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Systems of Higher Education and Research in the Maghreb region

– Ahmed GHOUATI

Introduction

Maghreb countries - Algeria, Morocco and Tunisia - have higher education systems that had very old missions conservation or cultural reproduction and elite training for the state and society. However, from the XIX century, under the impact of colonization and the Protectorate, these systems have been disqualified in favor of new systems 'modern'. In the ensuing competition between social groups, elites Maghreb from the modern system are those who have "inherited" the state and the administration.

After independence - 1956 and 1962 - the systems 'modern' were extended by the United Nations and developed according to national objectives: training of staff for the state and administration, training of technicians and engineers for economy and, finally, legitimation of political power.

Under the influence of several factors - social demand, massification, economic crisis and under-graduate employment - these systems are in crisis came from the 80s and the question of reform arose at the same time as of socio-economic choices. A Response favor international

organizations and institutions - IMF, World Bank and European Union - the liberal model was favored. In this context, since the early 2000s, the discourse of European and North African leaders around the 'modernization' of higher education and the "knowledge society" was used to justify the introduction of a package of reforms from the Bologna process. These reforms are aimed to offer a training open economic environment through the LMD (Licence, Master, Doctorate), introduce quality assurance procedures, develop research and development partnership focusing public Private, diversify funding and finally modernize governance through tools and standards from the New Public Management.

A decade after these reforms have transformed morphology systems, professionalized training and created structures for research and development and university-industry collaboration. However, the level of education, the quality assurance process has barely begun, the ratios are low - and depending on the country - and all universities are facing a significant mass. In university-business, research and development is not widespread, public research is not requested by the companies and the unemployment rate for young graduates is high. But more fundamentally, teachers and lecturers are not involved in the reforms. Hence the question: how to modernize higher education systems whose governance has been criticized by users, and finally, is it possible to reconcile autonomy as envisaged by the Bologna process with university autonomy?

This contribution is structured in three parts:

1. A brief history to show the relationship of education systems with the Maghreb Arab-Muslim civilization and the emerging development of these systems as a result of colonization and the Protectorate occurred in XIX century.
2. State systems of higher education is prepared in connection with educational policy and economic conditions of each country.

3. Finally, the third part focuses on reforms within the framework of the Bologna process and offers an assessment based on the evaluation criteria of the European Commission, including before and after the "Arab Spring."

I. ELEMENTS OF HISTORY OF HIGHER EDUCATION IN NORTH AFRICA

The conquest of North Africa by the Arabs in the seventh è (ap. BC) began with the foundation of great mosques, universities from the VII th century, especially in Kairouan, Tunis, Fez, Tlemcen, etc.. These first structures to include worship and education were first function is to socialize and form the first religious and cultural elites whose Muslim civilization needed for cultural preservation and management training. Over the centuries, this teaching became an art characteristic of the civilization of cities whose growth and one of the objectives was (is) to reproduce the ruling elite (Ibn Khaldun, El Muqaddimah, reprint 1969).

Despite significant differences in the evolution of this teaching from one country to another, until the beginning of XIX century, these structures have continued - and still continue with different statuses - to provide key executives and religious leaders (or scholars) for higher education, the judiciary and the religious leadership. Given the sacredness of "knowledge" in the Arab-Muslim civilization and the important role played by the alim (scholar) in society, for example in Morocco class - called "khasa" - which dominated Society Sharifian empire came from group 'alims who had the privilege and the power to declare the election of the Sultan during the Baya'a (allegiance). Or is this threefold cultural, political and religious higher education has been undermined by colonization and / or protectorate at the beginning of the nineteenth century. Indeed, in all three countries, higher education "modern" introduced by colonization and / or protectorate drastically altered the educational and cultural sector, even though it only affected a minority of young North Africans.

I.1. Algeria: 1830-1962

In the context of a division of the world and a race for colonies in the South of the Mediterranean, settlement activity began in Algeria in 1830 disqualified the local education system in favor of a new system - "modern" - more selective and consistent with a capitalist mode of production.

Established very early, such as the School of Medicine in 1833 in Algiers, educational structures have very little concerned young Algerians. Because long colonial rule remained torn between the moral conquest of Algeria by the school and / or University and the fear that it will become an instrument of liberation. It resulted in a very limited opening of the education system, that is to say, low enrollment form for some middle between colonial power and dominated society. Table I shows the evolution of the number of Muslim students at the University of Algiers in 1909 created:

Table I: Number of Muslim students enrolled at the University of Algiers, by year and by sector.

Years	Letters	Law Medicine	Pharmacy	Sciences	Total
1915-1916	24	4	7	4	39
1920-1921	17	16	10	4	47
1924-1925	33	21	8	4	66
1932-1933	40	44	13	6	103
1934-1935	41	36	18	7	102
1945-1946	52	91	165	52	360
1950-1951	117	150	71	48	386
1951-1952	122	148	109	63	442
1954-1955	188	196	123	82	589
1955-1956	260	193	128	103	684
1956-1957	106	91	17	53	267
1959-1960	243	276	100	195	814
1960-1961	449	420	150	271	1317
1961-1962	-	-	-	-	1732

(Source: Guy Pervillé, 1984).

The staff increases are more significant events after 1945 and especially after the outbreak of the war in Algeria by the FLN in 1954 (589 participants). This relationship also explains the significant decline in enrollment during the year 1956-1957 (267 registered), that is to say when the General Union of Muslim Students in Algeria (UGEMA) had appealed to intellectuals and students in solidarity with the struggle of the FLN. Witness the effect of this struggle, the closer to independence (1962) and the numbers are growing: from 1956 to 1957 to 1959 to 1960 they have doubled in Arts, Science and triplets quints medical-pharmacy. But overall, on a background of unequal access to education, the numbers have remained very low until independence.

1.2. Tunisia: 1881-1956

Seven years after the colonization of Algeria, the Tunisian government had founded the Polytechnic Bardo in 1837 to modernize its administration and army. Created on the French model, its management was entrusted to a French officer (Dupuy, 1955). This creation will be followed by a reform of the mosque-university Zitouna in 1842. These reforms marked also in the context of the Arab-Muslim reformist nineteenth century, that is to say, similar reforms were introduced in Egypt and Turkey in order to catch up with these countries were compared to a Europe hegemonic (Sraieb, 1993). In this context, further reforms will be implemented shortly before the financial crisis of 1863 that led to the financial tutelage of Tunisia, a prelude to the establishment of the protectorate in 1881 (Rivet, 2002). Thus the reign of Mohamed Bey Es-Sadok (1859-1882) was created the "Are Sadiki College" in 1875 offering education for 8 years and whose function is to form an elite bilingual. In this college there was a traditional teaching provided by teachers of the mosque-university Zitouna and another French taught by French teachers. That year, Mohamed Sadok Are implements a second reform of Zitouna

incorporating new materials, an assessment of lessons and three courses of study: primary, secondary and tertiary. But on the merits, the traditional education will be very challenged by teaching "modern" and this is probably one of the reasons behind the mosque-university was a hotbed of separatist nationalism (Tunisian Siino, 2000).

If one believes Charles-André Julien, strike students of the mosque-university of al-Azhar [Egypt] in November 1909 greatly influenced the student strike Zaytounians launched in 1910. In their petition to the government, claiming Zaytounians 800 students a quality education, fixed schedules ending teacher absenteeism, the right to take exams at the end of three years instead of seven, the exemption from military service etc. (Quoted by Chenoufi, 1993). In this context, a third reform was introduced in 1912 Zitouna establishing three degrees corresponding to the three levels of study: *Al-Ahlya* at the end of primary school, *Attahcil* in the junior-secondary and finally *Al-Aalimya* to graduate.

The movement to reform the traditional teaching will continue in 1951 with the creation of a modern section and the introduction of the diploma "*Attahcil*" A modern two parties, equivalent to the baccalaureate. This new section does not make it sufficiently competitive with graduate degrees in bilingual secondary education. But, nevertheless, the traditional teaching continue to attract students with its cultural prestige.

After the country's independence, with the nationalization of all structures of traditional teaching, the Socialist Party in power Destourien deleted Koranic schools in 1956, thus reducing a major source of education Zaytounian. The new organization of public education in Tunisia, introduced by the Act of 1958, facilitated the integration policy Ez-Zitouna University. Hence its transformation Faculty of Theology and Religious Studies

and the formal integration of the new University of Tunis-based model of the Tunisian Institute of Advanced Studies in 1960 (Law No. 60-2 of 31.03.1960). The political unification of education led the government to transform the annexes Ez-Zitouna in colleges and secondary examinations *Tahcil* classic or modern were abolished in 1966. Thus, the process of disqualification of traditional higher education, began in the first half of the nineteenth century and continued under the Protectorate, ending ten years after independence. Behind this process of reclaiming the colonial educational system and the nationalization of Zitouna, power seems to deviate a training of the traditional elite and potentially competing for control of the state and / or administration. Through what he calls tunisification the new government claims to legitimacy "nationalist" and is committed to the "development" and promoting a "New Man" - in the context of the new Republic Tunisia - where it mobilizes an authoritarian system of higher education.

1.3. Morocco: 1912-1956

In mainstream education, the college is a Qarawiyine specific management training for government and society as compared it "(...) has autonomy, informal structure of a university. But from the point of view of its function, but rather a college (in the American sense), the only country which has prepared a small minority to participate in public life, while encouraging individuals zaouias a private religious life. This is due to the role of the Qarawiyine in the formation of the elite, when the reform policy of the Makhzen made outside it, have helped give birth to a new elite, the mosque will be at center of the opposition and mark for long reaction Moroccan vis-à-vis other countries. Education it has ceased to provide is the image of a stable society, support of a small elite, it had to be customized and invariable "(Laroui, 1977: 199). In 1910, his numbers were estimated at 500 students (Vermeren, 2002).

Installed as Resident-General in 1912 as part of the protectorate, Marshal Lyautey had followed the example of Sadiki College (Tunisia), creating "Muslim college" to train new cadres bilingual - from the urban elite - for the administration and Makhzen¹. The result is a gradual devaluation of traditional education and a reduction in jobs for graduates Qarawiyine. College of Fez was founded in October 1914 and the Rabat in February 1916. In 1918, the Sultan himself, reproducing reform Mohamed Bey Es-Saddok to Ez-Zitouna, which establishes an evaluation of teachers and created a commission to reform. Which provoked the reaction of the opposition group, power supplies, for which this reform for the first time put the Qarawiyine under the authority of the sultan.

