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CHAPTER SIX:

MOVING TOWARDS
INTEGRATING THE
YOUTH IN THE
TRANSFER AND
LOCALISATION
OF KNOWLEDGE
AND BUILDING
THE KNOWLEDGE
SOCIETY IN THE
ARAB REGION

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Introduction

Previous chapters have addressed and clarified the status of the Arab youth in terms of their cognitive, cultural, economic and social effectiveness. The enabling environments of the Arab youth were also investigated along with the problems and challenges of capitalising on the Arab youth bulge to make it a source of wealth for achieving comprehensive development. Furthermore, the previous chapter presented the results of field studies regarding the status and problems of development, knowledge and youth in the Arab region. This final chapter addresses the following questions: “what is the Arab situation?”; “what’s next?” and “what should be done?” The analysis in this chapter extends to identify the most important themes and mechanisms of future movement to address this pivotal issue. It concludes by exemplifying a proposed vision for an action plan required for integrating the youth into the transfer and localisation of knowledge in the Arab region. It also presents a figurative model highlighting the components of such a plan and its various interactions.

In line with the Arab Knowledge Reports’ governing principle, the proposition of these scenarios does not, in any case, suggest that they are complete or that they answer all questions. After posing all the topics and problems, these scenarios offer a framework for a proposed vision of future action for both the decision-maker and the Arab citizen. And just as we have repeatedly emphasised, the Arab Knowledge Reports intend to create a status of societal dialogue over the topics presented towards achieving an Arab vision agreed upon by concerned parties. Such a vision would later be translated into the adoption of policies and the creation of programmes and projects. Such programmes would also help accomplish the goal of effective integration of the Arab youth into the processes of the transfer and localisation of knowledge, within the ultimate goal of achieving sustainable human development in the Arab region.

Human Development and Building the Knowledge Society in the Arab Region

In addressing the effective integration of the youth in the localisation of knowledge, the third Arab Knowledge Report 2014 is built on a clear critical understanding that defines the concepts of the complex problematic relationship between the triad of knowledge, youth, and sustainable development. It is also built on an accumulation of knowledge, derived from a series of relevant international reports and literature, as well as on the results of the previous AKRs that have determined a comprehensive and critical vision of the meaning of “knowledge”, “knowledge society” and “comprehensive development” in the Arab society, while also providing suggested approaches for achieving each of these priorities.

This report reached important conclusions stating that human development and the building of the knowledge society in the Arab region are facing many challenges; the most important of which is the knowledge gap. The second challenge is the “youth bulge” and associated concerns in relation to job opportunities, unemployment and capacity building. The third challenge is the reform of the supporting enabling environments, including learning and training systems. Challenges also include freedoms in their broader sense, and the systems and regulations that protect and govern the effective integration of the Arab youth in the processes of the transfer and localisation of knowledge. Despite accomplishments in certain countries, the knowledge gap in the Arab region indicates the absence of the main driver required to access the knowledge economy and the knowledge society to achieve genuine development. Knowledge is linked to development through an organic and dynamic relation; it is a tool for development and a result of it. The internal growth that is expected over the long-term is linked to knowledge elements including the efficiency of Research and Development (R&D) activities as well as the growth

Despite accomplishments in certain countries, the knowledge gap in the Arab region indicates the absence of the main driver required to access the knowledge economy and the knowledge society to achieve genuine development

The main challenges facing the fostering environments in Arab countries in general are the weakness of the human-capital forming institutions, especially the teaching, training and scientific research institutions

of human capital which is considered to be the fundamental pillar and pivot in knowledge-based economies and societies. The transfer and production of knowledge in all its forms and manifestations including those related to technology, science, culture and human sciences, as well as the ability to use and employ this knowledge, have become strategic and decisive factors in the economic growth and advancement of the Arab region. This is especially true with ever-increasing globalisation and economic competition.

Most of the indicators and reports, however, record minor improvement in the status of knowledge in the region as they note a continued and widening gap between the Arab countries and the world and highlight the discrepancies among Arab countries themselves. This report also highlights the size of this gap, indicating its importance and severity in relation to sustainable development, by using analyses based on various international and regional indicators. As previously indicated, and according to the latest available data, the World Bank indices, including the Knowledge Index and the Knowledge Economy Index (with its four pillars represented by four sub-indices: Economic Incentive and Institutional Regime, Education and Training, Innovation, and Technology, and ICT infrastructure) indicate the decline of the Arab world's ranking on these scales. In fact, the Arab region only precedes South Asia (rank 7) and Africa (rank 8). According to the Knowledge Economy Index, the Arab world attained 4.21, a score below the global average (5.12).¹ In this same direction, the Arab World Competitiveness Report 2012 highlighted that Arab countries, when compared to a group of corresponding developing countries (13 countries), have a gap of 30% in the latent competitiveness field (innovative energy, localisation of knowledge, human capital and technology).² Each of these indicators emphasises the limited ability to produce, diffuse, and adapt knowledge in the fields of human development. This requires the adoption of optimal strategies for supporting the advancement of knowledge in the Arab region.

The knowledge gap challenge coincides with a “youth bulge”, which is considered a key feature of the phase the Arab region is currently witnessing. Statistics indicate³ that the proportion of the age group of less than 15 years in the Arab region is expected to reach 32% by 2015,⁴ and that 1 in 5 people in the Arab region falls in the age group 15-24 years.⁵ This suggests that the demographic status of the Arab countries raises one of the most complex problems. A large segment of the population is made up of the steadily growing youth, who are supposed to form a real chance of progress using their energy and capabilities. However, the countries are incapable of transforming this youth segment into productive human capital. Add to this the marginalisation and exclusion that the youth is subjected to, and the subsequent turmoil and oscillations that were witnessed in several Arab societies over the last three years, the outcome of which can not yet be predicted. Addressing this critical problem is linked to the challenges of creating the supporting and fostering enabling environments when seeking to move towards the knowledge societies and economies. The challenges of such fostering environments vary, whether in their kind, volume or severity, from one Arab country to another. However, the main challenges facing the fostering environments in Arab countries in general are the weakness of the human-capital forming institutions, especially the teaching, training and scientific research institutions, and the growth of the public sector in the non-productive, wasteful employment of young people's energies. Other challenges include the state's capabilities that are based on rentier orientations adopted in most of the Arab countries and the negative effects on the development process this entails; coupled with the weakness of the private sector which is reflected in the weakness of the manufacturing industries, the entrepreneurship sector; youth unemployment as well as youth migration, or what is known as the Arab brain drain. And, finally, the gap of freedom, in its broad sense, which includes the weakness of accountability and transparency as well as the weakness of institutions' governance.

Variables and Problematics in Youth Integration and Knowledge in the Arab Region

Within this general framework and comprehensive vision of the topics related to establishing the knowledge societies and economies, it has become clear that the relationship involved in “integrating the Arab youth in the transfer and localisation of knowledge” is not a basic linear one. It is rather a complex dialectical relationship involving profound problems and a set of interactive variables, the most important of which are: knowledge, globalisation, youth and development.

With regard to its transfer and localisation, together with its surrounding global and local settings, knowledge is in itself also problematic. Knowledge economies enjoy various attributes and characteristics that need to be emphasised. These include the intensity of knowledge in terms of production and availability, the intensity of the use of ICT and the emergence of knowledge as an economic product. This comes in line with the growth of knowledge trade due to intellectual property rights, the increase of knowledge workers, the increase of the impact of knowledge through economic sectors, the emergence of knowledge management as increasingly important systems and practices, the emergence of innovation and creativity systems, and the capability of knowledge to be transferred and developed.

The analyses of this report, including the field studies, have asserted that the youth are not a single bloc, but one with different social, economic and cultural components that vary from one Arab country to another, and even within the same country. Despite these differences, there are certain values; elements and traits that are common among all the youth in the Arab world, the most important of which is probably the ability to update and innovate.

As for globalisation, and regardless of the nature of any dispute over its identification or specification, it remains the core of the

civilisation we are living in today and the one we have to handle. Among the paradoxes of globalisation is that some of its positive elements constitute the pillars of the desired knowledge society. Some analysts also praise the competitiveness that has been enhanced by globalisation, whether at the state level or among corporations, thus enhancing creativity, innovation and progress. In parallel, another view deems globalisation to be in the lead in enhancing the control of some states, instead of others, in terms of worldwide knowledge foundations. This is manifested in many facts, but most importantly in the dominance of the Global North over the knowledge production sectors and the international communication networks. Meanwhile, many warn about the risks of knowledge-based economies under globalisation, as they are, just like any other capitalist economy, governed by profit supremacy and self-interest without necessarily paying the needed attention to issues of social justice, which, in many cases, leads to the widening of poverty gaps.

