Systemic and institutional change of higher education

Tunisian universities count today 360.000 students (59 of them are females) and 193 institutions. The increase in the number of students imposed regularly the revision of the orientation plans and the redefinition of the university map and the training domains. The creation of the new universities in the regions became a necessity in line with a higher education concerned not only with the demographic and social data of the country, but also with the demands of the actualization and of the modernization of the transmission procedures of scientific knowledge.

The dynamics of the involved structural reforms was naturally completed by other reforms which encompassed the university affairs, the cultural activities, the accreditation, the doctoral schools, publication and many other sectors of university life.
Main reforms were undertaken :

2. Reform of the engineering studies

The reviewing of the engineers' training has unified the engineer's study regime on the basis of 5 study years for all the categories, two of which are preparatory and 3 years in the engineer's training establishments. The renovation of the studies in the domains of engineering and of technologies, took into account the needs of the country's economy and of the scientific and technological evolution, by securing the coordination between the training syllabuses in the different establishments as well as their evaluation through suggestions that aim at modernizing this sector.

2. Creation of higher education poles of excellence

Apart from the continuous efforts of the promotion of the quality of trainings secured by higher education in all the speciality domains, it became mandatory to set up some poles of excellence the calling of which is to train the elite.
The mission of this Institute is to provide the students with a training and with practical skills that meet the needs of the institutions. Two channels are provided : a short one (3 years) leading to the diploma of higher technician, and a long one (5 years) leading to the diploma of engineer. Juridiction characterizes this establishment, it provides it with more flexibility in its opening policy on its environment.

3. The creation of the higher institutes of technological studies

The creation of the higher institutes of technological studies in May 1992 reveals the concern of adapting the training to both the demands of the employment market and the economical options of the country 26 higher institutes of technological studies were created in every region

These institutions had as mission to train skilled technicians in the industial, economic and management fields. Field inquiries revealed, at the time, that only 30% of the needs of the different economic establishments, all categories included, in qualified technicians were met. It is the task of higher education to train the lacking 70%.

4. The Virtual University of Tunis (VUT)

The plan of the training at the level of higher education improved thanks to the creation of the virtual University of Tunis in charge of securing a diploma- oriented training that does not necessitate presence and of contributing to tackling the challenge of the continuous evolution of the number of students ; this will relieve, progressively, form now till 2009, the direct trainings at the university establishments of 20% of the teaching syllabuses, which will be remote dispensed, at the same time as the classical courses. Beside this first task, the UVT is called for to assist the modernization of the trainings provided by the integration of numerical technologies and to extend its scope of university trainings to new audiences outside the students' sphere, in accordance with the principle of the continuous for life training for the benefit of any Tunisian wishing to enrich his/her knowledge and eager to improve his/her professional situation.

5. The university and the creation of enterprises:

The Tunisian university has succeeded in making employability the reference criterion in all the reforms and in the creation of new university institutions. This represents a change in the traditional conception of the university vocation which was restricted to academic trainings without any concern for preparing the students to the after-university, in a world characterized by complexity and mutation.

This absolute priority to employability is, nonetheless, not sufficient to satisfy the ambitions of an economy in full change; this is why the idea of a university that channels the creative potential of its students towards the creation of firms, especially in the innovating sectors, imposed itself as a higher form of employability.

From then on, the initiative culture and enterprise creation in the university premises are no longer mere slogans; specific spaces are reserved to them, especially in the technological poles and in the enterprise incubators. The dynamics they have created contributed in spreading within the university milieu a genuine culture of targeted research and innovation. To assist in rooting this culture among researchers and students.

6. The missions of the technological poles:

The technological pole is a space that integrates, as interdependent and complementary components, the higher education, the scientific research and the economic activity. It has as mission to:

- Develop the highly qualified human resources required for the technological renovation,

- Promote scientific research as a national priority and contribute in the enhancement of the research results,
- Promote the high added value innovating activities,
- Welcome and create new innovating enterprises that propose a development research activity,
- Place the new scientific equipment at the disposal of the enterprises for the "modelisation" of their production processes and of the objective scientific analysis of their products

7. The passage to the BMD: Bachelor, MA, Doctorate:

On September 2006, The ministry started the BMD reform which is bound to enable Tunisia to harmonize its university system with the international systems applied in the advanced countries.

To secure the best chances to the success of the reform, the ministry has adapted a progressive approach on the basis of a large consultation with all those interested, and with an entrance schedule to the new system by successive waves, for the institutions that will be ready in due time, up to the deadline of 2009 which must see all the higher education institutions integrate the new system.

- The Masters (MA): baccalaureate + 5 years:

The bachelor's degrees are enhanced by research masters or professional masters to prepare the students to jobs requiring conception, supervision of projects and enterprise management, in the public and private sectors, or channel them towards research and the preparation of the doctorate.

At the end of the 4 semesters of the MA, the student obtains 120 credits, in case of success.

- The doctorate: baccalaureate + 8 years:

After the Bachelor's degree and the MA, the last 3 years of studies are reserved to the doctoral studies. They consist of supervision sessions, and above all, research work in view of the doctorate thesis. Trainings in laboratories or in the national research centres may also complete the training.

8. The improvement of the quality of higher education:

The improvement of the quality of higher education is the first objective of the implemented reform; it mobilizes the continuous efforts of all the components of the system, administrative and pedagogical, the university teachers, assume the theoretical and practical tasks of conception and shaping of the architecture of the domains, mentions and specialities for the training of the Tunisian students who can rival with the students of the best universities in the world.

It is this concern of the quality of training and the safeguarding of the credibility of our diplomas that explains the setting up of the evaluation system of the higher education establishments. These university establishments may choose to integrate progressively the system of the internal evaluation first, then the external one. The evaluation takes into consideration the 5 following parameters:

- The internal productivity of the establishment (rate of success, rate of the interruption of studies),

- The pedagogical renovation (new created disciplines, pedagogical supports whether classical or numerical produced per teacher, rate of remote training courses, the pedagogical training and the evaluation of the teachers,

- The scientific production (number of theses, MA memoirs, number of studies published, seminars and organized scientific meetings, patents…,

- Partnership and services (effective participation of the environment representatives to the life of the establishment through its programming and management structures. Involvement of the professionals in the training, partnership with the private sector and the foreign institutions),

- The employability (systematic follow up of the graduates of the establishment, rate of the graduates' integration, rate of the liberal professions, number of internships in enterprises).

9. The partnership with economic and professional environment :

For decades, the University secured the spreading of knowledge and training which our young nation needed (doctors, technicians, teachers, higher and intermediate administrative personnel); but in assuming its new functions, it tended to live in autarky, while still honouring its teaching and research vocations. This has habilitated it, in spite of all, to tackle the great mutations at the national and international scales of the last decade of the previous century, which saw the new liberal world economy assert itself as the only alternative for all, an alternative governed by the laws of the market and that of the free circulation of properties and capitals as well as the law of profit.