The result of the devaluation of traditional education especially in the eyes of the public is that the traditional city Qarawiyine saw his recruitment ruralize² and opportunities of its students become scarce. For the period 1942-1952, of the 150 title holders' alim, half were unemployed in 1952 (Vermeren, 1999: 53).

Among the structural characteristics of the Protectorate there was competition between social groups that led to the frustration of *toulabs*³ and constituted a source of nationalism. Mobilized since the promulgation of the Berber *Dahir*⁴ in 1930, toulabs committed more strongly in a violent

¹ Representing the traditional power structures of the state (Sultan, treasury, administration, etc.).. After independence, the Makhzen has criticized policies, particularly with regard to the system it represents (allegiance, submission, opaque mode of governance, etc.).

² In 1938, the number of urban students (mostly at the time represented by the group of Fassis) fell to 200, against 580 for the rural (Source: Lucien Paye, quoted by Vermeren, 1999: 52).

³ Taleb Taleb or of al-'ilm student or student looking for science.

strike against Dahir reform studies to Qarawiyine of 31 March 1933 establishing, as Ez-zitouna three levels of education, examinations at the end of the year, etc.. According Merrouni (1983), the political struggle for independence had brought cyclically *toulabs* and college [modern] in particular through the dissemination and defense of the Manifesto of Independence - the Istiqlal party. But the students, normally intended to administrative positions, getting the opportunity to spend the bachelor, had opened new avenues of study and careers more important than those of *toulabs*. While the latter were always positioned as guardians of traditions, the students, by training bilingual French-Arabic, appeared clearly in evidence collected by Merrouni (op. cit.), As representatives of modernity built following the example of the French. By choosing the latter camp, the colonial power had clearly chosen his "heirs" legitimized by cultural capital bilingual and modernist - which no longer depended on traditional higher education - for the control of the State and the administration.

II. HIGHER EDUCATION UNTIL 2000

Because of a common colonial history, the three countries had inherited a dual system of higher education consisting of a university on one side and the other high schools. In all three countries, the ambition was to build political power and the state administration and appropriate "modernity" based on the higher education system. However, despite the size and mass of the considerable development of educational structures, several issues remained unresolved, in particular the duality of education systems, the decline in the quality of education and the lack of autonomy academics.

⁴ Decree introduced by the colonial authorities and signed by the sultan May 16, 1930. This decree seems to have been inspired by the French military policy Berber in Algeria and gave a customary right to traditional Berber tribes. This was tantamount to relieving the courts of the Sultan and Islamic law. The first demonstrations began in Rabat and Fez, specifically from the Qarawiyine.

II.1. Morocco

II.1.1. Modernization of the state and government through higher education

In the aftermath of independence, the new government - dominated by executives from the Istiqlal party - wanted, as in Tunisia, integrate Qarawiyine the Ministry of National Education. This provoked strong opposition from *toulabs* and 'power supplies on behalf of the autonomy of traditional higher education. The creation in 1964 of the Institute in Rabat Dar al-Hadith al-Hassania, high school graduate in religious studies, shows that power is given the means to diversify the recruitment of executives at the expense of outgoing the Qarawiyine (Tozy, 1999).

However, the modern higher education system itself has not undergone reform. In addition, until the 1970s, most of the structures was created in Rabat. The target set by the government in this system for many years was quickly provide frameworks for the state and the administration. This objective also corresponded to a positive representation widely shared at the time that education in general and in particular the University are means of advancement and social mobility.

The first University - Mohammed V - Rabat was created in 1959 from the former Moroccan Institut des Hautes Etudes. But given the lack of facilities, the University of Bordeaux (France) continued to issue diplomas Morocco until 1961, the year of the creation of the Mohammadia School of Engineers (IMI) in Rabat. It will be followed by the opening in 1963 of the Agronomic and Veterinary Institute Hassan II, Rabat also. The Ministry of Higher Education and Scientific Research (MESRS) will be created in 1976. However, under the pressure of a strong social demand, especially from the 1970, the non-selective has been a significant development in its management and in its structures. The decentralization of university was started in 1974 with the University of Casablanca, Fez that in 1975, Marrakech, Oujda, Meknes, Kenitra and Jadida in 1978. At the same time, due to political criticism, the authorities

decided to Arabize materials scientists at the University, but without changing the division of tasks and powers between the different languages involved. On the other hand, to establish a highly selective authorities have encouraged the creation of large schools in the different ministries (the National School of Forest Engineers in 1970, etc.). Under the pressure of numbers, the authorities have developed new university structures from 1990-1991, but by introducing professional training and selective in the Faculties of Science and Technology (FST), the Higher Schools of Technology (EST) and National Schools of Business and Management. The non-selective benefited from the creation of a Degree in Applied (professional) designed to meet the needs of the business world.

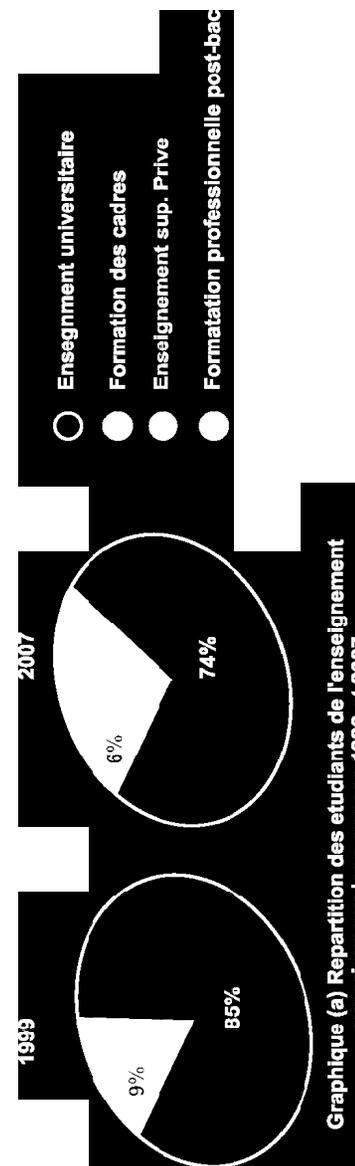
The most important changes have been prepared by the National Charter for Education and Training introduced in 2000 - by Law 01-00, including to regulate the flow of students. This Thus was established a new architecture based on the European system with three output levels: 3 years (Bachelor), 5 years (Master) and 8 years (PhD). But this architecture does not change the cut or the duality between selective sectors (schools) and non-selective (universities). The new law also legalizes the introduction of a private higher education, the combination of higher education in the "business world", "autonomy" of universities and finally the reinstatement of the research objectives in the missions of universities.

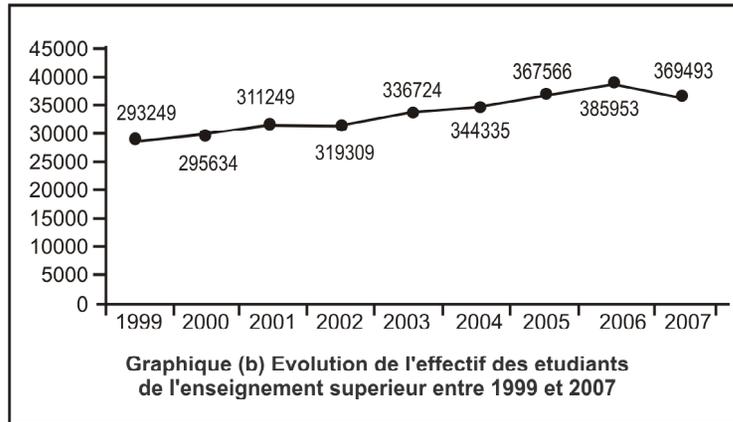
11.1.2. Improvements in the selective

The network of higher education structures becomes denser fabric and local management. In 2000, there were 11 universities and 249,253 students 9867 researchers. Research structures also develop: 133 structures in 2002, against only 23 in 1956 (Kleiche-Dray, 2007). In 2007 there were 15 universities, including private institutions consist of 105 units in 17 cities and offering 14 types of education for a total of 369 493 students (see Table II):

Table II: Evolution of the total number of students from 1999 to 2007

Secteur	1999	2000	2001	2002	2003	2004	2005	2006	2007
Enseignement universitaire	249253	250111	261629	266621	280599	277632	293866	201638	272578
Formation des cadres	27010	26373	27582	26438	23866	25179	22812	22688	23850
Enseignement sup. Prive	9266	10146	11519	13425	15483	17558	19215	21537	22456
Formation professionnelle post-bac	7720	9004	10619	12825	16776	23968	31663	40090	50609
Total	293249	295634	311349	319309	336724	344335	367556	385953	369493





(source: Council of Higher Education, 2008, p 76).

The number of students in public and private higher education amounted to approximately 370 000 students in 2007, an average annual increase of 2.9%. This shows that the system has experienced different rates in different sectors of education:

- The number of students in private higher education and post-baccalaureate training has grown faster compared to other sectors.
- The number of students in the field of executive education (non-university public tertiary education) fell by 1.5% per year during the same period.
- The number of students in public universities has dropped during the year 2007: 272,578 students, against 301,638 students in 2006, 10%. This decline has benefited mainly the post-baccalaureate training has increased from 3% to 14% during the same period.
- Finally, the number of private higher education has also increased from 3% to about 6% from 1999 to 2007 (MESRSFC, 2013).

Public universities in the number of students increased from 293,642 in 2009 to 308,642 in 2010, 66% in science legal, economic, social and Arts and Humanities. In 2009-2010 there was a slight increase from the previous year, despite a slight decrease in Arts and Humanities (Table III), there is always a mass in non-selective (Science faculties legal, economic and social and Humanities):

Table III: Number of students for 2009-2010.

