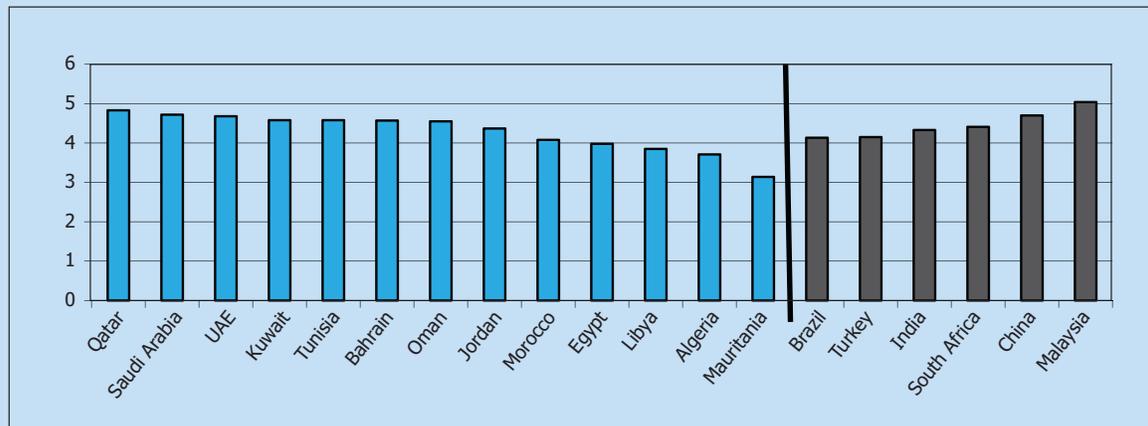
### Fraser Institute index of economic freedom of Arab countries vs. comparison countries



Source: Fraser Institute data base (January, 2009), <http://www.freetheworld.com>

FIGURE 2-8

## Index of global competitiveness for Arab countries



On a Scale of 1.00 (least competitive) to 7.00 (most competitive)  
Source: The World Economic Forum, 2008b

boom, beginning in 2000, from which the oil and gas producing and exporting countries in particular derived great benefit, and which led to an exceptional economic revival, unlike what was happening at the same time in many countries of the world, including certain developed countries. From 2000-2007, there was an increase in GNP (gross national product) in Arab countries, especially the petroleum exporters among them, and even a number of non-petroleum exporters such as Egypt and Tunisia, which benefited partially from the increase in petroleum prices (World Bank, 2009). Secondly, some Arab countries like Egypt, Kuwait, and Jordan took important steps towards openness and on the road to the deregulation of their economies and the removal of some inhibiting restrictions to business and to commercial, banking, and investment activity. This contributed to a relatively good economic performance for this period, which preceded the current economic crisis.

However, most of these huge petroleum revenues were invested in specific sectors like construction, which relies heavily on foreign labor, as well as in investments outside the Arab world which produce rapid returns. Therefore, petroleum revenues did not produce a comparable

surge in the growth of the per capita GDP in many Gulf countries. On the contrary, after 2005, these averages actually declined<sup>17</sup> in a number of petroleum countries, such as the UAE, Bahrain, Saudi Arabia, and Kuwait (see Figure 2-9). Likewise, the oil boom was not accompanied by a boom in knowledge mirroring the investment of oil revenues in knowledge sectors, nor was it reflected in an improvement in individual living conditions in all the social brackets in the Arab world as a whole. In fact, the poor grew poorer in the shadow of the inflation which swept across the world and through the Arab region at least until the autumn of 2008. Investment in the establishment of a knowledge society and economy was very modest, whether in quantitative or qualitative terms or in terms of impact. This is not to deny the numerous praiseworthy efforts and initiatives that have been made in this regard, both by the public and private sectors and by civil society organisations<sup>18</sup> whose goals are the transfer and indigenisation of knowledge and the enhancement of knowledge content or that include knowledge programmes and activities in one form or another. Numerous initiatives have been undertaken in the region in production fields such as industry, agriculture, and services, and in

The oil boom was not accompanied by a boom in knowledge mirroring the investment of oil revenues in knowledge sectors in the Arab world as a whole

External pressure, restrictions imposed by international agreements, and stipulations of free trade agreements do not always contribute positively to the establishment of knowledge societies

education, involving a reasonable quantity of knowledge value added and including different forms of knowledge transfer. These initiatives remain, however, modest and uncoordinated, especially when compared to total investment and revenues and to the opportunities in the field of knowledge transfer that might otherwise have been generated at the Arab regional level. All in all, the third oil boom has not sufficiently contributed to producing long-term Arab development, let alone a rise in Arab knowledge content.

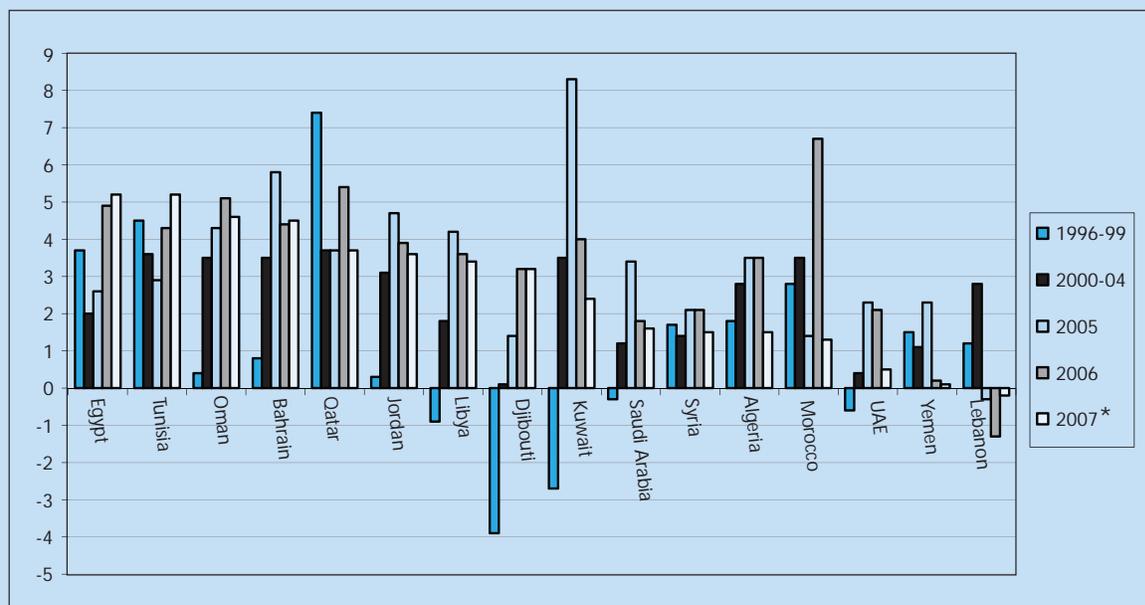
The slight improvement that may be detected in the Arab region is embodied in the advancement of economic freedoms in some countries, which has occasionally led to an increase in growth averages, as in the cases of Egypt and Tunisia. Nevertheless, that advancement remains limited and does not necessarily reflect a vision which aims at establishing a knowledge society and advancing Arab knowledge performance. This is evidenced by the fact that Arab countries continued to export raw materials and import high

value-added products that embody a high knowledge content. Statistical findings of the UN conference on commerce and development (UNCTAD) point to a continuing, even increasing, deficit in net exports of manufactured goods in most Arab countries between 2003 and 2006 (Figure 2-10). In contrast, most Arab countries had a steadily increasing surplus in exports of raw primary commodities during the same period.

Discussion of freedoms is fraught with difficulties, and measurements of economic freedom allow for numerous interpretations depending on the content and implications of each index. No matter how precise the indicators, there are reservations as to the perspective of each in measuring economic freedom. This perspective does not necessarily reflect the circumstances of developing countries, Arab countries included. These indices do not speak, for example, of the need for emancipation from the external hegemony and external legal restrictions that play a negative role in the rise of Arab knowledge performance. Similarly, external pressure, restrictions

FIGURE 2-9

### Average growth of per capita GDP



\*World Bank estimates  
Source: The World Bank, 2009

FIGURE 2-10

### Net exports of manufactured goods in Arab countries



Source: UNCTAD website, <http://stats.unctad.org/handbook/reportfolders/reportfolders.aspx>, on 22 March 2009

imposed by international agreements, and stipulations of free trade agreements do not always contribute positively to the establishment of knowledge societies in developing countries, and, among them, countries of the Arab world.

