UNESCO Study Report on

Financing Higher Education

in Arab states

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Foreword







































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Sustainable Development Goal 4

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all 99



4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes



4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education



4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university



4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship



4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples, and children in vulnerable situations



4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy



4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development



4.a By 2030, build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all



4.b By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries



4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States

Background and Context

igher education (HE) systems worldwide have seen tremendous changes in the pattern of financing in the past twenty years, with a predominant shift of higher education costs from the government to private sources: financial markets, philanthropy and households. The reasons for changes vary from region to region but mostly stem from the challenges to respond to pressures of growing demand for HE and heavily constrained public budgets, and to greater emphasis on better use of the limited resources.

HE in the Arab states is not an exception. The challenge is even more acute as the demand for HE has drastically increased in the past decades (the GER in HE more than doubled between 1991 and 2010 in the Arab region, from 11 to 24 per cen¹), which put the sector under a heavy pressure for massive expansion. Reasons for this increasing demand are many, but most probably attributed to by the exponentially growing population² and corresponding highest youth cohort in their history, the increasing recognition of the economic and social values of HE, and the concerted efforts for the realization of the EFA goals and the MDG targets which have led to a rapidly rising number of secondary school graduates seeking further learning opportunities at higher education level. Whilst there has been a tremendous growth in size, the expansion of HE in almost all Arab countries has caused average quality of education to decline as resources are stretched increasingly thin. Essentially, the expansion has been less differentiated and, therefore, ill-planned to confront emergent development needs, for example in pursuit of sustainable knowledge-based inclusive development, or due to worst hit by war and conflict, which have further compounded the fragility of the prospects of heavily constrained budget. Financing HE in these war and conflict affected countries presents acute adequacy challenges.

The government is the only source of funding for HE in many Arab states. However, the budgets allocated to HE remain "limited and insufficient to meet the growing needs of higher educational institutions". Recent experience in many countries from both outside and in the region shows a world-wide trend towards greater reliance on tuition fees and student loans to bridge these financing gaps. The sector also sees an increasing trend in diversifying the HE programmes and modes of delivery as a way to reduce reliance on state funding and to attract the private sources for investment in HE including the households. Different arrangements are being made for HE to be provided and financed by a combination of the state and the market in a variety of forms ranging from state/private provision of HE to local programmes/partnership programs with foreign universities. Consequently, many Arab states have experienced a proliferation of private universities (for example, Lebanon, Palestine, United Arab Emirates, Bahrain, Qatar), which have become a dominant feature of the development of HE in these countries in the past decade. Meanwhile, data on HE financing in many Arab states remains very limited, even inconsistent and contradictory³, which has hindered a complete understanding of the issues in financing HE, and possible implications on other HE policy outcomes. It is within this context that this study is undertaken.

¹ Source: UIS

² The United Nations Development Programme/Regional Bureau for Arab States (UNDP/RBAS) (2016). Arab Human Development Report 2016. Youth and the Prospects for Human Development in a Changing Reality. http://www.arab-hdr.org/ Accessed on 06/01/2017

³ Bashur, M. (2004). *Higher education in the Arab States*. Beirut. UNESCO

Rationale

The increasing prominence of social and economic values of HE, particularly its critical importance in the building of knowledge society and improving the individual country's economic competitiveness in the context of globalization, have been widely acknowledged4. Despite the strategic importance of the Arab region in the production of the majority of the world's oil as well as their abundant financial capital, most Arab countries still lack adequate scientific and technological infrastructure to absorb, apply and create knowledge. At present, almost all knowledge and technology used in almost all Arab countries is produced outside the Arab region reflecting high dependency of Arab countries on outside knowledge and technology. A widening knowledge gap predicts poorly for future development of Arab societies stymied by an inability to create knowledge economies that can gain benefits from the opportunities offered by globalization. It is therefore becoming widely recognized that efforts of these countries for expansion of HE, which have been largely in size and through the involvement of the private sector, have only been able to address the needs for access to HE opportunities. The declining quality due to the too thinly stretched out resources, the slow elasticity of the system to emergent development needs and the mismatch of the governance structure of HEIs, which is supposed to meet the needs of the dominant economic model based on the public sector, oil incomes and workers' remittances, are some of the most important challenges making the sector struggling to keep up with globalisation and the demands for expansion and development of knowledge-based societies. In another word, HE in Arab states is struggling to keep up with the demands for expansion and development while the funding, mostly from the government, is very limited and insufficient. Therefore, it would be appropriate to reflect on the policies for financing HE in Arab states on the adequacy of spending, the efficiency with which resources are utilized, and the equity implications of resource allocations.

