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The Impact of Globalization and Research in the Arab States

Summary Report ¹

By

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¹ This Report made use of notes and observations that appeared in individual reports submitted by the Rapporteurs of Session 2 of the Seminar, Prof. Zakia Bouaziz, and Session 4, Prof. Nouria Lakhdar Ghazal, and in notes submitted by the Rapporteur of session 3, Prof. Mohamed Najib Abdul Wahed. The contents of the presented papers however, and ideas expounded on them by their authors during presentations, constituted the main source of ideas in this report.

Preface

1. Terms of Reference

The main idea underlying the Seminar was that globalization has ushered a new stage in the history of world civilization, and that people, wherever they are, are affected by its dynamics whether they are willing or hesitant partners. Along with this, it is recognized that while education, as an activity, has been significantly affected by globalization everywhere, but, as a discipline or a field of study, it has fallen short of giving globalization the attention it deserves compared with what is given to it by other disciplines such as economics or political sciences. This faltering in attention or concern is particularly evidenced in the Arab region, where globalization is frequently mentioned as a target, but rarely dealt with as a phenomenon that requires serious examination. Hence this Seminar, focusing on globalization and its impact on higher education.

2. Scope and Organization

The Seminar was organized around four themes:

Session 1 gave a general introduction to the topic; it included three keynote addresses and one keynote presentation. Questions of definitions of education, culture, knowledge, knowledge society, and globalization were raised and answers given to them emphasizing a new turning point for the world, and an opportunity/challenge for the Arab states.

Session 2 took for its theme the WTO/GATS Agreement and its implication for the Arab states. Four presentations were made in this session, a mixture of theoretical and case study reports.

Session 3 explored the implications of globalization for research in higher education and also included theoretical as well as case study reports.

Session 4 took up the question of funding of higher education and scientific research in four presentations, one covering the Arab world as a whole, and the remaining three covering cases in individual countries.

Session 5 was the closing session; had a general discussion, reports on previous sessions and an “end note” presentation delivered by the Dean of the Faculty of Sciences at Mohammed V University where the Seminar was hosted.

SESSION 1- KEYNOTE ADDRESSES

1. **Globalization and Education** (Darim Albassam)

1.1 Globalization: definitions and Challenges

- 1.1.1 Globalization is evidenced in the structural changes in the global economy where knowledge, education and learning have become crucial factors of production.

- 1.1.2 This structural change may be expressed in a shift from the Fordist-Taylorist model of development to one based on innovation-mediated production. The first rested on 3 pillars: the factory system, scientific management and the assembly line. The second is based on the blurring of distinctions between mental and physical labor and on the increasing application of knowledge to the processes of production.
- 1.1.3 Another component of globalization is the increase in the connectedness of the world and the growing interdependence of people and countries.
- 1.1.4 A major manifestation of globalization is in the area of information revolution. Previous generations were faced with scarcity of information; the present generation is challenged by abundance of information.

1.2 Educational implications of globalization

- 1.2.1 “New habits of the mind” are required, expressed in terms of tolerance for and understanding of ambiguity, complexity and uncertainty.
- 1.2.2 Problem-based learning (PBL) becomes central; it requires inquiry, information gathering and reflection (information management) and processing of knowledge.
- 1.2.3 A shift from education for conformity to education for creativity; from individual to partnership and group work.
- 1.2.4 For the Arab world globalization highlights the need for “strategic imagination” which will render alternative scenarios of reform that deal with two of the conditions that most affect decision making in a globalized world: uncertainty and complexity.
- 1.2.5

2. **Higher Education, R & D, Regional and Global Interface** (A.B. Zahlan)

2.1 Nature and extent of knowledge gap in Arab societies

- 2.1.1 Arabs have more university students studying at home and many more studying abroad per million population than China or India. Some 12,000 Arabs earn Ph.D’s abroad annually.
- 2.1.2 The problem is not in the amount (stock) of human capital available or produced but in their employment and contribution to development at home: 85% of Arabs who obtain Ph.D’s abroad brain drain. On a per capita basis the Arab brain drain is 4 times greater than that of China and 5 times that of India.
- 2.1.3 Investments made through “turnkey” contracts make little provision for technology transfer, hence they do not generate local employment. They result in a low multiplier factor.

2.2 Research activity in the Arab region is abnormally low in terms of allocated funds, publication output and cooperation among researchers.

2.3 Measures to overcome current difficulties:

- 2.3.1 “Independence”, i.e., give the opportunity to Arab companies to compete with outsiders.
- 2.3.2 Scientific cooperation and collaboration.
- 2.3.3 Insure technology transfer through participation.