Source: Ministry of Higher Education, 2013. (Http://www.enssup. Gov. My /, accessed March 2013)

Source: Ministry of Higher Education, 2013. (Http://www.enssup. Gov. My /, accessed March 2013)

Conversely, the areas included in the random access (Medicine, Engineering Sciences, etc.). Represent only 6% of all students. In addition, the average growth rate in the number of students enrolled at the university remained relatively stable during the same period, less than 1.12% per year. However, compared to 2006, this rate is experiencing a significant decline, reaching less than 9.63% of the workforce in 2007 (MESRSFC, 2013). This decrease can be explained by the deterioration of coaching and working at the University that can be evaluated through the report Students / Teachers. In 2007, for example, in Medicine and Pharmacy channels ratio was 7 students per teacher, whereas Sciences Law, Economics and Social is 85 students per teacher (Source: <http://www.cse.ma/en/Higher> Council of Education, 2008: 77). In other words, if the average of 28 students per teacher in 2007 marks an improvement over 2006, it benefits the selective sector in general and the scientific and technical disciplines in particular.

In the selective, Al Akhawayn University has a very specific function. Indeed, its status and its openness to the international model more similar to a high school than a university: it selects on academic records, English language and registration fees, even if it proposes of scholarships for deserving students. Al Akhawayn University reflects the division of labor between different sectors of higher education: a non-selective host the largest number of students in low-income and middle a highly selective for minority and international students with the higher incomes and assets languages (English and French in particular).

11.1.3. Insertion difficult despite the professionalization of graduate

Some factors are unfavorable to the success of higher education, eg the lack of motivation among students, lack of preparation for higher education and a gap between the language of instruction at the primary and secondary school and the Higher Education (Basfao, 2005). For the Ministry of Higher Education (MEN-ESFCRS 2008: 39), the assessment made in relation to new students signed up LMD is negative. Because 75% of graduates are moving towards

the Arts and Humanities and Sciences Law, Economics and Social Sciences, at the expense of technical and vocational.

From a historical perspective, Zouaoui (2006) estimates that the decline in the standard of higher education was "inevitable" when the primary and secondary levels, have undergone a process of maldevelopment leading them to mediocrity. Noting a difference in the level of supervision across sectors selective and non-selective, it considers that the mass is a factor of quality degradation in higher education, particularly in the non-selective.

On the socio-economic, the harshest critics of the University appeared in the 1980s, after the implementation of the Structural Adjustment Plan (SAP) recommended by the World Bank and the IMF. As a consequence of the SAP was the limitation of public investment in social and educational and general recruitment in the public service in particular (Mellakh, 2000). In other words, the change in state policy that has resulted in withdrawal from other recruitment public, not offset by private investment, created a social problem related to unemployment "too qualified" since the early 1990.

Officially, in 1997 the unemployment rate without a diploma was 9.8%, while the number of graduates was 30.5% (HCP, 1997). Ten years later, the unemployment rate for college graduates has certainly slipped to 20.8% (HCP, 2007), but the difference with the unemployment rate without a degree (4.9%) remains high. This gap is even greater between the unemployment rate of those who have no grade (2.4%) and people with a higher level (21.8%). This is indeed a paradoxical situation for which lasts for several years and seems generalizable, in different proportions, to the Maghreb.

An evaluation of insertion devices implemented by the Moroccan authorities (Ibourk, 2005) identified three elements: the limits of social treatment of unemployment has become structural, an incentive framework for the creation of business and thus inefficient review and, finally, the inadequacy of private sector projects compared to insertion of a portion of the population - diverse - young graduates seeking employment.

For Ibaaquil (op. cit.) The issue of graduate employment is first malfunction of social mobility. According to three problems are the cause:

1. Policy imitation external educational programs.
2. Enrollment growth in higher education as a result of an explosion in demand for education.
3. The introduction of the criterion of economic efficiency requires higher education to break with its universal mission personal development and civic education for the student. From this point of view, "the perfect match between training and employment" seems to him as a "new liberal utopia" incompatible with the objective of developing a young nation.

After the evaluation of the program in January 2008 Franco-Moroccan ARESM for 2004-2007, the Ministry of Higher Education has approved the extension of the program for the period 2008-2010. On three aspects covered by this program, governance, education and scientific research, the Minister was satisfied (Le Matin, 01.19.2008). The stated purpose of the extension is to complete the computerization of the administration for it to "better manage human and financial resources to devote Moroccan university autonomy" (ibid.). Beyond this standard, managers are two other objectives:

1. Make Moroccan university "able to export its know-how acquired through this project through triangular cooperation. Transfer of know-how for the benefit of third countries and regional Mediterranean space "(ibid.).
2. Attract foreign investment in higher education. These objectives indicate that the state seeks to integrate into the "knowledge economy". However, to open the market for example the Moroccan higher education to foreign investors, the government also needs to develop quantitatively and qualitatively the higher education sector and research. It is in this framework that can interpret the government's decision to support the ongoing reforms, defining in

October 2009 a program called "emergency" over several years for higher education and research (See III.2. Balance sheet items in Morocco).

II.2. Tunisia

Since its inception, the University of Tunis should fulfill three tasks: train senior managers needed to develop the country, safeguard and promote "national culture" contribute to the advancement of knowledge through the promotion of scientific research and the organization cooperation with national and international organizations having the same vocation.

To achieve the first objective, the government has promoted the massification of enrollment and the rapid formation of university teachers through sustained cooperation, in particular with France and the USA since 1980. This diversification has led to the gradual departure of cooperating and increased ratios by Tunisian teachers: for example in 1993-1994 the ratio was about 93% against 7% of Tunisians cooperating (Siino, op. Cit .). The official results show a quantitative change dramatically (Table IV):

Table IV: Evolution of Higher Education from 1958 to 2008

Academic year	No. of schools	No. of students	No. of teachers	No. of graduates
1958-1959	06	2489		
1968-1969	10	7668	355	751
1978-1979	53	28618	1479	4162
1987-1988	59	43797	3775	4587
1992-1993	86	87780	4842	8922
1997-1998	90	137024	6324	15599
2002-2003	141	271404	12937	28565
2006-2007	190	340392	18117	58598
2007-2008	190	350828	18608	60840

Source: Ministry of Higher Education, 2009 (http://www.universites.tn/50/chiffres_fr.htm, January 2009).

With the exception of the 1978-1988 decade, one can note a tripling of enrollment every ten years. The massification of higher education can be explained by Siino (2000) by the extension of social work academics and beliefs characteristic of a period called "egalitarian", young people in social mobility through graduation. This sense of social advancement through education was also linked to a lack of frameworks - until the early 1980s - and therefore recruitment opportunities, particularly in the public sector.

But this mass mentoring some problems. Thus, the ratios at the university reached an average of 18 students per teacher: selective courses - ISET for example - are better supported with 11 students per teacher, against 25 students per teacher in a non-selective such that faculty 'Zitouna (Source, MES, <http://www.universites.tn/>, accessed March 2009). The low level of supervision at the University also shows that teacher training is still a weak point. In 2010-2011, the number of teachers was 16,486, including 1,017 teachers, 736 Lecturers and 5066 contract (not permanent), or 31% of the total faculty. This means that the non-selective sector in particular, works with assistants and teachers of secondary education, with no research training. This deficit in rank masterful coaching is the problem of the quality of higher education and political training of trainers.

General trends in higher education and three major periods sociopolitical trends seem to have characterized the relationship between higher education and political power (Guiter, 1997):

- The influence of the early 1970s, political and ideological called "left" and claim a genuine university autonomy vis-à-vis the authorities. This influence is reflected among others by the control of the General Union of Tunisian Students (UGET) by the current "left" at the expense of students' Destourians "(PSD) until the early 1980s. In addition, the reform of the status of faculty in 1973 devoted peer and teacher recognized the role of rank A regulatory authority in mobility in higher education.

- The arrival of a new generation of students and with it the Islamist movement and the rise of its ideological influence, including in the pedagogical university in the early 1980s.
- Finally, after the seizure of power (1987) by General Ben Ali's Constitutional Democratic Rally party he founded in 1988, takes the academic field in an authoritarian hand through students and teachers close to him. It speaks of a certain depoliticization, and a "pacification" or "normalization university scene" (Camau and Geisser, 2003) - compared to the attempt to empower higher education in the 1970s.

The period of domination of the Islamist movement coincided with both the end of the Bourguiba era and the entry into force of the Adjustment Plan (SAP) of the IMF in Tunisia. But it is in this context that the Minister Abdelaziz Ben Dhia (1985) will make a very severe diagnosis on Higher Education and announce measures to prepare a mutation liberal.

II.2.1. Higher education and entry into the market economy

The diagnosis of Ben Dhia (op. cit.) Identified four main factors negatively influenced the status and level of education. The first factor is upstream: the lower level of primary and secondary education affects higher education and is assigned to a coaching course politicized but has no pedagogical training. The second factor is related to the transformation of higher education in the field of political struggles. The third factor is political and it is manifested by the poor definition of roles and powers between the higher education sector and the supervisory authority. Finally, the last factor, the more financial is emphasized through the degradation of the situation of higher education and the lack of resources allocated to it. Made a year after the social unrest of 1984, shortly before the implementation of SAP, Ben Dhia report raises the question of social frustration and political implications.

Its recommendations to remedy this situation affects all aspects of university life and anticipate even some

interventions of the World Bank. At the political level, under the guise of maintaining and / or restoring order on campus, it proposes to reduce the freedom of assembly - assembly by prohibiting unauthorized by the dean and giving him the opportunity to establish a university guard - and open the way to university police interventions.

To improve the financial situation, he suggested to go for tuition payments based on income and the "reality" of prices. Similarly, if the state offers correct regional disparities, it does not carry least part of the funding to local authorities, companies or regions. By effectively at the center of its concerns teachers, it offers a status commensurate with their duties including in the field of technical education. But the downside is increased control of absences and renewable annual contracts, thereby avoiding such tenure systematic officials. Which also implies the establishment of National Commission assessment, the creation of regional academic and educational empowerment, financial and administrative from each university. In the design of Ben Dhia, the Ministry should load more planning and control. In this context, the ministry grants are determined on the basis of contract or program according to predefined criteria (area, number of students, industry, course of study, etc.).

