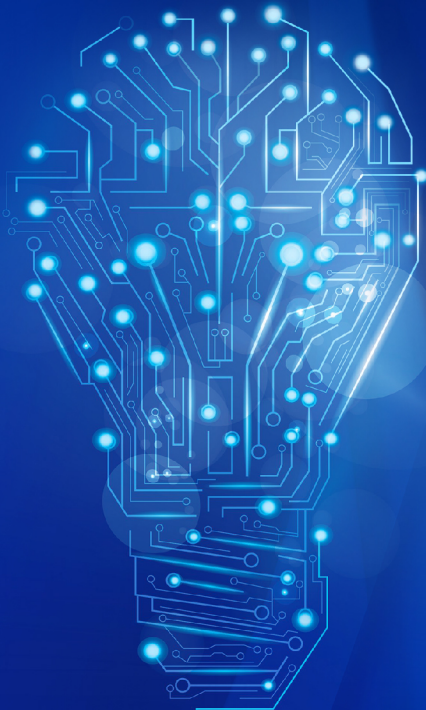


International Journal of INNOVATION AND KNOWLEDGE MANAGEMENT IN MIDDLE EAST AND NORTH AFRICA (IJKMMENA)



V9 • N1/2 • 2021




IJKMMENA is abstracted and indexed by:
ABI/Inform (ProQuest), Cabell's Directory of
Publishing Opportunities, Crossref, British Library
and most top universities across the world such as
Oxford, Harvard, Cambridge, London, etc.

تنشر بالتعاون مع المنظمة العالمية للتنمية المستدامة

ISSN: 2042-5988 (Print); 2042-5996 (Online)

www.mekei.org



 Middle-Eastern-Knowledge-Economy-Institute
 Middle Eastern Knowledge Economy Institute - MEKEI
 MEKEI_news

International Journal

of Innovation & Knowledge Management in MENA

Higher Education in MENA: A Social Policy Challenge



WASD
WORLD ASSOCIATION FOR
SUSTAINABLE DEVELOPMENT

RESEARCH PAPER

Higher Education in MENA: A Social Policy Challenge

Dr Abdulraouf M. Adam

Freelance Writer

Edinburgh, Scotland

Email: s.abdel@hotmail.co.uk

CITATION: Adam, A. M. (2021): Higher Education in MENA: A Social Policy Challenge, Vol 9, No. 1/2, pp. 63-75.

RECEIVED: 13 February 2021 / **REVISED:** 24 June 2021 / **ACCEPTED:** 9 July 2021 / **PUBLISHED:** 20 November 2021

COPYRIGHT: © 2021 by all the authors of the article above. The article is published as an open access article by WASD under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Abstract

Purpose: This paper aims to gauge the likely impact of COVID-19 on the sustainability of MENA states' higher education institutions (HEIs).

Design/methodology/approach: The study is based primarily on library research conducted by the author. It follows a sociological approach to studying certain features of MENA HEIs, their policies and problem areas.

Findings: Findings show that, spurred by a heightened global drive towards achieving the Millennium Development Goals (MDGs) and coupled with an urgent national necessity to play a key role in this process, most present-day MENA states have made decent strides towards modernising their lagging HEIs. Furthermore, this bold move is justified on the grounds that developed and middle-income developing countries have, to varying degrees, experienced shifts towards a knowledge-based society; MENA states have made an express desire to follow suit.

Originality/value of the paper: The author believes the novelty/value of the paper is shown by the new outlook that it seeks to bring to bear on the analysis of the problem areas. This incorporates a range of possible economic, social and cultural dimensions, contrasted with those prevalent in OECD and other developed countries.

Research limitations/implications: The study highlights the major opportunities and challenges most likely to face social policy and decision-makers in MENA states, and which could be described as chiefly 'institutional'. We conclude by offering, hopefully, some enlightened recommendations that have direct practical implications for policy-making.