And now that the global economic crisis is upon us, buffeting the economies of developed and developing nations in succession, the fact remains that Arab countries neglected to exploit the climate of revival and economic openness that accompanied the oil boom to bridge the knowledge gap, and to invest those returns in building Arab knowledge content. This could have allowed for the accumulation of organisational knowledge which, via the business sector, is engendered in knowledge industries and knowledge economies that are open to the world. More than ever before, this crisis calls for redoubling cooperative efforts not only to ward off the dangers associated with it but also to increase investment in Arab knowledge capital. It should guarantee the sustainability of development built on solid foundations, rather than on economic rent-seeking, and should move towards

supporting responsible economic freedom that gives priority to joint Arab investment, especially in knowledge industries, with a focus on supporting an Arab capability to catch up with the knowledge economy.

### MEDIA, CULTURAL, AND SOCIAL ENVIRONMENTS

#### POVERTY AND SOCIAL MARGINALISATION

Social freedoms are considered the real guarantee of individuals' ability to exercise their individual freedoms and political rights as they wish, without violating others' rights. Specific reference should be made to marginalised groups in society and, pre-eminently among these, the poor, who suffer from social exclusion and inequitable income distribution. In its modern definition, poverty is the curtailment of an individual's opportunities to attain his or her basic rights in society (Sen, 1999). Marginalisation constitutes, in all its forms and at all levels, a barrier to the individual's exercise of social freedom.

The global economic crisis calls for redoubling cooperative efforts not only to ward off the dangers associated with it but also to increase investment in Arab knowledge capital

The Arab poor suffer from social marginalisation, economic privation and social inequality—all of which have powerful repercussions on knowledge acquisition and production

Despite the discrepancy in the size of this bracket from one Arab society to another, this group constitutes an important segment of the population in the Arab world. Reference can be made to Yemen and Mauritania, among the most difficult Arab cases, for which the Human Poverty Index, published by the United Nations,<sup>19</sup> shows a poverty rate of more than 35 per cent. Eight other Arab countries that together account for about 60 per cent of all Arabs record averages of greater than 20 per cent on the UNDP's Human Poverty Scale.<sup>20</sup>

It is obvious that the Arab poor, some of whom are growing poorer, suffer from social marginalisation and economic privation, and that they do not enjoy equality with the remainder of their fellow citizens. If the poor represent the most important and most dangerous group among the marginalised, then class differences represent another large barrier to achieving social equity and freedom. And all of the above have powerful repercussions in the domain of knowledge acquisition and production.

#### TRENDS TOWARDS RELIGIOUS RADICALISM AND INTOLERANCE

It is difficult to approach the topic of social freedoms and their development without also considering the general structure of Arab culture, which rests on a complex of customs, traditions, practices, premises, social convictions, and religious beliefs. Space does not permit us to discuss all the areas of dysfunction within Arab culture. The analysis here is of freedoms, especially social freedoms and their relationship to the evolution of the environments needed to enable an Arab knowledge society. Furthermore, this analysis does not proceed from value judgments that either exaggerate or underestimate the extent of the matter.

The first thing to be noted is that Arab culture exists within the framework of a body of texts, established truths, and

deep-seated lore that impact convictions and codes of behaviour. The limits of practices that have been handed down generation after generation are more powerful and more numerous than those of the law. This cultural heritage constitutes the general framework of society and determines its trajectories in a way that makes emancipation from its influence difficult (al-Tahir Labib, background paper for the Report, in Arabic). These constants reflect, in many instances, an intellectual inertia which dominates the culture, resulting in a society that lives and thinks with a one-dimensional vision that rejects change, creativity, and innovation, believing in and preferring to submit to restrictions. As a result, society often takes a preconceived stance *vis-à-vis* 'the other,' one of rejection and condemnation that forecloses dialogue. All of this leads to the drawing up of civilisational battle lines, to reciprocal bouts of cultural mud-slinging, and to an enmity that may reach the point of symbolic and even armed violence. (see Chapter 1)

One cannot go into the restrictions imposed on social freedoms without referring to the fears that accompany writing on certain topics that have a role in shaping our social situation, such as religion, politics, and sex. These are problematic issues that stir up a host of taboos, fears, and sensitivities (al-Tahir Labib, background paper for the Report, in Arabic, and Nabil 'Ali, 2003, in Arabic), and the operative spheres of these taboos and their interpretations have widened in recent decades. This escalation has coincided with the high tide of religious dogma that has been disposed in most cases to outward forms and ritual at the expense of the true essence of religions as represented by their ethical values, tolerant teachings, and moderate practices. And these narrow-minded interpretations have become wide-spread among religions. A number of factors may have assisted the spread of this radical current among broad social groupings in the Arab world, especially the easily influenced young,

Arab culture exists within the framework of a body of texts, established truths, and deep-seated lore that impact convictions and codes of behaviour

namely the spread of poverty, social marginalisation, political frustration, and repeated political defeats, not to mention the waves of westernizing propaganda broadcast by the news media. As a result, obscurantism has increased, as has people's reliance on radical interpretations of texts as sources of religious authority. Likewise, there is a spread of religious rulings, or fatwas, labelling certain people as infidels as well as of resort by lay-people to closed-minded interpreters in understanding the matters of daily life. This phenomenon has reached alarming proportions with the spread of illiteracy in a number of Arab countries. Many such mistaken notions and practices have come to be reflected in aspects of daily life, creating restrictions on social freedoms and a challenge for knowledge advancement and intercommunication with the outside world.

Careful consideration of the content of some Arab media, especially that broadcast by some satellite channels, reveals a proliferation in production and dissemination of a radical religious discourse far from the language of religious tolerance. An opposite discourse, no less profuse in Arab media, springs from extreme consumerist, materialist values and tries to exploit politics, sex, or the dream of fame and quick profit. This polarization in broadcasting between openness to the point of libertinism, and isolationism to the point of hostility to the age and the world, that is at odds with knowledge and openness and constantly pulling the individual back into the past, has become wide-spread. All this redoubles intellectual and behavioural polarization, which is followed by social polarization. The discourse of rationality and moderation has a weak presence on the Arab airwaves in general, despite the serious effort it represents to present a knowledge content that is modern, critically balanced, tolerant, and in tune with the times, times which are responsible for many of the great knowledge feats of our world.

## FREEDOM OF INTELLECTUAL PROPERTY<sup>21</sup>

Intellectual property is an area of overlap between economic and socio-cultural data. It also brings together phenomena with mutually intersecting economic, cultural, and social indicators. These we will deal with under the rubric of cultural and social stability, while recognizing their direct implications on more than one economic front.

Economic and social freedoms are strongly tied to the issue of intellectual property, which plays a fundamental role in moving the process of human development forward. Intellectual property includes the output of the human intellect and all it involves in the field of patents, copyrights, trademarks, and industrial design. There is much debate in this domain over whether knowledge is a public or a private good, over the congruence between literary and financial rights, and over the consequent extent of the conflict between excessive protectionism and the principle of competition, especially in knowledge industries.

Intellectual property acquires particular importance through its relevance to the means by which developing countries benefit from and interact with the global reservoir of knowledge, both in terms of production and use. Thus, the issue of freedom of intellectual property has come to occupy centre stage, becoming a pivot for discussion in global discourse on the production and distribution of knowledge and its connection to development. While developed countries, backed by mega-corporations, call for additional protection of intellectual property, developing countries, backed by NGOs, defend the margins of available freedoms and affirm that a hard-line approach to protectionism and its improper application may have a negative impact on innovation and the spread of knowledge, and even on the other dimensions of development as well.