3. **Funding of Higher Education and Scientific Research** (Iman El-Kaffass)

This presentation was in the form of a slide show, highlighting the following:

- 3.1 Where do funds come from? Are they enough?
 - 3.1.1 97% of research funds in Arab states come from government compared to 30% in Canada, Sweden and Singapore, and 18% in Japan.
 - 3.1.2 1.5% of GDP in Arab states goes to research (0.9% in Egypt), compared to 2.5% in Europe.
- 3.2 What is to be done?
 - 3.2.1 Link education to development, and research to social needs (this was illustrated by a slide show on students training for leadership in development at the American University in Cairo, Egypt).

4. **Remarks and comments from the floor on Session 1**

- 4.1 Globalization is here to stay; need to deconstruct the concept and then reconstruct it to make it more meaningful and relevant to Arab needs.
- 4.2 Forces of globalization started long time ago. Science in its very nature is universal (global).
- 4.3 There are huge investment outlays in the Arab region in various fields; something is wrong in a region where there is so much to do and yet so many qualified people leave.
- 4.4 We have been addicted to foreigners to solve our problems; since Moh. Ali in Egypt 200 years ago, the approach was to import experts rather than depend on our own.

5. **Keynote Presentation: Research and Development in the Arab States: the Impact of Globalization: Facts and Perspectives** (Albert Sasson)

The position of the Arab states in terms of research and development is clearly low compared to most other regions of the world, but this should not hide some success stories. Examples of success are given in three areas: biotechnology, pharmaceutical industry and renewable energy.

- 5.1 Biotechnology: achievements in this field are noted in Egypt and Tunisia. In the later, the Pasteur Institut of Tunis employs 370 persons 60 of them are scientists; the Institut acts as an R & D center as well as a training ground for some 100 graduate students per year; its output in terms of publications and patents is considerable. The activities and programs of the Institute however are closely associated with overseas teams, particularly in France, where there is “an important diaspora of Tunisian scientists, physicians and engineers...”

Also in the United Arab Emirates (UAE) University- Faculty of Medicine and Health Sciences where significant research is taking place in clinical and molecular immunology in cooperation with Italian teams, and with institutes in the UK and the USA. "...the UAEU office of research is very active in engaging industrial and private support for research funding...the pro-business approach of the government and its forward looking mindset [has led] to the setting up of Dubai Biotechnology Park and the Arab Science and Science Technology Foundation which are good steps in the right direction.

- 5.2 Pharmaceutical industry in Jordan occupied the second rank in the country's economy; the value of its exports was \$280 million in 2003. There were about 230 producers, private or public companies, working in association with foreign partners. Eight pharmaceutical colleges in the country graduate about 800 pharmacists a year, 55% of them are Jordanians.

Morocco's pharmaceutical industry is another example of a thriving sector. In 2006 it included 22 industrial sites where national laboratories were manufacturing their products under certification of French regulatory bodies and Canadian and British bodies in several cases. The sector plays an important socio-economic role: 35,000 persons were employed in it directly or indirectly, including 20% managers and executives; 10% of the whole production is exported, mainly to French-speaking African countries.

- 5.3 Renewable energy: Abu Dhabi is seeking to become a centre for the development and implementation of clean energy technology. In 2006 it launched an initiative called Masdar, with a \$250 million Clean Technology Fund and began construction of a special economic zone for the advanced energy industry. In 2007 Abu Dhabi announced plans to build a 500 megawatt solar power plant—one of the most ambitious of its kind in the world. Furthermore, it announced an even more ambitious project to develop a graduate level research centre in association with Massachusetts Institute of Technology (MIT), to be focused on technology of renewable energy. In a decade it is predicted that Abu Dhabi will have expertise in solar energy, photovoltaics, energy storage, carbon sequestration and hydrogen fuel.

Other countries are moving forward in similar areas. Bahrain is experimenting with wind turbines, Saudi Arabia and other Gulf states began research programs in nuclear energy.

- 5.4 Conclusion: There is an increasing awareness in the Arab region of the need to invest in R&D, in higher education, and in the training and retraining of personnel and of skilled labor. Globalization plays a key role in this awareness, because it can offer opportunities and benefits to those who would like to penetrate markets and seek to build alliances and make joint ventures. In this context, research, development and innovation are key factors.

This session included four presentations, the first, an invited one, looked into the possible advantages and disadvantages of the GATS for Arab countries. The remaining three were more in the form of case studies: two of them on Saudi Arabia, and the third in the form of a proposal for setting up networking arrangements to speed up exchange and cooperation among Arab educators.