To improve the level of higher education, Ben Dhia proposes to establish an entrance exam to the University, a "modular" units based on value to be validated separately for a better flow of student tuition. Freedom of recruitment of students by universities, the establishment of a system of student loans for students, creating career paths and the possibility for universities to deliver (locally) diplomas are new proposals, but subject to the approval of ministerial responsibility. Similarly, to claim the national diploma of State, the student must validate two additional units of value.

Finally, further downstream, it proposes to reduce the burden of supervision of teachers especially for graduate students. More radically, it opens the opportunity for

business leaders - and the obligation for those companies in which the state intervenes - to be involved in the training of students. On the contrary, it requires teachers from technical, economic and management immerse themselves in business - by actual presence of at least three months every three years. In the same sense, become mandatory work placements for students in certain specialties and subsidies are provided for any academic work which aims to help solve a problem faced by the world economy. Furthermore juries graduation, the university-industry relationship must involve also training for senior practicing in business.

In this way, despite the resistance of academia through the unions in particular, the progressive implementation of the recommendations of Ben Dhia Minister laid the ideological and political bases to inaugurate an era of economic criteria have been of singular importance new directions in higher education. It is at this level that there is convergence with the economic and ideological orientations of the World Bank (1998) for an openly liberal reform - supported by a loan of \$ 80 million - the higher education system until 2003.

In the analysis proposed by Ben Kahla (2000 and 2004), the World Bank has progressively sought to privatize higher education and through this area to reach the entire society according to him "the diagnosis and recommendations offered (...) refer to essentially liberal and market design of scientific knowledge, the operation of the university and beyond it, the whole of society "(2004: 74). Thus, these guidelines and proposals (op. cit.) Come consolidate a process started several years ago and concluded inter alia by the accession of Tunisia to the WTO and the signing of a separate agreement with the European Union in 1995 for the creation of a free trade area. It is in this context that we can situate the action of the state, since the early 1990s, for example the spread of Information Technology and Communication (ICT). Among the proposals of the World Bank the introduction of ICT, including distance learning, the solution

should be almost unique for all the problems university teaching in Tunisia. Subsequently inserted in the tenth National Development Plan (2002-2007), this action was better ICT attractiveness of foreign direct investment in sectors with high added value. The government also aims to replace traditional sectors in new sectors such as mechanical engineering and new technologies where Tunisian engineers are equally qualified, paid less than European engineers. The geographical and cultural proximity is another advantage that the state wants to use to attract eg call centers, generating employment.

11.2.2. A statism and low results

According to the comparative analysis of Bras (2007), "the Tunisian government intervention in the conjunction of its economic and political dimensions, has effects inhibiting the development of the Internet, as part of the paradox of authoritarian modernization, where the state mobilized for ICT diffusion, but with modes of mobilization that hinder it" (p. 179). This observation suggests a greater social and political control of the use of the Internet.

In the computer industry, a survey of the development of IBS in Tunisia (Mathlouti and Mezouaghi, 2007) revealed three failures despite significant public financial support: "A small internationalization of and dependence on public demand" (p 311), the existence of "small enterprises newly created, whose viability can be questioned by, among others, limited access to financing, excluding procurement deficiencies of their managerial skills" (Ibid .) and finally a low technological production, despite the existence of a potential engineering.

In 2009, official sources, the share of ICT in GDP "has exceeded 11% (time from 2/01/2010). In terms of employment, for several years there is a paradox: the coexistence between a "strong sub-management companies" and a "high level of graduate unemployment" (Ben Kahla 2000, OECD 2008). Finally with a level of investment of 1.25% of GDP in research and development and a potential

15,833 researchers in 2008-2009, the relationship between the economic sector and the research sector remains very weak. The basic problem is that the area is well endowed physically, but its economic impact is very low (M'henni, 2007).

On the social state still fails to address two major problems: the massification of higher education and the employment of graduates. This was the first cause of the riots⁵ social and economic upheavals in the Gafsa region for more than 8 months of 2008. Indeed, after the announcement of the results of a competition judged irregular recruitment in the powerful Compagnie des Phosphates de Gafsa (CPG), graduates have occupied the streets before being followed by students and minors. Employing both repression and subsequent promises, the power has managed to restore calm, but claims remain. With hindsight, one might think that this revolt was the harbinger of the "Jasmine Revolution" - which led to the fall of President Ben Ali - which began in Sidi Bouzid December 17, 2010 from a social event, that of the young Mohamed Bouazizi, who set himself on fire.

On mass, on the recommendation of the World Bank, the State has encouraged and even financed⁶ the establishment of private universities by the law of 25 July 2000. Officially, this action should attract investors and "clients" in private education and help reduce the pressure on public higher education structures. However, in 2006 there were only 3,500 students whose third are foreign students (source: Mazzella, 2008), ten times less than the objective of the Tenth Development Plan (30,000 students). In 2008, there were 6,023 students in thirty universities,

⁵ View Karine Gantin and Omeyya Seddik, "Revolt of the" people of mines "in Tunisia," in *Le Monde Diplomatique*, July 2008.

⁶ The Tenth Development Plan has devoted 40 million dinars, half of the loan by the World Bank in 1998.

colleges and private institutes⁷, about half of which works in partnership with universities or private French North America. In 2012, enrollment reached 17,773 students in forty institutions whose majority is Tunis (Source: <http://www.mes.tn/>). Thus, helping private higher education, the State seeks the transformation of the whole higher education sector to become more open to international competition and in view of this objective, the "LMD" is an international facilitator.

11.3. Algeria

After independence (1962), the Algerian state was first created antennas university Constantine and Oran before raising to the rank of University in the late 1960s. The three universities - Algiers, Oran⁸ and Constantine - have kept the French system of faculties and schools have cohabited with some superior to selective entry: National Veterinary School, National Institute of Hydraulics, National Institute of Hydrocarbons, etc.. The first reform will occur in 1971. In this context, the system was abolished faculties and disciplines taught at departments were grouped together in the form of Institutes - on the model of technological institutes - have a financial and administrative autonomy. Indeed, the reform introduced a method of appointment by the Ministry officials instead of the electoral system. So what amounted to remove the election by peers as one of the principal terms of the collegial management.

The reform did not change anything in the system of selective colleges and institutes. By cons, while generalizing the modular system and semesters for educational progress, the ministry also introduced a module Arabic language in

⁷ Very "aggressive" commercially, especially towards a national and international clientele (African and European), with fees ranging from 5000 to 8000 euros per year, depending on the type of training and qualifications prepared.

⁸ The University Center was erected in Oran University by Ordinance No. 67-278 du20 December 1967.

all fields followed by a complete Arabization some lessons from human and social sciences (eg philosophy and history).

11.3.1. A formal adequacy university-industry

The state project to develop an industrial heavy and light was defined in the first four-year plan 1970-1973 which is also the origin of the Ministry of Higher Education and Scientific Research (MESRS) in 1970 and Overhaul of Higher Education (MESRS, 1971). The industrialization project required a pool of middle and senior management in all areas, especially in heavy industry and light industry. It was therefore form quickly at the national level, at lower cost and encourage the training of trainers and researchers abroad through a system of grants and scientific and technical cooperation. Cooperation should also participate in the training of the University, while the Reformation was to rapidly increase the performance of higher education.

But under the pressure of numbers, in the 1970s the Department has engaged in a quantitative logic at the expense of quality. Indeed, receiving 51,510 students in 1978, the university proceeded to a massive recruitment of assistants including many new candidates holding a BA and technical assistants. The pedagogical students will increasingly Algerian teachers with less qualified. Thus began a policy of administrative flows - giving a "place learning", that is to say, a physical place each student - instead of a quality management on scientific and educational criteria.

In terms of the integration of graduates through economic investments very significant public until the oil crisis of 1986, the labor market absorbed a demand for more and higher graduates. However, this momentum has been sustained independently of the interventions of the state. Thus, in the late 1980s, when the state has changed political and economic project, in particular by encouraging SMEs and transferring the bulk of production and services to the private sector, the supply of employment was no longer up to the application. In addition, for Higher Education adapt

to the new liberal policy, the new Ministry Delegate for Universities (MDU, 1989) introduced a "project of autonomy of the university," inspired by the concept of enterprise autonomy. This project did not have the support of academics and the question of autonomy and political science from the University arose openly. Finally, fellows remained abroad after their training, have added more and more executives who migrated abroad at the lack of employment opportunities, the devaluation of human resources and the degradation of working conditions .

11.3.2. More graduates, but a lack of senior university

Designed with an Algerian-American cooperation, the redesign of Higher Education had revised the existing system with many measures, including:

- Remove the annual organization of the curriculum and the teaching units.
- Introduction of modules and a semester system and quarterly validation module.
- Consolidation teachings common to different formations.
- Replacement by institutes and faculties, depending on the status of each university, creation of new institutes offering new courses (Communication Sciences, ecology, oceanography, Science education, etc.).
- Orientation disciplines to professional profiles and / or techniques, including the humanities.
- Reduced generalization lectures and practical work and training in the workplace.
- Remove theses, particularly in medical science, and their replacement by placement reports.

According MESRS (1978), the measures introduced by the reform have significantly improved performance: the graduation rate rose from 6.4% in 1971 to 10.5% in 1972. In total, during the decade 1971-1981, the education system has issued 45,900 certificates (Source: Labidi, 1992, Volume 1). However, for nearly two decades (1967-1985), the economy reached a growth rate of 6% per year and an annual average of 100,000 jobs created (CNES, 2002). During the same period, according to the CNES, the unemployment rate has declined significantly: 33% in 1966, 22% in 1977 and 16% in 1985. According to Bruno Etienne (1977: 189), the education system has trained 40,700 managers for the period 1974-1977, while the needs were estimated at 50,500 jobs. These possibilities were added to other opportunities in education and research, the University formed as teachers for secondary education and its own teachers and researchers with training abroad.

However, due to orientation "technicist" and a professional thrust of the Reformation, it is the major industrial and economic sectors - also offering better wages and working situations - which are most recruited among graduates of higher education. In addition, before and after the Reformation, several government ministries (Energy, Public Health, Industries, etc.). Had created their own colleges and schools. Where a reproduction of a dual university / colleges, the foundation of a powerful network of drainage frameworks for large companies and senior management. The consequence is that the University has remained rather under framed (See testimony of Ali Rachedi, 2006). In addition, the brain drain abroad participated and participates probably still the sub-frame.

