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التعليم العالي وسوق العمل في ليبيا (دراسة وصفية تحليلية)

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المستخلص: أن معرفة حجم مساهمة كل قطاع في النشاط الاقتصادي من خلال معرفة حجم القوى العاملة في تلك القطاعات يمكن أن يساعدنا على دراسة احتياجات سوق العمل. وعلاوة على ذلك لأنها تساعدنا على وضع خطط وسيناريوهات للتعليم العالي وسوق العمل بما يتفق مع حجم كل قطاع اقتصادي، وأهداف التعليم العالي. وفي ضوء كل ما قيل عن التعليم العالي وسوق العمل الليبي في هذا البحث يمكننا تلخيص النتائج الرئيسية على النحو التالي: انخفاض مشاركة خريجي التعليم العالي الليبي في القوى العاملة؛ انخفاض مشاركة المرأة الليبية في القوى العاملة، إذا ما قارنا ذلك مع حجم الإناث من مجموع السكان؛ ما تزال الجامعات الليبية تُعاني من ضعف في سياساتها وبرامجها، وضعف مُدخلاتها ومُخرجاتها؛ عدم تنوع هيكل الاقتصاد في ليبيا.

الكلمات المفتاحية: انخفاض المشاركة، القوي العاملة، ضعف المدخلات والمخرجات

Higher Education and Labour Market in Libya (Descriptive and analytical study)

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Abstract: Knowing the contribution of each sector to economic activity through understanding the size of the workforce in those sectors can help us study the needs of the labor market. Furthermore, it assists us in developing plans and scenarios for higher education and the labor market that align with the size of each economic sector and the goals of higher education. Based on all that has been said about higher education and the Libyan labor market in this research, we can summarize the main results as follows: Low participation of Libyan higher education graduates in the workforce; Low participation of Libyan women in the workforce compared to the female population size; Libyan universities still suffer from weak policies, programs, inputs, and outputs; Lack of diversity in Libya's economic structure.

Keywords: Low participation, workforce, weak inputs and outputs

ACRONYMS: .....

***HE**: Higher Education, **LM**: Labour Market, **LGPC**: Libyan General Population Census, **LCEQAIHE**: Libyan Centre of Ensure Quality and Adoption of Institutions of Higher Education, **LHE**: Libyan higher education, **LLM**: Libyan labour market, **UN**: United Nation*

***INTRODCTION*:** .....

Any discussion about the evolution of both the higher education (HE) and the labour market (LM) in Libya is hampered by the fact that any researcher will find it difficult to gather accurate and reliable statistics about the LM and HE from both official and non-official sources.

But there is another way to solve this problem, through reliance on the Libyan General Population Census (LGPC) from 1954 to 2006, because the LGPC is the official statistics of the state since Libyan independence to date. And also through them, it is possible to gather information on the population distribution by economically active population and economically inactive, educational and employment status, and sex and age classes. So, this research discusses the following key issues in the context of the literature available:

1. The development of HE in Libya based on the secondary data available on the sector. This comprises mainly the statistics for the number of students in universities and graduates, and educational status of the wider Libyan population.
2. The development of LM in Libya on the basis of the available research on the economically active population by sectors of economic activity.

SECTION ONE: ***Research Methodology:*** .....

► ***Statement of the problem:*** In Libya, since the 1960s and 1970s until now the major bottleneck of socio-economic development is the shortage of skilled and semi-skilled national labour force. As Mogassbi (1984, p. 6) has written: “The discovery and exportation of oil has caused Libya to accumulate a super-abundance of money while experiencing a shortage of skilled and semi-skilled workforce. In fact, trained manpower is the most decisive resource limiting Libya’s current rate of socio-economic development. The contention is unique, because in most developing countries, manpower is one of the most abundant factors of production while hard currency and potential capital are scarce. Such was the case for Libya slightly over two decades ago”

Moreover, according to Abd-Aldaym (1984) and Al-Badri (2007), the fundamental problems facing HE in the Arab world lie in the weak relationship between HE and society. There is lack of balance between the outputs of HE on the one hand and LM needs on the other. They also identify a low level of measurement and evaluation of the relationship between the HE outputs and the LM needs. In addition, Libya is undergoing economic and educational reform programmes encouraging increasing openness to the outside world. In this case three matters emerge that require urgent investigation:

1. The ability of HE to meet the skills needs of the LM in a rapidly changing context.
2. The ability of the LM to absorb HE skills.
3. The development of methods that will facilitate educational planning in the context of the Libyan situation.

Here, can be submitted four different scenarios that may explain the relationship between LHE outputs and the LLM:

1) The LLM is capable of absorbing all the outputs of the LHE.

2) The LLM is sound but the LHE outputs are unsuitable for the requirements of that market.

3) The LLM is incapable of absorbing the LHE outputs in spite their fitness to the economic and social development needs.

4) The LM is incapable of absorbing the HE outputs.

With regard to the second and third conceptions, these may exist in most countries, especially those in the developing countries. Also within these two conceptions there are a group of simulation and difference.

The extreme cases mentioned in the first and fourth conceptions are intended to reveal the full extent of the possibilities in the relationship between the LM and the HE outputs and to broaden the analysis. This means that the Libyan LM could not be capable of absorbing all the outputs of the LHE at the same time.

In contrast, there are mistakes in the privatization programmes pursued by the Libyan government, where Al-Gaddafi (2001, p: 12) confirmed that: "There are many negative aspects of privatization programmes [Sale of public sector institutions to the private sectors]. Also, there are no clear scenarios of how to use of Libyan human resources".

What is more, Al-Badry (2006, p. 150) in his study about HE problems in Libya says: “Higher education has no clear policies and scenarios, which has made a lot of problems in the higher education programmes".

Beyond this, Mogassbi (1984, p. 223) in his study about perception of the HE system and manpower development in Libya through analysis of a questionnaire survey found that: “It is obvious that the majority of the respondents to the questionnaire showed their agreement that the present university functions and roles are not able to respond to the needs of national manpower, therefore they should be re-evaluated and reformed”. In the same way, the International Labour Organization (ILO) (2007) emphasized: There is a lack of effective coordination between government departments and educational agencies within Asia and the Pacific countries. A coherent institutional framework is a crucial factor in facilitating effective training policies towards the development of a skilled human resource base. However, many developing countries do not possess the institutional capacity or organization to systematically coordinate their national policies.