It should also be noted that under the fourth Sustainable Development Goal (SDG) on inclusive and equitable quality education and lifelong learning opportunities for all, Target 4.3 states that, by 2030, countries should provide equal access for all women and men to affordable and quality technical, vocational and higher education, including university. The study will contribute to the understanding of HE financing issues in Arab states, which appears to be neglected, and therefore to the understanding of the financing issues relative to Target 4.3 in the Arab region.

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⁴ World Bank. (2002). Constructing Knowledge Societies: New Challenges for Tertiary Education. Washington DC

Objectives

The study is a first step to identify the current situation relative to HE financing in Arab states from which to elaborate on issues in HE financing that provide input for a variety of purposes: policy debate, UNESCO positioning, knowledge sharing, policy advice and recommendations for HE reform, etc. The study also contributes to the implementation of Target 4.7 of SDG4 of the 2030 Agenda for Sustainable Development.

This analysis of the financing of higher education in Arab states covers a total of nineteen countries, including Mashreq (6); Maghreb, including Sudan (6); and the Gulf countries and Yemen (7). The three regional groups and the countries involved are different in their approach and policies towards education and higher education in particular, but a number of similarities and common features also exist. In certain aspects all Arab countries could be

lower oil and gas prices, and which have been used to the presence of 'easy' money based on hydrocarbons and which have been relying mostly on foreign technology. But this need for economic transformation also applies for all other Arab even called a rather homogenous group regarding their higher education and the problems they are currently facing in the society.

Yet it was also observed that the rate of development and consequent changes can be fast in the Arab states, and a number of countries have also published new national visions and long-term strategies to meet the challenges in their education systems, and in higher education in particular. However, if has been observed that the actual implementation of these visions and strategies is often not supported by explicit measures and target setting.

The Methods used

This study took place between August and November 2017. The target countries were divided into three groups, and a separate reports were produced for each country, covering the political and economic backgrounds, and their systems of education. These then followed by description of financing their higher education, its adequacy, how it promotes equity, and its overall efficiency. The analysis resulted in a number of observations and recommendations, that were also presented in a Workshop on the Presentation of UNESCO Regional Study on Financing Higher Education in the Arab Region, in Beirut on 27 November 2017.

The data used were mostly acquired from public sources, but also a few personal contacts and interviews were made. In August 2017 a questionnaire was sent to the Education Ministries in each country with the same set of questions concerning especially the financing of their higher education systems. The responses were received from most of the countries, and generally contained useful information and opinions that were accounted for in this report.

A common problem faced during the study was that data acquisition encountered numerous problems; the data available covered only variable periods, and different sources tended to give different results and numbers, and after all there were big gaps in some crucial data, especially concerning some time series. However, the authors feel confident that the overall observations are still reliable and truthful. Generally, the Arab countries are lacking comprehensive and reliable national databases of their education systems, and this concerns the higher education institutions as well.

The Political and Economic Background

Some of the Arab countries as independent states are relatively old, e.g. Egypt, but most of them attained their independency only after the World War 2. Yet the countries all have had a long and prominent cultural history going back for centuries if not millennia, and not to forget the Golden Age of Arab science starting in ca. 750, and lasting for nearly 500 years.

The polical and economic backgrounds of the Arab countries vary greatly, and generally the oilexporting countries belong to the relatively wealthy group of countries, but most of the others could be listed as middle-income or lower middle-income cluntries. The group of its own are the countries which have recently been or still are under internal crises, such, Syria, Iraq, Palestine, Libya and Yemen, with their educational, economic, health, and social systems derailed.

There is also a group of countries which are still recovering from the past turmoils, and it takes time to rebuild the country and its infrastructures back to a fully functional level; among them are Algeria, Mauretania, Sudan, and partly also Tunisia. One general feature in the oil-exporting countries is the presence of a large foreign workers' and expatriates' cohorts which may make up a large portion of the population, or even in some cases make a clear majority, as in UAE, Qatar, and Kuwait. This may be exacerbated also by the presence (sometimes) of large numbers of refugees, like in Lebanon and Jordan, but they are not the only countries facing this situation.

Economically, it is widely recognised that the Arab countries need to diversify their economies, towards modern knowledge-based societies and economies. This is apparent especially in the oil-exporting countrie, which are hit by lowring hydrocarbon prices, but also in ountries whose economies may rest on a rather narrow sectors only, e.g. in banking. Also the informal sector of the economy is relatively strong in some Arab countries but usually invisible.

The need for economic diversification is getting even stronger when ever larger numbers of university graduates who to enter the labour market. In the past the main course of employment for them had been the public sector, but this avenue is becoming gradually closed because of the tightening state revenues. There is an apparent need for a new type of economic revolution, based also on digitalisation. But it is also a challenge for the entire education system to produce the necessary skills and manpower for it, augmented by proper public infrastructure and policies to support and maintain it sustainably.