The problem under supervision of the University can be measured by the increase in the number of students per teacher especially teacher lecture rank :

Table V: Number of teachers and students 1984-1985 to 2010-2011

	1984-85	1994-95	1997-98	1998-99	2005-06	2007-08	2010-11
Total number of teachers (unit)	11.803	14.684	15801	17.111	27 264	30 510	40.140
- Teachers (Pr)	491	651	827	-	1866	2 213	3186
- Lecturers A and B (MCF)	703	734	1318	-	2822	3 430	7632
- Lecturers (Chargés de Cours)	-	5.002	5932	-	9987	11 771	-
- Masters A and B assistants (MA)	6.167	5.006	5527	-	11685	12 358	28782
- Assistants (A)	4.442	3.291	2197	-	904	738	441
Number Students (unit)	111.766	256.128	357.644	383.000	767.324	979.949	1138.562
Number students/Teachers	9,4	17,4	22,6	22,4	28,1	32,1	26
Number students/PR + MCF	93,6	184,9	166,7	150	163,7	173,6	105,2
Number students/A+MA+CC	10	19,2	26,2	-	33,98	39,4	39

Sources: "Evolution of the number of teachers and teacher ratios in schools of the Ministry of Higher Education, 1984/85-1998/99 (in units and percentage)" MESRS cited by CNES (1999) . The 2005-06 column was constructed from raw data from: MESRS, "Some aggregates of higher education and scientific research," MESRS Algiers, February 2006. 2007-2008 The column was built from raw data from MESRS (2008b). Finally, the column was built 2010-11 from Statistical Yearbook No. 40 (MESRS 2010-2011).

From 1997-1998 to 2007-2008 the number of Professors and Lecturer certainly are multiplied by 2.6 and 1.9 respectively. However, given the increasing massification of enrollment and low ratios beginning in 1984-1985, there are more than 173 students per teacher level lecture. This problem has worsened under management at the end of 1980, that is to say at the time operated industrial restructuring, the decline in public investment and lower job creation. Between 1985 and 1995 and the job has increased from about 140,000 to less than 40,000 jobs per year. The new concepts introduced in this period, such as "flexibility", "enterprise autonomy", "management", etc.. have become synonymous with massive layoffs and contractualization for any category of personnel. For managers in particular, this period corresponded to a real political abandonment after being heavily courted by the political and economic power in the 1970s.

In 1989, for the purposes of this political and economic liberalization, the Ministry of Higher Education - now the Ministry delegated to Universities (MDU) - had planned to introduce a "school autonomy and institutions of higher education" (MDU op. cit.). Normally open to debate, but for a very short period, the reform has provoked strong protests. Introduced shortly after the visit of a delegation of the World Bank in Algeria - 12 to 15/02/1988 - The reform was seen by some scholars as the translation of new directions liberal nature (see Hadj Slimane, 1990). In the midst of a dispute, the Minister wanted to dramatize explaining the problem with a "weaning complex": "The idea of autonomy can be scary. (...) Finally, if the word autonomy discomfort, you can go in and talk about reform. The goal is to reform the institution for more efficiency "(Ali Rachedi, 1990: 11). The "efficiency" in this project was to make profitable all activities of the university. Completely detached from his ministerial responsibility, the University had to negotiate with the State's funding and sell its services to businesses and the whole environment (Ali Rachedi, 2006). However, there was no entrepreneurial culture in this environment

and economic conditions of the time did not support this choice. That is why, under pressure from the academic community, the project was withdrawn. Remains, however, an institution still dependent on political power, a lot of scientific autonomy and whose graduates will have difficulty to insert professionally from the 1990s.

11.3.3. The end of the training-employment ?

Table VI shows that graduate unemployment is higher than without qualifications and tends to increase significantly, especially from 2009.

Table VI: Change in unemployment rate from 2003 to 2010 (in%).

Year	2003	2004	2005	2006	2007	2008	2009	2010
Overall unemployment rate	23,7	17,7	15,3	12,3	13,8	11,3	10,2	10
Unemployment rate without diplomas								7,3
Unemployment rate of graduates	ND	ND	16,9	15,5	ND	ND	17	21,4

Source: ONS, "Employment and Unemployment (Q3 2005)", "Employment and Unemployment (3rd quarter 2007) and" Employment and Unemployment (fourth quarter 2008 and fourth quarter 2009), http://www.ons.dz/them_sta.htm (accessed in December 2006, February 2008 and June 2009). http://www.ons.dz/IMG/pdf/emploi_chomage_2010.pdf (March 2013).

Table VII shows that only channels "Health and Welfare" beyond the increase in graduates. Indeed, if the channels' social sciences, Business and Law "(nearly 29%), the" Arts and Letters "(27%) are the hardest hit, especially girls, dies" Science "(18%) and "Engineering, Manufacturing and Production" (15%) are also affected by unemployment.

Table VII: Unemployment rate by level of education, degree and gender (%).

	Male	Female	Total
Humanities and Arts	14.7	34.4	27.3
Social Sciences, business and law Sciences	14.0	43.7	28.7
(life sciences, physical sciences, mathematics, statistics and computer...)	9.8	28.6	18.1
Engineering, manufacturing and production	14.8	9.4	39.7
Health and welfare	1.6	5.9	3.8
Other	11.4	17.3	13.4
Total graduates of Higher education	11.1	33.6	21.4

Source: ONS, Employment and Unemployment in the fourth quarter of 2010 (2013).

This trend seems to confirm the hypothesis that the Maghreb markets continue to operate with more "no qualifications" and "intermediate level" (Charmes and Musette, 2002; Musette, 2006). According to Charmes and Musette (op. cit.) Under supervision of the Maghreb economies can not integrate or react to the technological advances. This would also explain the fact that in Algeria the transfer of production (excluding oil) of the state sector to the private sector, especially to Small and Medium Enterprises and Industries, was not able to absorb the flow graduates who continue to arrive. But this would also explain the preferred option Maghreb markets is encouraging in some way skilled migration to Europe and North America.

According to the Ministry of Labor, in 2010 there were 800,000 unemployed graduates of tertiary education (cited by El Watan Economics 26/4 to 2/5/2010). According to the same source, every year the labor market recorded 300,000 120,000 incremental demands from university graduates. In 2009, 277,618 young new applicants (approximately 50% of academics) were recruited either in business or in public or semi-public institutions within the new device Assistance Professional Insertion (DAIP). The problem is that the

remuneration (15,000 Da, 190 USD) in the framework of this device is not very motivating for young graduates and does not have a recognized social position. But the LMD reform is perceived by a majority of teachers and students as a way of social downgrading (Ghouati 2011 and 2012).

The persistence and aggravation of this problem insertion leads to increasingly violent acts: immolation by fire, firing Public diplomas, etc.. This violence and taken control of public opinion reveal the failure of a strategy based on flow management and the reforms initiated by the above.

III. THE BOLOGNA PROCESS TO TEST THE "ARAB REVOLUTION"

The Bologna Process is a set of reforms in higher education originated in Europe, following the proposal of the Attali Commission (1998). At a meeting between four European Ministers of Higher Education in 1999, he was to build a European Higher Education Area by 2010, to have better international rankings and compete in international competition. It was expanded in the Maghreb economic agreements of free trade. Two years after the "Arab Spring" movement that began first child while the European Commission came to celebrate the "Decade of the Bologna Process", this set of reforms does not revolutionize higher education and research, but introduces university utilitarian model.

The three Maghreb countries are part of a group of nine countries south of the Mediterranean associated with Tempus⁹ implemented since 2002 to "modernize" Higher Education. On the occasion of the decade of the Bologna Process, as funder Commission (2010) made an assessment in 2009-2010 in these countries. Overall, the Maghreb countries seem very well suited to programs and the Commission noted that "the tendency to move forward

⁹ "Tempus was primarily designed to contribute to the reform and modernization of institutions and higher education systems [ES] partner countries" (European Commission, 2010: 36).

according to the Bologna principles is clear" (p. 11). However, if the three countries apply the three-cycle structure (LMD or 3, 5 and 8 years of study) in accordance with the Bologna Process, we can identify differences on all other indicators (noted in italics).

The use and accumulation of *credits ECTS* are effective in Tunisia, but they are partially integrated in Algeria, and the system is not yet implemented in Morocco. Unlike these two other neighbors, Morocco has not introduced the *Diploma Supplement* document containing several information : nature, level, context, content and status of successful studies and a brief description of the educational system of membership of the student.

Compared to other MENA¹⁰ countries, only Tunisia to set up a *National Qualifications Framework*, that is to say, a classification of qualifications according to several criteria and for different levels of learning, designed to inform and facilitate access to qualifications in line with the labor market and civil society. In Algeria, this process seems to be under development.

For the European Commission, the notion of "quality assurance refers to the process of assessment, monitoring, security, maintenance and improvement of the quality of higher education systems, institutions and programs. "(p 12). In this sense, the ideal would be that the external evaluation conducted by a body both outside and independent of the institution. Based on this definition, Tunisia and Algeria officially started a *process of quality assurance*.

¹⁰ In Morocco, the implementation of the National Framework Certification (CNC) has been transferred to the Ministry of Employment and Vocational Training. On the ground, this implementation encounters some problems related to misunderstanding same interest and the purpose of the CNC, the low involvement of certification and the Ministry of Higher Education (Bouhafa, 2010).

Finally, concerning the recognition of diplomas, Algeria and Morocco are signatories to the *International Convention on "Recognition of Studies, Diplomas and Degrees in Higher Education in the Arab and European States bordering on the Mediterranean"* (Unesco, 1976). However, no North African country is not a signatory of the "Lisbon Recognition Convention", which is an international agreement allowing certified qualifications in one country to be recognized in another on the basis of standards set by the Council of Europe and UNESCO.

In general, the higher education system has better integrated Tunisian criteria of the Bologna process, while implementation of the "LMD" began only from 2006. This integration reflects the commitment to the highest peak of the state for this integration, following a decree of President Ben Ali, but also bank loans for several years by the World Bank for reform Higher Education through the Bologna Process.