Some developing countries have succeeded in profiting from these margins

A spread of religious rulings, or "fatwas", labelling certain people as infidels has reached alarming proportions with illiteracy in a number of Arab countries

Careful consideration of the content of some Arab media reveals a proliferation in production and dissemination of a radical religious discourse far from the language of religious tolerance

Arab countries have been absent from the negotiations specifically devoted to intellectual property, to knowledge access, and to efforts to combat international monopolies and external monopolistic pressures

Legislation on intellectual property and its application has been passed in Arab countries without regard for their particular circumstances

of freedom of intellectual property to subsidise their knowledge industries, with positive impacts on development. For example, in 2007, by national decree, Brazil used the flexibility related to compulsory licensing for immune deficiency medication and obtained permission to import an equivalent alternative from India (Martini, 2008). Such actions stem from a clear vision which stipulates that the individual citizen's right to health is a constitutional right guaranteed to all citizens (Shaver, 2008) and have led to a more than 70 per cent drop in the price of the medication. Likewise, India has been careful to promote the manufacture of generic drugs and invest in them. It has also decided that software programmes do not fall under the rubric of inventions and thus are not subject to the patent restrictions<sup>22</sup> that limit the exchange of knowledge and participation in its production. These actions reflect a vision intent on promoting knowledge industries.

#### *GLOBAL DEBATE, ARAB ABSENCE*

Naturally, we now find in the global arena a clear polarization in stances between advanced countries on the one hand and developing ones on the other. This makes debate and discussion, with an enlarged circle of participants, doubly important and adds impetus to the dialogue. Nevertheless, Arab countries have no presence, no active participation, in this momentous global discussion. They have also been absent from the negotiations specifically devoted to intellectual property, to knowledge access, and to efforts to combat international monopolies and external monopolistic pressures. Egypt may be the only Arab country to have participated in a number of international efforts calling for freedom of intellectual property for developing countries. These efforts include setting up a group of development-friendly countries, drafting a development document in 2004, launching the Access to Knowledge

initiative, and making a rough draft of a treaty for it in 2005. This treaty is still under discussion internationally.

Perhaps one of the most important axes of global discussion and debate is that of access to knowledge. This involves "the necessity of applying protection in a way that supports development and the spread of knowledge, especially by maximizing countries' ability to benefit from the flexibilities and exceptions present in legislation for the protection of intellectual freedom." Among the most important of these are the exclusions for the purposes of education and scientific research and the manufacture of generic drugs classified by quality. Most Arab countries have not made full use of the exceptions and provisions for flexibility in the World Trade Organisation's Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement of 1994, the agreement of international reference that governs all countries in their dealings with the intellectual property issue. Flexibility includes numerous facets, most prominent of which are flexibility in implementation, extended grace periods for the intellectual product, standard setting,<sup>23</sup> and implementation of intellectual projects, especially anything connected to education and scientific research.

While NGOs and consumer groups from other developing countries participate in the global debate on fostering knowledge and development, Arab civil society is absent from a global scene that is witnessing effective action from a number of countries in Africa, Asia, and South America. Arab debate on the subject is limited to the local purview among a restricted circle of legal specialists, as if the issue did not extend beyond the cloisters of the halls of justice. Legislation on intellectual property and its application has been passed in Arab countries without regard for these countries' particular circumstances and their need to benefit from the exceptions and privileges that international schools provide. Neither does this legislation

TABLE 2-2

### Arab Countries according to their ties to trade agreements and intellectual property

Arab Non-Members in the WTO	Arab Members in the WTO	Arab signatories to a bilateral free trade agreement with the USA
Algeria	Jordan	Jordan
Iraq	UAE	Bahrain
Sudan	Bahrain	Morocco
Yemen	Djibouti	Oman
Lebanon	Kuwait	
Occupied Palestinian Territories	Morocco	
Syria	Saudi Arabia	
	Tunisia	
	Egypt	
	Mauritania	
	Qatar	
	Oman	

Source: Muhammad al-Sa'id and Ahmad 'Abd al-Latif, background paper for the Report, in Arabic.

reflect a clear vision directed towards establishing a national perspective on innovation, the catalysis of creativity, and development of local knowledge content.

#### *REGULATING INTELLECTUAL PROPERTY IN THE ARAB WORLD: DISPARITY AND OCCASIONAL EXAGGERATION*

Perhaps without realizing the importance of intellectual property, Arab legislation has codified the restrictions that new international legislation dictates, based on the priorities of those countries most advanced economically, technologically, and in terms of knowledge performance. There is considerable disparity among the Arab countries in terms of the features of regulatory systems that protect the rights of intellectual property, depending on how closely tied they are to the TRIPS agreement. As a corollary, it is possible to divide Arab countries according to the regulations currently on their books for the protection of intellectual property into three groups, on the basis of how closely they apply the standards found in

international accords (see Table 2-2).

The first group includes Arab countries with fewer laws and standards than exist in the multilateral international system represented by the TRIPS agreement. An example is Yemen, which grants copyright for thirty years, rather than the fifty of the accord. Countries of the second group include Arab members of the WTO. All obligations and standards on the protection of intellectual property as set out in these accords are necessarily incumbent upon them as a fundamental and inescapable condition for membership. The third group is composed of those Arab countries that are members in the WTO but which, at the same time, are party to a number of additional trade agreements, such as free trade agreements or a bilateral economic cooperation agreement with the United States or the European Union. These agreements usually stipulate additional and more stringent restrictions and standards for intellectual property protection than those set out in the TRIPS agreement.

In fact, these agreements reflect the interest of mega-corporations and the terms of advanced countries, leaving little scope for creativity in developing countries.

Free trade agreements usually stipulate additional and more stringent restrictions and standards for intellectual property protection than those set out in the TRIPS agreement

TABLE 2-3

### Rights and responsibilities of Arab members in the World Trade Organisation in the field of copyright and access to knowledge

Country	Number of years author's rights are protected	Accepts special obligations in technical procedures for protection?	Permits compulsory licensing?	Makes exceptions for libraries and universities for scientific and educational purposes?
Bahrain	70	Yes	Yes	Yes
Djibouti	25	No	Yes	Yes
Egypt	50	Yes	Yes	Yes
Jordan	50	Yes	Yes	Yes
Kuwait	50	Yes	Yes	Yes
Mauritania	70	No	Yes	Yes
Morocco	70	Yes	No	Yes
Oman	70	Yes	No	Yes
Qatar	50	Yes	Yes	Yes
Saudi Arabia	50	No	Yes	Yes
Tunisia	70	Yes	No	Yes
UAE	50	Yes	Yes	Yes

Source: Muhammad al-Sa'id and Ahmad 'Abd al-Latif, background paper for the Report, in Arabic.

Nine Arab countries have accepted special obligations for technical procedures for the protection of digital products not found in TRIPS, and these should have been avoided

There, the strict protectionism in, for example, the pharmaceutical industry or of software protects the interests of mega-corporations that belong, for the most part, to industrialised countries that built their harvest of knowledge, historically, in a climate free from restrictions on knowledge exchange.

On the legislative level, regulations in Egypt, Lebanon, and Syria stipulate some exceptions specific to the pharmaceutical industry. In addition, some exceptions from the articles of patent law have been ratified in Egypt, Tunis, and Jordan, while in Syria, Morocco, and Jordan regulations allow for some flexibility in copyright laws. Djibouti and Mauritania remain exempt from implementing the provisions of the TRIPS agreement on medicines until 2013 and 2016, respectively. Bahrain, Morocco, and Oman, however, have broadened some of their commitments under this

agreement, and even accepted additional commitments in the framework of other free trade agreements ratified with developed countries such as the United States and the European Union. Similarly, legislation of many Arab countries includes special obligations for technical procedures for technology protection, such as encryption, even though these are not among the requirements of the TRIPS agreement.

Table 2-3 on rights and responsibilities of Arab countries shows that five of twelve Arab countries apply stricter provisions for protection of authors' rights than those called for by TRIPS, with protection extending to seventy, rather than the fifty years mandated by the agreement. Nine Arab countries have accepted special obligations for technical procedures for the protection of digital products not found in TRIPS, and these should have been avoided. And

while some of these nine countries became subject to these obligations because they are linked to secondary free trade agreements with developed countries, Egypt included them in its own national legislation for no apparent reason.

Noticeable in Table 2-3 is the fact that most Arab countries—nine of the twelve covered by the sample—have the right to issue and use compulsory licensing to exploit intellectual work without the agreement of its owner, in cases that serve the public welfare. However, this right has not been put into actual practice, and no compulsory license has been issued by any Arab country. However, all the Arab countries listed in the table obtained exclusions from the agreement for libraries and universities for scientific purposes. This is an issue of critical importance which must be implemented and awareness of which must be promoted in the Arab world to foster widespread access to knowledge.