The System of Education in Arab Countries

The overall education system in Arab countries in the modern sense is rather young, generally developed only after the 1960's and 1970's, soon after many of them had attained their independence. Yet various types of schools had already been founded in the 19th century in some countries, and e.g., the American University in Beirut was established as early as 1866.

For decades the Arab countries have placed heavy emphasis on education, and rather extensive school systems were established. School education has been mandatory in all Arab countries, and in many cases free, and sometimes even covering up to the secondary school levels, to 18 years of age. In most cases free or government subsidized education is also covering the higher education, at least in public institutions. The early results in the development of the education systems were impressive, especially in terms of rapidly dropping illiteracy rates, and now the under 65-old share of the populations generally have literacy rates close to 100%. Yet this does not mean that the more modern technological literacy is always attained. The remarkable feature is that there has been a gender balance in the education systems from the beginning, and thus women have had equal opportunities of achieving success in the society, though many cultural constraints still exist. Yet the Arab schools also follow the almost global trend that girls generally do better than boys, which also shows in the reverse gender balance even in universities, where women generally constitute the majority of students. The literacy rate seems also to follow the degree of urbanisation, when the countries with large rural populations have had less success in reaching all the young people, and the women also. The basic education has been publicly supported, though in some countries variable numbers of private schools have also emerged. Generally, the Arab states spend some 10-20% of their annual budget in education, including higher education.

Despite the relative success of education systems in Arab countries, certain criticism is also leveled against them. The main issue has the overall quality of the education, the old-fashioned teaching (and learning) methods, mostly based on rote learning without critical and analytical aproach, lack of pertinence of the skills obtained, poor learning environments, and finally, deficient preparedness for higher education and for further education in general. Apparently these problems have been recognised and a number of countries have developed projects or programs to improve teacher education, including even teacher training periods in foreign universities. Yet the systems for further education or training for teachers in the job is generally lacking, which is somewhat costly but would quickly pay off in better results. The issue of lifelong learning (LLL) could and should be a backbone for the entire education system.

The overall problem is that the learning methods, and the consequent problems that have been developed early at the school levels tend to penetrate throughout the education system up to the level of higher education, and even thereafter. It is important that the basic learning takes place in the mother tongue, but the modern world also requires relative mastery of at least one secondary language, either French or English in the Arab world, especially for the purpose of higher education, and even for the labour market that tends to be more and more international.

The higher education (HE) system all over the world have experienced great changes in the last twenty years, and this also includes the patterns of financing. This also applies to the Arab world as well. The reasons may vary between individual Arab countries, but in general the main pressure comes from the growing demand for higher education, following the high population growth rate and with new youth cohorts entering the school systems. After the 190's a number of new higher education institutions have been established, both public and private, though relatively more of the private ones. At the same times, the state budgets are becoming more tight, not only in the oil-producing countries, but also elsewhere. There is thus great demand for expansion of the financial basis for HE, but also for internal changes in the education systems at large to meet better the new demands.

In general, the Arab countries have been investing in free mass education, with reasonably good results, but the time now requires changes of policies from mere quantity to more quality-based education. This pressure comes especially from the labour market, since it appears that generally education seems to prepare people poorly for the readiness to enter the labour market successfully and productively. This issue is thus posing the question of both adequacy and the efficiency of financing of higher education. Yet in terms of equity and gender parity, the education systems have been working relatively well, but in the labour market the women still are facing many obstacles, for a number of reasons, many of them being cultural. It should be noted that in Arab countries the higher education systems in particular are relatively young, and thus it is often the first generation of people who enter the academic world and academic careers, usually without much family tradition.

The Arab world experienced a heavy expansion of higher education especially since the 1990's, thus following also the global trend. In the early 1950's only some 13 public and private universities existed in the Arab countries, but the numbers increased to over 700 universities with more than 13 million students just a few years ago. The total enrollment has increased at least 2.5 times in the last decade alone. Yet the overall stimates of the student numbers etc. are tentative in the sense that the concept of the university alone may vary in different countries, and may also include various kinds of colleges, branch campuses, private institutions, etc., which are listed under the heading of university. Thus also the 'real' numbers of universities can also vary accordingly.

The rapid expansion of the higher education sector has also strained its overall quality, which also concerns the quality of the teachers. Especially in the relatively wealthy Gulf countries the main part of the teaching staff in universities (and often in schools also) consists of expatriates, often on short-term contract basis only, though several attemps and policies have been formulated to make the countries more self-sufficient in this respect. In turn, the Maghreb countries especially have been successful in producing the teaching staff from the expertise from within their own country. The current expansive phase of higher education will certainly be strained also by shortage of fully qualified teachers everywhere.