Globalisation has had the greatest impact on forming the identity and awareness of the Arab youth as it has shaped various globalised standards including media materials as well as food, drinks and clothing. These manifestations and the nature of the changes they engender happen to clash in many situations with the social, economic and value-based dimensions of the Arab youth and resulted in many cases in what is known as “the hybrid culture”. The negative and positive effects of globalisation encompass the main mechanism that forms awareness, skills and values of the Arab youth, represented by education and formation systems, especially in universities and secondary education. In the framework of the skills and knowledge globalisation, international programmes and standards, as well as the internationalisation of education were established. Education itself has become a platform for launching the globalisation force in the country. It also strongly imposed on the youth the need to master foreign languages, particularly English. The globalisation movement also requires the youth to be able to understand

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Knowledge is a concept and a product that comprises all sorts of sciences, culture and arts in all disciplines. Whether implicit or explicit or whether manifested in technologies or coded in programmes, knowledge can be transferred by various means to be used and employed. Knowledge is also a “process” that can be transferred and localised. It is based on the research system in education, universities, research centres, development and innovation centres in institutions, and in ICT, which constitutes the pillar of development, connection and effective work, as well as the support for the development in science and production in this age. The connection between the production institutions and the centres for knowledge production within communication technology networks is also a necessity to ensure the continuation of the transfer and localisation of knowledge, not only as a product, but as a process that guarantees employment and production. As for globalisation, it is in mutual interaction with the progress in knowledge as a product and a process, and in what it achieves in terms of economic growth that expands the opportunities for building an economy based on knowledge.

The Arab countries have to deal with all the knowledge pillars, as they provide and create job opportunities and ensure the active integration of the youth. The required reforms for institutions of production, building policies and developing culture, all play a major role as enabling incubating environments for all these variables. The knowledge revolution we are witnessing highlights the importance of the tetrad of knowledge, youth, development and globalisation. The localisation and use of knowledge, as well as the integration of the youth to ensure the positive effectiveness of the connecting relations between the parties of this tetrad, all require policies and strategies for knowledge management and institution management, as well as establishing good governance and social justice systems. The success in building the knowledge society in the Arab region lies in the capability of the countries striving to achieve this goal in building regulations, mechanisms and networks for sustaining the implicit and explicit knowledge diffusion, building networks and providing advanced economic models.

The analyses of this report showed inconsistencies in the performance of the Arab countries in terms of the effective integration of the Arab youth in the processes of establishing a knowledge society

what goes on around them in the world and therefore requires Arab countries to handle an extensive translation and diffusion movement in order for them to master ever evolving sciences in the world. This also requires focusing on the Arabic language as an incubator for the cultural development process, which in turn represents one of the conditions of success in the processes of the transfer and localisation of knowledge.

Nevertheless, the Arab development structure and its environment define the interaction between the youth and the transfer and localisation of knowledge processes, through their social, cultural and political contexts, and by relying on the extent of what this reality offers in terms of abilities and choices, and of what it involves in terms of opportunities and threats. In this framework, the importance of social justice in knowledge-based development is confirmed. It refers to the close link between the request to transfer and localise knowledge and that of public and societal freedoms. Furthermore, considering development as a means to extend the choices of the youth, in addition to developing their capabilities, makes the relationship between the development environment, the youth and knowledge localisation a mutual and close

one. Youth are the knowledge carriers and development makers. At the same time, the development structures and environments provide more opportunities to prepare the youth to achieve sustainable development and enable them to access the knowledge society.

Discrepancies in the Performance of Arab Countries in Integrating the Youth in Knowledge Transfer and Localisation

The analyses of this report showed inconsistencies in the performance of the Arab countries in terms of the effective integration of the Arab youth in the processes of establishing a knowledge society. This was brought up during the survey of Arab youth effectiveness in four major axes: cognitive effectiveness, cultural effectiveness, economic effectiveness, as well as openness and intercommunication.

Cognitive effectiveness means empowering the youth while equipping them with skills and knowledge qualifications that enable them to assimilate, transfer, employ and localise technology. They also allow them to acquire Arabic and foreign languages skills, which help them communicate effectively

on both local and international levels. There are four basic levels in defining the cognitive effectiveness of the Arab youth to create an effective human capital in terms of capabilities; one that enjoys competence and justice in transferring and localising knowledge. The first level is related to acquiring knowledge, training and forming the basic knowledge capital required for the transfer and diffusion of knowledge, the extent of achieving fair distribution of knowledge opportunities among the youth, and the extent of the ability of the education and training systems to achieve this mission. The analysis showed that the majority of Arab countries were still unable to transform their youth population wealth into knowledge wealth that would bridge the knowledge gap and move into the establishment of knowledge-based economies and societies. The 2014 UNESCO data have indicated the existence of about 7 million illiterate young people, and around 51.8 million illiterate adults (15 years and above) in the region.⁶ These illiterates are not only excluded from the calculations of the knowledge economy but are also excluded from the minimum levels of human life, i.e. a life lived with dignity and social justice. Even though the Arab countries have accomplished adequate quantitative achievements in primary education enrolment rates, data show a failure to provide education opportunities that offer the minimum level of knowledge to move towards establishing the knowledge society. For instance, the gross enrolment rate in secondary education was 74.2% in 2012. Despite being close to the global average (73%), these rates remain below those of East Asia and the Pacific (84.5%), Central and Eastern Europe (93%), and Central Asia (98.6%).⁷ The same applies for the Arab youth higher and university education, where the gross enrolment rate reached 26% in 2012. These rates fall below the global average in higher education (32.01%), setting aside the average in Central and Eastern Europe (70.94%), North America and Western Europe (78.95%), Korea (98.37%) and Japan (61.46%).⁸

The second level in youth effectiveness is related to the extent of achieving an

advanced quality of knowledge acquired from education and training, and the extent of its success in improving cognitive effectiveness among the youth. Despite the progress achieved in many Arab states, particularly in the Gulf, most studies find that the quality of outputs, especially in the pre-university education cycle, still falls below the sought level. As for the outputs of higher education, the absence of scientific studies and evaluations restricts the judgement of their quality to the extent of employer satisfaction with the skills of university graduates. This was refuted by the findings of the studies regarding this subject, which indicated a decline in the quality of outputs and highlighted their incompatibility to the needs of the labour market. The third level is related to the development of self-capacities in the field of information and communication that aim to examine the Arab youth's capabilities and their extent in using information technology, as it constitutes a pillar for progress in the transfer and localisation of knowledge. Various data indicate an uneven spread of ICT, along with a progress in the possession of technological skills among the youth, as well as an expansion of technology use in the Arab region. Nonetheless, there is still a relative gap between the youth in the Arab region and their peers in developed countries while the employment of ICT for the purpose of obtaining knowledge is still limited. Reservations can still be observed regarding the quality of technology employment and the extent of the youth's success in integrating it as an essential mechanism in research, development and innovation, and in dealing with it as an essential structure in the scientific research system. The fourth level is associated with the active participation of the youth in scientific research activities and innovation, and highlights the determinants and obstacles standing in the way of the youth's effectiveness in diffusing and localising knowledge. In this context, and despite the difficulty of accurately defining the youth's net contribution in the research products; innovation and development, the general status of research activities and innovation in the Arab states indicates that the region

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in general is still excluded from the global competition. This comes despite some successes and the existence of inconsistent steps towards anchoring a research and innovation supporting environment. The average production of scientific research articles in the Arab region for every one million people is merely 41 research papers; in comparison with a global average of 147.⁹ The Arab countries spent in 2012 between 0.03% and 0.7% of their GDP on R&D, which is less than the global average, i.e. 2.13%.¹⁰ Similarly, innovation patents in Arab countries are negligible compared to international standards. If Arab countries want to move towards knowledge-based economy systems and knowledge-intensive production, then scientific research and innovation would require special attention and targeted policies that would make them development priorities.

When addressing effectiveness related to the issues of culture, identity, values, knowledge and citizenship, which are overlapping and interactive conceptual concerns, we discern many dilemmas and complex issues. Examining them in the Arab region remains imprecise most of the time and in many fundamental structural subjects. A collective awareness must be built regarding their disparities and interactions, including the problems of dealing with several dualities such as modernity and authenticity, openness and preservation of tradition, all the way to the establishment and adoption of general convictions to determine tendencies and foundations required to

Box 6.1

Globalisation and the Arab Cultural Identity

While discussing globalisation and knowledge societies and their impacts on the Arab cultural identity issue, many neglect the fact that the knowledge-based society, first and foremost, requires rationality in economic management, and is based on a social structure framed in a contemporary culture and great capabilities to communicate. Modern culture has created the economic institutions and has developed the information technologies for more connected and more productive societies.

Source: Kamal Abdul-Latif, background paper for the report.

deal with contemporary issues. And at the forefront of these issues in the Arab region are building knowledge-based societies and economies and the effective integration of the youth in these processes.