► ***Objectives of the Research:*** The main objectives of this research are to:

1. Prepare a literature review covering the development and purpose of HE and LM in Libya.
2. Build a historical and baseline context from available secondary sources to analyse of the contemporary relationship between HE and the LM in Libya from 1955 to 2006.

► ***Research methodology:*** In all educational research there is a specific purpose for forming a particular position to persuade of the significance of its claims, and there is methodology, which can be used in that research. This means that a research project must be designed to use research methods in the best way in order to achieve the its objectives.

The current search relied on the descriptive analytical method, where the secondary analysis deals with data gathered by researcher (A quantitative method is used in this research, because it

is more appropriate for research objectives). These sources have been collated and evaluated in order to provide the research with a baseline for the primary data collection and the analysis and interpretation of this data. The aim of the analysis of these statistics and data is in order to understand tends of development of HE and the LM in Libya. However, there is no specific body responsible for coordinating most of the economic sectors, which would have an overview of these sectors or data relating to them. On the other hand, data is not available on employment and the workplace in Libya, because there is not a system for the collection of this data at the workplace and a national level. Also, there is a lack of clarity of the administrative division [Functional structure of work] in the workplace.

► ***Definition of terms:***

- Libya: An Arabic African country in the northern part of Africa with total population of approximately 6 million, and 100 percent Sunni Moslems. (Mogassbi, 1984; LGPC 1954, 1964, 1973, 1984,1995 and 2006; Libyan in Figures, 2009; and Statistics Book, 2006)

- Libyan Higher Education (LHE): A system of LHE consisting of 12 public universities - in 2005 - with 246000 students, and 32 private universities - in 2003 - with 5000 students. (Al-Tier, 2005 and Elzalitni, 2008)

- Libyan Labour Market (LLM): LLM is a system consisting of all companies, factories and other institutions of economic activity that depend on the interaction among workers and employers for understanding the patterns of wages, employment, and income, as well as the type of commodities and services produced, where most economic activity is concentrated in the public sector because of the small size of the private sector.

SECTION TWO: *Libyan population: .....*

The population census is one of the most important sources of the study population characteristics in any country. To date six official censuses have been conducted in Libya. The first was in 1954 and the latest was in 2006. But it is also important not to forget that in addition to these censuses, the Italian government has two calculations of the population in Libya in 1933 and 1936 assessing the total population at 655,000 and 733,000 respectively. Table 1 shows population growth in Libya from 1954 to 2006.

Table (1)

Population growth in Libya from 1954 to 2006

Year Census	Gender		Total	Growth rate %
	Males	Females		
1954	564,450	524,439	1,088,889	-
1964	813,386	750,983	1,564,369	3.8
1973	1,057,919	994,453	2,052,372	3.4
1984	1,651,562	1,579,497	3,231,059	4.21
1995	2,501,766	2,297,309	4,799,075	2.80
2006	2,687,513	2,610,639	5,298,152	1.83

***Sources**: Researcher collated the data from raw data published in the LGPC 1954, 1964, 1973, 1984, 1995 and 2006*

Through an examination of the figures in Table 1 it is evident that between 1954 and 1984, population growth greatly increased with annual growth rate of approximately 4%, this may be due to several reasons including:

1. The increasing birth rate.
2. The return of numerous Libyans who fled to neighbouring countries during the period of Italian control and during the Second World War.
3. The discovery and exploitation of oil and the improvement of the social services and the per capita income.

In the same way, Zohry (2002) adds other reasons that have been found across the North Africa region: The high fertility sustained over the 1960s and 1970s in North Africa has produced a young age structure and has strengthened the future momentum of population growth. The strong population growth momentum will have a great effect on the future demographic situation in the countries of North Africa. Therefore, the recent decline in fertility in North Africa will not have its full demographic impact for several years. With sustained high fertility the age composition of the population will be dominated by the young, those who are age 15 or younger

This high rate of Libyan population increase may reflect an official policy of fostering rapid growth to meet labour needs and to fuel economic development. But it can be noted that the growth rate has increase in 1984 to 4.21 percent, and the growth rate has declined in 2006 to 1.83 percent. In addition, it can be noted that the rate of growth amongst the non-Libyan population has reached the highest level in 1973 at 16.7 percent; it also reached its lowest level in 2006 at 0.01 percent. This shows the size and contribution of non-Libyan population in the labour force.

Apart from this, “Geographic factors, particularly, precipitation, temperature, surface and underground water, to a large extent determine the pattern of population distribution in Libya; moreover, other factors such as economy structure cannot be ignored" (Misrati, 1983, p. 184).

On the whole, there is a striking difference in the geographic distribution of the population among the country’s regions (factors which determine the pattern of population distribution can help to explain the presence of most universities in northern Libya). This pattern of distribution can be attributed to the great aridity that dominates the country which led to more than 90% of the population to be concentrated along the coastal area in general and particularly the north-eastern and north-western coasts.

According to the Libyan Statistics Book (2003, p. 22): “The average population density is very low, about 3.20 people per km². However, the population density varies from one part of the country to another; it is high along the coast, estimated at more than 2207 people per km² in Tripoli and more than 796 in Benghazi, whereas it falls to less than one person per km² in the interior like El Kufra and Murzuq”.

This discussion of the geographic distribution of the population gives a clear idea of the magnitude of population in each region and therefore the size of available human resources, which gives us greater ability when studying or planning of HE and human resources. Furthermore, an understanding of the size and population distribution and also rate of population growth will enable a comparison with the size and growth of age groups that support the human resources as well as those within the scope of HE and LM. To be more precise, its important to focus on the age class from 15 to 64 because the participants in HE and LM are drawn from this age group, and Table 2 shows the population in this age group (15-64) during the period from 1954 to 2006.

