SUFAREL Project
First Video seminar, 14 March 2012
Qualification frameworks in forestry sector of EU: education, innovations and benchmarking

Contribution of the Erasmus Mundus programs to the development of EU Qualifications framework in forestry
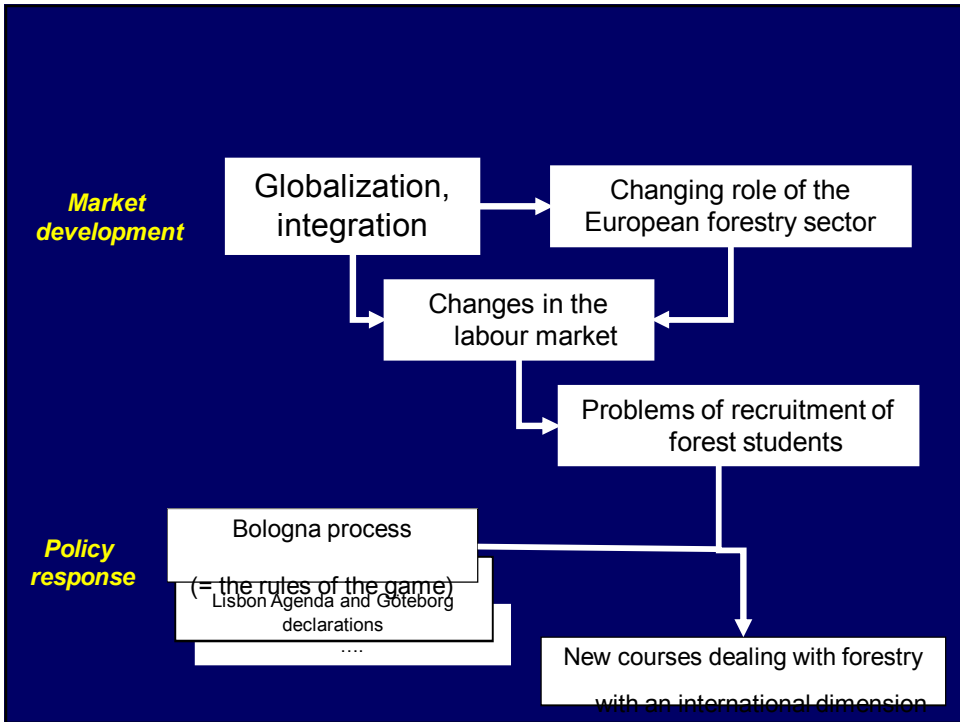
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Outline

1. The general framework of the Bologna process
2. International Master Courses related to forest resources
3. Governance issues related to the Int MSc courses dealing with forestry
4. Future challenges

1. The general framework of the Bologna process

Market development

Globalization, integration → Changing role of the European forestry sector

Changes in the labour market

Problems of recruitment of forest students

Policy response

Bologna process

(= the rules of the game)
Lisbon Agenda and Göteborg declarations
....

New courses dealing with forestry with an international dimension

Towards an European Higher Education Area

"*Higher education has been undergoing **major changes** in the past few years.*

***Comparability, compatibility of studies, cooperational activities** and **wide access** to education have been the key ideas of educational strategies and discussions.*

*The focus is on an **open and dynamic European educational area** and finally better competence in global educational markets*" (e.g. COM(1999)750)

Liisa Tahvanainen, 2003

Main Bologna action lines (1/3)

"Bologna process" = inter-governmental process which promotes reforms in higher education with 47 countries, leading to establishing a 'European Higher Education Area'

6 main actions:
•a system of academic **degrees that are easy to recognise and compare:** shared **Diploma Supplement** to improve transparency, joint and double degrees

DS templete: 8 sections

1 INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION
1.1 Family name(s):
1.2 Given name(s):
1.3 Date of birth *(day/month/year)*:
1.4 Student identification number or code *(if available)*:

2 INFORMATION IDENTIFYING THE QUALIFICATION
2.1 Name of qualification and *(if applicable)* title conferred *(in original language)*:
2.2 Main field(s) of study for the qualification:
2.3 Name and status of awarding institution *(in original language)*:
2.4 Name and status of institution *(if different from 2.3)* administering studies *(in original language)*:
2.5 Language(s) of instruction/examination:

