### HIGHER EDUCATION OF YEMEN: HISTORY, DEVELOPMENT AND CURRENT STATUS

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### ABSTRACT

Higher education is new in Yemen compared to advanced countries, where began the establishment of Sana'a University in 1970 and Aden University in 1975. On this paper, researcher embarked on a review study related to the history and development of Higher Education in Yemen. This paper heavily depends on the literature exploration as a secondary source of data collection, while the primary data collection was relying on the information gained throughout the interview with the top management of the higher education of Yemen. The findings show the current status of Yemen Higher Education and the current roles of its institutions that have been evaluated based on the experts' opinions.

Keywords: Higher education, Yemen, History, Development, Current status

### INTRODUCTION

At present, knowledge has become a basic component of economic and social development (Salmi, 2015). Therefore, many governments' leaders and associations are talking about this secret wealth. According to Norwegian Prime Minister," Knowledge is the key to a future after the oil age" (Erna Solberge, 2014), and according to the National Governance Association (2001), "the driving force behind the 21st century economy is knowledge, and developing human capital is the best way to ensure prosperity". As a result, and for a sustainable economic growth and enhanced living standards, the ability of a society to create, choose, adapt, commercialize, and use knowledge is critically required (World Bank, 2002).

In this context, higher education is an important form of investment in human capital development and in fact it is rightly regarded as the "engine of development in the new world economy" (Ceyda ÖZSOY,2008). Higher education could be the corner stone in development where the workforce is trained to lead the social, economic, political and culture changes (Abedalhakeem T.E Issa & Ahmed Gumaa, 2012). Higher education institutions (HEIs) are places where young people are trained, gaining knowledge and skills. Thus, it is essential to investigate the current status of Higher education of Yemen to get clear view of its situation. Hence the aim of this work is to study the higher education in term of its history and development as well as the current status. In addition, the roles of the institutions of Yemen higher education are evaluated based on the experts' opinions.

Beside this introduction, this paper is structured to five sections: literature review, methodology, findings along with discussion, and conclusion. In Section 2, literature review is presented by highlighting the related work to Yemen higher education. The methodology that is used to conduct this study is explained in section3. Whereas, the outcome of this study is presented precisely in section 4 (finding and discussion). Lastly, the conclusion of this work is given in the section 5.

# LITERATURE REVIEW

## **Glance of Yemen**

Yemen is one of the developing countries which is located in the Southern part of the Arabian Peninsula. It is bordered by Saudi Arabia to the north and by the Red Sea to the west and Oman to the east. The total area of the Republic of Yemen is about 555,000 square kilometers, with a population of 22 million people of whom over 40% live in poverty. Average gross domestic product (GDP) per capita is about USD 930 and Yemen was ranked 153 out of 177 countries in the 2007 Human Development Index and is by a considerable margin the poorest country in the Middle East and North Africa region (Elsa Duret, 2010). The official language of the country is Arabic and Islam is the official religion of the country.

### **Higher Education in Yemen**

Higher education is new in Yemen compared to advanced countries, which began with the establishment of Sana'a University in 1970 and Aden University in 1975 (Jamil Ahmed, 2007). In 1990, Ministry of Higher Education and Scientific Research (MoHESR) was crafted and the universities were under its responsibilities until was eliminated in 1994 and then re-established in 2001 (National Strategy ,2005).

Community colleges were under the MoHESR until 2004 but then their responsibilities were transferred to Ministry of Technical and Vocational Education (MTVE). Ministry of Finance is controlling the budget over the MoHESR and it is the unit which decides on the amount to be paid to individual universities (National Strategy ,2005). Moreover, MoHESR is a supreme council of

universities led by the Prime Minister and consist of 8 other ministers, such as (MoHESR, Finance, planning, Civil Service, Education, MTVE, Social Affairs).

In terms of autonomy, Yemeni universities are considered wholly independent by article 3 of the university law which clearly states "Public universities are administratively, financially and academically independent" (National Strategy ,2005). But somehow, the Ministry of Finance is heavily constrained and appoints employees in each university finance department to ensure that they have prior permission from Ministry of Finance (Elsa Duret, 2010). As a result, if the university have not spent the budget by the year-end, they cannot carry it forward to the next year, and this can be considered as a serious issue. In 2002, the World Bank made a study survey and discovered that of YR 258 million allocated for acquisition of new books in 1998, not more than 40 per cent was used and the rest was returned to Ministry of Finance (World Bank, 2002).

