Change and Development of Higher Education in Sudan

Hibatallah Mohammad Elhassan Salim Neelain University, Sudan hibtallahsalim@hotmail.com

Shukran Abd Rahman International Islamic University Malaysia shukran@iium.edu.my

Abstract

Purpose: The aim of the study is to identify the philosophy and objectives of higher education in Sudan; assess the changes that have occurred in the policies of higher education since colonization and until the National Salvation Revolution; identify the sources of fund and finance system, as well as its management. The study also examines the national standards for quality assurance and identifies the scientific research programs and innovation embarked by higher education institutions in Sudan.

Method: Information that correspond to the research scopes were sourced from books, articles, published researches and report published by relevant parties. Descriptive analytical method was adopted to address the research questions.

Findings: The study provides fundamental background essential to understand the objectives and agenda of higher education in the Sudan.

Significance: The information is expected to create awareness on the arising issues in various high education agenda in Sudan, shed light on ways to address the problems and difficulties facing higher education in Sudan.

Keywords: Higher Education, Sudan.

Introduction:

Education is instrumental in developing individuals to making them fully functioning in their society. The process to produce knowledgeable people in a society starts from lower education level, and continued by higher education level. In the modern society, higher education sector has been regarded as an important contributor for a country's advancement. It is expected to train workforce, generate knowledge and nurture innovation. It is considered the center of human resources development which leads the development and change of a society to achieve effective economic and social progress. Besides this main function, higher education represents a major pillar of development. Higher education institutions are also mandated to undertake innovative and applied research, and to improve their quality in all areas that the community is entitled to. In short, higher education sector contributes to the provision of important services to society in all its forms of applied research projects, training or consulting (Magboul & Ibrahim,2015)

The aim of this paper is to discuss the philosophy and objectives of higher education in Sudan. It also highlights the changes that have occurred in the policies of higher education in Sudan since its colonial time and until the National Salvation Revolution. The paper also discusses the sources of higher education funding as well as the management of HE financial system. Besides, the paper discusses the national standards for HE quality assurance, and identifies the scientific research programs and innovation embarked by higher education institutions.

Historical Background:

In Sudan, education was previously limited to the teaching of Quranic and other religious subjects. At higher education level, there were some Sudanese who enrolled in activities which could be classified as modern education when they went to Egypt and enrolled in al-Azhar University. (Ali & Hassan, 2015)

The so-called formal education in Sudan had started by the British colonial administration after their reconquest of the country in 1898. It has been reported that formal English education in Sudan started way back in 1902 when Gordon Memorial College (GMC) was established as a primary school. It was then expanded and upgraded to become high schools which provided post-secondary training, such as the Kitchner Medical School at Gordon College in 1924, the School of Agriculture, and the School of Veterinary Medicine in 1938, and the School of Engineering in 1940. Each school was affiliated with the government department (public administration). In 1944 these schools were merged except for the Kitchner School of Medicine at Gordon College. In 1951, both colleges joined the University of London to become Khartoum University College. Graduates of Khartoum College received the Bachelor's degree from the University of London. By the year 1956, that college became University of Khartoum. (Ali & Hassan, 2015)

The Cairo University of Khartoum Branch was established in 1955, in the premises of Farouk Secondary High School, as a gift from the Egyptian people to the Sudanese people in conjunction with the independence of Sudan. The university emulated the traditions and policies of the University of Cairo which original model is based on the traditions, policies and standards of French

universities. The University conferred the degree of Bachelor of Arts, Law and Commerce. (Ali & Hassan,2015)

In 1961 the Higher Teachers Institute and the Intermediate Schools Training Institute were established. In 1966 the Omdurman Scientific Institute, which was awarded the international certificate equivalent to the certificate of Azhar had been upgraded into the Islamic University of Omdurman. In 1965 Juba Training Centre had been upgraded to Juba University, and in 1975 Al Jazeera University was established but admission of students began in 1978.In 1990 the Institute of Technical Colleges that was established in 1975, upgraded to Sudan University of Science and Technology. (Ali & Hassan,2015)

Throughout this period 1953- 1970 there were no unified policies or standards for institutions of higher education. Admission was divided between these universities and colleges and was not governed by a single list or standard requirement until the establishment of the Unified Admission Committee for Universities and Higher Institutes in 1971. The committee supervise the admission of students to the bachelor's degree only. The acceptance of the technical institutes was done at the acceptance office of Khartoum technical institutes. (Ali & Hassan, 2015)

In 1975, the law on the regulation of higher education was issued and the National Council for Higher Education was established. This is the first period in which a unified institution of higher education has been established that sets its policies and organizes the work of its institutions. Then formed a unified admission committee for all institutions of higher education (for universities and institutes) and remained under the chairmanship of the director of the University of Khartoum, and under the management of the academic secretary of the University of Khartoum. In 1979, it gained its independence from the academic secretary under the name of the Office of Unified Admission. (Ali & Hassan, 2015)

Higher Education Revolution-Philosophy & Objectives

The year 1990 is considered as a turning point of the higher education situation in Sudan. The year witnessed the birth of higher education "revolution" adopted by the National Salvation "revolution" that came to power in June 1989. This regime declared that the situation of higher education in Sudan had severely deteriorated in all aspects and there was an urgent need for "revolution" reform. (Elhadary, n.d.)