1. **WTO/GATS: Possible Implications for Arab Higher Education and Research: An Invited presentation** (Abdallah Bibtana)

1.1 Definitions and Trends.

- 1.1.1 GATS stands for General Agreement on Trade in Services. The services in question include education at all levels, but concern has focused on higher education in particular. Joining the Agreement means lifting the barriers that stand in the way of importing or exporting educational services (as commercial products) across state borders. Individual states may negotiate specific terms or provisions that may apply to them alone when signing the Agreement.
- 1.1.2 As of February 2007, over 47 countries have made commitments to include education in the Agreement; 38% of those included higher education. Among the 47 countries there is so far only one Arab country (Bahrain) which pledged commitments under GATS. It is not clear, however, whether education and higher education have been included in the protocols signed by Bahrain.
- 1.1.3 Liberalization of trade in (higher) education has received fierce resistance from many quarters; it has also received endorsement and support from others for various reasons. The opponents and proponents do not correspond exactly to lines of division between the rich (developed) and the poor (underdeveloped) countries, but the pattern generally points in this direction.

1.2 Proponents

- 1.2.1 Diversifying the providers and delivery modes thereby increasing the likelihood of innovation.
- 1.2.2 Broadening access to help meet increasing demand for places in higher education.
- 1.2.3 Increasing the mobility of students, academic staff and researchers and promoting competitiveness which should lead to improved quality.
- 1.2.4 Increasing financial and economic aid.

1.3 Opponents

- 1.3.1 Losing government (state) control over education and consequent threat to national systems that cannot compete with foreign providers.
- 1.3.2 Drastic decrease in state control of quality, relevance and adherence to national priorities and agendas. Social principles, such as democratization and equal access, will no longer be policy priority; education as “public good” will be jeopardized. Likewise aspects such as

cultural identity, and national citizenship will have to be compromised as they cannot be traded off by foreign investors.

- 1.3.3 The absence or lack of sound mechanisms for accreditation or quality control in the receiving countries may cause many of them to fall prey to foreign programs of dubious quality.
 - 1.3.4 Gradual erosion in the character of the university as an “autonomous” institution depriving it from an essential prerequisite for delivering its mission.
- 1.4 Implications for Arab states and recommendations:
- 1.4.1 There is fear that Arab negotiating teams may not be aware of the negative consequences of GATS in a sensitive field such as education. These teams are usually concerned with economic and financial benefits rather than with social and cultural priorities.
 - 1.4.2 If any Arab country decides to include higher education in its GATS agreement it must either opt for gradual liberalization or lay down some restrictions and limitations that preserve national interests and maximize the benefits for itself.
 - 1.4.3 Arab governments must explore the possibility of entering into negotiations with GATS as a regional group, within the framework of the Arab League for example such as the case with the European Union.

2. The Effects and Influential Factors of Globalization on the Saudi Higher Educational System (Hind T. Al-Sudairy)

The general aim of this presentation was to show the various ways in which Arab and Saudi educational system in particular can benefit from joining the GATS, and at the same time be aware of the risks involved.

2.1 Benefits

- 2.1.1 Access to knowledge across borders. A country that is not a member does not have equal access to those markets that are open for members.
- 2.1.2 Particularly for a country like Saudi Arabia which has vast distances between its cities, distance and e-learning programs are of a great value, particularly for girls. Such programs are more likely to prosper and succeed under some “partnership” arrangement with the outside. Globalization and the GATS are positive factors in this case.

2.2 Risks

- 2.2.1 It is possible that GATS and globalization may foster a dual educational system: expensive private (globalized) education, enjoyed by the better off minority, and a poor quality government education for the majority.
- 2.2.2 Global education brings with it the potential of imperialistic attitudes, and the suppression of native culture.
- 2.2.3 Braindrain: highly trained people can be attracted and, with the existence of GATS, they can be more easily bought out, particularly with the ease in mobility at present.

- 2.2.4 Conclusion: Arab countries are obliged to embrace globalization and open their educational systems to international forces. Arab countries “should be ready” to face the challenges brought to them by GATS.

3. **Globalization and the Translation Industry in Saudi Arabia: Factors Inhibiting the Use and Integration of Translation Technology into Mainstream Course work** (Afnan Hussein Fatani)

3.1 Translation and Globalization

- 3.1.1 Translation studies have witnessed vast growth over the course of the last ten years. The world market in translation is thought to be in excess of £10 billion a year.
- 3.1.2 Global factors have affected not only the size of the market but the training required of professional translators.