#### *CHALLENGES AND OPPORTUNITIES FOR ACCESS TO KNOWLEDGE*

The Arab world faces a number of challenges in the field of protecting intellectual property rights and transmitting and providing access to knowledge. The first challenge lies in the absence of the subject from national agendas. Here, partnering with the global knowledge reserve and gaining access to its sources and resources of knowledge in important fields such as health, education, and development is of particular importance. The second challenge is embodied in the bilateral agreements on economic cooperation and free trade with industrial countries, especially countries of the European Union and the USA, which aim both at increasing opportunities for products of Arab countries to penetrate these markets and at increasing foreign investment flows. This has not actually transpired, due to the great disparity between the resources of these Arab countries and the capacities

of the developed countries. In fact, it is generally the opposite that happens, with all that that entails in terms of negative economic and social consequences for the Arab side.

The third challenge relates to how to benefit from the Arab knowledge product, however modest, through the provision of adequate support, accompanied by increased positive interaction with the rich and accessible global knowledge reserve, and the beneficial deployment of any outcomes. Finally, there must be participation in knowledge production in a way that moves sustainable development in the Arab world forward and diminishes the sharp disparities between countries in light of the rapid advancements in technology. In this context, reference must be made to the appearance of new business models in the world economy that depend principally on ideas. In these models, knowledge performance plays an effective role in boosting development through knowledge production, and the promotion of and investment in endogenous resources, rather than through the remittance of ever larger annual payments to manufacturers of knowledge in the developed world.

#### *OPPORTUNITIES FOR CREATIVE ARAB COOPERATION*

The Arab world, like other developing areas, suffers from a lack of competent specialists in legal texts in the field of intellectual property, a new field subject to global considerations. Along with these deficiencies come constant external pressures, pressures that may be formidable in the case of non-compliance with the articles of intellectual property agreements and which are often quickly capitulated to. This highlights the necessity for coordination and the sharing of expertise among Arab countries, especially those that have undergone such experiences, even if the results were of limited value (Muhammad al-Sa'ïd and Ahmad 'Abd al-

Arab countries suffer from a lack of competent specialists in legal texts in the field of intellectual property. This highlights the necessity for coordination and the sharing of expertise among countries that have undergone such experiences

It is possible to begin with specific and practical procedural steps to create real Arab cooperation in the field of knowledge by freeing up intellectual property

The current state of knowledge-enabling environments as viewed from the angle of freedoms in the Arab world is not one to stimulate the advancement of Arab knowledge performance

Knowledge is an integral, homogenous whole in its essential categories and components, influenced by the elements of the enabling environments and the cluster of freedoms

Latif, background paper for the Report, in Arabic).

It is possible to begin with specific and practical procedural steps to create real Arab cooperation in the field of knowledge. For example, one could provide latitude for the strengthening of the Arab knowledge reserve by freeing up intellectual property, in emulation of other countries that have realised the importance of providing latitude for freedom to produce and implement knowledge, with all the positive effects this has had on development. This strategy requires that government, the private sector, and civil society organisations participate in the formulation of policies and practical programmes. It also requires the existence of a wise and serious leadership at all levels able to implement these policies and present new initiatives. In this context, the maximum degree of coordination and cooperation between Arab countries would have to be realised in order to agree on united stances in the face of whatever issues might arise with regard to intellectual property on the world stage. An exchange of legal expertise to review many of the laws that some Arab countries have issued without benefiting from the allowances and flexibilities for which international agreements provide would also be needed.

These efforts would not begin from scratch, given that, in fact, there are already examples of Arab cooperation in the field of intellectual property, such as the Arab Agreement for Copyright (1981, then 2002), and the special legislation on protecting author's rights and associated rights (1998). Cooperation among members of the Gulf Cooperation Council in the field of patent law is considered a successful example of Arab legislative coordination; through this, a single system for patenting was applied from 1998, and modified in 2002. This system gives automatic protection in the six member states of the Gulf Cooperation Council without the patent having to be registered

in each of the states separately. The Unified Gulf Patent Office in Riyadh takes an active role in the process of examining, registering, and protecting the patents.

### **SUMMARY: FREEDOMS: A COMPREHENSIVE CLUSTER OR DISPARATE ELEMENTS?**

It can be said that the current state of knowledge-enabling environments as viewed from the angle of freedoms in the Arab world is not one to stimulate the advancement of Arab knowledge performance. The picture looks bleak when one compares freedoms in the Arab world to those in other regions. However, while this characterization is accurate, the situation with regard to Arab enabling environments varies considerably from one country to another and conflicting pictures sometimes emerge. Caution, therefore, is called for in making judgments and generalizing results, even when defining the relationship between knowledge performance and the enabling environment in any given country. Performance also varies considerably from one year to another, as the international reports show. While a particular Arab country may lead in economic freedoms and occupy an outstanding position in one of the pivotal knowledge performance categories, it may record in the same year a slump on the front of political and intellectual freedoms. This will inhibit the pivotal category of innovation that is so closely tied to the abundant supply of intellectual freedom (see Chapter 6).

This phenomenon may be explained by the fact that knowledge is an integral, homogenous whole in its essential categories and components, and influenced as a single entity by the elements of the enabling environments and the cluster of freedoms. Knowledge, after all, is a harvest of different kinds of information acquired from a number of sources, such as education, scientific research, media and publication, economic activity, cultural heritage, historical wisdom,

and political participation. All of these environmental components are affected by and affect each other in the context of whatever freedoms are dominant in the society. As a result, knowledge performance can improve in one country and deteriorate in another, just as one of the basic categories of knowledge may advance while the other categories relapse as a result of the performance of those freedoms, which constitute, in the end, an important and authentic part of any enabling environment for knowledge.

Arab countries, as societies and as individuals, suffer from tensions and contradictions in their performance in enabling knowledge, because, perhaps, of the lack of a clear vision and an organising strategy to catch up with the age of knowledge. These tensions may be the result of security or political fears which exert pressure in the direction of curbing freedom and deregulating commerce. Here, the lack of awareness that knowledge environments on the global front are heading in the direction of greater democratization of knowledge becomes clear. In that process of democratization, the principle of sharing by all citizens in the production of knowledge sparkles, offering an expression of thinking by groups of individuals through horizontal communication media, not through an elite discourse coming from on high.

Generally speaking, it can be said that change in the actual situation of freedoms in the region in recent years has been confined to an improvement in economic freedoms. An analogous improvement in political and intellectual freedoms, democratic pursuits, and freedom of expression has not occurred; they have remained as before in most Arab countries. There also has been no improvement in social and cultural freedoms; in fact, they may even have suffered a decline in some areas.

The freedom of thought and expression are still the weakest link in the cluster of freedoms and environments for advancement of Arab knowledge

performance. And the possibility of separating the various freedoms and defining the role of each in the advancement of knowledge performance remain among the most problematic of considerations that must be addressed. Clearly, exercising just a few types of freedom, and to a most minimal degree, will not be enough to establish a knowledge society in the Arab world, which lacks both political and social freedoms.

## FROM NURTURING ENVIRONMENTS TO SUPPORTING INSTITUTIONS

In the previous section of this chapter we have laid out what we believe to be the cornerstone of the enabling environments that should assist in the formation of a knowledge society in the Arab world, and we have classified these environments within a general orientation that we believe to be central to the formulation of such a society. All of this relates to what we have called an expansion of the domain of freedoms, whether at the political, economic, social, cultural, or media level.

The catchword 'freedom' is not a panacea for all the obstacles that fall in the way of the formation of a knowledge society and an advancement of Arab knowledge performance. Definitely, other factors besides a shortfall in freedoms hinder our ability to reach the thresholds of a knowledge society. One might cite the hegemony of custom, petrification of ideas, closed-mindedness, rejection of innovation, introversion, and a lack of interaction with the latest developments of our age.

Freedom, with the possibilities it offers of a leap forward towards all that contributes to strengthening and transforming the human experience, must be considered a central pillar of empowerment. It is also, as we have said, a pursuit that correlates with the needs of Arab society. Nevertheless, this empowerment, which is based on the responsible exercise of freedoms, requires

Arab countries suffer from tensions and contradictions in their performance in enabling knowledge because of the lack of a clear vision and an organising strategy

Empowerment, which is based on the responsible exercise of freedoms, requires the creation of supportive and protective institutional frameworks that ensure sustainability, development, evaluation, and oversight

To build and implement an enabling environment in the Arab world, we must propagate the institutional climate that nurtures the efforts made to establish the hoped-for knowledge society

Many Arab countries have begun attaching particular importance to the role of science and technology in the service of development. Certain Arab institutions are shining examples of this trend

the creation of supportive and protective institutional frameworks that ensure sustainability, development, evaluation, and oversight. This is because institutional society in the contemporary sense of the word is synonymous with modern society. In the knowledge domain, developed societies have hundreds of institutions capable of accumulating the symbolic and material goods of the knowledge society not only at the level of economic production but also at that of management and its various associated social, legal, and other spheres.