Keywords: *HE in MENA; MDGs; HEIs; Social Policy*

Premises: features and problem areas

Broadly speaking, one major characteristic of Middle East and North Africa (MENA) states is that they suffer from a lack of robust education plans geared to addressing the root problems underlying HEIs. The annual budgets of most MENA states allocate insufficient sums to the social services sector, including communications, education, agricultural extension, public health and research and development (R&D). This problem is partly attributed to a chronic lack of finance and failure to recognise the crucial role of the R&D industry in human development. However, even when such finance becomes available for investing in educational development, the authorities tend to trade off quantity and quality (in favour of the former). Arab states caught up in this trade-off quandary include Algeria, Egypt, Jordan, Morocco and Sudan, and to some degree, the Kingdom of Saudi Arabia (KSA). The most vivid example to note here is Sudan during the last decade of the 20th century: the number of universities grew exponentially, covering almost all localities, at the expense of quality (measured by poor training amongst university graduates compared to student graduates of pre-expansion times). Given the limited public funds, such horizontal expansion on HEIs caused capacity building shortages, under-funding and poorly trained staff. This problem was also exacerbated by the high intake of university students relative to staff in a desperate endeavour to exact more tuition fees on admission, therefore resulting in abnormally high staff/student ratios. No wonder then the demand for graduate students in the labour market is abysmally low, notably in industry, despite, and not merely because of, a surplus supply. Mostly affected are scientists, engineers and agronomists. Presently, graduate unemployment in Sudan is arguably one of the highest among Arab states.

Another point that pertains to Sudan is to do with the retrogressive nature of the various national research institutions. Until the 1980s, the government of Sudan was able to follow a decentralised approach emphasising the role of R&D in bridging urban rural disparities and related problems of poverty, health and education. It maintained the autonomy of the agricultural research institutions in Gezira (the agricultural research stations in particular), with the distinctive administrative structures inherited from the colonial powers. Therefore, a semblance of a complementary relationship was maintained such that counterpart research institutions in Gezira often filled research gaps at institutes in the capital, Khartoum. Gezira university students and staff duly visited the well-reputed Gezira research stations for scientific information. As such, the Gezira research institutions made an invaluable contribution to furthering R&D in Sudan's HEIs and beyond. The Gezira Research Station and other related research institutions conducted and assisted research publications in the salient areas of crop production, farm management, labour inputs and outputs and income levels, to name but a few. However, faulty decisions made on the part of armchair officials in Khartoum combined to cause the dereliction of research institutions, and ultimately to the utter collapse of the Gezira scheme. Therefore, the wealth of heritage in R&D and management is no more – a dire lesson in sustainability.

Expansionary Policies and Plans

On the other hand, the expansion of HEIs in Saudi Arabia is, partially, a prompt response to population forecasts of a rapid growth among the 18-25 year age group. Figures for 2016 gave an estimate that more than half the Saudi population would be below the age of 25 years (Al-Youbi, 2017). This indicates that different reasons explain the expansion of HEIs in any single country of the MENA states. We later return to the specific problems with which the KSA have to grapple, when we deal with the novel concept/model of the World-Class University (WCU). Notably, however, all Arab universities expanded their HEIs by 22.8% between 2003 and 2006, from 233 universities to 286. A phenomenal further expansion raised the figure to over 700 universities in 2015 – a mighty 200.4% increase. The 15th IAU General Conference on Higher Education and Scientific Research In the Arab World (which reported these figures) goes on to state that:

“The number of students was [in 2003] about 4,400,000 and the number of faculty staff members was 183,000 of whom were 78% Humanities, and 22% scientific studies only”. Meanwhile MENA expenditures on scientific research remains low, a mere 0.2 – 0.6 of GDP compared to 2-4% in industrialised developed states (Abu-Orabi, 2016).

The dearth of scientific research output of MENA HEIs for the world, in general, reflects negatively in terms of concrete impact on industry, innovation and infrastructure. This is shown in Table 1 below.