In consideration of the philosophy of higher education in Sudan that depends on the advancement of the society and its needs, and takes care of comprehensive development through the rehabilitation of individuals capable of creativity, innovation and interaction with the community, and to uphold the society spiritual and human values to reach the progress and development of the nation. (MHESR,2017), Higher Education Revolution of 1990 adopted several major objectives (Elhadary, n.d.):

1- Increase student intake at all institutions and reform admission policy (from elite students to all).

- 2- Geographical distribution of universities in different states of Sudan including rural areas avoid concentration of institutes in the capital.
- 3- Open chances for private higher education institution and relate educational programs with the local environment and the needs of society.
- 4- Abolish student boarding and subsistence schemes.
- 5- Encourage all students studying abroad to continue their studies at Sudanese institutions.
- 6- Use Arabic language as the language of instruction and research.

Due to these objectives of the higher education revolution in 1990, both public and private higher education institutions (HEIs) in Sudan have witnessed rapid expansion. The number of public HEIs increased from five universities and one polytechnic in 1989, to 35 universities, and 21 colleges and institution (Gasim, 2010). Regarding private HLIs, the number increased from two in 1989 to sixteen in 1996 and to 26 in 2003 (El Tom 2003). The number of private HLIs is now approaching 48 universities and 85 colleges and institution (see table 1). The expansion of HEIs happened at too rapid rate that the major role of universities in basic and applied research had been neglected and did not consider the need of the country. This has led to the claim by academics that higher education "revolution" in Sudan has stronger political influence rather than academic achievement. (Elhadary, n.d.)

Table 1: The number of HEIs before and after the "revolution" (Abu Al gookh,2015)

Institutions	1989	2015	
Public Universities	5	35	
Private universities	-	14	
Public colleges and institutions	12	21	
Private colleges and institutions	2	64	
Total	19	133	

Despite the positive side of the increase of the number of private institutions, there are negative sides. Geographically, 81% per cent of private HEIs are in Khartoum. Not only they are concentrated in one location, but also not well-prepared to address issues related to diversification. There are no major differences between disciplines offered by public and that of most new private institutions. It may be said that many of private institutions are based on profit rather than addressing the needs of the country for new specializations. (see table 2). (Abd El Rhaim& El Taher, 2015)

Table 2: Programs offered by specializations in higher education institutions

	Programs				
Specialization	Bachelor		Diploma		Total
	Governmental	Private	Governmental	Private	
Engineering Sciences	94	74	140	30	338
Health Sciences	85	87	24	33	229
Educational Sciences	165	3	5	-	173
Human Studies	112	59	35	3	209
Social Studies	93	136	135	93	457
Basic Sciences	57	-	34	7	98
Agricultural Sciences	94	-	21	1	116
Computer & Information Technology	51	67	129	32	279
Total	751	426	523	199	1899

In the year 1989-1990, about 5,000 students were enrolled in HEIs (Gasim,G., 2010), 3000 of them were enrolled in private HLIs. In 1994-1995 about 24,000 students were enrolled in private HLIs. In 1999-2000, HE system has admitted 38,623 students or 68.8% of total applicants. Enrolment at both public and private HLIs was of about 40,000 in 2003 (El Tom 2003).

It is worthy note that the Sudanese Ministry of Higher Education and Scientific Research as part of its objectives has formulated a quarter-century plan (2003-2027) that represented on the following points, (MHESR,2017):

- 1-Rooting science, and emphasizing the status of Arabic and English languages, and encouraging the mastery of other languages.
- 2- Preparing graduates to become highly skillful workforce and responsible citizens who can meet the requirements of the development orientation in the country.
- 3- Reformulating curricula and courses to combine between knowledge and skills of high level to be consistent with current and future state's trends and needs.
- 4-Giving special consideration to business creation skills, and building the entrepreneurial spirit of students to facilitate their employability after graduation so as not to remain mere job seekers, but to become active actors in job creation.
- 5- Giving priority to technical education and developing it to reach 60% of higher education.
- 6- Expanding admission to universities to reach the global percentage of the expected age group to be enrolled in higher education.