Further general data on the countries and their higher education systems are given in Tables 1-3, atached at the end.

Financing Higher Education

Adequacy of the financing system

Generally, the main financing of higher education comes from the public purse. Private higher education sector is still embryonig in some states, but strong e.g., in the Gulf states, but also elsewhere like in Lebanon, which in general are wealthier by per capita income and by their GDP. The share of private education varies between ca. 5% and 40% in student enrollment, the overall average in the MENA region being ca. 35%. Some of the private institutions are branches of European or North American universities. The share of the private sector is gradually increasing in a number of Arab countries, especially in the Mashreq region, partly as a result of particular public policies to lessen the pressure on public institutions, but a part of it is also driven by the market. The dichotomy between public and private financing of higher education has been rather steady, and between them there has been not much mutual innovations or interactions. The two major blocks in financing higher education are the public funds in the public sector, and the tuition fees in the private sector. An important question that addressed equity as well as efficiency is whether the financing of higher education has to remain the sole responsibility of the state, or is it fair to share this responsibility with individuals as their personal investments for their own good and indirectly also for the benefit of the state.

Cost-sharing efforts in financing often remain but minimal, with e.g., Sudan being one exception, but in general, the private economic sector has taken relatively minor interest in higher education and in research in particular. This may also reflect the fact that often the main movers of the economy have been and are big (international) companies which may have little interest in developing the local economies, and which also can get their main (and well educated) manpower from other international sources. Apparently there are but few such local companies that would carry true interest in partnering in the development of the local manpower and its innovative capacity, and the same applies to research activities. Thus strong bridge-building efforts and policies are required.

The resource allocation to the HE institutions is usually a rather straightforward process, whereby the universities get an annual lump sum, but clear criteria for the allocation process are lacking. Often it seems to be based on the numbers of students and of staff only, or on some other input-type criteria, but usually there is no explicit policy for guidance. Yet there are some Maghreb countries where some measures of performance-based financing have been adopted. Thus the funding of the institutions is usually not based on performance or the outputs, or on any similar criteria, though politically this practice may still be the easiest way of delivery. This may be also the consequence of the shortage or total lack of objective data that could be used as measure of an institution's effectiveness and impact. It also seems that in most cases the institutions have a rather tight rein with their governance and with the use of their budgets, and e.g., transfer of unused funds to the following year is may not be possible. Thus the funding pattern is mostly strictly annual, and not covering several years, which practice could make it possible for longer term planning of activities. There seems to be little information about the budgeting practices of the private universities, but apparently they function in a rather similar way to the public ones.

One special feature in the public universities in all Arab countries is the budget structure. Namely, it seems that that some 80% or even 90% of the total budget is spent on teacher and staff salaries, and thus there is little else for investments in the learning environments or infrastructure development, in further education, in research, in student services, etc. This way the functions of the institutions could appear rather inflexible and static, from year to year. There are also no specific funds or systems for continuing education, especially for the general public, or for any other outreach activities.

The universities mostly function as teaching institutions, with the Bachelor's degree as the main target for over 90% of students. In nearly every Arab country women make the majority in the student bodies of the universities, and this also shows in similar gender balance among the graduates. The postgraduate students make only a small minority in higher education in most countries, and apparently a good number of Arab students get their Masters and PhDs from foreign universities. The academic fields related to STEM studies are regularly underpresented. Several Gulf countries, but especially Saudi Arabia have been generous in providing grants for study abroad, but the problem is the true absorbing capacity of the domestic labour market, if and when the graduates come back to their home country. For instance, the number of Saudi students in foreign universities was estimated at least at 130,000 in 2014, and about half of them were studying in the US. In fact, indications are that sometimes a great many of them may stay abroad more or less permanently and build their future careers there. Recently several countries in Mashreq, namely Jordan, Egypt, and lately also Iraq and Syria have developed a parallel system of education by channeling private funds to public institutions whereby students not admitted through the centralised admission system have the choice to enter public educational intitutions for a minimal tuition fees. This way more pressure is also placed on families in financing higher education. Also, the pressure on higher education could be lessened by a vocational schools system, which however seems to be less prestigious than the university route. Similarly, non-traditional higher education like two-year degrees or continuing education or an open university system could work to the same effect. Yet the economy itself could benefit greatly of the availability of a variety of different study opportunities, especially in view of the fact that unemployment is hitting badly the 'traditional' university graduates.