To build and implement an enabling environment in the Arab world, we must propagate the institutional climate that nurtures the efforts made to establish the hoped-for knowledge society. The hope is that these institutions would then go on to embrace the requirements for its establishment, such as the creation and operationalization of a legal mechanism and laws to regulate the institutions that will have the task of supporting the knowledge conduit and reinforcing its branching side-channels. This will help forward the aim of generalising, propagating, producing, and patronising knowledge, whether in terms of human resources or of technological means. Laws and regulations must assume the role of protection, and provide the institutions with their legitimacy so that they may strengthen and elaborate their own regulatory mechanisms. This clarifies the boundaries and parameters of their work, as it does their relationship with the institutional network of the knowledge society.

The achievement of transparency depends on building institutions and their regulations, in that institutions contribute to oversight, accountability, and the rule of law. They also contribute to a degree of decentralization and effectiveness in the performance of their defining tasks, in that networking and subsidiary creation lead to a strengthening of the mechanism of institutionalization, which is synonymous with modernization. Through networking, institutions come to possess, in their

turn, the power to access the contacts of other institutions at home and abroad. This is particularly true when they have encompassed the networked spaces provided by the revolution in information technology. This generates an environment that stimulates acculturation, sharing, and learning, and offers opportunities for taking calculated risks, namely, institutional action in its responsible, rational form that is based on calculations of interest and return on investment.

The subject of supportive, regulatory legislation for efforts to inaugurate the knowledge society ramifies and grows as the issues related to its establishment expand and proliferate. The Arab world not only lacks an institutional perspective on knowledge; it also lacks many of the requirements of institutionalism, such as regulations and legislation specific to it. The delineation and development of these constitutes a basic requirement for the entire endeavour.

## PIONEERING INSTITUTIONS AND SHINING EXAMPLES

Despite the lack of vision and institutional practice and despite the weakness of the legislative framework within which to promote the advancement of the knowledge society in the Arab world, we find many illuminating institutional attempts aimed at embracing, catalysing, and propagating knowledge initiatives. Many Arab countries have begun attaching particular importance to the role of science and technology in the service of development. Certain Arab institutions that try to participate in the building of a knowledge society are shining examples of this trend; space permits us to mention only a small number of them here. In Jordan, for example, there is the Princess Basma Centre for Youth Resources, which was founded in 2004. It is the first such institution to specialise in youth programmes and is known regionally for its vitality and creative and empowering curricula. The Centre launched the

first INTEL computer club; INTEL is considered a pioneer in its attention to information technology and its use in development. This centre is likewise considered the essential partner to the International Youth Foundation (IYF).

In Saudi Arabia we should mention, among a number of examples, Mawhiba (Talent), the initiative of the King ‘Abd al-‘Aziz and His Men Foundation for Patronage of the Gifted, whose basic mission is to discover and sponsor those with talent. It has held a large number of lectures and seminars in the field of developing talent in various regions of Saudi Arabia, publishes the magazine Mawhiba, and has translated many books on the subject into Arabic. It has established a division to support Saudi inventors that has helped more than two hundred, introducing them to investors and issuing patents for their inventions. The foundation is working on setting up an invention incubator to develop and commercialise Saudi inventions. To this end, the foundation holds marketing sessions which bring together the inventor and relevant agencies from the private and public sector. The foundation also supports artistic and cultural creativity out of conviction as to its importance as a facet of knowledge.

In the UAE, among the most important initiatives in support of knowledge and creativity has been the establishment in 2007 of the Mohammed bin Rashid Al Maktoum Foundation, a personal initiative of His Highness Sheikh Mohammed bin Rashid Al Maktoum, vice-president, prime minister, and ruler of the UAE, who allocated the sum of ten billion dollars as a knowledge endowment. The foundation’s goals can be summarised as follows: to develop knowledge and human potential in the Arab region and to use those potentials in the creation of a new generation of leaders able to support comprehensive development efforts all over the Arab world. A second initiative, “Dubai Giving,” is an extension of the first endowment. In cooperation with the Mohammed bin Rashid Al Maktoum Foundation, “Elaf,”

#### BOX 2-2

### Towards Productive Intercommunication for Knowledge: Translation in the Age of al-Ma’mun

The Mohammed bin Rashid Al Maktoum Foundation is translating a number of the masterworks of world science and culture, at the rate of one book per day, thus calling to mind the Golden Age of the Arabs during the reign of the caliph al-Ma’mun—a period characterised by its interest in translation, by its openness, and by the ability and willingness of the Arabs to communicate with the

cultures of the rest of the world. This pioneering experiment may assist Arab knowledge societies towards wider intercommunication with other human societies. It may also help in creating a greater openness towards world sciences and scholarship in such a way as to enrich the existing Arab reserve of knowledge and the establishment of the hoped-for knowledge society.

the first Arab electronic newspaper, plans to launch a knowledge page on its site. The foundation has also launched academic scholarships for studying abroad, such as the “Mohammed bin Rashid Al Maktoum Scholarship Programme”, which falls under the knowledge and education sector. The programme offers scholarships to the top universities of the world for qualified Arab students.<sup>24</sup>

In Qatar, the mission of the Qatar Foundation includes preparing young people in Qatar and the region to face the challenges of an ever-changing world.<sup>25</sup> The Foundation also aims to advance the State of Qatar to the point at which it can assume a leading role in educating for innovation and scientific research. The Foundation works on three axes: education, sciences and research, and society. At its Education City, the Foundation provides support for a select group of institutions known for the excellence of their programmes, covering stages from early childhood to university and higher studies, and that offer integrated programmes focussing, in the first place, on building capabilities and developing character. In the realm of the sciences and research, the Science and Technology Oasis, which cost more than three hundred million US dollars to construct, is regarded as a research and development centre in basic fields, such as medicine, bio-technology, ICT, environmental sciences, particle science, and nano technology. The Qatar Foundation’s research division cooperates

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The new Bibliotheca Alexandrina is working hard to revive the spirit of openness and research which characterised its ancient counterpart

with its partners in leading a process of embedding the mainstays of this research environment in order to build technological and innovative capacity in Qatar and create early solutions for the difficulties and challenges faced by the country in the areas of health, climate change, clean energy, and others. Research is also part and parcel of the academic programmes of each university branch present in the Education City, the intention being to make a reality of the linkage between innovation and the educational process and to direct both to serve the needs of society. The Sciences and Technology Oasis also undertakes to commercialise new knowledge and inventions via support programmes that make it possible to convert research projects into marketable products. The Qatar Foundation also seeks to link its programmes to the service of the society, in fulfilment of the principle of knowledge as a road to development.

Oman's World Studies Institute was founded in 2005 as a non-profit non-governmental organisation. The Institute aims to undertake studies on local and global economic issues, focusing on the Arab world. The Institute is the representative in the region for the Fraser Institute for Economic Freedoms network.

In October, 2008, Egypt's Arab Academy for Science and Technology signed a cooperation agreement with the Egyptian Fund for Science and Technological Development (2008 budget, one hundred million Egyptian pounds), to reinforce cooperation between the two. It aims to offer patronage to Arab inventors, providing them with an appropriate climate, and directing the results of their scientific and technological research towards the service of Arab societies. The agreement covers exchange of expertise, arbitration for technological projects, and the provision of services in support of networking and cooperation among relevant Arab institutions to support science and technology and catalyse them in the service of the economic, social, and environmental development

for Arab society.<sup>26</sup> The new Bibliotheca Alexandrina is working hard to revive the spirit of openness and research which characterised its ancient counterpart. It is not only a library, but a cultural centre which brings together a library capable of housing millions of books, an internet archive, six specialised collections, a planetarium, and a discovery hall to acquaint children with science, in addition to a panoramic mural of civilisation, nine permanent galleries, seven academic research centres, and 'Vista,' a virtual interactive system for science and technology applications.