III.2. Balance sheet items in Morocco

Law 01-00 enacted in 1999 has set the following goals for education in general and higher education in particular:

- o Autonomy pedagogical, administrative and financial management of universities.
- o Extension of the missions of the university: initial training, ongoing advice, expertise, entrepreneurship, etc..

New educational organization

- o modular and semi-chains, continuous monitoring, bridges, etc.
- o Orientation progressive students by offering courses cross.
- o Strengthening of vocational training.
- o Lifelong life.
- o Generalization of a system of evaluation and accreditation of training and audit institutions.

- o Involvement of stakeholders in the socio-economic development of the university (representation in the university council).
- o Opening of the socio-economic environment and diversification of funding sources (services, operating licenses and patents, and marketing activities, equity in businesses, etc.).
- o Promotion of the private education sector.

In the framework of the implementation of this Act, the LMD reform was introduced in 2003-2004. In the progress report in 2008, the Ministry of National Education (MEN-ESFCRS, 2008: 39) noted an improvement in pass rates especially in the first cycle: in 2008, 33% of students obtained their license against 26% with the conventional system.

However, data from the Labour Force Survey (HCP, 2012) highlight the disparities against graduates of Higher Education: 20% of job seekers have a higher level against only 4% without diplomas. In addition, in 2008, 75% of graduates had opted for courses Arts and Humanities and Sciences Law, Economics and Social Sciences, at the expense of technical and vocational (MEN-ESFCRS, op. Cit.). Many other shortcomings (teaching, research, governance, etc.). Had led the ministry to develop a "crash program" for the period 2009-2012. This program was also a target of catching up delays. These are the elements of the balance sheet through this program that we present in this section.

III.2.1. A large supply of training courses but unequal

Between 2008-2009 and 2010-2011 there were 127,818 new registrations in total, including 41,055 in Arts Humanities (LSH), 46,785 in Legal Science Economics and Management (SJEG) and 39 978 in Science and Technology (ST). The number of teaching places also increased but much more selective in the area: 34 691 seats of which 16 049 in 2010-2011 (13%) at the University and 18 642 (41%) in the selective (medicine, pharmacy, etc.). Enrollments Professional License (LP) and Master of Science (MS) also

increased: 17% of LP registered in 2010-2011 (against 8% in 2008-2009). But the ST channels represent only 29% (against 22% and 6% SJEGLP Applied LSH). The rate of registered MS from 26% in 2008-2009 to 36% in 2010-2011, 59% T, 34% and 19% SJEGLP Applied LSH.

Generally, 63% of new courses and training offerings are accredited professional in the areas of environment, tourism, energy, logistics / transport and construction. This result meets institutional goals set, but does not seem to solve the problem of employability of graduates (HCP, 2007 and 2012).

III.2.2. More tutoring

30% of students received tutoring in 2010-2011, against only 1% in 2008-2009. In 2010-2011, 52% of students were tested level languages and 97% of teachers have benefited from the Continuing Education language. The same year, he was identified 89 structures of information and guidance for students and 71% of them have benefited from gateways.

III.2.3. More investment in Continuing Education and the management

To raise the level of personnel, three types of actions were carried out in the direction of three categories of personnel:

- Teacher training for teachers with 1021 in 2010-11 (against 308 in 2008-09). In addition, 886 teachers with training received abroad; 379 non-incumbents were trained in Morocco, contre 203 in 2008-09.
- Training for technical and administrative cadres in 1914 in 2010-11 (against 479 in 2008-09).
- Finally, in 2010-11, 187 officials were trained in the "management of higher education" and five universities have trained 139 people in the evaluation.

These actions are part of the preparation for the "autonomy" of universities is to say, the establishment of

structures for the management of "entrepreneurial" human resources and evaluation of the actions of establishment.

III.2.4. Better results in the selective

In 2010-2011 the number rose to 11,646 teachers for 300,000 students, or a general rate of mentoring 26 students per teacher. But this rate varies from one institution to another and from one sector to another. Generally, it is 43 students per teacher at the University, against only 12 students per teacher in the selective sector. The same year, found 86 students per teacher in chains SJEGLP, against 48 in LSH and only 20 in ST. These differences are also found at the administrative level: the University there are 75 students for an administrative officer, against only 22 in the selective sector.

Thus, the dual nature of Higher Education does not seem to be mitigated by the "LMD". On the contrary, it even seems to accommodate disparities or inequalities between sectors and industries.

III.2.5. Promotion of scientific research

In quantitative terms, the department believes that the objectives are achieved: 2019 articles published in 2010 (2376 expected in 2009), 11 patents in 2011 for 22 registered authors in H1 2011 and 29 registered authors in 2010, 23 projects Research and Development concluded in 2010 (out of 279 planned). According to the Ministry, there is more work on the structures of university-business interface, making it more simple procedures for financial management of R & D projects, especially for companies and encourage them to launch operations / projects innovation. The problem is that the approach and the first funding seem to be public. Where the limits of this policy approach from above.

III.2.6. A communication system and digital services

In 2010-2011 four universities had digital services via the digital workspace (ENT) and other four had launched an ENT experimental. Most of these services are offered to students but also to teachers (digital office, university life,

education and orientation, etc.). These services fit into the framework of the improvement of governance and practices seem influenced by European, especially French. The results are modest, but the ministry has decided to generalize these practices. The implementation of this program appears to meet the authorities and confirms their political will to put more and more in the Bologna process.

But the assessment is not the same level of teachers. According to a department head French Literature (University of Fez), "reform is much more beneficial to the selective. In the non-selective it does not work well and the massification many problems" (interview of 8/3/2012). From the point of view of Snesup Morocco, the reform is expected to include some changes regarding the organization biannual seems problematic, especially that of too much time spent on evaluation. The proposal made by the union and accepted by the Ministry, would return from 2013-2014 the annual organization and continuous monitoring. But it remains to address the issue of financing of higher education, including the participation of students and their families through higher fees.

III.3. Balance sheet items in Algeria

The "LMD" was introduced in 2004-2005 as an option and thus compete with the conventional system or academic. Whole higher education system should apply the LMD system in 2010. The deadline is past and the generalization of the reform is not yet acquired.

According to officials, the reform allows:

- Ensure quality training;
- To achieve real and effective opening of the socio-economic environment;
- Develop coping mechanisms to changing business continues;
- To be more open to global developments, particularly by:
- The adaptation of degree structures;

- Adapting programs;
- Encouraging the mobility of teachers and students
- The promotion and diversification of international cooperation;
- To improve the dynamic and educational engineering institutions.

III.3.1. Impact remains limited

According to the first report prepared in December 2006 by the coordinator of the reform (Djekoun, 2007), the number of authorized licenses from 270 in 2004-2005 to 1,326 in 2006-2007. The number of students who opted for the LMD system increased from 6194 (0.85% of total enrollment) in 2004-2005 to 58 101 (7.57% of total enrollment) in 2006-2007. The low success among students and teachers is explained officially apprehension level students and parents, an adaptation "unsatisfactory" teachers to the LMD system, the weak relationship University - Business and finally, flows of students (...) that "not conducive to the development of new approaches to mentoring, educational support, personal work, internships, ..." (Djekoun, op. cit, p 40). Hence the proposals for setting up of structures to ensure the role of interfaces University - Business (attended courses, observation of the job market, orientation) and restructuring education services, including monitoring routes and Finally, the introduction of a Diploma Supplement.

In the balance sheet in 2008, the number of registered voters increased significantly in chains LMD (MESRS, 2008; Ghouati, 2009). 18 universities in the east of Algeria - comprising 387,748 students - enrollment was approximately 22% of total enrollment in 2007-2008. 10 universities in the western region, the number of students signed up LMD was 28,000 students - a total of 200,000 - or an enrollment rate of 14%. Of all the 40 universities "empowered" officially at the national level, enrollment in courses LMD was 15%. As an indicator, this figure shows a lack of ownership by students and therefore indicates an offset to these expectations.

III.3.2. The system is always classical or academic

A third assessment was conducted in 2010-2011, but there is only partial data for western and eastern regions. In the official document presented at the meeting of June 2012 in Rabat (MESRS, 2012) it can be noted that about 54% of students are enrolled in courses LMD, out of a total of 1,236,627 students and 44,725 teachers. In the balance sheet of the Regional Conference of the Universities of the East (CRUE) on eastern universities for 2009-2010, we can just note that the traditional system was still 30% of registered voters and a virtual disappearance short cycle (within 3 years), with less than 1% of the workforce in this system (Source: RAW, 2011)

In 2010-2011, in the universities of the Western Region (Benziane, 2011) enrollment in courses LMD was nearly 45%, or 98,527 students out of a total of 220,005 registered. Nine years after the launch of the reform, the traditional system still comprised 55% of the students. In the conventional system, all sectors are down sharply, particularly short (average - 46% between 2007-2008 and 2009-2010):

DEUA ¹¹	-48%
DES ¹² :	-24.47%
License:	-15%
Ingénieur:	-16%.

By cons, a selective course, only specialty dental surgery has seen its numbers fall:

Medicine:	+8%
Pharmacy:	17%
Veterinarian:	11%
Dentistry:	- 8%.

¹¹ University Diploma Applied (3 years).

¹² University Diploma Applied (5 years).

As can be seen, the conventional system in general and in particular selective courses (Medicine, Pharmacy, etc.). Values are still attractive to students: on average 4.4% between 2007-08 and 2009-10. According to testimonies of students¹³, the LMD License is not accepted in many competitions of the public service. This fact reveals a basic contradiction at the state level and, despite the hype, it reflects the lack of political consensus on reform. In other words, the Ministry of Higher Education is implementing reforms giving diplomas whose value is not recognized in key sectors of the public service. This contradiction can also strengthen the analysis of the Union of Higher Education (SEES) that the ministry, knowing the difficulties that this reform could generate, seek a way out but without success so far (interviews with Professor Aissat and Professor Chouicha, 19 and 23/09/2012).

