



# PREPARING UNIVERSITIES FOR THE FUTURE

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# I shall convey three sets of messages

- It is a necessity to base economic and societal development on knowledge!
- The State (regional, national, supra-national) should create the right conditions for university development!
- Universities should work hard and well to improve and develop!

A photograph of a person's silhouette in the foreground, looking out at a vast ocean under a bright, hazy sky. The sun is low on the horizon, creating a soft, golden glow. The water is dark, and the sky is a mix of light blue and white. The overall mood is contemplative and serene.

I

**It is a necessity to base  
economic and societal  
development on  
knowledge!**



# Economic development is globally positive for any society!

- **At the level of society**, it raises the average standard of living of the population, contributes to the promotion of democratic values, social cohesion and cultural development
- **At the level of individuals**,
  - It diminishes the numerous hazards of life and their consequences (diseases, illiteracy, political or societal oppression,.....
  - It makes people less dependent on essentials and increases their possibilities to have a decent life and even with a lot of potential

# Knowledge creation and diffusion is good for individuals and societies!

- Education has numerous functions in modern societies: intellectual and democratic training, acquisition of professional skills, knowledge production
- Investment in human capital is an excellent strategy
  - for individuals as it means higher salaries and lower risk of long term unemployment
  - for societies as it contributes to economic development
- The closer a country is to the “technology frontier”, the more profitable it is to invest in knowledge through HE/R
- Developing countries are in-between a model of technology adaptation (priority on secondary and professional education) and a model of scientific and technology innovation (priority on HE/R

# The Impact of the rapidly changing environment is important!

- Causes of the rapidly changing environment
  - Globalization
  - Scientific and technological progress
  - In Europe, creation of the European Higher education area (EHEA) (=Bologna process) and the European research area (ERA)
- The consequences for societies
  - are multifold and even contradictory:
    - Acceleration of the rhythm of change
    - Increased **competition**
    - Greater necessity to **collaborate**
  - and impact on
    - Individuals persons
    - Private companies
    - Pubic institutions, even higher education institutions



# There are also serious consequences for HE institutions!

- Demand (pressure) from all stakeholders for more transparency and better accountability
- Increasingly demanding private sector (professional training, LLL, focused programs and research)
- Increasing competition from new types of HE institutions:
  - Private for profit and corporate universities,
  - Distance and trans-border education, among others elite universities creating subsidiaries abroad)
- And, at least in the developed world, universities do not enjoy anymore unlimited trust

# There are also serious consequences for research!

- The model of research and innovation is moving from a sequential to a “parallel” one
- Tendency of appropriation (privatization) of basic research findings due to increased private funding and/or private **basic** research
- It will become increasingly risky to live on others’ effort in basic research
- The cost of doing research is increasing rapidly; therefore, it is necessary to
  - Search for a critical mass
  - To collaborate with other teams and institutions (for ex. CERN, joint research projects)



An aerial photograph of a tropical coastline. The water is a vibrant turquoise color, transitioning to a pale yellow and white sandy beach. The land is lush green with some buildings visible. The sky is a clear, bright blue. The text is overlaid on the center of the image.

II

The State (regional,  
national, supra-national)  
should create the right  
conditions for university  
development!

# The State must create the right conditions to allow universities being responsible and responsive!

- Universities, in particular research ones should be
  - “Responsive” to the needs of society, and
  - “Responsible” organizations (contribute to the improvement of society)
  - “Responsible” organizations are “responsive” in the long run
- Autonomy (and academic freedom) is a necessary condition for “responsible” research universities
  - Choice of programs and research topics
  - Choice of faculty and students
  - Choice of organization and management models; ownership of facilities and equipments
  - No (micro) political management, BUT accountable institutions

- State HE/R policies and funding must
  - Secure a good secondary education
  - Give a high priority for HE/R
  - Reflect the national development priorities, in particular the development of human resources
  - Reward quality and promote competition between institutions and researchers (“output” based) (for ex.: UK model)
  - Open-up the country to world competition and take advantage of the world reservoir of competences



A photograph of a snowy mountain peak, likely Mount Everest, with a person's silhouette visible in the foreground. The text is overlaid on the image.