Table (2)
Population growth in age class (15-64) from 1954 to 2006

Year Census	Gender	Age Classes						Total
		15-24	25-34	35-44	45-54	55-64	Total	
1954	Males	93,779	80,050	51,105	43,959	31,865	300,758	576,351
	Females	82,600	75,634	51,569	39,790	26,000	275,593	
1964	Males	122,828	111,514	78,961	50,487	37,357	401,147	769,440
	Females	115,098	107,716	70,760	44,950	29,769	368,293	
1973	Males	182,086	153,174	126,565	81,594	41,860	585,279	1,064,667
	Females	164,325	122,832	95,113	61,709	35,409	479,388	
1984	Males	331,320	165,472	114,150	92,358	69,332	772,632	1,503,707
	Females	316,493	156,554	108,411	85,011	64,606	731,075	
1995	Males	552,477	341,379	166,585	119,363	93,635	1,273,439	2,504,043
	Females	537,522	335,226	162,691	112,288	82,877	1,230,604	
2006	Males	580,231	535,976	336,200	165,330	112,734	1,730,471	3,427,413
	Females	566,082	523,310	336,449	166,431	104,670	1,696,942	

***Sources**: Researcher collated the data from raw data published in the LGPC 1954, 1964, 1973, 1984, 1995 and 2006.*

Table 2 presents the census data for the 15-64 age range as these are the economically active years. These cohorts of the population accounts for 52.9% of the total population in the 1954 census, and in the 1964 census the ratio was 49.2%. In the 1973 census the ratio is 51.9%, while in 1984 decreased to 46.5%, in 1995 was 52.2% and finally in 2006 became 64.7%. This shows that since 1954 around half of the populations have ability to be economically active, ranging from 3.5% below and 16.5% above this level. In addition, because of the age and stage in their life cycle, a proportion of them are within HE. This led to increase the number of students in HE, because of increase number of population in age range 15-64. This could give a clear indication of the size of the human resource that were available during the period in question.

According to the United Nations (UN) (2000, p. 309) their demographic projections for Libya indicate: “The population will continue to grow between 1.2% and 2.2% over the next few decades”. This may mean that the contribution of this category in the total population could rise to more than 50% in the coming decades. In fact, this information about population (15-64) is very important for this research because it includes HE graduates and the labour force.

***SECTION THREE:* Development the Libyan higher education (LHE) and Libyan labour market (LLM): .....**

Education in Libya is the tool of change and reform, thus increasing the importance of HE in our lives day by day especially in the age of scientific and knowledge revolutions in various areas, it is one of the sectors that proves reliable in achieving the development goals of the social sector. So Tavakol (2007, p. 2) argues: "Today more than any other time in human history, nations' wealth or poverty is

dependent on the quality of HE, because of, generation, transfer and dissemination of knowledge has been the university's main objective from the very beginning, and knowledge constitutes the core in processes of the contemporary society".

On the whole the evolution of HE in Libya can be examined through the study of the growth of universities, numbers of students enrolled and graduates. Table 3 shows growth in the number of public universities in Libya from 1955 to 2005.

Table (3)
Growth in the number of public universities in Libya from 1955 to 2006

*Type of Institution****	*Years*					
	1955	**1965**	**1975**	**1985**	**1995**	**2006****
Comprehensive University *	1	1	2	5	5	10
Specialised University *	00	00	00	5	5	1
Open University *	00	00	00	1	1	1
Total	1	1	2	11	11	12

Sources: **Elzalitni, 2008, p. 46. **GAI, 2006, p. 133.*

Notes: **** Comprehensive University: Teach all subjects (engineering, medicine, arts and law etc)*
****Specialised University: Teach one subject (engineering or medicine or arts or law etc).*

In Table 3 it can be noted that the universities' growth has been slow until 1975 this can be attributed to a small population, where the population of Libya in 1973 was 2,052,372 in accordance with the general census population in that year (see Table 1-3) and also the lack of financial resources because of low oil prices in the sixties and early seventies of the twentieth century. In contrast, "the Libyan government began building a new headquarters for the University of Libya in Benghazi and Tripoli since 1968" (Libyan University, 1972, p. 24)

By 1985 the number of universities increased to 11 universities, 5 of which are comprehensive, 5 Specialised University and one Open University. And in 2005 there were 12 Universities, 10 of which are comprehensive, 1 University Specialised and one Open University. This can be attributed to the increase in oil revenues which gave Libya the opportunity to accelerate the process of educational development at the end of seventies and the beginning of eighties, as well as the re-structuring and reform of the educational system in 1980.

However, some researchers argue: "That this number of universities was excessive for a population as small as Libya's (about 5.5 million according to the census in 2006). And educational planners had suggested a ratio of 1 university to 1,000,000 people" (Elzalitni, 2008, p. 45).

In the same way, some analysts have argued that the establishment of universities has not been appropriately planned to meet the actual needs of the different regions of the country. This unplanned expansion has been well summed up by Al-Badri (2006), who argues that: Haphazard and sudden expansion of universities has been conducted without taking into account the actual distribution and density of the population. These ideas have probably been born of the moment because they did not take into account the simplest requirements of the HE institutions such as appropriate buildings, administrative staff and most importantly, sufficient number of faculty members to carry out the various teaching responsibilities at these newly established universities.

As for private universities (Private Sector) these universities did not start their activity until 1997 and Table 4 shows the growth in the number of private universities and the number of students enrolled from 1997 to 2003.

Table (4)
Growth in the number of private universities and the number of students enrolled from 1997 to 2003

Years	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*
Number of universities	1	3	5	7	15	25	32
Number of students	*	*	257	255	1145	3600	5000

***Source**: Al-Tier, 2005, p. 44. **Note**: * Data not available*

In Table 4 it can be noted that in 1997 there was one private university without students, also in 1998 there were not students at three private universities, and in 1999 there were 5 universities, and 257 students. The number of private universities rose from 7 in 2000 to 32 in 2003. This means that the growth rate was about 10 universities per a year, and this rate is very high if compared to the number of students, which did not exceed 5000 students nationally in 2003.

And maybe this is what prompted some researchers and writers to criticize those universities, as Al-Tier (2005, p. 44) has said: "What happened in Libya is something quite different from what is happening elsewhere in the world. Between day and night some people decided to found a university, and they have not experience and knowledge about working at university. And those universities do not have infrastructure such as headquarters, libraries, laboratory and equipment. And do not have full-time faculty members and administrative staff, also that the number of students enrolled in some of them are very small. It seems that the establishment of private universities has become like a joke."

Furthermore, Alfaidy and Ibrahim (1997, p. 199) have specifically commented on the various shortcomings that were affecting the productivity these universities: "It was noted that some of the new HE institutions have no economic value due to the lack of sufficient equipment and professional human resources, and not to mention the low level of educational attainment of this new faculty. It has also been observed that a large proportion of higher institutions tend to enrol in the social science and humanities, this is despite the fact that the society is badly in need of graduates of science disciplines… as it continues to rely on expatriates both at secondary and postsecondary levels in the areas of education as well as training".

Fundamentally, this focus on the university raises the issue of what is meant by a "university" in Libya? How is it defined and how can it be set up? Does it has degree awarding powers? The Libyan Centre of Ensure Quality and Adoption of Institutions of Higher Education "LCEQAIHE" (2007, p. 7) has defined the university in the guide of quality assurance and accreditation as: "A scientific institution dealing with HE, and scientific research and community service. And with legal personality and independent financial, and provide scientific programmes and research courses are approved and granted bachelor's degree, doctoral and master's through the colleges and various sections".