3.2 Translation Industry in Saudi Arabia

- 3.2.1 The recent entry of Saudi Arabia into the WTO, the irreversible globalization of Saudi business, the large number of Saudi sectors that have recently entered into partnership with Microsoft, and the internet revolution, have all combined to make translation services a rapidly growing field with excellent employment opportunities.
- 3.2.2 This case study presents the results of a market research aimed at addressing the gap that exists between the training of translators at Saudi universities and the requirement of professional life in the country. Conclusions of the research indicate that the majority of Saudi graduates majoring in English are reluctant to venture into Translation Technology (TT). Saudi translators are still using a dictionary-based strategy, i.e., translations are done in a roughly word-by-word manner with no attempt to upgrade the technique.
- 3.2.3 One reason for this shortage is explained in terms of poor English language preparation of students at the university as well as at the pre-university level. A more stubborn reason may be found in the cultural attitude of many who consider Arabic as the “chosen language” and resist opening themselves to another language.

4. **Inter-university networks: experience and propositions** (Fouad Badran)

This presentation is more in the form of an invitation to Arab educators to organize themselves into working networks. It illustrates the advantages of this arrangement by referring to a network which is already in operation under the name Med Link.

4.1 The Concept

- 4.1.1 Networking emphasizes cooperation among members, and horizontal (transversal) rather than hierarchal relationships. It is project based and memberships shift depending on the tasks to be accomplished.
- 4.1.2 A network is different from an organization or an institution, which has more fixed goals or positions.

4.1.3 Universities are institutions or organizations; a network connecting university members may be formed to undertake more immediate and specific tasks or projects across university borders.

4.2 Some Illustrations

4.2.1 “Summertime Universities”: nine of these have been held since 1997, with 75 university participant in each, from Syria, Jordan, Lebanon, Palestine and Iraq.

4.2.2 Tempus-Finsi: The focus in this is on exploring the interdependence that exists between industrial systems and establish linkages between them. Some 35 engineers and university professors from Jordan, Lebanon, Palestine and Syria have joined forces with others from Europe to exchange and disseminate experiences.

4.2.3 Tempus-Rufo: This is a project designed for Palestinian universities, with a focus on capacity building in the area of distance education in cooperation with European networks.

4.3 Conclusion and recommendations

It is recommended that a special fund be set aside for stimulating and supporting activities that relate to networking. These will complement the work of the universities in a more concrete and more rewarding effects.

5. **Remarks and comments from the floor on Session 2**

5.1 There is a difference between internationalizing higher education and globalization. The later carries with it the seeds of corporate control (business) and marketization.

5.2 There is a need to find out which Arab states have already signed up with GATS, and which are in the process of doing so, and whether higher education is included and under what conditions.

5.3 One major aspect not highlighted is related to the training that Arab students need so that they may assume leadership positions. A shift in the leadership structures from traditional factors to those based on qualifications and skills will constitute a big jump towards joining the advanced world.

5.4 Some of the Arab states do have quality control mechanisms and regulations. Experiences are building up. Barriers to joining GATS are more likely administrative and procedural rather than ideological.

5.5 As a faculty member or member of a university institution, an individual is bound to the values and expectations of that institution; he/she may be bundled with too many regulations in which he/she has no interest. The same person working in a network is freed from all these bundles; his/her energies become more focused on specific tasks.

SESSION 3- GLOBALIZATION, HIGHER EDUCATION AND SCIENTIFIC RESEARCH

This session included five presentations, two of them theoretical and the remaining three were case studies dealing with specific countries or issues. Two of the three case studies were on Palestine, and the third was on Sudan.

1. New Roles for Arab Schools and Universities in the Knowledge Society

(Abdullateef H. Haidar)

The term “knowledge society” refers to “...the dissemination and production of knowledge and its efficient utilization in all societal activities...in a continuous quest to advance human development.”