III

Universities  
should work hard and well  
to improve and develop!

# Universities should have a clear understanding of their objectives and missions!

- Very few universities can excel at doing everything (teaching and research in all disciplines)
- Institutions should try to position themselves in selecting rigorously their missions
  - Playing at regional, national or international levels?
  - Comprehensive, focused or mono-disciplinary?
  - Teaching and/or research?
  - Traditional students and/or LLL? Traditional teaching methods or distance education
- AND try to be good (excellent) in what they have chosen to do
- Institutions must play the game of competition and exploit the potential benefits of collaboration

# Human resources should receive the highest priority!

- The recruitment of faculty is a key decision
  - It should be competitive and in most cases open to international competition
  - Salaries AND working conditions should be attractive; however, it is not the only criteria
- The training of the next generation faculty is crucial at national level
  - MA and doctorate studies should be encouraged and of good quality
  - Doctorate students and post-doctorate fellows should have teaching part time assignments
- Students
  - Must be selected according to their merit at least at MA level and higher
  - Deserving students with insufficient means should be supported



# Institutions and faculty should “fight” for funding!

- A basic reality: State funding will never be sufficient
- Development will depend largely on the capacity of the institution and faculty to raise additional resources. There are a couple of possibilities:
  - Outside:
    - To raise students’ fees (arguments in favor and against)
    - To apply for research grant to the “research council” or a foundation
    - To promote and sell the IPR (patents, licenses)
    - To create and grow an endowment fund thanks to keeping track of former students (alumni, ...)
  - Inside
    - To reward success in found raising (matching funds); HOWEVER, it is crucial to protect those disciplines living in a “poor” environment
    - To set-up an innovation fund capable of rapidly support a promising initiative not foreseen in the 4-5 years plan or budget

# Universities should run an active innovation policy!

- No single receipt, but a few basic principles
- “Innovation will remain a dream if there is nothing to apply”; basic research is a prerequisite
- Most innovative teams are multidisciplinary and composed of people doing basic as well as applied research (also working in academic research lab. and business)
- Non “scientific” and technology disciplines are not “second class”
  - Many (if not most) societal problems will not (only) be solved by science and technology (for ex.: peace, social cohesion, human security and dignity, access to education and medical treatment, etc...)
  - A good education in social sciences and humanities broadens researchers’ minds and make them more sensitive to their environment
- Scientific (in the broad sense) and technological curiosity and creativity
  - should be continuously promoted since primary school,
  - Internally promoted thanks to the creation of a favorable communication environment

# Universities should run an active communication policy

- There is a variance between the reputation of an institution and its effective quality
- Reputation contributes to quality! therefore, it is important to raise reputation. Main vectors
  - Research and publications (determinant for world rankings):
    - promote the publication of research results (in the best known journals),
    - harmonize the “institutional signature”
    - Collaborate with better known institutions
    - Internationalize
  - Communication policy
    - Run an active (aggressive) communication policy in the local and international press, on the web, in fares, etc..



# The University of the future is lead and managed!

- The university leaders should
  - Lead their institution and have the power to do so
  - Be “academics” with a proved ability to manage a complex institution
  - Report to a board of trustees (and not to the government)
  - Be accountable to the State and/or their sponsors
- The high level of scholarship and innovation capacity at the base of the hierarchical “pyramid” requires
  - an intensive communication (consultation) system
  - a management system by objectives and output financing
- Universities must develop an internal quality culture in order to improve quality “across the board”

# Conclusion

A photograph of a snow-covered mountain peak, likely Mount Everest, under a clear blue sky. The word "Conclusion" is written in a large, bold, blue font across the center of the image. The foreground shows a snowy slope with some dark rocks and a small figure of a person in the bottom right corner.

- Becoming a good university serving the country is not the product of chance (history helps, but is by far not sufficient)
- In order to progress in the world ranking lists, any institution
  - should benefit from a good environment,
  - sets its missions in line with reality and fix priorities and posteriorities accordingly,
  - be responsible towards society
  - be lead, proactive (entrepreneurial) and well managed,
  - promote and reward quality, creativity and innovation through the management of human and financial resources, as well as innovation and communication.



# THANK YOU FOR THE NICE INVITATION

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