Table 1: Impact Ranking 2020: Industry, innovation and infrastructure and Quality education

Rank for industry, innovation and infrastructure	Name	Industry, innovation & infrastructure	Rank For quality education	Overall
28	King Abdulaziz University Saudi Arabia	93.3	201-300	75.4-83.3
54	Alfaisal University	85.3	401-600	46.7-61.4
101	Khalifa University UAE	53.3-74.7	-	46.7-61.4
101-200	Assiut University Egypt	53.3-74.7	301-400	46.7-61.4
101-200	Universite Saint-Joseph Beyrouth Lebanon	53.3-74.7	201-300	46.7-61.4
201-300	Benha University Egypt	39.5-53.2	101-200	57.4-83.3
201-300	University of Mohamed Boudiaf at M'Sila Algeria	39.5-53.2	-	N/A
301-400	University of Babylon Iraq	24.3-39.4	201-300	46.7-61.4
301-400	University of Sfax Tunisia	24.3-39.4	301-400	9.5-46.6
301-400	University Of Sousse Tunisia	24.3-39.4	601+	9.5-46.6
301-400	Universite Hassan 11 de Casablanca Morocco	24.3-39.4	401-600	9.5-46.6

Source: THE, 2020

For MENA HEIs striving hard to achieve levels of excellence on a par with WCUs, the keys to that goal do not seem to hinge on massive financial investments alone. Other factors, such as internationalisation and openness, also matter. Openness, for instance, engenders knowledge transfer, fosters joint research, knowledge exchange, and reaches out to the wider world. The abjectly low scores on openness have partly impacted Saudi Arabia's HEIs standing relative to global counterparts. For instance, King Saud and King Abdulaziz universities were ranked the top two in the country, yet the respective figures in world rankings are not as good: merely 409 and 434, respectively. Moreover, both in terms of impact and excellence, the Kingdom of Saudi Arabia's HEIs did not fare well either, as Table 2 shows.

Table 2: Webometrics Rankings for KSA universities, July 2020

Ranking	World Rank	University	Impact Rank	Openness Rank	Excellence Rank
1	333	King Saud	1,120	348	205
2	346	King Abdulaziz	1,966	451	108
3	356	King Abdullah University of Science & Technology	1,177	163	270
4	712	King Fahd University of Petroleum & Minerals	2,264	488	560
5	1452	Umm Al Qura	2,814	957	1,686
6	1590	King Khalid	5,254	902	1,313
7	1731	Taibah	6,282	1,255	1,303
8	1851	Al Imam Mohamed Ibn Faisal University	8,063	924	1,310
9	1864	King Faisal	4,953	1,030	1,904
10	1972	Al Imam Moh'd Ibn Saud Islamic University	4962	1,210	2,024

Source: Webometrics, July 2020.

Tables 1 and 2 also indicate that MENA states' HEIs overall research and innovation linkages are not strong enough to make a world-wide impact. Yet in most MENA states it is the researcher, proper, who is accentuating the research problem. A recent survey study conducted by the Al-Fanar Media reported that 91% of researchers working in the Arab states wish to emigrate. That survey, covering a total of 650 researchers working in 22 Arab states, further concluded that the root cause cited by the respondents was "the environment that doesn't support doing science". This worrying revelation seemed ironic, that such dissatisfaction is growing "despite large investment into universities in the region" (Nott, 2019). The future of research in the MENA states would look even bleaker when we consider the cost of a university student in some MENA states is projected to reach \$6,000 a year, and in the Gulf States it is currently in the range of \$15,000-50,000 per year (see, for instance, Abu-Orabi, 2016).

Challenges to MENA HEIs

Research into some MENA HEIs highlights a series of wide-ranging and interconnected challenges facing scientific research. Here are some of these major challenges (see, for instance, Abu-Orabi, 2016):

- under-funding of scientific research;
- low outputs of scientific research (publications and patents in particular);
- graduate students produce scientific research that fails to address the mundane socio-economic problems of the Arab World;
- collaboration between MENA HEIs is lacking in terms of information exchange, experience, and joint research publications;
- poor linkages between scientific research and national development sustainable plans;
- too few incentives for innovation and entrepreneurship cast dark shadows on motivation;
- the governance system of many MENA HEIs lacks full autonomy.