1.1 Characteristics of Knowledge Society

- 1.1.1 Specialized knowledge: knowledge in the context of and related to a specialty. It has value only if it has practical application, described as “knowledge in action”. People who lead in a knowledge society are “knowledge workers”; they include surgeons, lawyers, accountants, engineers, teachers..etc. “Knowledge workers” depend on their brains more than on anything else to achieve their purposes.
- 1.1.2 Learning organizations: for knowledge workers to develop knowledge and turn it into product, they need to belong to learning organizations.
 - 1.1.2.1 A learning organization is a group of individuals who interact with one another and with the world around them; they share a common feeling and identify with the organization they belong to.
 - 1.1.2.2 Organizations provide knowledge workers with opportunities to work in teams to discover and produce new knowledge and to apply it.
- 1.1.3 Team work: knowledge workers will face up to new challenges, hence they need to work in teams. When people face a task that is beyond the ability of any one individual, or when they are faced with a short and urgent deadline working in teams is the surest way to success.
- 1.1.4 Inquiry: inquiry is an essential ingredient for the discovery of new knowledge as it requires reflection; reflection is the backbone of professional growth.
 - 1.1.4.1 Inquiry helps professionals to identify best practices and consequently develop standards for the profession.
 - 1.1.4.2 Institutions which adopt the learning organization mode provide their workers with ample opportunities to inquire, and find solutions to the problems that face them.
- 1.1.5 Life long learning: the pace in which knowledge production has been taking place is phenomenal. Knowledge workers have to keep up with this pace making learning a process that never stops.

- 1.1.5.1 I.C.T. has become pervasive; distances among individuals and nations have practically disappeared; business is a 24 hour a day affair, so learning must be.
- 1.1.5.2 Institutions need workers who are skillful in ICT so that they may accomplish their tasks faster and better—anytime, anywhere.
- 1.1.6 Globalization: countries do not have the choice anymore to be or not to be a part; people interact all over the globe. Companies work internationally; some chose to leave their home bases and establish headquarters abroad. Multinational companies are a reality; business has become international.
- 1.2 Proposed New Roles for Arab Schools and Universities
 - 1.2.1 Revise mission: schools and universities need to provide specialized knowledge and professional development to knowledge workers, as well as opportunities for continuous upgrading; they need to function as learning centers for all members of the community.
 - 1.2.2 Convert schools and universities from teaching institutions into learning organizations. The school/university as a “factory” model is obsolete; learning organizations are places where problems are tackled and solutions sought, where learning and pursuit of answers occurs collectively in a team fashion.
 - 1.2.3 Develop and renovate curricula, methods of teaching and assessment. In this regard the new discoveries in learning psychology, brain research, and nature of intelligence have to be taken into consideration. The emphasis on reconstruction as the heart of learning put at present by one of the most advanced theories of modern psychology calls for serious attention. Intelligence itself is not uni-dimensional anymore but varied in content and direction. The implications of all this to assessment is huge, where judgment on performance of the learner is never terminal but a step for better performance (formative).
 - 1.2.4 Utilization of ICT in teaching. Modern technology has opened new vistas for learning; the challenge has become finding the best ways to utilize the huge resources that ICT offers, and using these effectively. This requires technical skills but more importantly it requires the active involvement of the learner in the process of acquiring knowledge. Arab countries are urgently called upon to make full use of this new technology in their educational systems, particularly in the interest of the less advantaged groups of people who do not have access to it in their homes, or elsewhere in the society.
 - 1.2.5 Facing up to the demands of globalization. Globalization is a fact of the present, and Arab states must face up to this reality and prepare their youth to become active participants at the global level. This requires knowledge about the rest of the world, and involvement in whatever issues or problems it faces.
 - 1.2.6 Quality assurance measures. Arab learning institutions are required to adopt systems of quality assurance so that their graduates may turn out to

possess the kind of knowledge and skills that qualify them to compete and succeed in the global markets.

- 1.2.7 Reform of administration. Arab educational systems suffer from heavy-handed centralization. New educational challenges require that this be broken down, and decentralization become the guiding principle. Particularly at the school level, the head of the school (chief executive officer) is to be given freedom to make decisions, take initiative, and respond creatively to challenges facing his institution.

2. **Higher Education and Globalization in the Sudan** (Tahani Mohammad) (an invited presentation)

Sudan is a vast country with a very rich history; has a mixed character: African/Arab/Moslem. Since independence in 1961, it had a very turbulent history which reflected itself in radical and sudden shifts in education. Two major features leave their mark on its present educational terrain:

- 2.1 Massive increase in the number of higher education institutions. The number has jumped from one or two in the early years of independence, to 6 or 7 in the 1990's, then to more than 40 at the turn of the century. The increase in the last 5 or 6 years is accounted for by the government opening regional institutions, a situation different from what happened in other Arab countries where the increase was due mostly to opening of private institutions. With this great and sudden expansion there is serious concern regarding the drop in quality of higher education in the country.
- 2.2 Negative interpretation of globalization. In the Sudan, globalization is recognized as a force, but the interpretation given to it put it in the category of neo-colonialism of the West, particularly the USA. To many Sudanese globalization is a one-way street, carrying the influence of the powerful over the less powerful, where the rich get richer and the poor get poorer. This attitude, however, is not generalized towards the new technology, which is regarded as helpful and necessary for the development of the country.