In the countries of the Maghreb, we find, to name but a few examples, the Islamic Foundation for Education, Science, and Culture in Morocco, an institution founded in 1979 to coordinate the specialised agencies of the Organisation of the Islamic Conference in those three fields and that organisation's member nations. Recently it has taken an interest in a number of strategies for the development of bio-technology in the Islamic world (2003), for water resource management (2003), for developing university education (2006), and for cultural solidarity in the service of civilisation and development issues for Muslims.

Outside the orbit of these institutions, a number of other activities have been undertaken, such as the dedication of prizes and the holding of exhibitions, all of which point to the importance a number of Arab countries attach to catalyzing, in expedient fashion, the establishment of the knowledge society. In Saudi Arabia, the foundation of King Abd al-Aziz, Mawhiba, with participation by the Saudi Aramco Corporation, organised the first Saudi innovation exhibition, "Ibtikar 2008," in March 2008, under the slogan "Innovation in the Service of Development." With the participation of sixty-three inventors and an estimated twenty-two thousand visitors of all ages, the exhibition displayed its selection of over sixty medical and electronic inventions. The exhibition organised basic prizes for boys and girls

from the ages of thirteen to twenty-five and certificates of appreciation to those under twelve. Among the goals of “Ibtikar 2008” were developing inventions and national innovations, highlighting them, evaluating them, and investing in them on an individual basis, with the participation of the public and private sectors. It also strove to provide guidance, help knowledge and technology take root and invest in them, and transform innovations into products with an economic return, all of this paving the way for the realisation of comprehensive development in Saudi Arabia.<sup>27</sup>

In November, 2008, Qatar began celebrating Academic Excellence Day with the designation of six prizes for high school graduates, university graduates, holders of doctorates, outstanding teachers, outstanding schools, and scientific research for secondary students.<sup>28</sup>

The Kuwaiti Science Club organised the first international exhibition for inventors in the Middle East in October, 2007. The Kuwaiti Office for Patronage of Inventors, adjunct to the Kuwaiti Science Club, does follow-up on Kuwaiti youth, fostering their talents and helping them register and enforce patents. A number of Arab and international science agencies took part in this exhibition, helping many inventors to get acquainted with each other and with the investors; this was especially important in view of the fact that marketing is the one problem common to all inventors around the world. This exhibition invited Kuwaiti investors to offer support funds to the inventors by acquainting themselves with the inventions and choosing those of use for manufacture.<sup>29</sup>

The Syrian Ministry of Economy and Development announced a contest for the best young inventor for 2008 to be chosen from among university and institute students, as part of a programme for the dissemination of the culture of intellectual property and the promotion of creativity and invention. Prizes of over 30,000 Syrian liras were earmarked for the competition.<sup>30</sup>

Our review of institutional initiatives reveals actions that truly aspire to strengthen institutionalism and fortify the supporting environment for the knowledge society. At the same time, however, these actions place us in uncharted territory: they neither cover all the domains of knowledge, nor do they reflect a clear policy for doing so. They are, rather, an avant-garde action in dire need of oversight, consolidation, and expansion so that together they may indeed contribute to propelling us into the knowledge society.

These laudable efforts, despite their important role in spurring and providing financial support for contributors to the field, are disorganised and uncoordinated. Indeed, some of them overlap and repeat the work of others, leading to a waste of effort and of the meagre resources available. Here again, we call for openness and interaction in order to profit from the experiences of others. Many countries that have made progress on the knowledge front have taken competitiveness into consideration in this domain and have worked on drafting treaties and strategic initiatives to prepare an appropriate institutional atmosphere for the knowledge society. In March, 2000, European leaders put forward an agreement known as the Lisbon Treaty which aims at making the European Union more competitive and dynamic. The initiative comprised many policies and focused on creating new job opportunities, bringing together 2,010 policy initiatives aimed at utilizing the possibilities of information and communications technology to promote additional innovation and productivity in Europe.<sup>31</sup>

## **LEGISLATION AS THE WAY TO SUPPORT INSTITUTIONALISM**

Establishing the oversight institutions that support efforts to establish the knowledge society requires carefully configured regulations and legislation. In a knowledge society, the value of institutions increases in proportion to

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## The Legal Framework for the European Union

The communications market in the European Union was completely deregulated in 1998. From that time on, a rapprochement of communications technology and broadcasting via digitalization in the European Union forced the redrawing of organisational borders to include “all internet communications and services” in a new organisational framework which came into force in July, 2003. In less than five years this framework was reviewed and brought up to date.

Principal Goals of the Organisational Framework for 2003:

Decreasing organisational burdens on companies that provide services to the information society

- Making sure that all clients, including those with disabilities, have the right to all basic services at reasonable prices (telephone, fax, internet access)

- Encouraging competition through deregulation of the market and of the monopoly by some national companies that offer services like high-speed internet

The reorganisation that the European Commission launched at the end of 2007 aims at simplifying and systematizing laws by establishing a single unified European agency to undertake these regulatory tasks.

The European Union is determined to guarantee that citizens and companies benefit from the knowledge society. In 2006 the Commission worked to limit the unwarranted rise in prices for the use of mobile telephones during travel in other E.U. countries, and it reduced what are known as ‘roaming’ charges by more than sixty per cent in 2007, followed by further reductions in 2008 and 2009.

In the long range, it gives priority to eradicating the “digital

gap.” The E.U. also has numerous initiatives of providing high speed broadband connections, expanding e-commerce and business services to companies, putting public services on the web, and supporting competence and the competitive potential of all sectors of industry and service.

There are three priorities:

- Providing companies and citizens access to a large group of high-quality, moderately priced services and utilities of the communications infrastructure

- Providing every citizen the skills necessary to live and work in an information society

- Providing life-long access to learning as a fundamental part of the European social model

The organisational authority is an inseparable part of the organisational framework of electronic communications in the European Union and it takes on its shoulders the reform process which must be implemented before the end of 2009.

As for the national organisational authorities, among their fundamental tasks are:

- Encouraging competition in the domain of electronic communications networks and services

- Guaranteeing users the benefit of the greatest degree of choice, price, and quality

- Encouraging investment in infrastructure development and encouraging innovation

- Encouraging the active use of wireless and digitalizing resources

Source: the website of the European Commission: Europe's Information Society  
[http://ec.europa.eu/information\\_society/Europe/i2010/ict\\_and\\_Lisbon/index\\_en.htm](http://ec.europa.eu/information_society/Europe/i2010/ict_and_Lisbon/index_en.htm)

Arab legislation remains, for the most part, insufficient to address the questions and issues of the knowledge society

the legal framework that endows them with the foundations that guarantee their continuity and make them viable in society. The task of legislation is also to provide institutions with the tools that allow for self-scrutiny and accountability and thus impart transparency.

The reality, however, is that Arab legislation remains, for the most part, insufficient to address the questions and issues of the knowledge society, whether by protecting them, as in the case of property rights, or by supporting them, or in drafting guidelines for their continuity and development. For example, Arab countries’ positions vary widely as regards the law of freedom of information published by Privacy International. Some of them find themselves in the list of countries with an inferior level of laws guaranteeing this freedom; a large number fall into the category of countries that have not

made laws governing information; and three Arab countries are still waiting to implement these laws, laws which have come to be taken for granted in free and developed countries.

It is incumbent on us to make use of this aspect of the experience of more developed countries. In Europe, the Legal Framework for the Information Society (LEFIS), was established by the European Union as an international research project under the “Sixth Frame” programme. The project has more than sixty members, including academic and research institutions, companies, lawyers, and European Union public administration experts.