However, there are many reasons for us to believe that the root of HEIs' problems lay at pre-university education rather than at the university *per se*. Yamada's recent research on schools in Gulf Cooperation Council (GCC) countries revealed that students are under-achievers in both mathematics and science (Yamada, 2018:592). Would a MENA country bound for entry into the club of WCUs still have such low learning outcomes among its students? Let us test this for the Kingdom of Saudi Arabia (as it the chief MENA country that aspires to shortly join the WCU club). An OECD report (2020) on education in Saudi Arabia seems to answer our question in the affirmative, as shown in Table 3 below:

Table 3: Key Indicators: Learning outcomes for KSA students compared to OECD average

	List of indicators		
	Learning outcomes	Saudi Arabia	OECD average
1	Mean students' performance in reading (PISA 2018)	399	487
2	Mean students' performance in science (PISA 2018)	386	489
3	Mean students' performance in maths (PISA 2018)	373	489
4	% Of students below PISA proficiency level 2 in reading (PISA 2018)	52.4	22.6
w	% Of variance in reading performance explained by student's socio- economic background	11.5	12.0

Source: OECD, 2020

The figures in Table 3 for the year 2020 still confirm Yamada's observation made two years earlier with respect to student under-achievement in both mathematics and science – here compared to OECD countries. Obviously then, it is incumbent on the education authorities of MENA states to revise the overall structure of the educational system as whole, from the bottom and upward to university level; only then might plans for modernising HEIs stand on a firm basis. However, the massive funds the KSA has so far committed for investment in HEIs are paying some dividends, and it is crystal clear that at least two KSA universities are in the top ten universities in the Arab world. These two universities, King Abdulaziz and Alfaisal, have continued to maintain these positions for the second time in a row (both for Times Higher Education World Rankings 2020 and 2021 publications) as shown in Table 4 below.

Table 4: Times Higher Education rankings of top ten universities in the Arab World 2021

Arab Rank 2021	Arab Rank 2020	University	Country
1	1	King Abdulaziz University	Saudi Arabia
2	2	Alfaisal University	Saudi Arabia
=3	7	Qatar University	Qatar
=3	3	UAE University	UAE
5	6	American University of Beirut	Lebanon
6	4	Khalifa University	UAE
7	5	Jordan University of Science and Technology	Jordan
8	10	King Saud University	Saudi Arabia
9	8	Aswan University	Egypt
10	9	Mansoura University	Egypt

* North African States of Algeria and Morocco ranked 13, 14 and 19, 20 for the years 2021 and 2020 (represented by the Ferhat Abbas Setif University 1 and Sidi Mohamed Ben Abdellah University), respectively.

Source: THE, 2021



It is clear that two top Saudi universities have out-ranked all MENA counterparts, however, they have also failed to meet the KSA's target of joining the world's top 200 (see below). Despite these daunting facts, some MENA states, like Saudi Arabia, have shown a commitment to catapult their HEIs into the highly acclaimed WCU models of developed and middle income industrialised countries. This is likely to prove a thorny pathway given the magnitude and complexity of the problems cited above that continue to bedevil most of KSA's HEIs. In the early 2000s, the late King Abdullah turned to higher education and assigned it top priority in development of the Kingdom. Later, King Salman reiterated his predecessor's commitment in a famous address to the nation when he announced the so-called Saudi Arabia's Vision 2030. In line with 'Vision 2030' an Afaq (lit. 'Horizons') 25-year plan was introduced as a research initiative purporting to improve higher education opportunities, boost scientific research, and lead the way through to up-grading at least 5 Saudi universities to a WCU level. The plan set a target to be in the top 200 universities in international rankings and earmarked a sizeable sum amounting to US\$1.6 billion for R&D for 2019 and 2020 alone (see insidehighered.com).

We assume ascendance of Saudi HEIs to WCUs within the next nine years or so to be somewhat daunting, if not over-ambitious, given the current stage of development of most of the Kingdom's universities. WCU is a benchmark too high to match unless laborious efforts are made, first to address the afore-mentioned problems, and second, to place Saudi HEIs squarely within a knowledge-based economy unlike that of the seemingly out-moded oil-based one. WCUs have certain features and characteristics too specially tailored to industrially advanced nations with a distinctive and inextricably diversified economy. A cursory look into the WCU model is in order, so that we may have an intimate grasp of the said features.