Regarding the future of the relationship LMD-classical system, the national coordinator of the LMD system, Mr. Djekoun¹⁴ believes that the traditional system will be maintained until its extinction. This would allow the authorities to continue to encourage students to opt for courses LMD, while discouraging to enroll in the traditional system, for example by requiring an average of more strong. But curiously this incentive seems to involve only the first cycle (Bachelor). Because it should also be noted that, contrary to promises given to attract students into the new system (LMD), there is a selection that occurs at the entrance of the Master. This selection can be explained by the lack of space and coaching offered but also by a desire to select the "best" students knowing that the lower level is widespread and features both old and new graduates LMD. In addition, the LMD system there is a concern of managers streamline the system, ie do not create a bottleneck. Where a practice "teaching" of passing students to the next year with debts or non-validated modules. But under pressure from the

¹³ Interviewed June 3, 2011 at the University of Constantine.

¹⁴ See El Watan 03/27/2011.

workforce and to make room for many newcomers, the risk is to issue the diploma while some modules are still not validated. Another problem, not least, raised by Professor Chouicha, SEES union official, is the large coefficient 14 assigned to report graduation and License that allows students who are not also mean, still validate their degree (maintenance 19/09/2012).

However, the prospect of employability after university education has an impact on competition within the University. If we judge by the frequency and severity of student strikes directly related to the selection, entry into Master is a continuation of studies interesting and sought after, especially in the context of a labor market limited. This is what can explain the actual pressure on long cycles in general (+74% increase) and Master in particular, which rose very significantly: 91% increase in 2010-2011.

Doctoral training in the Western region recorded a decline in job opportunities in the Doctoral Schools (- 246), and an increase in positions of Magister (+ 412) and DGPS¹⁵ (157). The latter two degrees are still very well received by students and is one of the solutions to current lack of leadership in general and particularly in lecture at the University.

III.3.3. A large disparity between universities

In 2010-2011 there were 673 teachers (Pr) and 1166 Lecturers Class A (MC-A), for a total of 8606 teachers in the universities of the West, which was a student-teacher ratio of 21 Rank% of Magistral (RM). But the proportion of part-time teachers was 45%, or 3881 contractors. While the average ratios of Magistral Rank progresses (2.73%), however, the number of students per teacher (or ratios general) is rather high: 26 students per teacher. In addition, this rate varies considerably depending on the type of institution and geographical location: 45 students per teacher at the University Centre Relizane (within the

¹⁵ Post-Graduation Diploma of Specialized.

country), against only 15 at the University of Science and Technology of Oran (USTO). Finally, the differences are even more significant between the ratios of Magistral Rank: 2764 students per teacher rank lecture at the Centre Universitaire de Relizane, and only 52 to 54 USTO and ENSET.

Thus, the differences between sectors in addition to regional disparities may reveal the duality of the education system and the LMD system, as in the Moroccan situation, does accompany and be a certain way.

III.3.4. Centralization of decision

Since the launch of the reform, all decisions are taken at ministerial level. For now, school autonomy is not a reality. Institutions rather apply the decisions and do not seem to have a specific policy management, training and research. On the administrative staff, the only data available are related to the number of ATS (Directors and Officers Technical services). With a workforce of 6219 in total from 2010 to 2011, their number increased (+14%), including 1,533 permanent staff and 1973 ATS contract. Which gave ratios of ATS for 35 students.

III.3.5. Openness to the world economy and international cooperation

The international opening is measured by the number of agreements signed with companies. For CRUO there is a clear improvement: 74 Conventions in 2010-2011, against 40 in 2008-2009. Following the same logic, international cooperation is evaluated by the number of bilateral programs: between 2008-2009 and 2010-2011, and Tempus programs Tassili, dedicated to the support of the Bologna process, have increased sharply, 25 programs Tassili (+73%) in 2010-2011 and 17 Tempus (+ 56%). The problem is that the balance sheet and especially the funding of the evaluation of these programs are the responsibility of the European Commission. In other words, it seems that the

Commission did not apply one of the principles (independence of the evaluator) to which it subjects all partners.

III.3.6. insufficient level of publication

III.3.6.1. Quantitative growth

Universities in the West, 2008-2009 to 2010-2011 the number of laboratories has increased from 182 to 203 (5.6%), comprising 4737 researchers (8%) with 3800 research, 99% approved CNPRU¹⁶, 0.4% and 0.5% ANDRU¹⁷ ANDRS¹⁸. The record says nothing about the number of theses and research publications.

IV.3.6.2. Low scientific production at the national level

Between 1996 and 2011 the total scientific production amounted to 21,059 Algerian published documents (Source: <http://www.scimagojr.com/countrysearch.php?country=DZ>, accessed 09/11/2012), ie ie within a document by teacher researcher. Taking into account the total number of researchers and teacher-researchers, the ratio of publications / researcher is still very low. Hence the hypothesis of an important scientific production assured by only a minority of teachers and researchers¹⁹. We are thus in a university with little academic, that is to say, a minority of people with the necessary skills and participating in student training and renewal of knowledge through research.

¹⁶ National Evaluation Committee of university research projects.

¹⁷ National development agency for academic research.

¹⁸ National development agency for health research.

¹⁹ Approximately 18% of teachers are rank masterful national rate varies by regions, disciplines and institutions (MESRS, 2012).

Table VIII: Scientific production by country and year

Year	Algeria	Morocco	Tunisia
1996	369	808	427
1997	376	895	578
1998	420	1,052	622
1999	456	1,171	711
2000	495	1,184	755
2001	515	1,221	871
2002	597	1,196	1,068
2003	799	1,280	1,252
2004	1,089	1,297	1,570
2005	1,138	1,287	1,928
2006	1,575	1,455	2,345
2007	1,784	1,559	2,750
2008	2,281	1,764	3,572
2009	2,732	2,053	3,986
2010	2,862	2,277	4,415

Scimago Lab, Copyright 2007-2012. Data Source: Scopus®

Compared to other countries in the region (Table VIII), after a period of slow growth (1996-2005), production increased significantly from 2006. The weakness of the first period can be explained by many factors, including the "black decade"²⁰ experienced by the country, the lack of financial resources, material and human brain drain, but also the lack of human resource development.

Table IX shows the share of publications produced in collaboration with at least one foreign country. This

²⁰ It began with the assassination of President Boudiaf in June 1992, the judgment of the electoral process followed by a period of almost ten years (1992-2000) during which armed clashes, particularly violent.

collaboration provides an important international openness and allows the internationalization of local search. However, for two periods (1996-2005 and 2006-2010), if we remove the proportion of articles in conjunction with at least one foreign country (66% in 1996 and 56% in 2007), there is a small local production or endogenous:

Table IX : Percentage of documents with more than one country.

Year	Algeria	Morocco	Tunisia
1996	66.125	63.119	41.920
1997	64.894	56.760	44.464
1998	63.333	59.791	41.640
1999	62.281	55.081	39.241
2000	51.515	51.436	39.735
2001	47.767	43.489	37.773
2002	43.719	43.980	38.670
2003	55.069	52.266	42.093
2004	53.260	57.132	45.223
2005	55.272	56.799	45.124
2006	53.968	52.509	43.070
2007	55.998	54.458	44.836
2008	51.556	54.762	41.825
2009	53.367	47.540	44.305
2010	52.446	47.606	43.918

Source : Scimago Lab, Copyright 2007-2012. Data Source: Scopus®

The government's goal (MESRS, 2007) was to invest 1% of GDP in the research sector for the period 2006-2010 (against 0.22% for the period 1999-2004) and bring more staff 32 000 teachers and researchers. When signing research contracts in 2011, the Minister of Higher Education

stated²¹ that the 2577 national research programs newly authorized in 2011 have been based on one of the main criteria is the transfer of product of research into the socio-economic sector and including a representative part of the project, in accordance with the framework law on scientific research.

But what material and financial investment if the potential remains relatively modest quantitative researchers and some of which do not mobilize even in the context of national research programs? The research-economy can certainly make sense for Research and Development. But this relationship is sufficient to provide the meaning of work and academic and scientific autonomy necessary for researchers and lecturers? The analysis by the union SEES, highlights drifts across the higher education system with a negative impact particularly on the place and role of teachers and researchers. According to the union, an assessment by specialists in social sciences and humanities have been commissioned by the Research Branch of the Ministry of Higher Education and Scientific Research, which tends to show that at the ministerial level there may be a department that currently has questions on how to challenge the "LMD" (interview of 19/9/2012).

III.4. Balance sheet items in Tunisia

The preparation conditions of entry into the Bologna process started in 2002. But the implementation of the LMD reform began only in 2006, one year after the publication of a presidential decree (2005) confirms this choice and two years before the orientation law No. 2008 - 19 of 25 February 2008 on the reform of Higher Education. For the Ministry of Higher Education (MES, 2006), are numerous and ambitious objectives, in particular:

- Ensure readability grades and training levels of employability.

²¹ See *El Watan* 09/05/2011.

- Develop a training system characterized by flexibility and international comparability.
- Reform programs and diversify routes in niches.
- Develop training courses responsive and efficient, an academic and applied, providing all levels of employability opportunities.
- Promoting student mobility nationally and internationally.
- Give the student the opportunity to restructure his career in training.
- Facilitate the equivalence of diplomas.
- Create a new generation of versatile graduates able to adapt to a changing global context.

Evaluation of the *Support Programme to Sector Modernisation of Higher Education* (PAMES) conducted in 2008 by the European firm ECO (2009) - funded by the European Commission - reveals positive but mixed. This does not completely confirm the official position - before the triumphant Revolution - the Tunisian government. This evaluation focused on seven main criteria (noted in italics):

1. In terms of *relevance* and *efficiency* objectives seem PAMES with: reorganization of higher education system based on the labor market (more vocational training and engineering), an increase in quality Higher Education (teacher training and educational reform), and finally a synergy university-business world. However, experts are discrepancies between the indicators and the evaluation situation - as presented by the ministry - which they believe requires further investigation. Similarly, the "user consultation" them appeared limited to a few small circles.
2. *Effectiveness* is evaluated positively because PAMES raises a "new balance" between academic training

and applied training or professional, a systematic partnership between academia and the business world and training for teachers. However, there are questions on many issues: what is the quality of training received by teachers? What is the level of demand and the nature of the relationship with the business world? Etc.