Analyses have demonstrated that the political and cultural history of the Arab region, including the Ottoman legacy, the various Arab independence movements, the emergence of conservative intellectual and religious streams and the rise of globalisation, have played a key role as a cultural force in the formation of the Arab mind and the youth in particular. The conflict between the currents pushing towards modernity and others towards tradition – that mostly drift towards the past – has led to the formation of a “hybrid culture” and diverse intellectual currents among the youth. The data also revealed the absence of comprehensive policies to develop culture in the Arab countries, in order to build new cultural structures that are aligned with the transfer and localisation of knowledge, similar to what has been achieved in developed and developing countries such as Japan, South Korea, Malaysia and Singapore. These countries have actually succeeded in establishing new cultural structures that support scientific, technological and social development, and were thus able to achieve comprehensive development in their cultural and developmental status.

Every country in the Arab region faces the necessity of enlightened cultural development that supports modernity, scientific and critical thinking methods and creativity, as well as building social and political rules that enable the youth to expand their opportunities and choices to integrate into the global competitive economy. This would complement the renaissance project without which it would be hard to build the knowledge society, and make the processes of transfer and localisation of knowledge succeed.

As for the economic effectiveness of the youth, it has been noted that young Arab people remain far from employing knowledge in the activities of the economic field, and from appropriately participating in production and development. Several studies attribute the weakness of economic

effectiveness among the youth to several factors, including a decline in the quality of education, the discrepancy between educational outputs and the labour market requirements, as well as the unfavourable structure and conditions of macroeconomics which hinder investment in fixed capital and productivity growth. This coincided with a cultural pattern unfavourable for work values, in addition to social bias against women. Women do not properly participate in the labour market and economic, political and social life, despite achievements made in bridging the gender gap, especially in education. Also, economic effectiveness is related to the Arab youth in many important issues, on top of which lies poverty, with its various dimensions. By linking poor income with other dimensions such as food safety, education and health, we find that the Arab region has failed to build effective mechanisms and policies that achieve social protection coupled with social justice foundations. This is clearly reflected when examining the equality and income distribution issue that is, in turn, linked to the distribution of knowledge, skills and education opportunities.

Openness and intercommunication form a major requirement and regulating line in the overall activities aimed at the effective integration of the youth in the transfer and localisation of knowledge processes. Openness and communication among the youth are centred on several factors, including cultural openness to contemporary data in terms of knowledge, culture, sciences and arts, acceptance of diversity, active contribution to the production of the global culture, as well as the Arab youth's capability to use modern technology to communicate with what they witness in terms of cultural interactions in the surrounding world. Add to that the factor of freedom of immigration and of internal and external mobility. In this setting, the available data revealed an expansion in the circle of openness and communication among the youth in the form of travel for the purpose of tourism, or in the context of regional or international exchange. This would contribute to the expansion of the experiences of the youth,

and give them the opportunity to benefit, in addition to the explicit knowledge, from the implicit knowledge enjoyed by others in developed countries. This, in turn, contributes to the transfer and localisation of knowledge in their original countries.

Box 6.2

Youth Immigration: From 'Brain Drain' to 'Brain Gain'

Serious efforts and strategies in India, China and the Philippines have succeeded in benefitting from their immigrant citizens abroad. At first, they succeeded in building internal scientific and dynamic groups that attract their citizens, either to return, or to participate in research, projects and programmes. Second, they prospered in creating networks and connections between the local scientific groups and the ones abroad, and connecting all of this to international research centres and scientific groups in developed countries. Third, they succeeded in increasing the scientific effectiveness in the nation through continuous education and training, and improving the learning environment in universities and institutes. Fourth, they have succeeded in retaining the new generations through continuous motivation and support. Fifth, they succeeded in focusing on the foreign languages, especially English.

Source: Report Team.

The basic enabling environments are the major pillars for integrating the youth into the transfer and localisation of knowledge. These enabling environments include the higher education system, the scientific research system and the overall development environment, including the infrastructure, business climate, investment projects and the laws and legislations. The analyses revealed a number of obstacles; some are related to the underdevelopment of the education and training systems (enrolment systems, teaching methods, scarcity of the research activities and student density), and others are associated to the weakness of the scientific research system (the weak research budget, lack of motivation and lack of cooperation and partnership networks with the institutions of the public and private sectors). These are, in fact, obstacles related to the stumbling of the development system as a whole in many Arab countries. In this respect, the various development indicators

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confirm the progress of oil-based economies represented by the GCC countries, in comparison with the lowest-income Arab countries that occupy low ranks on Arab and international levels. This indicates the existence of an Arab-international gap, in addition to the presence of another equally important gap, i.e. the Arab-Arab gap, on many levels. These factors have contributed to the aggravation of the labour emigration phenomenon, notably in highly-skilled labour, that has affected national production, despite the financial returns.

Results of Field Studies Strongly Suggest the Need to Act...

The image on the status of the Arab youth and their relationship with the process of transfer and localisation of knowledge is complemented by what the field surveys provided in terms of data retrieved from the youth themselves. In preparing this report, the field surveys conducted within four Arab states (namely Jordan, UAE, Tunisia and Morocco), have pointed out a major inconsistency in the possession of cognitive skills among the Arab youth in the final stages of university, with the emergence of a specific weakness in written communication skills in both Arabic and foreign languages. Despite the differences between one country and another, these findings are analogous to those of previous studies on both regional and international levels. This is a cause for concern especially if we look at it from the perspective of building capacities for the transfer and localisation of knowledge.

However, the status of the youth with regard to the value aspect seemed to be much better than their knowledge status. Their answers revealed positive tendencies towards a set of cognitive, social, universal and personal values. This is contrary to effectiveness, where the students in the study showed a general weakness in the various arenas of effectiveness (especially political and social effectiveness), with the exception of cultural effectiveness. The outcomes also showed that the citizenship concept was scattered between those linking it to a place and those linking it to history or belief, which indicates

that this concept remains underdeveloped for the majority of these students.

The pursuit of the transfer and localisation of knowledge requires openness to the parties that produce this knowledge and possess its secrets and mechanisms. This would occur in the context of a fostering enabling environment that offers the youth opportunities to develop their competences. However, the findings of the current research have revealed a decline in the degree of openness among the sample students. A large percentage were unsatisfied with the university education system, most importantly the teaching methods and the academic research system. Concerning the student perceptions of the transfer and localisation of knowledge, the answers were mostly positive. The participating youth expressed their interest in this issue, and acknowledged its positive impact on the economy and society, as well as its role in stimulating the creativity, reducing social differences and unemployment. At the same time, the majority acknowledged the possible influence of the knowledge transfer and localisation on changing the cultural characteristics of the Arab countries and the marginalisation of local products. Opinions, however, were divided concerning the process of transfer and localisation as a consecration of subordination to the West.

Based on the results previously outlined, we confirm that promoting youth effectiveness and value systems is a collective responsibility, in which the family, school, university and society play a critical role. Also, and not to be neglected here, is the contribution of civil society institutions through the value-based dimensions they consolidate in their activities and the various initiatives they take. These develop the youth skills and their capability to employ knowledge to serve their country's economy and to promote their societies. This should take place in the context of a civic life based on values and principles of tolerant religions, the culture of human rights, ideals and morality based on moderation, mutual respect and the acceptance of diversity and difference.

A major role in the formation of political awareness and its consequences in terms of positive tendencies regarding democratic practices remain ruled by several factors, at the top of which is the education system. With its various human contents, democracy cannot be separated from people's awareness and recognition, and must be realised through education, prior to being manifested in reality. Therefore, education needs greater attention. This heightens the responsibility of governments to provide education for all and the responsibility of the school and curricula to develop positive tendencies towards volunteering activities and establish social networks, as well as anchoring a citizenship spirit and supporting it with a solid base of social standards.

In the process of renewing the cultural structures of the Arab society, citizenship imposes itself as one of the pillars of identity formation, and as an essential introduction to the democratic practice. Citizenship is based on equality in rights and obligations, social justice, the rule of law and other values that respect humans and guarantee their rights to a decent living and effective participation in building human civilisation. This can only be achieved through the diffusion of the culture of positive citizenship starting at childhood, and offering the opportunity, through curricular and extracurricular activities in all education cycles, to practice the various dimensions of this citizenship and absorb them in such a way that they become a part of the person's conscience in the individual, social and global self.

In this context, university systems should bear the responsibility of acquiring the cognitive effectiveness and forming the youth to enrol effectively in the labour market and public life. The responsibility of governmental and non-governmental organisations and youth institutions, is as important considering they are among the pillars that enhance the role of education and training systems. Communication with other young people, either on-line or face-to-face, and opening up to other cultures can enhance the acquisition of life skills. And for that to be achieved, countries must make efforts to develop the

openness horizon among the youth within the framework of a well-planned policy and in accordance with clear objectives and accurate standards. This would help in directing openness efforts appropriately be it in order to select the parties whom openness efforts should be directed (to universities, academic laboratories, training centres, research institutions and scientific clubs and organisations), with the perspective of enhancing the student experience and empowering their competitive capacities.