Moving towards a World-Class University Model

The adaptation of HEIs to worldwide shifts to a knowledge-based society has alerted MENA states to the new found concept/model of the World-Class University (WCU) (a model propounded by Yingjie, 2001; Taylor and Braddock, 2007; Salmi, 2009; Sadlak and Lui, 2009; Shin and Kehm, 2013; Lee, 2013; Hazelkorn, 2007; Hsiou-Hsia, 2007; Dill and Soo, 2005). If anything, technological change in the last two decades has been markedly knowledge-based, catapulting many developed and middle-income states' HEIs to WCU status. Ample research has been conducted covering the major features of this concept/model and the pre-conditions for entitlement by an HEI to WCU status. We outline parts of the WCU aspects that can act as bottlenecks for MENA and KSA in particular:

- 1- 'Internationalisation' is an enabling feature for both effectiveness and efficiency of a WCU, in terms of the inputs and outputs involved and related to the real needs of society, both national and global. It ensures that society and, of course, HEIs get the maximum benefits from scientific knowledge at low cost. The KSA is not open enough for internationalisation and guards against it on the unsubstantiated grounds that the latter would bring in its train social problems due to social, cultural and political differences. What is certainly true, however, is that internationalisation does impinge on contemporary events and attitudes, some of which will affect government activity in one way or another. What is not clearly certain, however, is whether 'openness' will have an adverse effect on local society. The authorities uphold 'tradition' against unknown or 'imagined' social costs of breaking up with the past.
- 2- WCUs function properly within a governance system based on institutional autonomy. Most research undertaken in the KSA points to a lack of autonomy (Almansour and Kempner, 2015:530). Currently, not enough effort has been made to furnish this enabling governance for the Kingdom's public HEIs.
- 3- Problems posed by (1) above cause, in turn, 'internal tensions' and this is likely to render all 'expectations' of improvement of the higher education system unrealistic. WCUs are immune to these 'internal tensions' and have effective mechanisms to keep any likely tension promptly at bay.
- 4- Due to (1), (2) and (3) above, the HEIs would ultimately be lost in the battle for 'global competition' (which is a prime feature of a WCU).



As discussed previously, early indications show that the top 10 KSA universities are far down in the world rankings, and a complex set of factors, cited above, is intricately involved.

The decisions made by policy-makers in the Kingdom of Saudi Arabia, on the other hand, too often impede HEIs' efforts at reaching the very goals the said authorities aspire to achieve. For example, to assist Saudi universities upgrade to WCUs, a plan was tabled by the Ministry of Education in 2015 for consideration in which a recommendation was made to increase the number of private HEIs and invite foreign universities to the Kingdom. The Shura Council turned down the recommendation on the grounds that "foreign universities might undermine Saudi cultural traditions" (Yamada, 2018:604).

Reasons for this inability to fully transition to WCUs seem to depend partly, but to a large extent, on the KSA's philosophy of education laid down by policy-makers. As early as 1980, the Ministry of Education stated this to be a purely Islamic philosophy of education and that higher education in particular should be geared towards achieving clearly defined objectives, including: "preparing competent and qualified citizens to perform their duties in the service of their country for the progress their nation in the light of sound Islamic principles and ideology"; and crucially to perform "activities and publications to bring sciences into the service of the Islamic thought and enable the country to perform its leadership role in building human civilisation on Islam's genuine principles that steer mankind to righteousness and spare humanity material and atheistic deviations" (Saleh, 1986:19).

Performing "activities and publications to bring sciences into the service of the Islamic thought" would require modification of their 'traditional-bound' system of education and narrowing of the gap between foreign university courses and those in certain HEIs of the KSA. The first genuine step towards transition to WCU is the elimination of differences between the Saudi educational system and those of the foreign countries, which the former wish to emulate. A WCU model is, typically, western, and it follows from this that the borrowing country must make its education system more similar to that of western countries. Once such differences are ironed out and the pattern of the national HEIs is modified to accommodate western elements, then Saudi students bound for scholarships overseas would fit smoothly into western universities. And, vice versa, for researchers, professors and scholars from overseas to pursue educational missions in the KSA. By and large, the KSA's HEIs are so far showing credible evidence of making a bold transition to WCUs, and have excelled regionally (among MENA), but have yet to make it globally.

Conclusions

This leaves us with a distressing conclusion that ascendance of MENA HEIs to WCUs, in general, would prove to be a tall order unless the following series of radical changes are introduced.

First, and right from early stages in secondary education, students need to be imparted with a good command of foreign languages and understanding of cultures other than their own, and a full grasp of the basics of advanced and professional education. In HEIs, prospective researchers and scholars would require more intensive training in methods and techniques of research and teaching these methods as a stepping-stone to practical work and public service.