The role of research is rather modest if nearly non-existent in nearly all Arab universities, and on the average the countries spend very small amounts of funds for research and development (R&D), usually well below 1% of their GDP. One exception is Saudi Arabia with a few relatively strong institutions also involved in research, which also shows in their international ranking positions, though not yet reaching a position among the 200 'best'. Another example is Lebanon which currently is matching government funds with funds allocated by private institutions to promote research in universities. The issue of research is also linked to the quality of the teaching staff in universities, and there are countries like Sudan, Libya, and Algeria where a sizable portion of tthe eachers do not have even a PhD degree. Generally also the percentage of professor who do and supervise research or are involved in young researchers training is relatively small, though more exact data are again lacking. Yet considering the budget structures of the universities, there appear but small room for investments, if any at all, in special laboratories and research facilities at large. Research is actually an activity which requires good linkages between universities, research laboratories, and especially with international research partners. The mode of working of most Arab universities seems to be to make it all alone, though good individual examples exist to the contrary in some countries. Yet even within a single university whose teachers and scientists represent different fields and skills, they still could combine their intellectual power to

tackle together many common multidisciplanary problems. The common feature and even a requirement for higher education all over the world is that teaching should be based on research! Research is essential for the national economic development as well.

The main obstacle for more and better research may not be only a shortage of funding, but the present situation would call for a strong and committed national R&D strategies, with proper funding, and with nationally important research areas or even themes defined. Naturally this also requires a proper infrastructure to deliver the strategy in collaboration with universities and research institutes, as well as with the private sector. But similarly, the universities and research institutes themselves also need a long-term commitment for good research, expressed in their own research strategy, which covers all aspects of the process, including funding, researcher training, faculty involvement, infrastructure development, etc. In the current situation, however, the universities are not producing the Masters' and PhD degrees in numbers that could support continuing research policies, though some universities have hired scientists from abroad. Yet any research policy should always aim at reaching best possible international standards!

Training and opportunities for entrepreneuship has been encouraged and initiated in some countries, though with vary variable results, but the subsequnt financing systems for, say, the start-up companies is undeveloped, and in way may even prevent new businesses to emerge. The system of science parks in collaboration with university campuses has been found useful at least in Europe, but there have been few attemps in this direction in Arab countries.

There should be no shortage of problems that are calling for heavy and long-term research investments in all Arab countries, e.g. dealing with water, health, food, energy, environment, social wellbeing, i.e. all aiming towards a more sustainable future. A number of countries have expressed visions and plans to diversify their economies away from oil and gas, though the real results are still to be seen.

How efficient is the financing of higher education?

The problem of the efficiency of financing higher education in Arab countries can be approached by several measures. One of the dilemmas appears to be the fact that although the majority of higher education institutions are public, but new measures need to be taken by them to fully serve the public good.

It has been noted almost without exception in Arab countries that higher education seems to prepare the students poorly for the labour market, though part of the problems must have been long in the making. There is a number of reasons for this mismatch, starting even at the school level; one of them is the reliance on old fashioned teaching methods which do not support independent learning and analytic thinking. Another feature seems to be that the school curricula badly prepare the pupils for higher education, by their curricular structures, poor mastery of the secondary language, and further, the admissions policies into universities may not be selective enough, thus allowing in students who are not yet fully fit. Commonly admission is based on school leaving diploma. Admittedly some countries (UAE, etc.) have adopted special foundation programs to prepare school students better for HE, but they are very expensive though in terms of equity they are of service to the students.

There are few solid data on the dropout rates, or of the direct reasons for them in Arab universities, but indirectly some inference can be made. In several countries the problem of dropouts seems recurrent especially in the secondary and tertiary cycles. There are a number of causes for it, but the main reasons seem to be relative ill-preparedness of students for higher learning, the change in the linguistic medium of instruction, poor learning infrastructures and learning environments, lack of supportive pedagogical mechanisms for students with learning difficulties, and so on. To this may be added also a low learning motivation by students for reasons of their difficult economic and social backgrounds. There are some data on this issue from one country (Oman) showing that the most 'difficult' fields appeared to be engineering and technology, while e.g., religion and philosophy generally had very low dropout rates. It must also be noted that there are also large numbers of young people who are out of school.

As noted most Arab universitires are but teaching institutions, and thus do not produce the necessary specific skills that are needed in the labour market and business life; this especially concerns the STEM studies. The past history shows that the Bachelor's degrees produced could often be enough for jobs in public service, but this particular market is gradually coming to an end. As an alternative to higher education, the vocational school sector is rather invisible in many countries, maybe also because higher education is seen as more desirable and prestigious, usually also linked to the local culture.

Thus there appears the big dilemma in virtually every Arab country that the majority of the unemployed are educated people, and this imbalance is striking especially among women, who are also facing a number of obstacles in the labour market, often also for cultural reasons. Women's unemployment rates may well exceed 30% in many countries. In fact, the unemployment among degree holders has reached alarming proportion, especially amongst graduates in Social Sciences, Humanities and Law.

