

Issues and Challenges of the Surveying Engineering Education in Morocco Present and future

El Hassane SEMLALI and Driss TAHIRI, Morocco

Key words: Surveying engineering, geo-information, education, curriculum

SUMMARY

The Surveying Engineering Branch of the Institute of Agronomy and Veterinary medicine Hassan II (in short IAV Hassan II) was created in 1970. Up to know more than 800 surveying engineers have been graduated, about 10% from them are from Africa.

In order to improve the quality of the academic programs, follow the advanced technologies and answer the needs of several potential users, this Branch has known important adjustments and progress that can be summarized in three periods.

- 1- From 1970 to 1988 the education program was reserved to engineers of application (four-year program)
- 2- From 1988 to 2004 the education program concerned engineers in surveying (six-year program)
- 3- In 2004-2005 starts the new program of engineers in surveying based on five-year program.

The most important factors behind the third reform are:

- The reform of the university based on the law 01-00
- The recommendations of the Project of establishment of the IAV Hassan II
- The demand and opportunities of employment by private and public sectors
- The evolution of new technologies of information and communication
- The adoption by the ministry of higher education of a global educational architecture similar to that of the European countries (LMD system: License , Master, Doctorate)

The new curricula will emphasize to provide the surveying engineer a polyvalent education considering the practical and theoretical components of the profession such as:

- Professional courses (Geodesy, Cartography, Remote sensing, Surveying, Photogrammetry, GIS, Adjustment computation, Astronomy)
- Professional connected courses (land consolidation, land management, hydraulics, urban and rural management, road networks, purification network, allotment projects...)
- General courses (law, marketing, management, economy, finance, communication).
- Practical works (laboratories, practical project works, field training works, seminars, thesis...)