In terms of structure, today, there are nine public universities and eighteen private universities, for a total of 27 universities including 179 colleges. (Yemen information center,2010). In light of this, the number of students enrolled with the governmental and private universities increased from 35,000 students in 1990 to 266,096 students in 2010. The percentage of females in higher education increased from 16% in 1990 to 30% in 2010. In private universities, the contribution of enrolling students increased from 0% approximately in 1993 to 23.5% from the total enrolled with tertiary education in 2009/2010. At the same time, the number of students enrolled in public tertiary education for the same year reached 203497 students and in the private universities about 62599 students (Indicator and data of education, 2008).

On the other hand, outcomes or the graduates are an important process where the total number of graduates from public universities in 2009/2010 reached 22,454 students, while the graduates students from private universities numbered about 5877 (Indicator and data of education, 2008). The following Table 1 shows the number of students graduates from public and private universities from 2004 to 2010.

Number of graduate	Year						
students	2004	2005	2006	2007	2008	2009	2010
Public universities	23329	25087	23357	22794	20383	23318	22454
Private universities	1783	2034	—	3710	5373	5685	5877

Table 1: Number of graduate students of tertiary education 2004-2010

*Source:* Indicator and Data of Education, Yemen Information Center (2008)

As shown in the above paragraphs, the numbers of enrolment and numbers of graduate students are growing from year to year. As a result, government gives special attention and spends funding on higher education.

The expenditure on education grew from 5.1 % of GDP in 1996 to 6.8 % in 2004 and this is considered high compared to most Arab and lower-income countries (National Strategy, 2005). Table 2 shows the percentage growth of spending from 1991 to 2006. Table 2 above shows that the GDP share for spending on education rose from a combined total of 5.5 % of GDP in 1991 to

7.7 % by 2006, with their share in total government expenditure showing a minor increase from 18.7 percent in 1991 to 19.8 % by 2006.

On the human resource side, Yemeni universities employed nearly 6630 teaching staff in the public universities in 2010, including 620 international staff. A total of 271 are holding postdoctoral degree, 720 as Associate Professors, 2,306 assistant professors and 784 teachers. The number of teaching staff in the private universities in 2008-2009 reached 1881 teachers, including 1734 Yemeni teachers, and the number of female teaching staff reached 193 Members, or 10.26% of the total teaching staff (Yemen National Information center, 2015).

	Year					
	1991	1994	1997	2000	2003	2006
Defense	23.3	39.0	18.2	16.8	18.2	14.1
Health	3.7	4.1	3.3	4.1	4.0	4.3
Education	15.0	21.6	15.2	18.0	17.0	15.5
Subsides	6.4	10.1	29.3	28.7	14.6	26.8
As share of GDP						
Health	1.1	1.2	1.2	1.4	1.4	1.7
Education	4.4	6.1	5.3	5.9	6.1	6.1

Table 2: Main government spending items, 1991-2006 (Percent of Spending and of GDP)

Source: United Nations Department for Social and Economic Affairs (2011)

In term of quality, until 2008 Yemen universities did not have a national quality assurance process (National Strategy, 2005). The absence of quality assurance resulted in giving the freedom to the private universities without evaluation. Mahyub, (2009), argued in his paper that, there are no formal mechanisms for quality assurance and accreditation processes have been fully developed within higher education institutions in Yemen.

Therefore, the Yemen government began to establish the quality assurance and accreditation unit in higher education and in Sept 2009, a Presidential Decree (Decree Number 210 for the year 2009) was issued to create Council named "The Council for Quality Assurance and Accreditation in Higher Education." (Abdullateef Hussain Hiadar, 2009).

The research culture within the universities is relatively weak or not well activated and still underdeveloped, with an absence of facilities such as laboratories, libraries, journal and technical staff (National Strategy, 2005). A look at the annual ranking of the Global Innovation Index (GII) shows that the Yemen ranking is 0. The following Figure 1 shows the ranking of Yemen in terms of Research and Development (R&D) (The Global Innovation Index, 2015).