The scarcity of data and of critical indicators, including such as per student expenditure, student aid funding, R&D investments, etc., do not enable to produce a comprehensive evaluation of external efficiency of the financing of HE, but many indicators reveal that except for certain disciplines in some countries (e.g., engineering, medicine) the universities are producing graduates who are poorly qualified for meeting the skills requirements of the labour market. The investment in education and its subsequent return rate is an important indicator of its external efficiency. Naturally this rate varies from country to country, but in the international perspective it is relatively low in all Arab countries.

Does higher education promote equity

An important issue in the Arab countries is to what extent their higher education promotes equity? Generally and except for a few countries like Lebanon, Libya, Sudan, etc., both general and higher education have been totally financed by the state in the name of social equity and democracy. It has produced relatively good results in improving especially the lot of women in Arab societies and throughout their education systems, but there still exist a number of cultural constraints for women to be overcome. This applies particularly to womens' roles in and contribution to the labour market, though variation exists among the Arab countries in this respect. A strong public education service for all citizens, regardless of their social class, income, or ethnic affiliation, always symbolizes the values of equity.

A special and difficult concern exists for the foreign workers, especially in the Gulf countries, but the same applies also to the large groups of internally displaced people, refugees and migrants coming from conflict-ravaged countries and areas. This has placed added burden on the education systems in countries like Iraq, Egypt, Jordan and Lebanon, but they are not the only ones. In some cases financing the higher education in these populations has been covered by international organisations, and supplemented by the host governments. Yet a new phenomenon of inequity has also emerged whereby the financial support provided to refugee populations is leaving behind disadvantaged youth from the host community. Right now conflict-ravaged Yemen is a special case of its own, and for its future reconstruction it will need heavy investments and help from outside donors, etc., once the crisis is over.

Yet in some cases the reinforcement of the private sector could be an indication to the contrary in terms of equity. In many wealthy Arab countries, the role of the private sector is relatively strong, and it often happens that families with proper financial means may prefer the private education sector, or even be able to send their offspring to foreign universities, though also assisted by governmental grants. But in poorer or middle-income countries the role of the public education is even more crucial for offering proper education to everybody and the socially disadvantaged. Although the access to higher education is free, not everyone may be able to benefit fully from it due to discrepancies that exist within the primary and secondary levels of education. Many students from rural areas or in the lowest socioeconomic quintiles may not even pass the secondary school examinations to be eligible for higher education. Thus it is important that the national education policies also carry concern for the entire education system, including the private one, through proper accreditation and other policy measures that are needed to assure that nobody is left behind.

Accreditation and Quality Assurance (QA)

The role of accreditations and especially the value of Quality Assurance (QA) systems have been well recognised in Arab countries and Arab universities, and good effort have been made to develop it. The Arab Network for Quality Assurance in Higher Education ANQAHE was established in 2007 as a nonprofit nongovernmental organization. The purpose of this Arab network was to create a mechanism between the Arab countries to exchange information about quality assurance, to construct new quality assurance agencies or organizations, develop standards to establish new quality assurance agencies or support the already present one, to disseminate good practice in quality assurance, and to strengthen liaison between quality assurance bodies in the different countries. These recommendable aims apparently still need time to show their true effect and 'teeth', though good individual examples exist.

A properly functioning QA system can be an effective tool also in improving the overall governance of the higher education institutions, and thus also affecting the overall efficiency of the money use, and especially their service to the society at large. This naturally would include measures to observe the needs of the labour market, also in terms of equity.

Quality in HE is a very multidimensional concept, but generally it is interpreted as being fit-forpurpose. That is, it is based on the ability of the institution to fulfill its stated aims, based on its mission and strategy. Thus for the QA process, the institution's strategy is the starting point, is it realistic, is it relevant and sustainable, etc. For its strategy the university also needs a longterm national strategy within which to function, in order to support the national development by providing the needed manpower, the research capacity, and also the overall services to the society. The main purpose should be to promote and support the local long-term development and to build the nation's human capacity. But the QA system also needs an institution-wide database on its structures and functions; without it an assessment cannot be made. This should be necassary also for the leadership for the management at large, but it should be essential for the staff, the students, and the stakeholders at large. One important issue in QA is the concept accountability, who is responsible for what! For proper accountability the universities need more autonomy, especially in the academic matters, but still within the context of the national higher education strategy. The database is fundamental for assessing the overall performance of the institution, both short-term and long-term. Especially if and when the funding is to be based on institution's performance.