- 7- Enhancing the participation of higher education in building a culture of peace as a guarantee of justice, based on the right to satisfy the basic needs of individuals.
- 8-Encouraging civil and foreign education. Set standards and conditions to ensure its levels to participate in the spread of education, in accordance with international and local changes and developments, considering multilateral agreements of the World Trade Organization to open the way for investment in education and liberalization of capital movement leading to the entry of foreign investors in education, individuals, or institutions.
- 9-Investing in research to achieve economic and social goals, and taking into consideration researches in basic sciences which are the starting point for future innovations while ensuring balance between them and applied research.
- 10- Developing universities to become centers of excellence in research and development, establishment of special units and centers of future studies in order to provide knowledge and applications, in order to achieve economic and social development programs and projects.
- 11- Having interests on selecting researchers and preparing them in the framework of graduate studies, which must be taken care of and developed in all universities.
- 12- Helping to serve the community and promote its values.
- 13- Contributing to the development and improvement of education at all levels, especially through the preparation of teachers and curriculum development and educational research.
- 14- Activating the role of the university and conduct research in universities to transfer knowledge to students and society through the extended life education.
- 15- Promoting international cooperation in higher education and scientific research, both through the adoption of national policies and international arrangements about facilitating the permanent and unhindered return of scientists and researchers to the country.
- 16- Diversifying the sources of funding for higher education and scientific research, and the continuation of government funding, which will remain a key factor in ensuring the balance in the performance of scientific and social tasks.
- 17- Take care of the social welfare of the students, including their subsistence and housing.
- 18- Take care of the cultural, intellectual and sports activities of the students, and to develop their mental abilities to prepare a generation capable of assuming responsibility for understanding, awareness, and awareness of the requirements of the next stage.

19- Facing the increasing number of successful students who do not find sites in the current universities, by liberalizing university education from temporal and spatial constraints, reducing the cost of higher education while minimizing the negative effects of the higher education revolution.

Funding of HEIs

Historically, funding of higher education in Sudan came from the government and this trend continued till the birth of higher education "revolution" in 1990. The rapid expansion of the HEIs has resulted in remarkable funding decline. Currently public HEIs in Sudan are funded by the Ministry of Finance by 2.1% of public expenditure (in the mid- 1990s it was 5.2%), through a grant distributed by the Finance Department of the Ministry of Higher Education according to specific criteria of government universities. The grant covers all or part of the first semester in accordance to the size of the university: (Abbas,2015).

There are other means of financing through self- generated income, which includes: (Abbas, 2015).

- (1) tuition fees, that faces number of challenges that include (a) difficulties to obtain the fees from students, (b)lack of expenses imposed on students, this due to the difficult economic situation experienced by most Sudanese families, (c) Frequent grants and exemptions from tuition fees (example Students of Darfur province).
- (2) universities investments, many ambitions investment projects of some universities have been hit by a number of obstacles, such as providing letters of guarantees from the bank of Sudan, or excluding them from prohibitions on mortgage financing, or even customs facilities to help exempt productions inputs, taxes or other indirect support methods.
- (3) universities services such as advisory bodies and student service centers.
- (4) donations.
- (5) endowments.

When the number of universities jumped from five to 35 universities, the Sudanese public universities responded to this financial cut by amending their admission requirements to increase student intake, and raise student fees. Universities struggle for funding, contributes negatively to the standard and quality of higher education. (Elhadary, n.d)

Research in HEIs

Despite the increase in the number of universities in Sudan and the increasing number of faculty members and research centers in these universities, scientific research is lagging technological progress. There has been a decline in quantity and quality in recent years due to weak research capacity, lack of training for human resources development, and limited financial resources. Expenditure on higher education and scientific research includes government support, which is currently limited to paying wages and salaries, and a small amount of expenditure on facilitation, rarely including research spending in universities. (Abu Al gookh,2015).

There are several combined factors that affect directly and significantly on the level of the outputs of scientific research in the Sudanese universities, including (Abu Al gookh,2015):

- a- lack of detailed plans for the strategy of scientific research at the Ministry of Higher Education and scientific Research.
- b. Absence of research plans in most institutions of higher education.
- c- Weak funding, the global rate is 2-3.5% of national income, while in Sudan is 0.2%.
- d- The difficulty of publishing locally for periodic irregularities as a result for financial difficulties, and globally for not keeping pace with research related to local development with the requirements of publication in international journals.
- e- Lack of uniform data for research of professors and research of graduate students.
- f- Weak use of the results of scientific research due to absence of coordination between the universities and the beneficiaries of those researches, and the absence of the appropriate mechanism to benefit from the outputs of scientific research.
- g- The weakness of material and moral motivation for distinguished researchers, and the migration of many of them to improve their economic conditions.