Future Action: Towards Effective Enabling of the Arab Youth in the Transfer and Localisation of Knowledge

Box 6.3

Bright Spots in Scientific Research

Studies show that there are solid factors that can be built upon. They are manifested, firstly, by the presence of universities, institutions and research centres comprising active scientific cadres. Even if they do not constitute the required critical mass yet, they are however, active participants. There are also some highlights in many fields. In the research field, for example and not exclusively, Morocco has taken the lead in neurosciences, Tunisia in communication sciences and Egypt in agriculture and biotechnology sciences. Egypt and Jordan have taken the lead in the pharmacy and pharmaceutical industry sciences. The GCC countries were ahead in medicine and pharmacy. Obviously, these bright examples are still in a development phase compared to the global levels. However, they can be built upon while seriously addressing the weaknesses of the research field, especially when it comes to developing corporate governance, building motivation systems, devising comprehensive strategies for research and linking the latter to development in the region.¹¹

Source: Report Team.

The region is currently witnessing a historical shift in which it enjoys the youth wealth alongside financial wealth. It is a shift also characterised by the rise of knowledge and technology wealth in which the developed world around us is surging, and which is available due to the globalised nature of accessible knowledge, if the true political and societal will is available; and due to the nature of the

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Scientific studies have confirmed the positive relationship between student achievements in science and maths and the economic progress of society

liberal reality prevalent in the world despite many constraints and obstacles. The triad of financial wealth, human-youth wealth and the global knowledge revolution means that the opportunity of the Arab world to make its breakthrough is presented, even strongly required. It is an opportunity for the countries of the region to move from a traditional rentier economy to knowledge-based economies, and from a youth bulge to a demographic treasure characterised by the economically and socially active youth with what they own in terms of knowledge equipment and effectiveness based on principles of knowledge, skills and values, in order to build a new Arab in a new world-one that enjoys freedom, dignity and well-being.

Box 6.4

A New Education for Building New Cadres

The job map and its management have altered. In fact, new jobs need people who enjoy various experiences and know how to smoothly deal with the diverging and complex technical issues, in addition to those related to management. For example, an IT operator has to be someone mastering technology and protecting it, and must also be an expert in business management. Scientific studies have confirmed the positive relationship between student achievements in science and maths and the economic progress of society. In countries in which achievements in science and maths has increased, and that have moved towards teaching methods based on critical analysis and instilled cooperative education, the production efficiency has also increased alongside an increase in national income. Their economies have also prospered. This is attributed to the formation and enabling of their labour forces.

Source: Sherif Kandil, background paper for the report.

Axes and Mechanisms of Action

The field studies and analyses presented in previous chapters of this report, which revealed the existence of problems and dilemmas that are hindering progress, place enormous responsibility on policy and strategy-makers to act before these challenges get worse and start to threaten stability and growth.

In order for the youth to become an active, knowledge-based economic and social force in building a development renaissance based on knowledge and education, a social cohesion must be built on strong foundations of social justice; enlightened cultural development that changes the social perception of the human being; knowledge; the fair distribution of skills, knowledge and capabilities; handling ICT; enhancing the will of active participation; and updating the innovation systems and promoting them among the youth. Social cohesion imposes social justice as a compulsory condition for the progress of the nations, puts an end to marginalisation and exclusion and integrates youth as an active energy in the transfer and localisation of knowledge, as well as the progress of the nations.

These facts highlight the need to act along clear axes to induce deep changes that are translated into accomplished policies and strategies that can comprise the following:

Building National Institutions for the Integration of the Youth

The youth integration process in the field of knowledge production and diffusion necessarily requires, in addition to training and formation institutions, the establishment of developmental institutions aligned with the production and governmental services sectors, as well as the private sector in various areas (health, education, food, work, employment, technology, arts, environment and science). These institutions must grant the youth the opportunities to deal with an informal education and training system, enabling them to obtain degrees and experiences that the government and the private sector acknowledge. These would act as systems that motivate integration and positive participation, and turn the school-to-work period for the youth and public life from an invalid state, destructive to the acquired skills, to a stage of investment and testing of these skills in reality; which contributes to exploiting and enhancing them. The absence of these institutions in particular, and the absence of mechanisms of integration of the youth in society in

general, in the Arab region, are probably among the most important reasons for the length of the periods during which the youth wait, after graduation, to enter public life.

Arab countries should also work on equipping and building national services programmes for the youth, which would enable them to start their own local projects and programmes that address the development of entrepreneurship and respond to the local needs of the youth. Such programmes would grant the youth formal and informal training opportunities allowing them to gain experiences, knowledge and useful expertise and skills. Add to that other programmes that provide information about the labour market, guidelines for career paths, knowledge of available job opportunities, especially in the private sector, as well as the requirements for obtaining these opportunities. As for communication and marketing skills, they are among the essential skills for the youth. They promote confidence in themselves and in their society, and deepen their belonging and motivation towards the future.

This report also addresses the social responsibility of corporate capital in offering continuous training programmes that prepare for work on one hand, and a continuous reform of the education systems on the other. Continuous education and training must become a permanent philosophy regulated by policies that strive for the knowledge society.

Reforming University

Most Arab universities have numerous problems. At the top of these lies the issue of student density that does not match the absorption capacities of universities and the weak available resources and scientific facilities and the issue related to the status of the teaching staff and their development opportunities. Furthermore to be noted are the lack of traditions rooted in scientific research and the absence of research plans; which have produced a quality of outputs that is below standards.

Box 6.5

India's Experience in Building Democratic Institutions and Organisations for Enabling the Youth

In the institutions established by India during the rule of Nehru, the youth learn, train and work in planning, devising strategies and implementation in the fields of health, food, education, training, labour, employment, culture, arts, behaviour, life values, citizenship and participation and effective handling of the problems of environment, technology and entrepreneurship. They learn through direct work and training as well as the collective practice of knowledge. They act as informal education institutions, working in parallel with the formal education system, as well as with universities and secondary education. While the State defines the public policies, priorities, needs and vision of these institutions, the youth tend, through these institutions, to conduct the operations of planning, implementation, work, learning, training and connection to the labour market. The State and the private sector acknowledge the outputs of learning, in accordance with rules that inspire motivation and mutual trust. These institutions have aimed at: first, enabling the youth through work, participation, education, training, culture, knowledge and development of capabilities; second, achieving equality, addressing gender-based discrimination, supporting women in terms of health, education, work and social protection; third, finding institutional connections and strong ties between the development sectors in society, such as education, health, work, training and other sectors; fourth, building technology networks and research and development systems in the field of youth development and capacity-building; and fifth, creating an effective climate of entrepreneurship connected to knowledge, technology and knowledge economies.

Source: Kumar 2009.

The Arab countries ought to respond to international development resulting from the globalisation phenomenon and associated intensification of competition over higher education markets and the increase of investment costs

The Arab countries ought to respond to international development resulting from the globalisation phenomenon and associated intensification of competition over higher education markets and the increase of investment costs. It has become imperative to take measures to reform higher-education systems, so that they can keep up with international standards and guarantee high-quality conditions, as well as measures of accreditation in order to improve the quality of the human capital and its competitive capabilities, in addition to focusing on the philosophy and systems of continuous learning. Throughout its

Box 6.6

The Institutional Accreditation for Higher Education Institutions as a Mechanism

Obtaining institutional accreditation for higher education institutions can be considered the minimum required to ensure the quality of many elements related to the formation of students for the transfer and localisation of knowledge, and for their acquisition of the knowledge skills required for this process.

According to the Saudi National Organisation for Assessment and Accreditation "Ptamad" (www.ncaaa.org.sa), the quality insurance and accreditation standards for higher education institutions comprise 11 standards that include the institutional context, learning and teaching quality, the support for educating students, infrastructure, and societal contributions.

It is certain that meeting these standards and obtaining institutional accreditation by the Arab universities would effectively contribute to insuring the quality of higher education and the quality of the final product, as well as forming it to be able to contribute to the transfer and localisation of knowledge.

Source: Walid Zibari, member of the report's Reading Committee.

The accelerated and significant change happening worldwide in technology, labour, competitiveness and globalisation has imposed an accompanying adjustment in the environment of international institutions and organisations working in the transfer and production of knowledge

limited years, higher education cannot fulfil the requirements of professional life, as well as those of providing ever-changing economic and social environments and international markets driven by steadily developing technologies. This can only occur if graduates are capable of following the changes and updating themselves independently after graduation.¹²

Facing these challenges requires an increase in budgets allocated to higher education and research, devising strategic objectives and action plans that can be implemented, creating accurate and credible databases as well as high-capacity networks, in addition to encouraging the private sector to contribute to research and university education.