Second, experience tends to indicate that severance of HEIs from the state's control of their economic, social and cultural activities does pay. Examples to cite in this connection include the well-reputed and distinguished Massachusetts Institute of Technology (MIT) and California Institute of Technology (CalTech). Universities, rather than the state, must have the upper hand in structuring society on the basis of knowledge (see for instance Khelfaoui, 2010:275). Khelfaoui cites Algeria as a telling example of state control that has benefited the French language at the expense of Arabic. This unwholesome situation, he maintains, has been accentuated by a tendency of religious education to target 'Arabised', disadvantaged rural-based groups while technological and professional education targets middle, urban-based groups who favour the French language. Society therefore becomes culturally and socially polarised, with far reaching implications. Coordination between HEIs of both parties is unnecessarily stifled. It therefore appears to us incumbent for MENA states in general to approach changes into their HEIs with a new 'cultural outlook'.



Recommendations

It is now imperative that we make a handful of recommendations, but in doing so, we advise that there is no one ‘one size fits all’ as far as MENA states are concerned. Each has its own specific problems and priorities, and must therefore feel free to select the points it deems relevant.

- 1- MENA states must develop realistic targets and strategies for developing public and private HEIs with a detailed allocation of their scarce scientific and technological resources.
- 2- It would be better if the limited financial resources were earmarked for improvement and capacity-building of pre-existing HEIs rather than following the current costly expansionary policies.
- 3- Research requirements’ priorities should be rescheduled to match the pressing national needs, whether the latter are sending students on scholarship overseas, teacher training or importation of research results carried out abroad, etc.
- 4- The incessant drive towards building WCUs seems to be motivated by a desire to achieve national prestige. Were this to be true, then the state must balance this objective with equally important aims of sustaining economic development/growth and public welfare. Trade-off between these major aims could prove too costly.
- 5- Research and development (R&D) programmes must have more emphasis on innovation and offer lucrative incentives for entrepreneurship – as a stimulus for researchers and graduates to reach out to the market place. The labour market is likely to respond more positively to new graduates once competence is shown. This in turn would relieve the chronic problems of graduate unemployment.
- 6- A reliable patenting system is urgently needed to support innovation and R&D efforts.
- 7- Collaboration between MENA HEIs through prompt and timely sharing of information and the rising stock of knowledge must be encouraged and boosted, as this is more likely to ease accessibility to information and reduce costs.
- 8- For the purposes cited in (7) above, we would recommend that a MENA information network be built as a regional pool accessible to all member states. Alongside this, every member country should introduce improvements to its pre-existing HEIs and maintain its national R&D inventory for its own use and for that of the remaining MENA states.
- 9- A recommendation by a World Bank and OECD joint panel to the Government of Egypt ten years earlier is still relevant and should be reiterated for all MENA states. It is recommended that MENA states adopt an holistic approach to raising educational quality and effectiveness that would (a) “focus on learning outcomes in terms of the capabilities that graduates will need in a changing world for life, work and further learning; (b) integrate research into university education, especially in graduate schools; and (c) involve government agencies and institutions accepting shared responsibilities for raising the standards of educational inputs, processes and outputs, in consultation with employers and in the context of a *strategic approach* (italics mine) to internationalisation” (in OECD, n.d.).