Having discussed the development of the university sector through an analysis of the establishment of the institutions, the next section will move on to discuss the growth of the number of students enrolled in the Libyan universities. But we note that all statistics on Libyan students and there is no clear information on the numbers of students in general and the numbers of non-Libyan students in particular. This has meant that the gathering and collating the best available data has required

considerable work as these data were not available from a single source. The data collected does not include compiled statistics for the number of students enrolled in Libyan universities in some years because; despite considerable effort and extensive enquiries it was not obtainable when conducting this research. Table 5 shows the collated data on the number of students enrolled in Libyan universities from 1955 to 2006 which has been gathered from 11 separate sources. It should be noted the range of sources the researcher has reservations about the comparability of the data across years, but this is the first time that a continuous year-on-year data set has been compiled for the university sector in Libya.

Table (5)
Enrolment of students in Libyan universities (from 1955 to 2006)

Academic Year	No of Students	Academic Year	No of Students	Academic Year	No of Students
1955-1956(1)	31	**1972-1973**(2)	7100	**1989-1990**(11)	47404
1956-1957(1)	79	**1973-1974**(2)	8200	**1990-1991**(2)	64248
1957-1958(1)	189	**1974-1975**(2)	10100	**1991-1992**(2)	67248
1958-1959(1)	331	**1975-1976**(2)	11100	**1992-1993**(2)	72197
1959-1960(1)	526	**1976-1977**(2)	11100	**1993-1994**(2)	116473
1960-1961(1)	705	**1977-1978**(2)	12100	**1994-1995**(2)	144412
1961-1962(1)	853	**1978-1979**(2)	12000	**1995-1996**(7)	126348
1962-1963(1)	1047	**1979-1980**(2)	12700	**1996-1997**(10)	136274
1963-1964(1)	1196	**1980-1981**(2)	17900	**1997-1998**(11)	*
1964-1965(1)	1436	**1981-1982**(2)	26200	**1998-1999**(4)	165447
1965-1966(1)	1722	**1982-1983**(2)	29900	**1999-2000**(10)	173214
1966-1967(1)	2041	**1983-1984**(8)	35387	**2000-2001**(10)	198521
1967-1968(1)	2242	**1984-1985**(8)	34469	**2001-2002**(8)	171385
1968-1969(1)	2671	**1985-1986**(4)	36600	**2002-2003**(3)	171394
1969-1970(1)	3215	**1986-1987**(8)	38840	**2003-2004**	*
1970-1971(1)	4661	**1987-1988**	*	**2004-2005**(5)	150171
1971-1972(2)	5600	**1988-1989**(6)	269302	**2005-2006**(9)	246000

Sources: *Adapted from (1): Libyan university, 1972. (2): Al-Falah and Salem, 2006, p. 106 and Al-Shakshwky, 2006a, p. 143. (3): GAI, 2003, p. 44. (4): Al-Tier, 2006, p. 42. (5): GAI, 2004, pp. 50-70. (6): Al-Gaddafi, 2001, p. 4. (8): Al-Maqury, 2006, p. 105. (7): GAI, 1998, p. 26. (8) Al-Badri, 1993, p. 127. (9) General People's Committee for HE, 2005, p. 10. (10) GPC "General People's Committee" (2004). (11): Mansour, 2003, p. 76.*

Note: * *Data not available*

Elfenish et al; (1998) have doubted the accuracy of available official statistics about students at the Libyan universities. However, the numbers of university students that are shown in the Table 5, suggest that:

1. That students enrolled at universities were growing steadily, and in the academic year 1988-1989 there were about 269,302 students. Later changes to these numbers show unbalanced change;

2. That increase in the number of students in some years and a sharp drop in other years;

3. That the sharp fall in the number of students at Libyan universities from 269302 students in the academic year 1988-1989 to 26200 students in the academic year 1989-1990 is due to restrictions on the admission of students to study at universities (can go to the university if their rate of graduation is high 2 from 4, and above/ 75% from total rate of graduation).

It is possible to ascribe these growth trends in the number of students enrolled in institutions of HE to several reasons, including:

1. High population growth rate, where the contribution of the high rate of population growth in increasing the number of students at the university.

2. Closure of teacher training colleges prompting the students to demand university education instead.

3. The university system is obligated to provide college education to every secondary school graduate, through free access and open door admission to all colleges of the university.

4. Higher social status for university graduates.

5. The absence of a clear admissions policy at universities relating to the selection procedure for applicants to university learning programmes.

6. Employment policy, which gives access to jobs for university graduates more than others.

With regard to growth of the graduates of Libyan universities Table 6 shows the number of graduates of Libyan universities from 1956 to 2006.

Table (6)
The number of graduates of Libyan universities from 1956 to 2006

Years	Number of graduates	Annual growth rate
1956-1960(1)	136	-
1961-1965(1)	819	98.8%
1966-1970(1)	1953	27.6%
1971-1975(2)	3648	17.4%
1976-1980(2)	9317	31.1%
1981-1985(2)	12863	7.6%
1986-1990(2)	12998	0.21%
1991-1995(2)	50295	57.4%
1996-2000	*	*
2001-2005(3)	148212	*
2006	*	*

Sources: *Adapted from (1): Libyan university, 1972, p.329. (2): Al-Shakshwky, 2006a, p. 145. (3): Al-Maqury, 2006, p.99.*
Note: * *Data not available.*

Fundamentally, there is a contradiction in the numbers of graduates and lack of statistics about university graduates in some years. Nevertheless, the trends observable in the data presented in Table 6 could be summarised as follows:

- The number of university graduates had increased steadily until 1980; and
- The rate of growth in the number of university graduates from 1981 to 1990, decreasing dramatically; and
- Between 1991 and 1995 the number of graduates increased dramatically, up to 50,295 graduate.
- Between 2001 and 2005 the number of university graduates increased, up to 148,212 graduates.
- In 1996-2000 and 2006 there are no statistics on university graduates.

Actually, this discussion of growth of graduate numbers and its evident erratic change over the period concerned suggests the reason for the rise and decline in the number of university graduates may be the result of absence of a clear policy at universities. As Al-Badri (2007, p. 2) has confirmed: “Returning to higher education in our country and despite the proliferation of universities throughout the country, it is still weak in its policies, programmes, output and weak in its input, and this means that the higher education system in Libya lacks diversity”

Beyond this, Mniena (2001), in her study about the effect of structural and administrative changes on higher education policies in Libya, has confirmed that: The frequent and incoherent structural and administrative changes have affected adversely the stability of the sector and its ability to design and implement educational policies in general, and a central admissions policy in particular.