3. **Respecting Globalization or Globalizing Respect: Palestinian University Students' Perceptions of Globalization** (Nabil Jondi)

This study aimed at investigating Palestinian university students' views regarding globalization, based on responses of 200 students enrolled in four Palestinian universities (50 students from each). In addition, focus groups were used to elaborate on those views. Results of the study show that:

- 3.1 Palestinian students have high levels of readiness to engage in various forms of globalization and to avail themselves of its products, while holding negative attitudes towards it at the same time.
- 3.2 The negative attitudes are specifically directed at the political aspects associated with globalization, which is viewed by most as "Americanization"; this is equated by them to "McDonalization of markets".
- 3.3 The positive attitudes students have are towards information technology, internationalization of curricula, cultural exchange, and trade and immigration.

They also believe that revolution in communication and technology can enhance the competencies of Palestinian institutions and prepare them to engage more effectively in globalization.

- 3.4 In terms of actual practice, results show that Palestinian students do make use of internet provisions in conducting their research and carrying out assignments in their daily work.

4. **The Impact of Globalization on Palestinian Higher Education** (Labib Arafah)

This is a general presentation of development and evolution of higher education in Palestine under political/military occupation. The volume of the educational enterprise has grown tremendously since 1971; at present it includes 12 universities and 32 community and university colleges. This development has taken place under extremely adverse conditions and stands out as an act of commitment to human resource development and faith in education as a force against oppression. The majority of HEIs have started and remained public non-profit.

- 4.1 Rationale for globalization: globalization has become a fact. It finds its rationale in all spheres: economic, political and cultural factors.
- 4.2 International trends: manifestation of globalization are apparent in systems of higher education everywhere; examples are given from the USA and Europe (Bologna declaration); the impact of IT and internet is highlighted as well as new emphasis on quality assurance mechanisms.
- 4.3 Responses of Palestinian higher education students: these are described in terms of opportunities/threats:
- 4.3.1 Opportunities lie in the field of international cooperation (mainly with Europe), the exponential growth in IT and sharing in knowledge society, and in quality assurance mechanisms.
- 4.3.2 Threats lie mainly in financial cuts and dependence on foreign support, and in the possible drop in quality as a consequence of vast expansion in numbers.

6. **Globalization, universality and academic transfer** (Abdelhak Bellakhdar)

- 5.1 Definition of globalization: sharing a global space in all fields: the economic, political and cultural. Means: deregulation, externalization and delocalization.
- 5.2 Constraints: globalization magnifies internal and external constraints in the Arab countries, because these countries do not have the immunity that comes from “regional globalization”, such as that other countries have, like the Europeans.
- 5.3 Identity: Arab identity has served as a mythical reference that did not prepare for modernity; identity is approached more as a content than as a process.
- 5.4 Scientific discourse: Arab scientific discourse does not negate, nor does it reconcile traditional knowledge with the modern; in our universities priority is given to information over method, and experimental method is reduced to ready-made recipes.
- 5.5 Role of the State: the State in Arab countries can play a structuring role at four levels: the universality of knowledge and methods, the coherence of the educational system, community of common interests, and the assemblage in

supra structural entities.

6. **Remarks and comments from the floor on Session 3:**

- 6.1 Distinction should be made between knowledge transfer and knowledge generation: the first is likely to make us followers; the second can make us partners.
- 6.2 Knowledge society and the emerging knowledge-based economy are the context in which higher education is becoming globalized.
- 6.3 In proposing roles for Arab institutions to cope with globalization, it is not sufficient or helpful to produce lists of items of what needs to be done. More important is to prioritize these and explain steps and the order of implementation.
- 6.4 There is doubt as to whether “specialized knowledge” or specialization is one of the attributes of the “knowledge society”. It is quite possible that a broad based knowledge in the form of liberal education is more essential.
- 6.5 Thinking in terms of Arab conditions and Arab challenges, we should not ignore important facts and realities on the ground, namely, that the Arabs belong to different states, and that it is the state structure which needs to be examined and corrected.
- 6.6 In networking, consideration is to be given to the complexities involved, particularly when moving horizontally from one Arab state to another, across private/public or national/international groups, or across centers of influence.
- 6.7 It might be attractive to contemplate the advantages of investing in training of human resources in education; teacher-trainers, for example, as versus training of engineers or medical doctors, where the returns from the first can have a much higher value (or profit) in view of the higher multiplier effect that applies to training of teachers or educators as compared to training of others.
- 6.8 There is a mood of opposition to globalization and aversion towards it as a concept or a force that makes it close to “globalophobia”. This opposition, however, is much lower towards the technical fruits of globalization, particularly among the younger generations.
- 6.9 In our talk about knowledge and research, we tend to overlook the factor of “language” in which the research is framed. Whether we like it or not, we in the Arab world are very much affected by Western ideas because the language of research, even when translated, is Western.