Restructuring and Activating the Research System

The emergence of the government sector in conjunction with the strong role of the state in managing research activities in the region, and the ties of these activities with public universities in most Arab countries, allowed for the domination of bureaucracy,

the centralisation of management and the hierarchal organisational structure of research institutions. This, however, does not match the requirements of building a society, and hinders the proper management of knowledge, in a way that allows communication with the world. It is also incompatible with drafting cooperation frameworks with universities and advanced international research centres. Efficient knowledge management necessarily requires shifting from a bureaucratic and hierarchical structure to governance based on intensive knowledge. In fact, research institutions, as well as R&D and creativity and innovation centres should operate in a "Flat World" and have live interaction that is based on scientific ethics and standards. Knowledge systems should also be connected with national development programmes and plans.

The accelerated and significant change happening worldwide in technology, labour, competitiveness and globalisation has imposed an accompanying adjustment in the environment of international institutions and organisations working in the transfer and production of knowledge. This necessarily requires a new pattern of leadership that enjoys new capabilities and mental models. The Arab region in its management of scientific institutions (universities, research centres and creation and innovation centres), is in need of a new leadership, with specific intellectual characteristics, communication skills and cooperation with the Flat World, in addition to personal capabilities in knowledge management. This aims at building an integrated system of R&D that forms an integral whole for comprehensive relations with economic, political and cultural structures and legislation, as well as information and knowledge bases in their mutual interactions with the R&D system in institutions locally, regionally and globally. Successful knowledge management expresses knowledge connections in its links to effective relations in society.

It is also necessary to establish authorities that are responsible for the collection of data and information on scientific research

Box 6.7

Technology Parks and Business Incubators: Towards Establishing Supportive Environments and Technology for the Localisation of Knowledge

Since the 1950s, so-called technological parks or gardens have emerged, based on the concentration of industries and research institutions in the same space, in order to establish the tie between research and production systems. Drawing on these experiences, a limited interest appeared at the beginning of the 21st Century among some Arab countries to launch such initiatives in the vicinity of universities and industrial areas, and examples of this abound; the El Ghazala Technological Park in Tunisia, specialises in the production of communication applications. This park includes a research centre, an educational institution, a business incubator and start-ups operating within partnerships with foreign institutions from India, the United States and other countries. In Egypt, a city for scientific research and technological applications was established in the area of New Borg El Arab and Alexandria. It is a research body that aims at linking industrial enterprises with scientific research institutions by focusing on technology incubators for small and medium industries. The Arab Science and Technology Foundation was established in the UAE and is based in Sharjah. It aims at strengthening the link between the world of production, universities and research centres inside and outside the Arab world by encouraging companies to provide the funds necessary to employ research in priority areas of economic development.

On another level, business incubators were centred within universities or in technological cities. Business incubators are an intermediate environment between the educational institution and the independent work field. The passage of university graduates through business incubators represents a transitional stage limited in time between the study period and the stage of entering the world of production. Many countries such as China and Malaysia have betted on these structures to support research and development activities and generate technology through the creation of a fabric of innovative institutions in various specialisations. Incubators adopt and host young entrepreneurs who have graduated from academic institutions, providing them with a space for a specific period with the minimum services to help them transform their ideas and creativity to a marketable product. The incubation period usually lasts three years and ends with a final project and then new innovators and projects are welcomed.

Information about success stories achieved by these incubators in the Arab world is still scarce because the production of accurate statistical information is still not part of their institutional practices. Therefore, we do not have sufficient data on the number of job opportunities created every year by business incubators in Arab countries, nor do we have information about entities that were successful after being hosted by, and graduated from, such incubators.

Noureddin al-Diqqi, member of the report's Reading Committee.

In conclusion, there is an urgent need to build supportive and motivating policies and strategies to engage the government and the private sector in developing the scientific research system, including the reform of university, pre-university education and higher education

activities, institutions, policies, cost and its expenditures. One of the results of the absence of this type of institution is that research efforts have become unplanned and not related to the immediate and future needs of the region. We cite for instance the insufficient research in energy, desalination and environment preservation. The absence of such institutions shall hinder the training efforts, result in the absence of agreed scientific standards and delay their localisation through scientific means and methods.

In conclusion, there is an urgent need to build supportive and motivating policies and strategies to engage the government and the private sector in developing the scientific research system, including the reform of university, pre-university education and higher education. This also entails building creativity and innovation systems

in institutions and at the national level, supporting the technology infrastructure in training and research, as well as enhancing the effectiveness of production entities in developing training and establishing motivation systems for the youth in R&D.

Encouraging and Supporting Foreign Investment

Studies have confirmed the importance of Foreign Direct Investment (FDI) in the transfer and localisation of knowledge. There are lessons to be learned from the experiences of those countries which have made progress towards building knowledge economies and dealt with FDI by reducing its disadvantages and maximising its advantages and by establishing conscious standards for integration and cooperation between this investment and the local efforts made in development, the establishment of advanced

Continuous education and lifelong training should be a social motto adopted by the society as a whole

The private sector should support development activities that are based on knowledge, technology and the integration of the economy

technological industries that encourage youth employment and the dissemination of the technology of innovation, scientific research and development. In order for the countries of the region to advance towards modernity and the establishment of the knowledge society, such as the corresponding countries in East Asia and Central and Eastern Europe that have achieved progress in this regard, they have to take into account that FDI is a major indispensable component in the process of the transfer and localisation of knowledge, the transition to modernity, the restructuring and modernisation of institutions, and the establishment of the knowledge economy and the knowledge society.

Encouraging and Supporting the Private Sector

It is necessary to encourage the private sector, support it and stimulate it to create job opportunities for the youth, transfer and employ knowledge and gradually shift from the policy of government employment to develop the personal capabilities of the youth, encourage entrepreneurship and build mechanisms that integrate young people into the labour market. This requires countries in the region to improve the work environment and ensure the proper governance of the public sector, in addition to reducing the size of the public sector and encourage the private sector role in the production and development of the economy. This must happen together with the establishment of links between the youth and the labour market and education through National Qualification Frameworks that also need to be established. These efforts should be made along with the establishment of institutions to support young people in taking advantage of the formal and informal systems of continuous learning that are closely linked to the private sector and its evolving needs.

As already established, it is essential to encourage and support the private sector, but this does not eliminate the role of the State in drafting policies that ensure protection of social justice and citizenship rights. The private sector should support

development activities that are based on knowledge, technology and the integration of the economy. This support should be based on the pillars of social cohesion, without marginalisation or exclusion. These development means should also support the participation and freedom of women and expand opportunities available to them, in particular, in the transfer and employment of knowledge.

Supporting Training Programmes and Capacity Building

It is also necessary to support the public and private sectors along with the civil society organisations in order to enable them to contribute to the establishment of training and capacity building programmes, in light of successful experiences in other countries such as India and Singapore. Continuous education and lifelong training should be a social motto adopted by the society as a whole. Such programmes should ensure the continuity of re-qualification and capacity building for the individuals to enable them to cope with the rapidly evolving job market whose changes are accelerated by the knowledge and technological revolution.

In order to provide high-quality education and training in addition to the qualification of the youth to join the labour market, there must be a high-level commitment from employers; one based on advanced legal and institutional frameworks. In fact, training in work institutions is a process that should be regulated by law and carried out within the framework of government policies and institutions enjoying enlightened governance. There is also a need to make training a part of the formal agreements between companies and universities, along with orientation centres for students in each university to facilitate their enrolment in training in the companies that have signed the agreements, noting that the training certificates should be recognised from the private sector, the government sector and the university.

Training and qualification should focus on providing young people with transferable

general skills, such as problem solving, critical creative and contemplative thinking, logical thinking, having a broad imagination, taking the initiative, flexibility and the analysis of the issues from different perspectives. These skills include trying innovative and creative ideas and making decisions on the basis of experience, empirical evidence and the use of Arabic and foreign languages to stress the value of intercommunication and openness.

The consideration of training leads us to the issue of secondary technical education in the Arab region. It is noted that this education is either exaggerated, as is the case in Egypt, or less available than needed, in varying degrees, in terms of both quantity and quality. It is in both cases an education similar to secondary education but does not lead to university. Hence, it turns into a second-class education socially and outside the scope of the new requirements of the labour markets that should advance on the basis of knowledge and modern technology. In its 2012 Education for All report, UNESCO considered that the separation between the general and technical path in secondary education compounded the issue of inequality in opportunities, increased academic leakage and harmed the professional potential of the youth. Secondary education must be dealt with – for both the technical and general path – on the basis of the availability of a wide cognitive and skill base that prepares young people from either entering the labour market or continuing their education at universities. This way, secondary education becomes a good source to provide universities with young people who enjoy the general skills that help in gaining more specialised skills. Good planning can only be built on a broad

Building education and training systems, producing knowledge and encouraging the private sector are not enough, as governments in the Arab region are still responsible for preparing the general environment for the transition to a productive economy based on knowledge and scientific research. The elements of knowledge, economy and the youth would then merge to achieve economic growth and build a knowledge society and economy.

base of general knowledge and skills. This is the essential mission of secondary education, and this perspective could provide the means for adopting the philosophy of continuous learning for everybody for life.