Additionally, she has argued: The individual admission polices practiced by the different colleges at Garyounis University, and the transfer of many students from one college to another, reflected clearly the inability of the Secretariat of Education (Ministry of Education) to implement and enforce its policies on one hand, and divided the central admission policy of its content and importance, on the other hand. (Mniena: 2001)

Apart from this, the Symposium on Higher Education and Development in Libya (SHEDL) (2006, p. 422) has recommended: "Reform and rationalization of the student admission policies at the universities and higher institutes, and linked to the requirements of development and the labour market needs, and admission of students according to their abilities and inclinations".

Under these circumstances the HE system in Libya lacks diversity although the development of the university sector has to some extent at least spread its institutions throughout the country. Equally importantly, the administrative changes have affected adversely the stability of the HE and its ability to design and implement educational policies.

Based on the foregoing discussion it is possible to review the contribution the LHE graduates in the LLM through a review of the educational situation of the Libyan population in the age group 15-64, which represents the economically active proportion of the population, as shown in the Table 7. This Table represents a rare representation of this data in one single Table. The researcher has had to gather and collate these data from a range of publications in order to develop an overview of the evolution of the educational status of the population because this information is not widely available in the form presented below.

Table (7)
Total of Libyan population (15- 64) by educational status from 1954 to 2006

Educational Status	Gender	Census Years					
		1954	1964	1973	1984	1995	2006
Illiterate	Male	222,992	235,679	161,559	143,072	82,114	132,912
	Female	255,237	351,033	366,500	407,726	313,838	349,531
Read only	Male	418	3,612	6,287	6,697	*	11,671
	Female	33	427	1,418	3,443	*	12,137
Read and Write	Male	71,191	110,395	159,066	131,186	119,672	89,845
	Female	3841	11,535	38,742	78,711	126,673	93,144
Primary	Male	*	31,031	78,225	118,744	266,493	234,923
	Female	*	3,413	17,380	62,097	200,500	197,599
Preparatory	Male	*	14,486	33,726	71,905	377,436	536,870
	Female	*	1,429	6,932	31,368	303,377	415,795
Secondary	Male	*	4,431	26,234	87,182	302,524	500,805
	Female	*	294	5148	47,605	218,770	427,022
Above Secondary	Male	*	*	1,284	3	7,751	*
	Female	*	*	76	1	1,898	*
University Degree and Above	Male	*	1,408	6,126	25,109	75,800	172,748
	Female	*	91	433	3,729	28,673	141,341
Not Stated	Male	6,178	106	563	*	169	3,339
	Female	15,527	81	333	*	55	17,665
Total		575,417	769,451	910,032	1,218,578	2,425,743	3,337,347

Source: *Researcher collated the data from raw data published in the LGPC 1954, 1964, 1973, 1984, 1995 and 2006.*
Note: * *Data not available.*

In 1954, there is no university graduate in age group 15-64; this due to the absence of universities in Libya until 1955. Also, prior to independence there was no evidence of sending even senior civil servants overseas for university training. Whereas, in 2006 the proportion of the HE graduates in this category has increased to 9.4%, and male HE graduates 5.2% of the total population in the same age group, also the percentage of female HE graduates 42.04%.

Through an examination of the above figures in the Table 7, was noted that the contribution made by graduates of the HE to the human resources needed by the LM in Libya was very low despite the increase in numbers of HE graduates, which are shown in the Table 6-3, this may because of:

1. A high rate of failure and leakage among university students; and
2. A reduction in the portion of females in the LM despite the high numbers of female students enrolled at the Libyan universities; and

3. Sought overseas employment through migration to other countries, which makes the shortage even more acute; and
4. Weakness of the economic structure, which relies on the public sector for the employment of most university graduates.

In the same way, Al-Maqury (2006) - in his study about the relationship between HE outputs and LM - has noted that the number of university graduates seeking work was very low despite the increase in numbers of university graduates, as Table 8 shown.

Table (8)
Distribution of Libyan seeking work by educational status in 1999

Educational Status	*All seeking work*			
	Male	*Female*	*Total*	*%*
University Degree	7551	7599	15150	15.9
Higher Diploma	3296	2777	6073	6.4
Other seeking work	42327	31603	73930	77.7
Total	53174	41979	95153	100

Source: *Al-Maqury, 2006, p: 99.*

Through an examination of the above figures in the Table 8 one can note that the proportion of work seekers who are university graduates was very low, 15.9%, compared to the proportion of graduates from high technical institutes 6.4%, and others accounting for 77.7% of those seeking work. To be more precise, Al-Maqury (2006) believes that there is an imbalance in the relationship between HE and LM because of the following:

1. The contribution of output of HE to the LM is low: The limited participation of HE graduates in the LM during the past four decades, is clearly illustrated by the fact that their proportion did not exceed 14.8% of the total workforce in the LLM. The same situation is to be found in some other Arab countries, Jerio (2010) - in his study about HE quality standards and indicators in Iraq - has confirmed that: High rates of unemployment among higher education graduates, and that the weak link between higher education and the requirements of the labour market, since education does not produce the required skills needed by the labour market.
2. There is a concentration in the graduate output of HE in the services sector: 85% of the total HE graduates work in the services sector.
3. There is a concentration in the output of HE in the public sector: 74.64% of total HE graduates are working at the public sector.
4. The geographic concentration of the output of HE: most of the workforce of graduates of HE are concentrated in major cities such as Tripoli and Benghazi, because of the high level of services. And about 69.3% of HE graduates are living in Tripoli and Benghazi.
5. There is a failure in the employment of females amongst the HE graduates: Although the females represent about 50.5% of the total number of HE graduates in 2001, they represent only 6.0% of the total workforce.
6. Continued weakness of the LM to absorb the output of HE.

Equally importantly, the country still relies extensively on foreign experts, as Zubi (1992); explicitly comments: Despite the increasing and rapid expansion in the educational system, the rising figures for enrolment and well equipped buildings, the country still suffers from an acute shortage of the well qualified and skilled human resources that should meet the country's socio-economic development and transformation plan and run the increasing number of large industrial establishments in the oil industry, where a large number of foreign personnel still occupy core functions.