Table 3: numbers	of researches	conducted in	Sudanese Un	niversities, (Abu Al s	gookh,2015)
						,

Year	Doctorate degree	Master	Diploma	Researches of Professors	Total
		Degree			
2006	670	3311	957	314	5252
2007	969	3532	841	819	6161
2010	742	2073	415	145	3384
2014	1.681	5.835	662	1.470	9.648

Quality assurance in HEIs

Considerable efforts have been made over the past few years to develop an effective national framework for quality assurance. Part of these efforts resulted in the establishment of the Evaluation and Accreditation Commission in 2003 as a specialized authority to create and encourage a culture of quality assurance and accreditation within all Sudanese universities, and to check out that the universities are accountable and effective in delivering academic programs and services. (Abdalla, 2016).

Study for Abdalla (2016) based on detailed reviewing of quality dimensions coupled with some descriptive and inferential statistical methods indicates that there is a quality gap between intended and actual quality assurance practices within all Sudanese universities.

Discussion

This paper has shown that the number of public and private HEIs has increased dramatically due to the slogan of higher education "revolution" adopted by the current regime. It is fair to argue that there was an urgent need to expand Sudan's higher education institutions due to the huge cost

associated with sending students abroad for a developing country like Sudan, and to the growing population. The distribution of universities in the states has helped to reduce cost of travelling and accommodation in towns or in Khartoum. Due to that, the percentage of female enrolled for higher education in relation to male jumped from 16 per cent in 1975 to 53 per cent in 2003 and today it is approaching 60 per cent (El Tom, 2003).

In addition, the "revolution" has made higher education accessible for all regardless of socioeconomic status and constraints. Accessible higher education has been made possible by the opening of non-conventional education such as distance education which also serves as a response to the growing social demand for more diverse academic programs. (Elhadary, n.d.)

conclusion

The increase in HEIs in all the states of Sudan has led to the increase of female students and reduction of the socio-economic cost to study in the capital and main towns. On the negative side, this paper reveals that the unplanned expansion has led to degraded quality of higher education institutions in terms of production of poor graduates and research output.

Critics of the higher education revolution argue that horizontal expansion occurred at the expense of intermediate stage education, as most newly established colleges and universities outside the capital city were opened in buildings that were formerly intermediate schools. The change in elementary education from 12 to 11 years (from 6+3+3 to 8+3) gave the government an opportunity to facilitate its policies by transforming many intermediate schools into public universities. Unlike their predecessors from the1960s to the late 1980s, most of the higher education instructors were educated in non-western countries. The Immigration of many professors and instructors abroad in search for better economic condition is considered another grave mistake from higher education financial policies towards academic staff. As natural result, the country and top public universities witnessed the largest "brain drain" since Sudan gained independence. Changes in higher education are being dictated by political expediency rather than social or economic needs. (Kilase,2013)

Reference

- 1- Ali, Awad Haj, & Hassan, Asim Ahmed, 2015, Assessment of Strategies & Institutions of Higher Education, *Deliberation of The Third Higher Education and Scientific Research Conference*, p.18-31.
- 2- Abu Al gookh,2015, Scientific Research in Institutions of Higher Education, reality & prospects, *Deliberation of The Third Higher Education and Scientific Research Conference* p.75-83.

 3- Abbas, Abd Al Raouf Ahmed, The Reality and Future of Higher Education Funding *Deliberation of The Third Higher Education and Scientific Research Conference*,2015, p. 216-203.
- 4- Abd Al Rahim, Youisf Hassan, & Al Taher, Abd AlHafiz, 2015, The Reality of Higher Education, Private and Foreign, in Sudan, *Deliberation of The Third Higher Education and Scientific Research Conference*, 2015, p. 216-203.

- 5- Abdalla, Suliman Zakaria Suliman, 2016, Quality Assurance in Sudanese Higher Education: Current Status & Challenges Ahead, *Journal of Total Quality Management*, Sudan University for Sciences & Techonology, volume 17, vers.1
- 6- El Tom, M.E.A. (2003). 'Sudan', in Teferra, D. and Altbach, P.G. (eds.), African Higher Education: An International Reference Handbook. Bloomington: Indiana University Press, pp. 563–573.
- 7- Elhadary, Yasin Abdalla Eltayeb, (n.d), The Higher Education "Revolution" in Sudan and its Impact on Research in Higher Education Institutions, *National Higher Education Research Institute (IPPTN)*, Bulletin 9.
- 8- Gasim, G. (2010). Reflecting on Sudan's higher education revolution under Al-Bashir's regime. *Comparative & International Higher Education*, 2(2), 50-53.
- 9- Kilase, Mohammad Eid, Academic Freedom & State Control on Universities: Lessons Learned From Sudan Experiences ,2013, International Journal of Humanities & Social Sciences, vol.3, no.10.
- 10- Ministery of Higher Education & Scientific Research (MHESR),2017, Retrieved from http://www.mohe.gov.sd/
- 11- Magboul, Osman Al Amin, Ibrahim, Al Taaib Mohammad Abd Al Mlik, University Professors Statues, *Deliberation of The Third Higher Education and Scientific Research Conference*,2015, p. 111,120.