3. Despite the decline in just three years (2006-2009), the estimate of the *impact* of PAMES is positive. The program appears to have contributed to their "change of perception, previously largely negative, Tunisian society compared to professionalizing training purposes" (p. 137). But the employability of graduates was difficult to estimate given the lack of recoil. On the merits, we do not know how the experts judge the change in perception (negative to positive) vocational training in Tunisia.
4. The evolution of the legislative framework in Tunisia and preparation conditions of implementation of Framework Medium Term Expenditure Framework (MTEF) - accounting framework PPBS - they seem to ensure *sustainability* of the measures introduced by the PAMES. Indeed, the Act of February 2008 on the reform of higher education, the principle of contractual State universities is derived directly from PAMES particularly through MTEF and evaluation of actions. In contrast, PAMES has not contributed to more reliable data as well as the quality of information systems developed by the Ministry of Higher Education.
5. Of the three instruments promoted by the PAMES, namely the MTEF, the Observatories of the students and the insertion device quality indicators, only the latter is operational at the time of expertise. MTEF were not developed at universities and the device quality indicators had not experienced significant progress. However, experts generally are *coherent*

political and economic in the sense that the program²² "is well within the objectives of the European Commission to facilitate the economic integration of Tunisia in the dynamics of free exchange. "

6. Finally, in terms of *European added value*, if different interventions were considered complementary (between the European Union and six other members of the EU), they missed synergy. For example, the pilot project - supported by France - license co-constructed by the Institutes of Technology (ISET) and business has not been an "opportunity for better synergy" operated by PAMES. Similarly, the European experiences in reform - quality indicators, strategic management, etc.. - Were not either of lessons for the PAMES.

Overall, examination of the differences between planned activities and those carried out shows significant differences often but mainly in quantitative terms: increase of new entrants, increased channels "in promising sectors," enrolled in higher PhD (including fellowships abroad), increased development plan in academic institutions, increasing the number of agreements signed with partners and, finally, increasing the number of institutions evaluated.

For cons, the evaluation conducted after the "Jasmine Revolution", the qualitative assessment prepared by Adel Ben Amor (2012), less than the previous book focused more on the "failures and prospects." Particularly critical, this qualitative assessment takes into account several domains (denoted in italics)²³ :

²² Reinforced by the Tempus III program, specifically dedicated to the reform of higher education in the context of the Bologna process in the Maghreb (See RESULTS).

²³ In fact, during interviews conducted in February 2012 at the University of Sousse, teachers, researchers and students of the French department told us not to be aware of the objectives and methods adopted within the framework of the reform LMD (Talks 02/22/2012).

1. *Governance* of universities and institutions of higher education and research (EESR) is marked by centralization of decision-making, where a lack of autonomy of local institutions, a lack of means and resources and the absence time management system and quality policy of continuous assessment.
2. Six years after the *introduction of the LMD system*, Ben Amor highlights a lack of information for students and teachers²⁴ and a hasty approach in the design and implementation of curricula and courses of study.
3. One consequence is that poor *employability* of graduates also due to many causes ranging from upstream to downstream of the higher education system: upstream, a level insufficient school graduates as well as their orientation and downstream, the inability to create jobs and business leaders are "not controlling their interests." Between the two are also implicated mode management and evaluation system actions.
4. Chronically lacking qualified supervision, using "abusive context unqualified" leads Institutions of Higher Education and Research to create a *suitable teacher* and consequently degradation qualitative and quantitative ratios of students.
5. However, this framework is also affected by teacher *massification of higher education* which translates, according to Ben Amor (op. cit.), An increase in the rate of graduates seeking jobs, protests and a loss of credibility academic institutions.

In terms of outlook, Ben Amor (op. cit.) Suggests the establishment of a process of evaluation and quality policy, but after a "national consultation to reform" Higher

²⁴ More radical, some authors argue that "what is exported to Africa is not the Bologna model, but some French recipes application" (Charlier et al., 2012. P 95).

Education and Research science. At the heart of the management system of quality it offers, are highlighted ISO 9001 and the orientation or "customer focus" for a better "claims management". In structural terms, the reforms suggested by Ben Amor (op. cit.) Aim to establish another governance, "autonomy", "networking" and "professionalization" of Institutions of Higher Education and Research (EESR). In the proposals, autonomy is defined as "to decide without reference to a central authority, hierarchy, authority" (p. 9). It combines the autonomy of "good governance" and suggests a "superposition of several elected councils that oversee and assist the President (Board of Directors, Scientific Advisory Board, etc.)". As to the extent of autonomy, in addition to traditional activities, Institutions of Higher Education and Research would have to manage finances, issuing diplomas, teacher recruitment, student choice, asset management property and the definition of the internal mode of organization.

If the severity of the diagnosis is the radical post-revolutionary context, seeking to distinguish themselves from the Ben Ali era, the remedies recommended against by not exceeding the reproductive stage guidance already put forward by the European Union and the OECD. This reproduction can be explained by two factors, one endogenous and one exogenous. The first is the inertia of structures and managers. In other words, as we have said many teachers and researchers (interviews of 8 August 2012), despite the novelty brought by the "Revolution" which is to elect the leaders of various bodies (department, faculty and university), staff Manager has not really changed compared to that exercised under Ben Ali.

The second factor, it is due to constraints introduced by the Bologna process itself. As part of this process, it may be noted that the European Commission has exported a model and standardizing certainties relayed by representatives of

European countries²⁵. From this point of view, the Maghreb in general and Tunisia in particular are in a posture that mimic a perspective change. Students face more challengers²⁶, the new Minister of Higher Education has criticized the LMD - in reproaching him for having introduced "without taking into account the specificities of the Tunisian university and market requirements of the employment" - and offers to make improvements, but no real change from the commitments already made by the former minister. Indeed, it is for the department, restarting the sectoral committees of the LMD system, to submit proposals for upgrading courses to suit the needs of the labor market while giving priority Masters licenses and high employability, revise the evaluation system in the sense of a greater role in setting teacher. By cons, in this troubled context, the Ennahda party plans to rehabilitate the University Zitouna. Which, from the point of view socio-historical, is akin to a return of the repressed.

CONCLUSION: Limits reformism modernist

Modern Maghreb elites, formed during the colonial period, states have inherited after independence and renewed educational systems "modern." More than fifty years after independence, the balance of the higher education systems may be regarded as positive, but in quantitative terms. Indeed, the three countries have been able to build many structures including a majority of universities (see summary table), especially in Algeria. However, despite a large investment (6% of GDP), the level of publications is modest, governance is still under

²⁵ Among the many slogans posted in March 2012 by striking students of the National Institute of Applied Sciences and Technology (INSAT), at the Ministry of Higher Education, it can be noted among other things: "our lives, our lives we do want more profit, "or" They want to punish the youth, students INSAT meet resistance " and " LMD = Liquidate the Maximum of Students ".

²⁶ Students interview members of the "Committee of Independent Students

construction and the rate of graduate unemployment reached almost 34% in Tunisia. Despite a high degree of professional training, socio-professional integration of young graduates remains a major problem. This professionalization is not new in the Maghreb, as it was one of the goals of the redesign of the 1971 Higher Education in Algeria. However, in recent years it takes a systematic can be explained by the pressure of the local youth and growing influence of the new paradigm promoted by the European Union in which "Enlightenment ideas on education are replaced by a utilitarian view, a consequence of current problems of governance across the European Union" (Ozga, 2012, p 12).

The application of this vision in the Maghreb may have enabled managers to manage the flow of mass in universities, with a majority of girls. But if you judge by the low quality results, one might think that universities are the best places to prepare the best careers. More importantly, the events related to the "Arab Spring" has shown the limits of ten years of reforms introduced by the Bologna process: these reforms give no hope or teachers or students. For example, the assessment after the "Jasmine Revolution" in Tunisia shows that successful integration of European standards does not always meet the expectations of students and teachers and even the socio-economic environment. Leaders in higher education are twofold:

1. develop qualifications such LMD assigning them a value they did not in the eyes of students, teachers and some sectors of the public service.
2. To disappear gradually State diplomas in favor of the new degrees LMD. Now this is a sliding type of qualification to another that appears to reveal and / or create in students a sense of social displacement and fear of the future socioeconomic status. In this context Maghreb very tense, the future of the "LMD" is increasingly discussed and students already formulated the demand²⁷ for "comprehensive reform for the University ... reborn."

²⁷ Students interview members of the "Committee of Independent Students"(NESC, Algiers) with the daily El Watan 15.4.2011.

Table X: Key indicators of higher educational systems in the Maghreb 2011-2012

	ALGERIE	MAROC	TUNISIE
Nombre d'habitants (en millions)	37 100 000	32 309 239	10 777 500
Nombre d'établissements d'enseignement supérieur public	90	166	195
Nombre d'universités publiques	47	15	13
Effectifs étudiants	1 236 627	432744 (2010-2011)	339 619
% de filles	59,5% (2010)	50 % (2010)	61,6 %
Effectifs étudiants de l'enseignement supérieur privé	ND	35118	17773
Enrollment in higher education (20-24 years)	ND	ND	36,9% (2010-2011)
Of foreign students	ND	10243	1901
teaching staff	44725	10467	22410
Including Lecturers and Professors	8051	5629	1898
	(18 %)	(54 %)	(8,45 %)
Contract (not permanent)	ND	ND	4791 (21,4 %)
Administrative staff, technical workers and	44488	9793	10240
Rate budget of higher education in relation to GDP	6 %	2,15 % (2009-2010)	1,68 %
Number of scientific publications in 2011	3264	2737	4943
Licenses Number	3193	ND	584
Number of Licenses Professional (professional rate)	3045	371 (72%)	392 (67 %)
Master Number	2308	ND	419
Master Number of professionals (professional rate)	ND	229	233 (53 %)
Unemployment rate of graduates	21 %	19 %	33,7 %
	(2010)	(2011)	(2012)
Number of private higher education institutions	ND	197	44

Sources: MESRS, MESFCRS, MES and <http://www.scimagojr.com/>, accessed March 2013 for data on publications. ND = Not Reported.

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