If the mission of HE is the preparation of the labour force with the skills and capabilities in a variety of disciplines and its ability to occupy advanced positions in economic activity, the task of the LM lies in its ability to absorb the labour force and provide adequate conditions to maximize the benefit from it in the form of an increase in production and income. In addition, the absorption of labour and efficient development patterns are an important element of strategies to improve human capital development.

Libya has experienced a substantial economic growth rate over the past few decades, which has resulted in a drastic change in the labour force profile. The transformation of the economy has brought about a rapid evolution in the numbers of the national labour force, and that the structure and size of the labour force has changed between economic sectors.

These changes can be discussed in relation to the data presented through Table 9, which shows distribution of the economically active Libyan population between sectors of economic activity from 1954 to 2006.

Table (9)
Economically active Libyan population (15-64) by sectors of economic activity from 1954 to 2006

Sectors Economic Activity	*Gender*	*Census Years*					
		1954	**1964**	**1973**	**1984**	**1995**	**2006**
Agriculture, Forestry, Hunting and Fishing	Male	171676	118814	80832	60619	80381	100,307
	Female	9030	1915	11729	2459	3190	18,980
Mining and Quarrying	Male	393	11468	8008	10320	18447	31,952
	Female	7	52	85	263	678	2157
Manufacturing	Male	13231	17683	11190	28917	63642	43302
	Female	19705	6784	1372	3861	10083	3888
Electricity, Gas, Water and sanitation	Male	780	5314	8100	10051	28530	37,507
	Female	1	83	60	323	1380	2,096
Construction	Male	6859	29032	30223	12703	16075	30,737
	Female	31	157	37	407	612	1,499
Wholesale and retail trade	Male	15720	22891	30910	37330	76102	101,534
	Female	158	188	184	4562	2928	4,261
Transport, Communication and Storage	Male	7380	21120	40897	39481	58842	61,162
	Female	5	98	201	1716	2275	3,373
Financing, Insurance, Real Estate and Business Services	Male	*	*	4797	6879	15655	23,935
	Female	*	*	188	1469	3681	5,636
Public Services	Male	40742	70200	132718	339937	346634	505,900
	Female	225621	4309	12068	68552	147135	343,556
Activities not adequately described	Male	43978	37087	13351	27	4253	9,857
	Female	21025	2464	146	1	233	3,455
Total	Male	300759	333609	361026	546264	708561	946,193
	Female	275583	16050	26070	83613	172195	388,901
	All	576342	349659	387096	629877	880756	1,335,094

Sources: *Researcher collated the data from raw data published in the LGPC 1954, 1964, 1973, 1984, 1995 and 2006.*

Note: * *Data not available.*

Through Table 9 it is possible to see that the public services sector was the largest sector. Where the proportion of workers in this category ranged between 21.31% in 1964 and 64.85% in 1984, including in 1954 this proportion was 46.2% and in 1973 it was 37.4%, in 1995 it was 56.06%. Afterwards in 2006 this proportion increased to 63.63%. And the mining and quarrying sector was the smaller sector - where the proportion of workers in this sector 1954 did not exceed 0.07% of the total. At its highest in 1964 this sector accounted for 3.29%, and in 1973 this proportion was 2.09%. In 1984 this proportion becomes 1.68%, while this proportion was in 1995 about 2.17%. In 2006 this proportion was 2.55% -, in terms of size of force labour, which absorbed.

In the same context, the low participation of women in the labour force should be noted. For instance, in 1954 the proportion of women was 47.8% of the total economically active population, while it had fallen to back 4.6% in 1964. Afterwards in 1973 this proportion increased to 6.7%, and then again increased in 1985 to reach 13.3%. In 1995 women accounted for 19.6%, while in 2006 it rose to reach 29.1%.

While forecasts cannot predict the future precisely, they can signal trends and complement other LM information. In the same context, with no clear long term trend the extent of this variation in ratios from year to year can be ascribed to several factors, including:

- Low rate of illiteracy among males due to continuous improvement in education;
- Increased reliance on the oil industry since 1959, which has led to emerge of new jobs and new skills;
- Volatility in the rates of dependence on foreign labour due to instability in Libyan development plans.

Data contained in Table 10 can point to sectors that may need more attention and highlight sectors where need to know more about change education and training or career paths etc. However, the data contained in Table 10 demonstrates a very important point: it is the size of each sector in economic activity as measured by the size of the labour force in those sectors; this provides a particular view of the LM needs. Furthermore this baseline data and understanding of the structure of the labour force can be fed into the later stages of the project presented in this thesis, in particular the planning and building of scenarios for the Libyan LM that are consistent with the size of each sector and its aims.

Evidently, the population of Libya shares a number of similar characteristics with other Arab oil exporting countries in regards to labour force. These characteristics were summarised as follows by the ILO (1979, p. 17) more than 30 years ago, but still hold true to a large extent:

1. The supply of indigenous labour is unusually small not only because of the smallness of the population, but also, because of the absence of women from the labour force.
2. The youthfulness of the population.
3. The increased number of students in secondary and HE.

Finally, through the analysis of some of the laws and decisions on Libyan education system and LLM, the relationship between the stages of the educational system and the LM in Libya can be identified. This results in a conceptualisation of the Libyan education system consisting of three stages [The basic education, secondary and HE], each stage leading to the next stage or to the LM. With the observation that basic education does not lead to the LM, but leads only to the secondary school, so it can be noted:

1. The basic education (age 6-15) only leads to secondary specialist education or secondary vocational education, so there is no direct relationship between the basic education and the LLM.

2. Secondary vocational (age 16-18) leads to higher institutes of vocational education and/or LLM. Secondary vocational graduates can go to higher institutes of vocational education or work in one of the economic sectors. For example, some of them can work as auto mechanic or electrical technician or technician of refrigeration and conditioning etc.

3. Secondary specialist (age 16-18) leads to university and/or LLM. Secondary specialist graduates can go to university or work in one of the economic sectors. For example, some of them can work as assistant engineer, social Work and laboratory technician etc.

4. Higher institutes of vocational education: higher institutes of vocational graduates should go to LLM, but some of them can go to the university if their graduation grade is high (2 from 4, and above). But they need to study additional courses (Pre-master) in order to join a master's degree.

5. A university degree leads to master's degree and/or LLM. And master's degree leads to doctoral degree and/or LLM. Doctoral degree leads to LLM.

6. Also, can be note that there is two-way relationship between LLM and some stages of the educational system. So that workers can return to the educational system in order to continue in the study or get short or long-term training courses.