So far ANQAHE does not fully cover all Arab countries, and the local development of QA systems varies greatly between them. Traditionally many universities, and especially the private ones, have sought accreditation from foreign agencies. The establishment of national QA agencies has been variable and even delayed in some countries while in some others there have been relatively good starts to utilize them. Financial constraints may also been been reasons behind these delays with the agencies. However, many of the agencies established so far seem to be lacking true independency, and are rather unctioning under direct control of the Ministry, which may also create problems with conflict of interest. Yet it is important that each country has a pool of its own QA experts, and such an expertise that could take care of the very local needs of the higher education institutions and their continuous development through the QA systems. One particular issue should be to work on solutions for the comparability of diplomas and degrees, especially considerimng the relatively high mobility of students in the region. Furthermore, another apparent problem in the work of ANQAHE is still a relative lack of close regional cooperation and collaboration in mutual QA work, that is, each country mostly seems to be functioning on its own, though regional meetings take place around the theme of QA. A natural development and next step could be the formation of the Arab Higher Education Area (AHEA), maybe even according or close to the European model of EHEA.

A common observation throughtout this project has been the paucity of up-to-date data and information about the higher education and its trends in Arab countries, though some examples to the contrary exist. It should be the Ministries' task to provide solid databases of the entire education system in the country, including the higher education sector in particular. Naturally each HE institution also should need its own internal database, for the sake of its overall management and quality assurance, and also for the sake of informing their stakeholders, the staff, the students, and even the public at large. The students especially would benefit from regular job markets analyses and market trends, but also the databases would help the universities themselves also to direct their curricula in the proper direction to meet better the demands of their students and of the society at large.

Conclusions

Higher education systems in the Arab countries are facing a multitude of challenges, which include the pressure to expand but also, at the time, taking care of equity, but also ensuring high quality and relevance. Currently the demand for investments in HE is only increasing, because of the strong populations growth, and the large cohorts of young people are looking for good education and for good jobs in the society. However, in addition to more money, several structural changes are needed in the national higher education policies and also at the level of HE institutions themselves. The mismatch between the entire education system and the labour market requires a number of new measures, especially because in several countries there is a large, highly educated, but still mostly underused group of people consisting of women.

Recommendations

The final conclusion of this analysis of financing higher education in Arab countries is that the pressure on the HE sector is only going to increase in the near future, also because of the high population growth rate, and thus more investments are needed. This is putting pressure also on the state budgets, but at the same time the new funding requires new innovative measures and sources between the public and the private sector, but also involving the citizens themselves. Yet the requirements for better equity and efficiency in the services offered by the higher education systems are growing even stronger. The current problems may not disappear by additional funding only, but the entire HE systems in Arab countries require new internal development measures which have been discussed in this report. Thus the following particular observations and recommendations emerged during this analysis:

- 1. There is a need for national higher education strategies so that the HE institutions can allocate their budgets according to the national priorities, also following the needs and development of the labour market. New forms of education could complement the existing systems, including further and continuous education, etc., so that people could rely and be supported by the principle of life-long-learning, far into the future.
- 2. Similarly a national strategy for a research policy is needed, to be financed in accordance with the national long-term needs related e.g., to issues dealing with energy, health, environment, etc., as well as the overall sustainability of the society and its economy. The research strategy could even define the main research themes that have to be tackled, not only within a single country only but linking with several other countries and universities in the region and even wider internationally. But the first step in this direction would also be that the universities within the same country start collaborating in research (as well as in teaching), also through joint financing.
- 3. Encourage participation of the industry and the private sector especially in research financing, thus also for the sake creating new linkages between universities and the business world. Encourage and support also new entrepreneurship activities right in the intersection of higher education and the private economy.
- 4. The Quality Assurance systems need to be build to their full strength throughout the Arab countries, thus creating also new networks between the higher education institutions in the region.
- 5. Create proper databases covering the entire education system and the higher education in particular. This requirement would naturally concern the construction of institutional databases as well, which are needed for the overall management and governance, and also for development of their internal quality assurance system in the universities. These should be complemented by proper national job market analyses and by the trends therein, also for the sake of providing guidance to students, and the society at large.

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Annexes

TABLE 1. Data on the Gulf States and Yemen, and on their Higher Education

	UAE	Qatar	Kuwait
Total population	9.4 millio	2.6 million	4.1 million
GDP per capita US\$	72,419 (WB)	127,660 (WB)	71,887 (WB)
Gvt expenditure on education % of GDP	1.11 (UIS)	3.6 (UIS)	3.8 (UIS)
R&D expenditure % of GDP	0.49	0.479 (WB)	0.302 (WB)
Nos. of HEIs⁵	12 (3) 51	7	12
Tertiary enrolment	143,000	150,000	
% of Females ⁶	> 50	60	ca. 70
Higher education GER %		14.518 (WB)	27.027 (WB)
Unemployment rate for HE graduates	Negligible, but many women outside the economy	Negligible, but 60% of women outside the economy	Unemployment rate 17.5%, many women outside the economy

⁵ Numbers of Universities: Ranking Web of Universities, July 2017

⁶ Percent Females, from various sources;

⁷ Unemployment rates from various sources. The main sources the World Bank (WB), and the Unesco Institute for Statistics (UIS).