References

- Abu-Orabi, S.T. (2016): Higher Education and Scientific Research in the Arab World, *15th IAU General Conference*, Bangkok, Thailand, Higher Education: A catalyst for innovative and sustainable societies, in *eiseverywhere.com*, Chulalongkorn University, 13-16 November 2016.
- Almansour, S. and Kempner K. (2015): Princess Nourah Bint Abdulrahman University's challenge: transition from a local to a global institution, in *Higher Education*, Vol. 70, No. 3, pp.519-533.
- Al-Youbi, A.O. (2017): The development and advancement of higher education in Kingdom of Saudi Arabia, in *QS Asia News Network*.
- Dill, D.D. and Soo, M. (2005): Academic quality, league tables, and public policy: A cross-national analysis of university ranking systems, *Higher Education*, Vol. 49, No. 4, pp.495-533.
- Hazelkorn, E. (2007): The impact of league tables and ranking systems on higher education decision-making, *Higher Education Management and Policy*, Vol. 19, No. 2, pp.1-12.
- Hsiou-Hsia, T. (2007): The features of a world-class university: lessons from international ranking. In Sadlak, J. and Liu, N.C. (Eds): *World-class university and ranking: Aiming beyond status* (pp. 31-38). Bucharest and Cluj-Napoca: UNESCO-CEPES and Cluj University Press.
- Khelfaoui, H. (2010): Higher Education and differentiation based on knowledge. In Mazawi, A.E. and Sultana, G. (Eds): *The Year Book of Education: Education and the Arab World: Political Projects, Struggles and Geometries of Power*, Routledge: London.
- Lee, J. (2013): Creating world-class universities: implications for developing countries, *Prospects*, Vol. 43, No. 2, pp.233-249.
- Liu, N.C., Wang, Q. and Cheng, Y. (Eds) (2011): *Paths to a world-class university: lessons from practices and experiences*, Rotterdam: Sense Publishers.
- Nott, W. (2019): Arab Researchers Consider Emigrating. *The Pie News*, 5th December 2019. Available at: <https://thepienews.com/news/arab-researchers-want-to-emigrate-study/>.
- OECD (2020), Education in Saudi Arabia, Reviews of National Policies for Education, OECD Publishing, Paris, <https://doi.org/10.1787/76dfl5a2-en>.
- OECD (n.d.): Reviews of National Policies for Education: Higher Education in Egypt 2010. Available at: https://www.oecd-ilibrary.org/education/reviews-of-national-policies-for-education-higher-education-in-egypt-2010_9789264084346-en.
- Sadlak, J., and Liu, N.C. (Eds) (2009): *The world-class universities as part of a new higher education paradigm: From institutional qualities to systemic excellence*, Bucharest and Cluj-Napoca: UNESCO-CEPES and Cluj University Press.
- Saleh, M.A. (1986): Development of higher education in Saudi Arabia, *Higher Education*, Vol. 15, Nos 1-2, pp.17-23.
- Salmi, J. (2009): *The challenge of establishing world-class universities*, World Bank, NW, Washington, D.C.
- Shin, J.C. and Kehm, B.M. (2013): The world-class university across higher education systems: similarities, differences, and challenges. In Shin, J.C. and Kehm, B.M. (Eds): *Institutionalization of world-class university in global competition* (pp.275-286). Dordrecht, Heidelberg, New York & London: Springer.
- Taylor, P. and Braddock, R. (2007): International university ranking systems and the idea of university excellence, *Journal of Higher Education Policy and Management*, Vol. 29, No. 3, pp.245-260.
- Times Higher Education (2021): World University Rankings: 2020.
- Webometrics (2020): *Ranking Web of Universities: Saudia Arabia*. Available at: <https://www.webometrics.info/en/aw/Saudi%20Arabia%20>.
- Yamada, M. (2018): Can Saudi Arabia Move beyond "Production with Rentier Characteristics"? Human capital development in the transitional oil economy, *Middle East Journal*, Vol. 72, No. 4, pp.587-609.
- Yingjie, W. (2001): Building the world world-class university in a developing country: universals, uniqueness and cooperation, *Asia Specific Education Review*, Vol. 2, No. 2, pp.3-9.

Biography



Dr Abdelraouf M. Adam gained his PhD from the University of St Andrews and is an independent researcher. He is the author of four books, *The State and Society in Sudan* (in Arabic: al-dawla wal Mujtama fis-Sudan, published by Dar al-Hikma, London in 1997); *Cultural Dialogue and the Culture of Dialogue: The problem of identity in Sudan* (in Arabic: Hiwar al-Thaqafat wa Thaqafat al-Hiwar: Mushkilat al-hawiyya fis-Sudan, published by Dar al-Hikma, London in 1999); co-authored by Dr Abdullahi O. El-Tom, *Globalisation: Analytical, Critical View* (in Arabic: A-Awalama: Dirasa Tahleelia Naqdiyya, published by Dar Al-Warrak, London in 1999); co-authored by Dr Abdullahi O. El-Tom, *Proverbs of Western and Central Sudan*. Published by the Sudanese Studies Centre, Cairo, 2002).