This section has discussed the key issues in the context of the research literature available about the development of HE and LM in Libya based on the secondary data available on both sectors, this comprises mainly the statistics for the number of students in universities and graduates, also by data on the educational status of the wider Libyan population, also the available research on the economically active population by sectors of economic activity. In the same context, through an examination of the statistics in the Tables and figures in this section about LHE and LLM, there are three key facts:

1. Although there is a geographical spread of universities throughout the country, the HE system in Libya lacks diversity.

2. That the contribution of HE graduates to the human resources needed by the LM in Libya was very low.

3. That the proportion of women graduates of HE was very low if compared it with the size of females in the age group (15-64)

SECTION FOUR: *General characteristics of LHE and LLM: .....*

These points above have explained the quantitative development of HE and LM in Libya. In order to capture the general characteristics of HE and LM in Libya, an extensive literature survey was conducted to identify existing related literature. Therefore in this part of the research, some previous studies about LHE and LLM are reviewed.

- ***Previous studies about LHE:*** It should be noted that the literature on this specific topic is very limited by comparison with many other countries and so the conceptual foundation for this research is limited. Considerable effort has gone in to making an exhaustive search for literature on this topic both in Libya and internationally. The sparse and limited nature of the literature makes the need for an exploratory study like this all the more urgent. The Table 10 includes a summary of the previous studies that are relevant to the focus of this research.

Table (10)
Summary of previous studies about LHE

Researcher and Date	Main objective	Key findings
Bubtana (1976)	To know the role of the university system in national development of Libya.	The policies of student admission at Libyan Universities are inconsistent with development plans.
Al-Badri (1993)	Evaluate the admission policy at Libyan universities In the light of contemporary trends.	The aims of LHE since the fifties of the twentieth century have revolved around the preparation of teachers and administrative staff to working in the government departments.
Mniena (2001)	To know the effect of structural and administrative changes on the policies of student's admission at Garyounis University.	Those policies of student's admission at Garyounis University, which were applied between 1980 and 1994, are not clear and unstable.
Al-Badri (2003)	To know the reality of the internal efficiency of postgraduate level management education and training at Libyan universities.	Lack of clarity in the philosophy and objectives of postgraduate studies. Also, there is weak relationship with the society problems and aims.
Elzalitni (2008)	Contribute to the body of knowledge about the Public Higher Vocational Education and Training Colleges sector.	There is a substantial mismatch between the outcome of Public Higher Vocational Education and Training Colleges and the exact requirements of the society; most of the suffer from limited human and physical resources, and the unavailability of standard criteria for the establishment and development.
Theeb (2009)	To an analysis of the changes in the LHE institutions management system.	The HE governance needs to find a clear mechanism for the process of evaluating the course of HE institutions and everything related to the role of a university, identifying its strengths and weaknesses and identifying opportunities for development, both at the university level and in HE management and policy-making to enhance the effectiveness of this vital sector in various areas.

***Sources**: Researcher concluded the data from raw data published in the Bubtana (1976), Al-Badri (1993), Mniena; (2001), Al-Badri (2003), Elzalitni (2008) and Theeb (2009).*

Based on the results of the studies mentioned in Table 10, the general characteristics of LHE can be summarised as follows:

1. An absence of scientific planning to satisfy the essential requirements or demands of society for qualified manpower, due to an absence of the overall vision and strategic outlook for the role of university education in the future development and investment of Libyan national resources.

2. No balance in the distribution of students between the departments at universities, due to failure to adopt a well-defined and articulated policy for admission of students at Libyan universities based on scientific standards.

3. Highly centralized management of LHE where the faculties cannot even conduct their own affairs, except through Supreme Council of Universities or the level of university administration, which may delay and hinder the educational process.

4. Haphazard planning and improvisation of the establishment and distribution of universities, due to absence of criteria and systems for assessing the performance of HE institutions.

5. Weakness of practical training during the undergraduate, due to reliance on traditional teaching methods in many disciplines (method of memorization).

6. The lack of good information system at universities and therefore the lack of adequate information for decision-makers and curriculum designers.

7. Absence of the effective role of the faculty staff and the scarcity of scientific research activity due to long teaching hours or of a lack of the potential for scientific research.

As a consequence of these key conclusions of the analysis of the available literature, a comprehensive study of the HE sector in Libya and its links to the country's LM is clearly required. The points above indicate a lack of a coherent planning process or long term strategy for the development of the HE sector and its role in society. One of the key aims of this thesis is to address some of these issues through establishing a baseline understanding of the HE sector in Libya, followed by an exploration of the relationship between the HE sector and the LM sector as well as an exploration of future scenarios for the HE sector.

- ***Previous studies about LLM:*** A literature survey was also conducted to identify existing related literature the LLM, and to gather data and information about the issues associated with the research problem. As in the of the literature on HE in Libya it should be noted that the literature on the Libyan LM is equally sparse and an exhaustive literature search was carried out in Libya and internationally on this topic. Table 11 shows summary of the studies available on the Libyan LM.

Table (11)
Summary of previous studies about LLM

Researcher and Date	*Main objective*	*Key findings*
Vaughan (1968)	To assuming simple linear relationship between non-petroleum sectors and supply of labour.	It was shown, within these limitations that neither the supply of capital, nor the balance of payments appeared to be the active constraints on Libya's growth of non-petroleum sectors. The supply of labour of certain skill levels may pose an active constraint. In view of this, the optimum allocation of labour was determined using only labour skill supplies as constraints.
Mogassbi (1984)	To development perceptions for the HE system and manpower development in Libya.	To conclude the findings it is obvious that the majority of the respondents to the questionnaire showed their agreement that the present university functions and roles are not able to respond to the needs of national manpower, therefore they should be revaluated and reformed.
El-Hawat (2005)	Studying the relationship between the preparation and qualification of human resources and development in the province of Tripoli.	Develop basic principles of human resource development strategy through Improve the quality of education, and awareness of social, cultural and economic, also review of legislation and labour laws.
Al-Maqury (2006)	To know the nature of the relationship between HE and the LM.	Low contribution of the HE output in the LM, and concentration in the services sector.
Al-Shakshwky (2006a)	Analysis of the reality of the labour force in Libya.	Lack of coordination between workforce planning and economic development planning

***Sources**: Researcher concluded the data from raw data published in the Vaughan, (1968), Mogassbi. (1984), El-Hawat, (2005), Al-Maqury, (2006) and Al-Shakshwky, (2006a).*

Based on the results of the studies mentioned In Table 11, the general characteristics of LLM can be summarised as follows:

1. Absence of a clearly defined philosophy and objectives.

2. Chronic mismatch between LHE outcomes and the skills required by the local LLM.
3. Lack of specialization and division of labour within the economic sectors.
4. Low productivity of Libyan labour force.
5. The lack of continuous assessment and follow-up in order to achieve human development.
6. There are no specific criteria for measuring the performance of workers or companies and factories.
7. Weak institutional environment within the public sector.
8. Low contribution of the HE output in the LM, and concentration in the services sector

The points above indicate a lack of policies or long term plans to the development of the LLM and its role in economic-social development.