Oman	Saudi Arabia	Bahrain	Yemen
4.6 million	33.0 million	1.5 million	28.5 million
46,698 (WB)	20,55,158 (IMF)	50,764 (IMF)	2,375 (IMF)
4.9 (UIS)	6.8 (UIS)	2.6 (UIS)	?
0.246 (WB)	0,818 (WB)	0.101 (WB)	
33	56	45	25
	3.6 million	55,000	
	54		10 (?)
	63.066 (WB)	41.309 (WB)	?
12%	30-34 % for women	Ca. 25%	Total female unemployment 78%

TABLE 2. Data on the Maghreb Countries and Sudan

Indicators	Algeria	Libya
Total population	40,6 million	6,4 million
GDP per capita US\$	15,000\$	14,200\$
Gvt expenditure on HE % GDP	1,2%	NA*
Gvt expenditure on education % of GDP	4,4	NA
R&D expenditure % of GDP	0,07%	NA
Nos. of public HEIs	50 Universities 62 HEI	18 universities 16 HEI
University enrollment (public)	1,5 million	372,010
Percentage of female enrollment	60%	51,38%
Higher education GER %	36,92%	NA
Unemployment rate for HE graduates	24,8%	50%
QA System	Exists formally Application?	Exists formally Application?

DATA SOURCES: UNESCO Institute for Statistics (UIS); World Bank 2016; World Data Atlas; OECD Database; Ministries of Higher Education's DataBases.

^{*} NA= Not available

Mauritania	Morocco	Sudan	TUNISIA
4,3 million	35,9 million	40,1 million	11,5 million
4,400\$	8,400\$	4,500\$	11,700\$
NA	1,1%	NA	1,7%
2,93	5,26	2,22	6,26
NA	0,73%	0,23%	0,68%
1 university 4 HEI	14 Universities 143 HEI		13 universities 195 HEI
20,298	750,000	570,000	340,000
33%	48,5%	52,2%	61,5%
5,34%	28,14%	16,32%	34,61%
NA	33%	79,5%	29,2%
Exists formally Application?	Exists formally Application?	NA	Exists formally Application?

TABLE 3. Data on the Mashreq countries, and on their Higher Education

Indicators / Countries	Lebanon	Jordan
Total population	4.5 million	9.45 million
GDP Per Capita (\$)	7,914.0\$ (WB)	4,087.9\$ (WB)
Govt. expenditure on higher education as a % of GDP	0,74% (UIS)	0,46% (UIS)
Govt. expenditure on education as a % of GDP	2.46%	12,37%
Expenditure on tertiary education as a % of expenditure on education	28,74% (WB)	1,4% (WB)
% GDP on research (R&D Expenditure)		0,15% (WB)
No. of HEIs ⁸	46	78
No. of Public HEIs ⁹	1	17
University Enrollment	196,119	337,500
Percentage of Female Enrollment	57,17% (WB)	
Higher Education GER	38.48% (WB)	44,87% (WB)
Unemployment rate for HE graduates	36.1% (WB)	34% (WB)
Cost-sharing practices ¹¹	Indirect Std. loans	

⁸ Number of higher education institutions provided from ministry websites and verified by ministry focal points through interviews

General sources of information:

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⁹ Number of public higher education institutions provided from ministry websites and verified by ministry focal points through interviews

¹⁰ including those of the Palestinian Auhtorities, excluding UNRWA institutions

¹¹ Information on Lebanon and Palestine is received from relevant ministries of higher education

¹² Parallel Education System

Iraq-Federal	KRI	Palestine	Egypt	Syria
39 million	5,61 million	4.67 million	91.5 million	18,792,029
4,609.6\$ (WB)	4,188.9\$ (WB)	1,745.9\$ (WB)	\$3,614.7 (WB)	2000-3000\$
1.11% (UIS)				4.97% (UIS)
4.87% (WB)		1.32%	6%	12% of public sending
22,8% (WB)		3% (WB)		
0,037% (WB)	-	0,492% (WB)	0,723% (WB)	-
134		52	43	27
78		29 ¹⁰	20	
		220,000	2.87 mln.	486,524
		60% (WB)		
16% (WB)		25.8% (WB)	36.23% (WB)	44,05% (WB)
			34% (WB)	
		PES ¹² NGOs		