Building Arab Qualification Frameworks

The UN message entitled “Youth as a Smart Investment” indicates that investment in the youth and families in the Arab region is mainly focused on education and training. However, the majority of young people cannot benefit from these investments or even use their skills, due to the low value of the acquired skills that are not compatible with the requirements of the labour market, in addition to not giving great importance to the factor of merit in getting a job. From here comes the need to adopt qualification systems for young people to get education and jobs, in addition to making available the various education fields and the second-chance options as essential elements in the development of the productive workforce. A society that is based on merit reflects in a clearer way the needs of the market for education and training systems. It thus directs the demand for “appropriate” skills in the “appropriate” areas and bridges the gap between the needs of the market and

The majority of studies agree on the need for state intervention with effective mechanisms to support the private sector and civil society organisations to integrate young people into the labour market. This is done through providing the sector with knowledge, skills and technical training and making it acquire life and social communication skills and standardising this relationship in light of new “National Qualification Frameworks” linking the levels of skills and knowledge and the levels of the labour market. This can also be achieved by building institutions to support young people after graduation – or even during their studies – and linking between the general and technical secondary education and the university. All of these are important mechanisms, but their activation requires institutionalising them in the form of constitutional, legislative and legal rights to protect young people and motivate the private sector. The mechanisms should also be enabled to function on the basis of good governance.

A society that is based on merit reflects in a clearer way the needs of the market for education and training systems

Good planning can only be built on a broad base of general knowledge and skills

the outputs of the education and training system.

The experience of the European Union countries since the 1990s and the current experience of East Asian countries emphasise the importance and necessity to establish a National Qualification Framework to integrate labour, especially young people, in the knowledge economy. The Arab world should also use the National Qualification Framework as a way to join the global competitive markets. The National Qualification Framework is the mechanism that links the knowledge and skills provided by the various education stages, levels and programmes on the one hand, and the knowledge and skills required in the labour market in production and services on the other hand. It should therefore be an important element in the recruitment process due to its inclusive standards that regulate the skills and knowledge needed for the job market at various levels and also its ability to contribute to the development of education, training and assessment tools. This is in addition to their motivating role in activating production in the private sector and encouraging confidence in young people and the abilities, knowledge and skills they provide.

Transition to Knowledge-Based Development

The current global changes dictate considering and addressing the impact of many variables on the status of economic, social and cultural structures in the Arab region. We must interact with these variables, benefit from the opportunities they provide and avoid the risks involved. The most important impact of international changes on the economy is the underlying shifts in the labour market and the economy structure manifested in arbitrary changes in the behaviour and structure of the institutional organisation of the labour market. Production and services enterprises in the labour market are seeking to achieve highly-efficient institutional performance and highly-flexible institutional systems that focus on achieving quality with distinct

Box 6.8

The Experience of Singapore

The experience of Singapore emphasises important pillars, including the dependence on high-skilled human capital that has intense knowledge, the attraction of FDI and maintaining stable and peaceful relations with neighbours (China and Malaysia, mainly), while improving the business environment, finance and fighting corruption. This is accompanied by the interest in R&D, establishing the national qualification degree (the framework of national qualifications) to provide the needs of the industry with the required standards, and engaging it into continuous training programmes. All of this sits in the shadow of the social justice principle, not “social welfare”, starting from providing shelter to every citizen, building an education system that offers high-quality education to society, and providing governmental support to education and health.

Source: Ahmed Kawaz, 2011.

standards, diversifying economic structures, raising productivity, encouraging the behaviour of initiative-taking, creativity and problem solving, as well as building the systems of scientific research, development, innovation and creativity. In the context of globalisation and the knowledge and technology revolution, these new systems were based on a network for communication and information exchange directly between all employees. They produced new patterns of social and cultural relations, relying on directness, access to information, transparency, expansion of the base of participation, accountability and the rule of law. These conditions also allowed the internationalisation of knowledge and skills and the movement of capital. If the Arab region aspires to advance, it will not be in isolation from these changes, and it should build the policies and strategies to achieve socio-economic, cultural and historical progress that links it to global civilisation and makes it a competitive partner.

The Arab states are required to adopt the developmental state model, based on the foundations and pillars of building a knowledge society. They also need to exclude the model of the rentier economy-based state, so that it enjoys the capacity of turning the remarkable capabilities and human

The Arab states are required to adopt the developmental state model, based on the foundations and pillars of building a knowledge society

resources in the region into a base that develops social cohesion and integration, and works on the transfer and localisation of knowledge. The localisation of knowledge is among the major levers in economic growth. It guarantees the rights and welfare of the Arab human being. Likewise, it also reduces poverty, creates decent job opportunities and regards social spending as a true investment for the future and an enforcement of the citizens' right to education, health and work. The state should be supportive of effective institutions and good governance, more submissive to accountability and strict in enforcing the rule of law, supportive of the individual's participation, and assertive of positive citizenship. Development, in this sense, achieves effective competitiveness and positive integration in the global civilisation, in its present global sense.

Social Justice, Citizenship and Preserving Social Cohesion

The concept of social justice is an essential axis in development that strives to build a knowledge society. However, building this society is not limited to establishing the knowledge economy, despite its importance. The knowledge economy, by nature, is concerned essentially with economic growth and is more interested, as any other capitalist economy, in profit than in the cause of equality and citizenship. Hence, the focus is on the element of social justice and on transcending the knowledge economy in its narrow sense, and seeking to establish the knowledge society which is an integrated "state" of progress and human welfare. This is why we emphasise the tetrad of knowledge, social justice-based development, globalisation and youth, as four dimensions that ought to be integrated in order to ensure success of the transfer and localisation of knowledge and to establish a knowledge-based progressive society. We also underline the issue of citizenship for the equality, active participation and enabling of women in the Arab region; these are indicators of social justice which is a pillar for development that achieves the integration of the youth and asserts their effectiveness as well as

the development of their cognitive and economic capabilities.

The knowledge-based development that seeks the establishment of the knowledge society based on social justice will face no contradictions between the freedom of the market and the state. The market and the state are integrated in achieving development in this sense. The state is also responsible for supporting and developing the private sector so that it assumes its role in achieving a comprehensive and non-exclusionary development that encourages everyone, and assumes its social responsibility, provides decent job opportunities, and encourages participation among all citizens without any discrimination or exclusion. The state is also responsible for providing protection policies and legislations that ensure the enforcement of rights and provide the fundamental structure for technology and the transfer and localisation of knowledge. In the context of market freedom and state support, the private sector enhances competitiveness by investing in the human capital and in localising and producing knowledge and human welfare.

Administration and Good Governance of Institutions

It is essential to discuss the reform of institutions based on good governance and the development of a flexible structure that promotes expertise, individual capabilities and plurality. One of the obstacles to progressing in the transfer and localisation of knowledge and the integration of young people to move forward towards modernity in the Arab region lies in the relationship between the traditional cultural structures and the rentier economic structures. This backward cultural and economic mix excludes the youth instead of integrating them, supports disintegration instead of achieving cohesion and imposes cognitive structures that impede the path of modern institutions – such as universities, research centres and others – in their progress towards the transfer and localisation of knowledge; thus preventing the region from completing the modernisation and growth project and from establishing the knowledge society. The changes in the revolution of knowledge, technology and globalisation impose institutional reforms based on scientific research, development, creativity and innovation, in addition to transparency,

The knowledge economy, by nature, is concerned essentially with economic growth and is more interested, as any other capitalist economies, in profit than in the cause of equality and citizenship. Hence, the focus is on the element of social justice and on transcending the knowledge economy in its narrow sense, and seeking to establish the knowledge society which is an integrated "state" of progress and human welfare

the fight against corruption, knowledge management and openness to the world on the basis of mutual dependence. The efficiency of these institutions is asserted through increased productivity and through the cultural, scientific and economic openness to the world.