As a particular issue related to this, the postgraduate students is very small where the number of postgraduate students was about 1500 in year 2005 in whole country and 2665 in the year 2008 (Indicator and data of education, 2008).

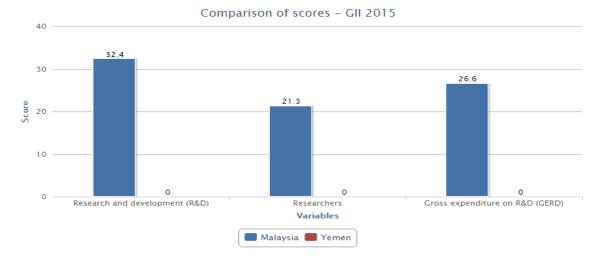


Figure 1: Yemen score in GII in terms of R&D

## **RESEARCH METHODOLOGY**

The data collection method used for this paper is qualitative method. The qualitative method was presented by the structured interview where the data were gathered throughout it. Those who have been formally interviewed are from top management of higher education and expert people in education and higher education in Yemen. Table 3 presents the participated experts in the interview, their positions, years of experience, and the way they were interviewed. There were four expert people from the top management of education and higher education of Yemen. We have been contacted usually via face to face and phones. To guide the interview discussion, we used a set of open- ended questions, related to higher education of Yemen. Therefore, open-ended questions method allows the respondents to discuss more issues that are important related to the research.

Table 3: Demography of i	interviewed people
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Position level	Years' of experience	Interview method	
Minister of Higher Education 2006-2011	35 Years	Face to face	
Minister Higher Education 2014-2016	40 Years	Face to face	
Deputy Minister Higher Education 2001-2015			
Minister of education 2003-2007	20 Years	Phone	
Dean of Postgraduate Studies –university RHODE Island and consultant to Deputy Minister Higher education Yemen	20 Years	Phone	

# **RESULT AND DISCUSSION**

Based on the conducted literature review exploration and the interview with experts, there are two major findings of this review. The current image of the higher education in Yemen is identified and the evaluation of HIEs' role is obtained with percentage for each role. The identified current image of the higher education in Yemen is presented as follows:

- 1. The current situation and as a result of the earlier stages can be represented by the total number of male and female enrolled in the public and private universities. The increase of the enrolment students did not cope with teaching staff development where the ratio of the staff: students were 1:20 in 1990 and the ratio now is 1:50.
- 2. The development that happened in the students' enrollment was not associated with a quality development in a number and type of teaching staff as well as limited expanding in buildings, study halls, laboratories, libraries, requirements of Information Technology and the electronic library.
- 3. The majority of student's enrolment is in humanities and social sciences that represented by 86%, and only 14% study in the science and technology.
- 4. Enrolment of female students represents only 26% which raises the issue of equity.
- 5. The percentage of postgraduate students does not exceed 2% from the total number of students in the higher education institutions.
- 6. Weak governance in the higher education institutions and lack of leadership which have a future vision in how HEIs should be in the future.
- 7. Shortage in financial resources and bad usage for the available resources. The funds from the government and the tuition fees as well are consumed as operating expenses under many weak excuses.

In addition, a percentage for the four well-known roles of HEIs is given to Yemen HIEs by the experts. Table 4 shows the role evaluation of the HIEs in Yemen and its percentage.

No	Universities Roles	Yemen universities	Percentage
1	Teaching and learning	Perform good	90%
2	Scientific research	Still limited	40%
3	Serving the society	Still limited	20%
4	Predict the future	Very absent	0%

Table 4: Percentage for the roles of Yemen universities

# CONCLUSION AND RECOMMENDATIONS

This paper aimed to study the Yemen higher education in term of highlighting the history and development and identifying the current status with role of its institutes. Literature exploration and interview methods are used as research instruments and method for date collection purpose. The related work to higher education were collected by conducting the literature exploration, while the interview with four experts have been performed to qualify the findings that have extracted from

literature exploration. The current status of Yemen Higher Education and its institutes are the findings of this work. The current status has indicated several issues such as student enrolments, teaching staff, ratio of teaching staff to students, weak governance of HIEs, shortage of financial resources, percentage of postgraduate students and the percentage of the role of HIEs as well as the number of public and private institutes.

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