SESSION 4- FUNDING OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH

Four presentations were made in this session, the first used a wide angle taking in Arab states as a whole; another was theoretical, and the remaining two were country case studies, the first on Algeria and the second on Kuwait.

1. **Funding Higher Education in Arab Countries: Thoughts and Reflections on the Topic** (Ali El-Hawat)

1.1 Patterns of finance

- 1.1.1 In the past half century or so emphasis was on expansion in numbers (of both institutions and students), and a considerable amount of money was expanded in this regard to support this expansion.
- 1.1.2 This past trend could not be sustained due to accelerated population growth and massification of secondary education, coupled with inadequate financial resources for education in view of competing and rising demands.
- 1.1.3 In the more recent past, new providers appeared on the scene in the form of private institutions, many of them in partnership with American or European institutions. These shared with the older government establishments the burden of finance, but introduced a new factor in terms of supply and demand as they were accessible only to those who could afford to pay tuition.

1.2 Changes and crises

- 1.2.1 Many Arab states are caught in a dilemma of not being able to uphold their long-standing goal of democratization and equality of opportunity for all, as a consequence of increasing enrolments and heavier burdens of finance.
- 1.2.2 Some measures to cope with the difficulties included charging fees for certain university services, establishing parallel or after the hour special fee charging programs within the existing public institutions, or combining universities, hence reducing their numbers (14 public universities in Libya were recombined to become only 9), and, above all, encouraging and soliciting private investment in education, a practice considered unacceptable only a few years ago.
- 1.2.3 Many of the new private institutions are like fast food stands in crowded streets of Western cities; many of them teach only low cost high return subjects such as business administration, computer skills, foreign languages—subjects that may be desired for immediate employment, but not always in line with long range development needs of the country.

1.3 Plans and actions

To face up to the impending crises, three lines of actions (scenarios) are suggested:

- 1.3.1 Scenario No 1- maintain the present funding system but with redirection (or modification) such as: imposing new taxes on luxury goods, using Zakat funds, or allocating a certain proportion of the oil revenues for education.
- 1.3.2 Scenario No 2- create a higher education system that is owned jointly by the public and private sectors. Higher education institutions under this arrangement will become “corporations” funded in a partnership manner.
- 1.3.3 Scenario No 3- open the door to private universities that will be financed either by local market or foreign capital. The universities will charge full fees, except from the highly qualified (talented) students. The state will be totally out of the market except as a “monitor”.

- 1.4 The author prefers the first scenario for the Arab states. Along with it, he recommends the establishment of a series of junior or community colleges linked directly to the market.
- 1.5 In all cases, quality should not be compromised.

2. **The research professor: between administration and prevailing culture: keys for understanding** (Laroussi Amri)

This presentation posed a number of questions on the state of affairs and the issues that face higher education and scientific research in the Arab world in a globalized environment.

2.1 Main issues

- 2.1.1 Tribal or feudalistic.
- 2.1.2 Centralized political power.
- 2.1.3 The individuality of researchers affected by easy money and social prestige.
- 2.1.4 Uprooting of researchers from their social origins.
- 2.1.5 Enchanted culture as origin, communitarianism and patriarchy as dominant value patterns.

2.2 Methodological framework for reform

- 2.2.1 Practical experience, some sort of engaged participation, similar to action research
- 2.2.2 Anchored position (grounded theory)

2.3 The state of higher education and scientific research in the Arab world:

- 2.3.1 The Jacobin framework in administration: founded on a social order marked by social segmentation, both at the individual and collective level.
- 2.3.2 Higher education organically joined with scientific research. As an ideal.

3. **Scientific research in Algeria: between local necessities and international tendencies** (Hocine Khelfaoui)

This was an account of the Algerian experience in research, especially of measures Taken during the last 10 years.

3.1 Revival of interest in research :

- 3.1.1 Scientific research has shown important transformation in Algeria caused by interna land external influences.
- 3.1.2 By the end of the 1980's, state structures were saturated with employees ; crisis in financing, and a call for reform became more pressing.

3.2 Institutional plan for research

- 3.2.1 Financial measures were taken to promote research and increase links to social and economic development.
- 3.2.2 Almost all research in universities and centers in the country is sponsored by Government.
- 3.2.3 Research output is still below the norm quantitatively.