Supporting Arabic Language Reform Programmes and Advancing it Towards the Knowledge Society

We must look at reforming the use of the language and its role in the knowledge society as an opportunity for the prosperity of another aspect of regional collaboration and integration and for strengthening cooperation between the involved institutions at various levels, and through the engagement of all expertise within and among the Arab countries. The translation and language reform also constitutes an area of partnership outside the Arab region, since

Box 6.9

Efforts by the League of Arab States to Develop the Arabic Language

The League of Arab States has always advocated for a more focused approach to the Arabic language in schools and universities, as well as in the street, in homes and in the printed and audio-visual media outlets, both to learn and teach it. The League highlights the need to pay special attention to the Arabic language curricula in order to improve the quality of its teaching and provide skills as the historical, social, cultural and scientific communication tool. For example, the conference of the Arabic Language in Education Between Identity and Creativity called for the need to emphasise the cultural distinguishing character; develop the teachers' pride in the Arab and Islamic identity; support their confidence in the Arabic language and its ability to assimilate modern sciences; meet the communication needs in life without confining them to specific purposes; support efforts aimed at the use of modern technologies; and take advantage of these technologies in the areas of language teaching. It also recommended to call on the Arab League Educational, Cultural and Scientific Organisation (ALECSO) to establish a centre to address the development of the Arabic language in terms of learning and teaching, as well as the study of its current status and the development of relevant curricula and teaching methods, while taking care of the qualification of its teachers.

Source: Ahmed Kanaan 2004.

the publication, translation and distribution partnerships might be an opportunity to revive the translation movement from the perspective of the transfer and localisation of knowledge and the perspective of global cooperation, as well as in terms of supporting the areas of publishing and culture in the Arab region.

ICT applications are expected to have deep and widespread effects. However, the nature and extent of these effects depend on what the relevant parties do to build and strengthen the different categories and patterns of the Arabic content. If the governments and other parties concerned fail in generating and disseminating the cognitive content that is closely related to social and economic conditions, cultural structures and citizens' aspirations, it is likely that most of these effects will have negative consequences. In fact, the opportunities that new technologies offer are accompanied by significant risks and they require informed approaches that keep up with rapid technological development and employ it in the pursuit of sustainable, balanced and comprehensive socio-economic development. The Arab countries can then look forward to a better future, in which new technologies play a supportive role in responding to the chronic crises in the region, both on the cognitive and developmental levels.

Box 6.10

Promoting and Developing the Language

It is not enough to call for the promotion and development of language learning. We must build the foundations of clear initiatives on regional, national and institutional bases. The objectives should include the reform of the language itself. Without such initiatives, the language speakers will not succeed in investing in the capabilities offered by the current and future internet technologies.

Omar al-Bazri, member of the report's Reading Committee.

Learning Foreign Languages as a Gateway for the Constructive Interaction with the World

The emphasis on the Arabic language stems from its link to the issue of identity and

ICT applications are expected to have deep and widespread effects. However, the nature and extent of these effects depend on what the relevant parties do to build and strengthen the different categories and patterns of the Arabic content

social cohesion and the enabling of people to achieve progress and master the link to modern technology and digital culture. However, this assertion brings us necessarily to the importance of the youth's acquisition of foreign language skills in reading, writing and understanding – notably the English language, which has become the first language of communication in the scientific, commercial and internet sectors – so it becomes a lever and a tool to achieve direct communication with the world.

No one can deny the extreme importance of foreign language education in this age, for learning these languages provides knowledge of sciences and communication with them. It also achieves communication and acculturation with the world. This does not only apply in Arab countries, but also to all the countries of the world. Although English ranks first among the languages of the world in the percentage of people who learn it, reports indicate a growing demand for other languages such as German, French, Chinese, Japanese, Russian and Spanish, as well as Arabic. Developed countries such as the United States and Britain have encouraged the teaching of foreign languages in general and higher education, as politicians and businessmen believe that remaining a key player in global competition, both politically and economically, requires the prevalence of bilingualism and multilingualism among peoples, as one of the requirements for global competitiveness.¹³

However, the fate of teaching and learning languages in Arab countries depends, from our point of view, on two facts:

- The first is internal, represented in the fears many specialists expressed claiming that teaching foreign languages might lead to the marginalisation of the Arabic language, thus harming the unity of cultural fabric and social cohesion among Arab peoples;
- The second is objective, represented in providing a strategic vision for language teaching and in securing the means

necessary to achieve this goal. These means are many and some of them – or perhaps the most important – include the good formation of teachers and professors and the building of the necessary infrastructure, such as educational tools and language laboratories.

Successful experiences in East Asia in the transition to knowledge societies and knowledge economies inform us that the attention these countries geared towards the English language was one of the factors that contributed to, and supported, their success as was the case in Malaysia, India and China. It should be noted in this regard that learning languages within the regular classroom is no longer sufficient to achieve high levels of language proficiency that enables using it correctly. It rather requires the provision of opportunities for using it in different situations of everyday life. There are some promising global initiatives in this field, such as the experience of Singapore. In the context of its continuing efforts to encourage the correct use of the English language, fearing that weak language skills might affect its reputation as a centre for business, Singapore launched a campaign called “Speak Good English” to push the level of the language forward. For this purpose, it hired the most famous comedian who imitates women in Singapore; Kumar who impersonated the role of “Queen of Grammar” in a series of videos, in which the Queen taunts the citizens because of the way they use the English language.¹⁴

Cultural Development

Taking care of the youth, equipping them with knowledge and skills, and forming them as a knowledge capital constitute the decisive factor in enabling developing countries, including Arab ones, to bridge the knowledge gap and move forward towards the establishment of knowledge economies and societies. Due to the link between cognitive efficiency and the systems of social and cultural upbringing, studying the latter is one of the most pressing topics to help us understand the organisational

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context of formative scientific operations to which the Arab youth are exposed, and their responsiveness to the requirements of involvement in the dissemination and production of knowledge and the shift towards a knowledge-based economy.

Therefore, countries should emphasise the need to bring about an enlightened cultural development that supports critical scientific thinking, a spirit of scientific research of innovation and creativity and the values of diligence, proficiency and excellence. This cultural development should also support the setting up of social and political norms that enable young people to expand their choices and their integration into the global competitive economy, for the purpose of completing the scheme of modernity, without which it would be hard to ensure the success of processes of the transfer and localisation of knowledge or to build a knowledge society. In addition, establishing the culture of positive citizenship in the Arab countries does not abbreviate the concept to the mere belonging to a geographical spot; to the formal possession of an identity card or national passport; or the mere feeling of links shared with members of the community, such as

Box 6.11

Cultural Development is a Condition for Sustainable Development in the Arab Region

Decision-makers may not be surprised that the most important determining factors of development are mainly uneconomic, such as the rule of customs and traditions, the loss of constitutional life despite the existence of a constitution, (how can the rule of constitutional institutions and the loss of constitutional life be present at the same time?), the absence of a growth project in general, and the lack of an upscale educational system that serves the growth project in particular. The economic solution in developing countries often depends on other variables, including cultural, social and political ones. These conditions are necessary for growth and development, and if they remain absent, it would be difficult to talk about stages of transition, and they will be unsustainable if they actually happen.

Source: Ahmed Kawaz, 2011.

blood, neighbourliness, habitat and way of life. The establishment of the culture of positive citizenship expands to include granting the citizen rights and duties. This cultural system will be a framework to regulate the relations between the citizens themselves and between them and the state, as well as to support moral values. The need to stimulate active participation in the areas of public life should also be encouraged.

Achieving Economic Integration in the Arab Region

The achievement of regional economic integration has become imperative for the development of the countries of the Arab region, and this calls for accelerating efforts and optimising them in this direction. The factors of integration between the countries of the region are still represented in language and religion, as well as in history and geography, which together represent the attributes of a common identity. However, this identity has not yet achieved an integration based on institutional factors, development programmes, or a conditioned futuristic vision in integrated plans, as has happened in the countries of the European Union, for example. The transition to a diversified economy is based on knowledge as an unlimited source, on dealing with the requirements of globalisation and the blocs it imposes, and on a fierce competitive environment that imposes regional blocs and integration in the Arab region, along the lines of international economic blocs. Therefore, achieving economic integration in the Arab region requires the establishment of comprehensive strategies and policies, supported by an infrastructure, a road network, plans for civil protection to link the region's countries to each other and to other blocs, such as Europe, and the drafting of plans that support small businesses and youth entrepreneurship. This integration is also based on a collective interest to achieve peace in the region, consolidate the factors of stability, prosperity and human rights and manage migration and labour mobility between countries. It also

necessitates the evaluation of work projects and organisations throughout the Arab region, according to the training systems and advanced technological research they provide.