LEFIS proposes standards for information technology and communications in schools and law faculties, promotes the study of laws and by-laws, and practices in applied arts centres. The project has also applied itself to devising teaching

solutions that allow use of the available academic resources on-line. A further goal is to draft legal policies arising from discussions that have sprung up around the European Union. The aim of the project is to formulate and implement a plan for educational infrastructure as well as for research in the legal field to effectively address the needs of the knowledge and information society. Based on previous initiatives subsidised by the European Union, it can be expected that this project will lead to an improvement in legal education and succeed in adapting it to the new social, political, and institutional climate. Legal education will thus come to include electronic, social, economic, and ethical dimensions as well as policy-making.<sup>32</sup>

The Free Knowledge Institute, a non-governmental organisation, believes that “by promoting the use of free knowledge in the fields of Technology, Education, Culture, and Science more individuals and organisations will profit from the benefits of sharing knowledge.” The institute supports ‘free knowledge’ in all its forms in the fields of information technology, and educational, cultural, and scientific materials, so that it may be used, studied, modified, and freely distributed. The institute’s basic goal is to support equal opportunity, prosperity, and the collaborative ethic in creativity and knowledge exchange. Among the institute’s most important initiatives is SELF, funded by the European Commission, which has drawn up a programme to encourage creativity, cooperation, exchange of academic materials, and ongoing training. It gives special importance to free and open programmes so that all who wish to may contribute by presenting and sharing knowledge without restrictions, drawing inspiration from the example of Wikipedia.<sup>33</sup>

The European Union has also undertaken the drafting of a legal framework to regulate the climate in which such institutions operate, to provide the environments and freedoms necessary

to the establishment of the knowledge society, and to facilitate its movement and its development. This framework is periodically reviewed to help it stay current with the continuous changes in the knowledge revolution.

We live in the age of the “fifth freedom,” that is, the freedom of movement of knowledge between countries. This expression was coined by the European Union in 2006 and under its rubric it set aside approximately twelve billion euros to subsidise creativity and technology.<sup>34</sup> It follows that, among Arab countries, too, this concept must be applied in the exchange of expertise in the knowledge fields.

Our examination of European examples reveals the fragility and marginality of the institutionalisation currently in place in many Arab countries and in the region as a whole. Arab institutions of scientific research are like isolated islands lacking everything that is needed for collaborative work aimed at raising levels of scholarship and creativity, be that between the Arab institutes themselves, or between them and scientific research institutes known around the world for their productivity and creativity.

This impels us to consider the generalisation and prioritizing of institutionalism as a way of accessing the knowledge society.

### **ON THE NEED FOR AN ALTERNATIVE INDEX: A PROJECT IN CRITIQUE AND TRANSCENDENCE**

An analysis of the enabling environment of Arab knowledge demonstrates that an alternative methodology is needed for studying the state of knowledge and measuring knowledge performance in Arab countries. However, this can only come about through<sup>o</sup> the use of a new index that monitors, as one of its chief indicators, the various freedoms to which this chapter is devoted, to wit, freedom of thought and expression,

Arab institutions of scientific research are like isolated islands lacking everything that is needed for collaborative work aimed at raising levels of scholarship and creativity

An analysis of the enabling environment of Arab knowledge demonstrates that an alternative methodology is needed for studying the state of knowledge and measuring knowledge performance in Arab countries

The desired Arab index will transcend the traditional methods of measuring the production of knowledge via indicators imposed from on high, seeking, instead, to measure knowledge production from an internal perspective

and the political, economic, and social freedoms. It must do this in addition to monitoring institutionalization and enabling and encouraging legislation, as well as measuring actual progress towards the knowledge society. These freedoms provide the climate needed to build the various branches and types of Arab knowledge and the institutions that support them, as well as the laws and regulations in force and their implementation. It is to be hoped that the desired Arab index will transcend the traditional methods of measuring the production of knowledge via indicators imposed from on high, seeking, instead, to measure knowledge production from an internal perspective. It should search for evidence of environments that act as catalysts to the use and production of knowledge content and that boost good governance through a method suited to the production of knowledge under the umbrella of these freedoms. It is an index that would depend principally on participation within a broad space of freedoms, and aim to encourage and utilise indigenous resources and the spread of democracy in producing and disseminating knowledge and creativity instead of importing knowledge from industrial countries.

The alternative index might also explore scientific knowledge environments and scientific research in creative ways to motivate scientists in research and development groups in an atmosphere of academic freedom and freedom of thought and expression. The index might also be broad enough to measure the level of cooperation between scientific and research institutions on the one hand and the industrial sector on the other. It would also monitor the extent of participation in the production of knowledge via digital media (Arab content in Wikipedia, Arab sites in the worldwide web) and Arab publications (the number of independent newspapers, for example, and the number of detained journalists and bloggers) and it would evaluate the state of social freedoms (gender freedom, freedom of marginalised

classes and the poor, freedom of religious practice).

The above is just a summary of the broad outlines of such an index, and in particular for one linked to freedoms. It suggests a starting point for the observation of Arab knowledge environments from an internal point of view that comprehends the interaction between freedoms and knowledge and sustainable development. It would observe knowledge from the vantage point of Arab reality itself and not according to indicators derived from industrial countries. This would pave the way for the construction of an alternative index to monitor Arab knowledge environments and synthesise what may perhaps be considered the nucleus of a project for Arab knowledge accomplishment.

## PEERING INTO THE FUTURE: TRAJECTORIES OF THE ENABLING ENVIRONMENT

It is possible to peer into the future of knowledge-enabling environments in the Arab world in light of the diagnosis presented in this chapter by pausing before three possible future trajectories. The first is pessimistic. It assumes that the state of knowledge-enabling environments will remain as it is, with the continued imposition of restrictions that rein in freedom of opinion, thought, creativity, social participation, and intellectual property. Slight improvements in knowledge performance and a partial improvement, possibly superficial, in the state of freedoms, may occur but will not necessarily lead to an advanced, competitive economic structure based on sophisticated local knowledge industries. On the contrary, the situation will worsen, especially in view of the global economic crisis, with the continued squandering of natural and human resources, including an additional brain drain and loss of promising scientific and university talents. The Arab world will remain, according

to this trajectory, a consumer, not a producer, of knowledge.

The second trajectory presents a realistic outlook that contains a degree of hope. This trajectory would take proper advantage of the slight opening to economic freedoms in the Arab world and give it a little push for the sake of an enhancement of Arab knowledge performance, while trying to find vistas for “new levels of freedom” that the world economic crisis may open through new possibilities for the use of Arab knowledge (see the section devoted to the economic crisis in the preamble). This realistic trajectory requires an enlightened leadership aware of the impediments that a continued flow of Arab resources abroad entails, especially in the light of current global economic conditions. Under such a leadership, Arab investments in two basic domains would be encouraged. Top priority would go to a heavy investment in Arab human capital. This would occur through support of creative initiatives in education, establishing and operating endowments for research and scholarships, and expanding science prizes as a sophisticated means of encouraging individuals to participate in scientific research, as is done elsewhere in the world, even by mega-corporations. These would be over and above an opening to global knowledge networks and support for the trend towards the democratisation of knowledge rather than its monopolisation. Second priority would go to investment in promoting knowledge-based industries, such as the pharmaceutical industry, software, and information technology, and expanding them by making the greatest possible use of the flexibility available in the laws on intellectual property and by working together with other developing countries. This would lead to a boost for national knowledge industries as they integrate into global economies, while maintaining the priorities of the Arab countries, and without submitting to the dictates of the developed world.

Nevertheless, this trajectory does not remove the fundamental impediment

that hampers Arab knowledge, namely, the restrictions imposed on the freedom of thought and expression irrespective of how the Arabs may flourish economically. Even if this trajectory leads to some economic success,<sup>35</sup> that success will run into the ceiling of restrictions on freedom of thought and expression and perhaps the ceiling of cultural restrictions, from which liberation can be expected, at best, only in the long term.

Finally, the most desirable trajectory is the optimistic scenario which shows a leap forward in vision and leadership in the Arab world and a consequent expansion in political freedom to complement economic freedoms. This would come about as a result of an awareness of the danger of repressing freedom of thought and expression. It would happen when attention is paid to the implementation of competitiveness, freedom of intellectual property, the enrichment of intellectual life, scientific research, and creativity, and the realisation of Arab knowledge unity, based on a climate headed towards democracy in its broad sense, including the democracy of politics, business, and knowledge. In this healthy climate, cultural and social freedoms would be realised successively, and Arab countries would cooperate, particularly in view of the global economic crisis and the coordination of efforts it requires of developing countries.

The ideal solution is to release all these freedoms. This is in harmony with human rights and will bring about equality and social justice. If the Arabs direct their attention exclusively towards economic freedoms, the basis of Arab knowledge-enabling environments will remain incomplete and far from realisation. A knowledge model built on a limited number of freedoms will lead to the production of only certain forms of knowledge, not to a knowledge society. The likeliness of the success of such a knowledge model and its longevity, not to mention its ability to bridge the knowledge gap, remains questionable, both on the Arab and the global level.