- 3.3 Characteristic of scientific research
 - 3.3.1 Priority is given to engineering and technical fields.
 - 3.3.2 Research trend is marked by a growing influence of the global over the local.
- 3.4 Measures for a better use of research results :
 - 3.4.1 Increase exchange, cooperation, and communication between different institutions and groups working in similar fields.
 - 3.4.2 Emphasize connections between research, development and application, and stress on forward-looking resource management.

4. **Funding and Financial Performance of Private Higher Education Institutions in Kuwait** (Imad M. Al-Atiqi and Mohamed El-Azma)

In 2000 a law was passed in Kuwait (Law 34/2000) to regulate the work of private universities, and a council was established to oversee the new policy under the name The Private Universities Council (PUC). The following is a description of how this council works:

- 4.1 Financial reporting for the purpose of financial monitoring—the model:
 - 4.1.1 Sources of funding
 - 4.1.1.1 Paid in capital. Kuwaiti law 34/2000 stipulates that founder's equity for private institutions must have a local (citizen) majority. Most educational providers in Kuwait are owned by registered corporations.
 - 4.1.1.2 Loan facilities. Licensing procedures allow for loan facilities typically not exceeding owner's equity. Statements for operating institutions reveal that total liabilities amount to 42% of total assets.
 - 4.1.1.3 Enrolment fees. Tuition fees are agreed upon during license application. These range between 130 and 170 KD per credit hour. The fee structure is not allowed to increase before a lapse of five years.
 - 4.1.1.4 The offset program. This relates to deviation of particular financial commitments from foreign companies that provide imported goods and services to the government of Kuwait. The commitment is equal to 30% of the contract value to be executed within eight years of the contract award, with a multiplier factor to encourage foreign companies to invest in education.
 - 4.1.1.5 Interstate funding programs. This is related to agreements with trust foundations or the UN organization. The largest example of it is the agreement with AGFUND which led to the establishment of the Arab Open University in 2001.
 - 4.1.1.6 Government facilities. The provision allows for private universities to lease state lands for their campuses—an arrangement similar to Land Grant laws in the USA; or government agencies granting scholarships to students in private universities.
 - 4.1.2 Tools of analysis

These refer to a number of ways (tools) employed by the PUC to ascertain the financial viability of the university. These include

- Economic analysis of industry
- Competitive strategy analysis
- Accounting analysis
- Financial analysis, and
- Prospective analysis

4.2 Application of the model to private higher education

4.2.1 Five higher education institutions are licensed in Kuwait so far: 1) Gulf University for Science and Technology, 2) The American University of Kuwait (AUK), 3) Australian College of Kuwait (ACK), 4) Kuwait-Maastricht Business School (KMBS), and 5) Arab Open University (AOP). Every one of these institutions was checked out by the PUC for financial viability. In the following are some of the interesting findings:

- 4.2.1.1 The gap between supply from existing institutions, public or private, and demand by high school graduates justifies private ventures in higher education.
- 4.2.1.2 Programs offered by private institutions tend to concentrate in areas of liberal arts, business administration, and computer sciences and technology. This shows a tendency on the part of these institutions to avoid investing in high cost programs in order to insure a higher profit margin.
- 4.2.1.3 The PUC requires institutional accreditation within two years of the starting date; association with a reputed university on an affiliation basis through a joint degree program, or operating as a branch of such a university.
- 4.2.1.4 Financial analysis shows that four of the five private licensed institutions manage to achieve a higher return on their investment than they expected in their early years of operation. So far, these institutions are operating in temporary buildings, and the picture may change in the future.

SESSION 5: REPORTING AND CONCLUSIONS

This last session included brief reports by the Rapporteurs of the four Sessions, and an end-note delivered by Professor Wail Benjelloun, Dean of the Faculty of Science at Mohammad V University, followed by a general discussion. The discussion was in the form of comments and remarks made by various participants, but no final conclusions or recommendations were made or attempted. There was a feeling that the issues and questions raised in the papers presented, and the experience that participants went through during the previous sessions, and the discussions that followed, provided a unique opportunity for a few Arab scholars and officials in higher education to broach a subject very wide and far reaching in its scope and implications for the Arab region. With a feeling like this, it was almost impossible to come up with any final conclusions

or recommendations other than those that may re-affirm the obvious. It was hoped that the papers presented, and the conclusions made in them, and this Summary Report, will be useful as a reference (when published), for any future deliberations on the topic by Arab or other scholars and policy makers.

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