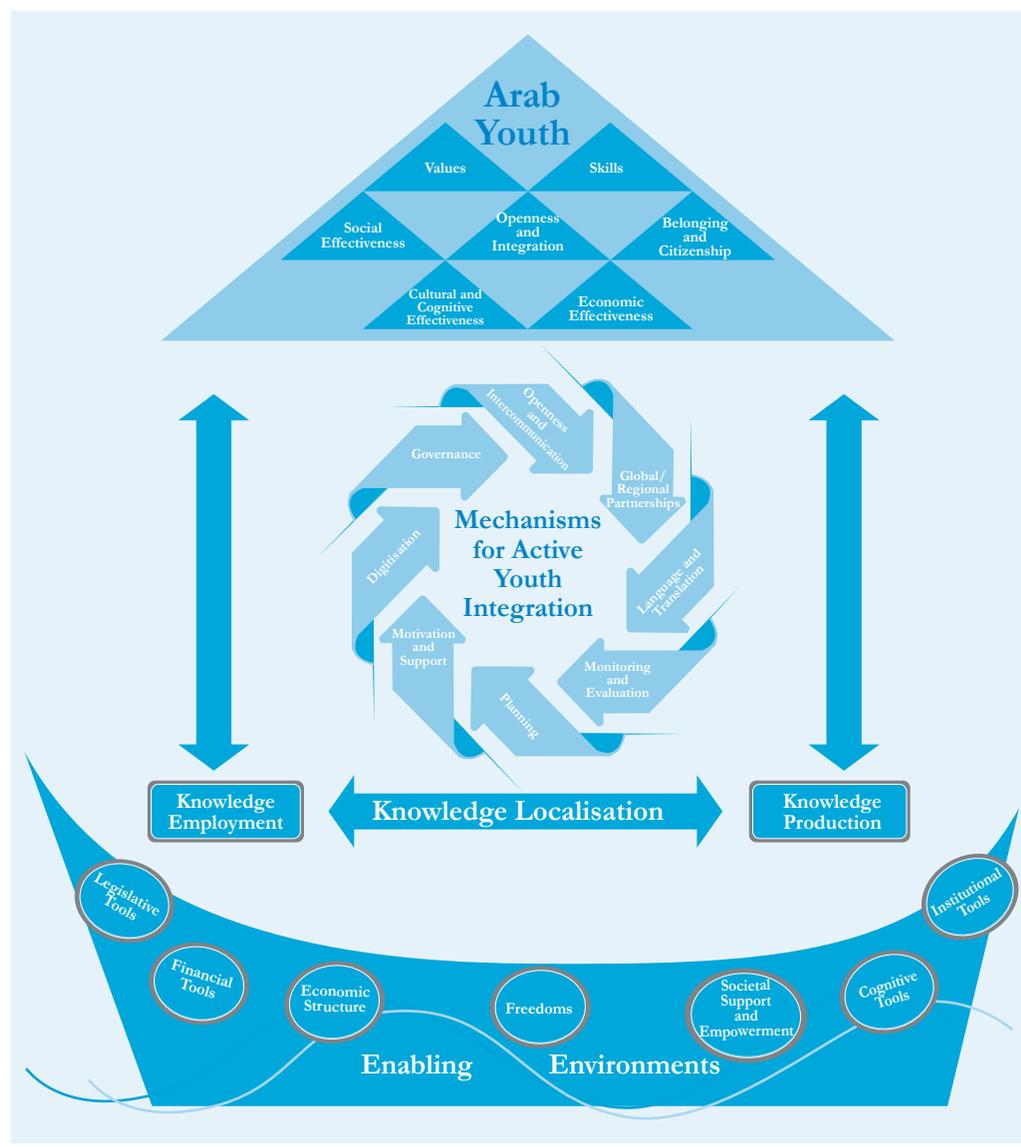
This integration is capable of ensuring Arab countries sustainable development based on economic diversity, varied growth sources and the establishment of knowledge-based economies. This shall open the door to modernity, the establishment of the knowledge society and the realisation of a comprehensive growth that provides people with well-being and dignity throughout the Arab region.

A Metaphorical Model to Move for Future Action

Future action towards efficient youth integration in the transfer and localisation of knowledge depends on the availability of the four major elements previously mentioned; first, enhancing the enabling systems of the Arab youth; second, strengthening the systems of the localisation of knowledge, including the operations of its transfer, production and effective employment in order to promote human development; third, providing the fostering and supportive environments for the first two elements; and fourth, the mechanisms required in

The positive critical vision adopted in this Third Arab Knowledge Report is an urgent call to seize the opportunity to integrate knowledge, innovation and technological progress - as it constitutes a leverage for development - while focusing on youth and future generations

Figure 6.1
Moving towards the Active Youth Integration in the Process of Knowledge Transfer and Localisation



There is a strong opportunity to prepare young people, provide them with formation, enable them and actively integrate them into the processes of localisation of knowledge and contribute to construction and progress

the field to achieve a positive interaction between the three aforementioned systems, in order to achieve an influential and active movement of the Arab youth to transfer, localise and employ knowledge, leading to the ultimate goal, i.e. the establishment of knowledge societies and economies and the achievement of comprehensive and sustainable development throughout the Arab region.

Figure 6.1 represents a ship sailing through the seas of knowledge with its strong structure, solid base, regularly-operating engines and a sail that takes it to the shores of progress and growth. We use this figure as a metaphor that portrays the march of Arab communities in the middle of local, regional and global challenges. The structure of the ship represents the strong enabling environments that foster and support all the growth aspects we desire. The base of the ship symbolises the system of structures, processes and basic institutions for the transfer, localisation and employment of knowledge. A sail representing the youth is fixed to the base of the ship, and correspondingly, young people serve as the captain in this figurative perception. The ship's engines are the mechanisms that enable young people to access the skills, knowledge and abilities that qualify them in this cognitive process. The youth are the sail in the ship of the Arab societies, and the mechanisms are the engines that ensure harmony, provide youth efficiency and facilitate their integration into the processes of transfer and localisation of knowledge. Hence, the ship of the Arab societies enjoys competitive advantages thanks to the work of its youth. It is a ship capable of sailing, facing the cultural, economic, social and political encounters, breaking the waves through knowledge and capabilities, and safely heading forward with sound visions, policies and strategies thanks to the capabilities and skills of its young people. The ship has a strong body, sail and base of science, knowledge, research and development systems. It provides people in the Arab region with prosperity, on the foundations of knowledge and social justice.

Conclusion

The positive critical vision adopted in this Third Arab Knowledge Report is an urgent call to seize the opportunity to integrate knowledge, innovation and technological progress - as it constitutes a lever for development - while focusing on youth and future generations. Despite the impact of recent events and fluctuations in some Arab countries, and the relative political and economic instability that was coupled with the youth-led political and social movements; those events have opened up real opportunities to achieve the aspired reform and establish a more transparent and efficient governance. There are also opportunities to build more efficient institutions to unleash the economic potential of the Arab countries and mobilise the potential of the youth to transform the current youth bulge from an enlarged human mass threatening to explode, into a human capital and real wealth that acts as a lever for moving towards the transfer and localisation of knowledge; and for establishing a knowledge economy and knowledge society within the overall perspective of achieving sustainable development. The reform that the people of the Arab region seek cannot meet the demands of the young people unless it is allied to better life standards and positive youth citizenship. This is the gateway to achieving comprehensive reform, which turns the Arab rentier economy, based on natural resources and the traditional factors of production, into a knowledge-based economy in the systemic sense that we have already presented. This requires providing the conditions and requirements of success, most importantly the establishment of an enlightened rational culture and enabling environments that foster and support progress in education and scientific research, as well as the incorporation of solid standards of social justice and reform. In all cases, there is a strong opportunity to prepare young people, provide them with formation, enable them and actively integrate them into the processes of the localisation of knowledge and contribute to construction and progress. Knowledge is the lever in

building a new society that contributes to the world's progress in the new context of globalisation. Young people's possession of knowledge, skills, and values within an Arab vision to access the knowledge society, is the right way to realise the objectives of

the integration of the youth in the process of transfer and localisation. This will help the Arab countries establish foundations of sustainable human development based on positive citizenship and social justice.

ENDNOTES

- ¹ Report team calculations based World Bank Data KAM; World Bank 2012a.
- ² Arab Planning Institute 2012. (Reference in Arabic) For more details, refer to Chapter 1.
- ³ For more details, refer to Chapter 1.
- ⁴ Report Team calculations based on the US. Census Bureau Data 2014. Refer to the Annex number 4, table A 4-1.
- ⁵ UNPY & ESCWA 2011.
- ⁶ For more details, refer to Chapter 4 and Annex 4, table A 4-5, UNESCO 2014a.
- ⁷ For more details, refer to Chapter 3 and Annex 4, table A 4-7, UNESCO 2014a.
- ⁸ For more details, refer to the Annex 4, table A 4-7, UNESCO 2014a.
- ⁹ UNESCO 2010b.
- ¹⁰ Refer to Chapter 4, figure 4.3.
- ¹¹ For more details, refer to Chapter 4.
- ¹² Ibn Abdel Aziz EL-Akl 1432 AH. (Reference in Arabic)
- ¹³ Tawasul 2011. (Reference in Arabic)
- ¹⁴ Reuters 2014. (Reference in Arabic)