The most desirable trajectory is the optimistic scenario which shows a leap forward in vision and leadership in the Arab world and a consequent expansion in political freedom to complement economic freedoms

## End Notes

- <sup>1</sup> The index divides the Arab states into five groups according to their degree of press freedom (good, satisfactory, noticeable problems, difficult, very serious) based on a sliding scale according to which the higher the level of press freedom the lower the value on the index.
- <sup>2</sup> [http://www.economist.com/media/pdf/Democracy\\_Index\\_2007\\_v3.pdf](http://www.economist.com/media/pdf/Democracy_Index_2007_v3.pdf).
- <sup>3</sup> Calculations were made according to Table 3 in the Democracy Index, 2008, published by the investigations division of the Economist. <http://a330.g.akamai.net/7/330/25828/20081021195552/graphics.eiu.com/PDF/Democracy%20Index%202008.pdf>.
- <sup>4</sup> This applies also to the Governance Index issued by the World Bank, which consists of several indicators, the most significant of which are political stability, absence of violence and terrorism, efficacy of governance, quality of institutional performance, freedom of expression and accountability, the rule of law, and control of corruption. See Governance Index, World Bank, 2008, covering the years 1996-2007. <http://info.worldbank.org/governance/wgi/worldmap.asp#>.
- <sup>5</sup> This section of the Report draws primarily on the background paper prepared for the Report by Naomi Saqr, "The Impact of Media Laws on Arab Digital and Print Content," in English.
- <sup>6</sup> See [www.heritage.org/index](http://www.heritage.org/index).
- <sup>7</sup> See <http://www.freetheworld.com/2008/EconomicFreedomoftheWorld2008.pdf>.
- <sup>8</sup> See <http://www.weforum.org/en/initiatives/gcp/ArabWorldCompetitivenessReport/index.htm>.
- <sup>9</sup> See [http://www.doingbusiness.org/documents/DB09\\_landlocked.pdf](http://www.doingbusiness.org/documents/DB09_landlocked.pdf).
- <sup>10</sup> Components of the Index are: business freedom, trade freedom, fiscal freedom, size of government, monetary freedom, investment freedom, financial freedom, property rights, freedom from corruption, and labor freedom.
- <sup>11</sup> It should be taken into consideration that some of the freedoms, such as monetary freedom, were based on the average rate of inflation from January 1, 2005 through December 31, 2007.
- <sup>12</sup> Statistics for 2008 include seventeen Arab countries, namely, Algeria, Bahrain, Djibouti, Egypt, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Tunisia, Syria, UAE, and Yemen.
- <sup>13</sup> The Heritage Index reveals conflicting results, showing a sharp decline in Kuwait, Oman, and the UAE from 2003-2009.
- <sup>14</sup> The index relies on only thirty-nine indicators for the Arab countries, given the paucity of data and the use of 2006 data for the 2008 report.
- <sup>15</sup> Evaluation is made on the basis of data available to the public and on opinion polls, according to a comprehensive annual survey conducted by the World Economic Forum in cooperation with its network of institutes (the research institutes and business organisations in the countries covered by the report), and in 2009 information was gathered from more than 12,000 business executives (see World Economic Forum, 2008b).
- <sup>16</sup> See Statistical Annex, Table 5.
- <sup>17</sup> Despite the rise in per capita income as an absolute figure in these petroleum countries in the period from 2005-2007, there was a decline in the rate of growth of GDPs during the same period.
- <sup>18</sup> See the section of this chapter entitled "Pioneering institutions and shining examples," which is devoted to efforts and initiatives aimed at the establishment of knowledge-nurturing institutions.
- <sup>19</sup> The index is calculated as an average of three components: first, adult literacy rate, second the likelihood of not surviving up to the age of forty, and third, the average percentage of the population that does not have reliable access to water and the percentage of children who are underweight for their age. To examine the index for human poverty, 2008, see the website for human development: [http://hdr.undp.org/en/media/HDI\\_2008\\_En\\_Tables.pdf](http://hdr.undp.org/en/media/HDI_2008_En_Tables.pdf).
- <sup>20</sup> The list consists of Djibouti, Egypt, Iraq, Mauritania, Morocco, Sudan, Yemen, and Comoros. Somalia should perhaps be added to the list, despite the lack of supporting data (Statistical Annex, Table 2).
- <sup>21</sup> The term 'freedom of intellectual property' in the sense of emancipation from restrictions on intellectual creativity was used by Naglaa Rizq in her book Intellectual Property and Knowledge Creation in the Arab World: the Political Economy of Knowledge and Development, Edward Elgar Publishers, forthcoming 2010. This section of the chapter relies heavily on the background paper for the Report by Muhammad al-Sa'id and Ahmad 'Abd al-Latif, in Arabic.
- <sup>22</sup> This is according to the third paragraph of the patent ordinance of 1970. For further detail, see (Noronha, 2006).
- <sup>23</sup> Examples of TRIPS flexibilities include early use, compulsory licensing, and government use of patents in some

specific cases. These flexibilities have been provided for the sake of public welfare such as the fair and just use of intellectual property for purposes of education.

- <sup>24</sup> The website Dar Al Hayat, "The Mohammed bin Rashid Foundation and Elaf launch "Ma'rifa" electronic website".  
[http://www.daralhayat.com/science\\_tech/02-2009/Article-20090213-+7067573f-c0a8-10ed-0095-ef1792de150d/story.html](http://www.daralhayat.com/science_tech/02-2009/Article-20090213-+7067573f-c0a8-10ed-0095-ef1792de150d/story.html), on 14 February, 2009.
- <sup>25</sup> See the Qatar Foundation's website: <http://www.qf.edu.qa/output/page40.asp>.
- <sup>26</sup> "Cooperation Agreement to Assure 'Freedom of Knowledge Movement' and a Conference on Investing in Arab Inventors," [http://www.mawhapon.net/ver\\_ar/news.php?news\\_id=3971](http://www.mawhapon.net/ver_ar/news.php?news_id=3971) on 16 March, 2009.
- <sup>27</sup> "Grounding the Culture of Invention in the Society: Prizes Distributed at Inventors' Exhibition," <http://www.sec.gov.qa/content/resources/detail/19079> on 16 March, 2009.
- <sup>28</sup> The Qatar initiative to develop education website, March 2009: "Sheikha Al Hamud: Honoring high-achievers is a feature of a developed society," <http://www.sec.gov.qa/content/resources/detail/19079> on 10 March, 2009.
- <sup>29</sup> "Kuwait hosts the first regional inventors' exhibition," [http://www.mawhapon.net/ver\\_ar/news.php?news\\_id=2757](http://www.mawhapon.net/ver_ar/news.php?news_id=2757) on 16 March, 2009.
- <sup>30</sup> "The Syrian Ministry of Trade announces a contest for the best young inventor for 2008..."  
[http://www.mawhapon.net/ver\\_ar/news.php?news\\_id=3195](http://www.mawhapon.net/ver_ar/news.php?news_id=3195) on 16 March, 2009.
- <sup>31</sup> European Commission website: "2010 in the context of information and communications technology and the Lisbon Strategy," [http://ec.europa.eu/information\\_society/eeurope/i2010/ict\\_and\\_lisbon/index\\_en.htm](http://ec.europa.eu/information_society/eeurope/i2010/ict_and_lisbon/index_en.htm), on March 16, 2009.
- <sup>32</sup> LEFIS, <http://www.ittig.cnr.it>, on March 10, 2009.
- <sup>33</sup> For more information on the institute, see the website: <http://www.freeknowledge.eu/>
- <sup>34</sup> The first four freedoms are: the free mobility of humans, capital, services, and products among countries of the European Union.
- <sup>35</sup> In view of the continuing restrictions of associated freedoms, and particularly political freedom, some observers are placing their bets on economic freedom alone as the lever most likely to raise Arab developmental and knowledge performance, alluding to the possibility of the Arab region repeating the achievements of certain countries in East and South Asia and of China. Such a bet is beset by risks and pitfalls. A large body of literature exists that offers a different assessment of the experience of these Asian countries. In light of the clear differences in the regional and global political situations of each area, and the clear difference between them in terms of economic and social make-up and systems of knowledge and production, such comparisons and bets are fraught with difficulty.