SECTION FIVE: *Conclusion and Recommendations: .....*

Conclusion: Increase in the proportion of urbanization in Libya, where more than 86% of the population of Libya's 5,298,152 million, according to the 2006 Census are living in cities and urban centres and the population density measurement refers to the existence of an imbalance in population distribution, while the rest of population is distributed in municipalities spaced from each other, which constitutes a demographic imbalance reflected on LHE and LLM in the focus of their services in the areas of population density and need to provide HE services and employment opportunities in communities scattered and distant and sparsely populated. In light of all that has been said about LHE and LLM, a brief summing up of the main findings of this chapter can be summarised as follows:

1. The official statistics indicate a large increase in the number of HE institutions in Libya since independence, but the evidence in the literature suggests that this increase has considerably exceeded the actual needs and demands of the country. There is also evidence to suggest that this increase came at the expense of the quality of the HE provision. This may be partly explained by the evidence that Libyan HE institutions have suffered a lack of physical and human resources.
2. In line with the growth in the number of HE institutions in the country, the data shows that the numbers of students enrolled at universities have grown steadily up to 2006, these growths can be ascribed to high population growth rate as well as the closure of teacher training colleges prompting students to demand university education instead or higher social status for university graduates. Evidence gathered in this research suggests that these trends may also be due to the absence of a clear admissions policy at universities relating to the selection procedure for applicants to university learning programmes and employment policy.
3. The graduates of HE have not contributed a great deal to the human resource of the LM despite the increase in numbers of HE graduates. There is also evidence of a reduction in the share of females in the LM despite the high numbers of female students enrolled at the Libyan universities. This may be explained by social factors imposing expectations on young women to give up work once they get married and begin families.
4. The evidence also suggests that there is weakness in the economic structure, which relies on the public sector for the employment of most university graduates.

5. The general characteristics of LHE as described in the available literature are: Absence of scientific planning to satisfy the essential requirements or demands of society for qualified manpower and haphazard planning and improvisation of the establishment and distribution of universities. Moreover, evidence suggests that there is an imbalance in the distribution of students between the departments at universities, and a weakness of practical training during their undergraduate studies. Furthermore, the sector is characterised in the available literature as lacking a good information system at universities, having an absence of an effective role for faculty staff and a scarcity of scientific research activity. In contrast, the literature suggests that the general characteristics of LLM are: a chronic mismatch between LHE outcomes and the skills required by the local LLM and lack of specialization and division of labour within the economic sectors. In addition, a lack of continuous assessment and follow-up in order to achieve human development and low contribution of the HE output in the LM, and concentration in the services sector.

6. That the lack diversity in the Libyan economic structure has led to the similarity of the situation of the economic sectors at the local and national level, due the proportions of the labour force growing at a similar proportions rate the size and distribution of the labour force between economic sectors; and a low participation of women in the labour force.

***Recommendations*:** In the light of the findings, but taking account of the difficulties encountered in the course of the research, the researcher proposes two sets of recommendations. The first set of recommendations is for future LHE. The second set is directed to the LLM.

1. Recommendations for LHE:

   I. The Libyan universities have until now focused their education on the transfer of information more than the practical training, which has led to the inability of students to apply and develop their skills and abilities, in order to develop of appropriate individuals in the right place, to optimize the exploitation of their skills. So, it is recommended that Libyan universities expand the practical training period from a few weeks in the final year to continuous participation throughout the years of study.

   II. The Libyan universities should develop their curricula to bridge the gap between skills available and LM demands, through review, rethink and re-orient their policies to facilitate the university-to work transition and to give graduates a good head start in working life.

   III. In order to assure a minimum level of quality of HE and to promote decentralization, as well as support development and innovation at Libyan universities, it is recommended that Ministry of Education develop universities accreditation framework through stronger emphasis on performance outcomes, especially student-learning outcomes, in accreditation decisions. To produce a clear portrait of graduates' skills - or labour - of any assessment process must look beyond the quantifiable variables in the HE sector or the LM, because these indices and the criteria used to calculate them provide only a preliminary idea of these skills - the material foundations of skills -. Also, completed levels of HE do not necessarily reflect the true quality of an individual's skills.

   IV. Because of the total area of Libya is 1,759,540 Km2 and the number of population is 5,298,152 people, it is very important that the Ministry of Education considering the geographical distribution of universities to be more compatible with the size and distribution of the population in each region. Al-Badri (2006) has argued that the establishment of universities has not been appropriately planned to meet the actual needs of the different regions of the country (See Chapter 3). In addition, Elzalitni (2008, p. 45) believes: "That this number of universities was excessive for a population as small as Libya's (about 5.5

million according to the census in 2006). And educational planners had suggested a ratio of 1 university to 1,000,000 people".

V. Develop clear policies for HE that would raise the economic value of output of HE through raising the level of interest in applied science to take stock of the LM orientation of HE in Libya by concentrating on some aspects such as: strengthening the links between scientific research and LM institutions; and insertion of graduates into the LM.

2. *Recommendations for LLM:*

I. Because of the intensity of labour within the workplace public sector due to the recruitment policies - because of the recruitment policy is based on the absorption of all the graduates -, which may affect the proportion of labour in the total inputs to a productive process and therefore higher production costs. So, it is recommended that the new policy of the Libyan workforce that private sector should appoint Libyan employees, and takes the initiative of selecting their future employees from the HE graduates in order to ensure that graduates are absorbed by this sector, because the public sector cannot do this alone.

II. It is very important that LLM institutions develop training programmes in the workplace to raise the level of performance and productivity.

III. It is very important the Libyan LM institutions should develop the laws that regulate the relationship between workers and employers to develop the ability of employees and initiate the pursuit of personal and institutional development.

IV. Finally, and linked to the previous recommendations, it would be very useful for LLM institutions to allocate part of their budgets for the purposes of research and development, in order to make an appreciable improvement to products or services through knowledge and application of appropriate scientific and technological changes.

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