3 INFORMATION ON THE LEVEL OF THE QUALIFICATION
3.1 Level of qualification:
3.2 Official length of programme:
3.3 Access requirements(s)

4 INFORMATION ON THE CONTENTS AND RESULTS GAINED
4.1 Mode of study:
4.2 Programme requirements:
4.3 Programme details: (e.g. modules or units studied), and the individual grades/marks/credits obtained:
   (if this information is available on an official transcript this should be used here)
4.4 Grading scheme and, if available, grade distribution guidance:
4.5 Overall classification of the qualification *(in original language)*:

5 INFORMATION ON THE FUNCTION OF THE QUALIFICATION
5.1 Access to further study:
5.2 Professional status *(if applicable)*:

6 ADDITIONAL INFORMATION
6.1 Additional information:
6.2 Further information sources:

7 CERTIFICATION OF THE SUPPLEMENT
7.1 Date:
7.2 Signature:
7.3 Capacity:
7.4 Official stamp or seal:

8 INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM
(N.B. Institutions who intend to issue Diploma Supplements should refer to the explanatory notes that explain how to complete them.)

Main Bologna action lines (2/3)

"Bologna process" = inter-governmental process which promotes reforms in higher education with 47 countries, leading to establishing a 'European Higher Education Area'

6 main actions:

• a system of academic **degrees that are easy to recognise and compare:** shared **Diploma Supplement** to improve transparency, joint and double degrees

• a system based on **3+2+3 cycles**

The 3+2+3 system: Bachelor + Master + PhD

Contents of the 3 title: see the "Dublin descriptors"

www.ond.vlaanderen.be/hogeronderwijs/bologna/documents/QF-EHEA-May2005.pdf

www.ond.vlaanderen.be/hogeronderwijs/bologna/documents/050218_QF_EHEA.pdf

Cycle	Knowledge and understanding:
1 (Bachelor)	[Is] supported by advanced text books [with] some aspects informed by knowledge at the forefront of their field of study ..
2 (Master)	provides a basis or opportunity for originality in developing or applying ideas often in a research* context ..
3 (Doctorate)	[includes] a systematic understanding of their field of study and mastery of the methods of research* associated with that field..

	Applying knowledge and understanding:
1 (Bachelor)	[through] devising and sustaining arguments
2 (Master)	[through] problem solving abilities [applied] in new or unfamiliar environments within broader (or multidisciplinary) contexts ..
3 (Doctorate)	[is demonstrated by the] ability to conceive, design, implement and adapt a substantial process of research* with scholarly integrity .. [is in the context of] a contribution that extends the frontier of knowledge by developing a substantial body of work some of which merits national or international refereed publication ..

The 3+2+3 system: Bachelor + Master + PhD

	Making judgements:
1 (Bachelor)	[involves] gathering and interpreting relevant data ..
2 (Master)	[demonstrates] the ability to integrate knowledge and handle complexity, and formulate judgements with incomplete data ..
3 (Doctorate)	[requires being] capable of critical analysis, evaluation and synthesis of new and complex ideas..

	Communication
1 (Bachelor)	[of] information, ideas, problems and solutions ..
2 (Master)	[of] their conclusions and the underpinning knowledge and rationale (restricted scope) to specialist and non-specialist audiences (monologue) ..
3 (Doctorate)	with their peers, the larger scholarly community and with society in general (dialogue) about their areas of expertise (broad scope)..

	Learning skills ..
1 (Bachelor)	have developed those skills needed to study further with a high level of autonomy ..
2 (Master)	study in a manner that may be largely self-directed or autonomous..
3 (Doctorate)	expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement ..

Main Bologna action lines (3/3)

"Bologna process" = inter-governmental process which promotes reforms in higher education with 47 countries, leading to establishing a 'European Higher Education Area'

6 main actions:

• a system of academic **degrees that are easy to recognise and compare:** shared **Diploma Supplement** to improve transparency, joint and double degrees

• a system based on **3+2+3 cycles**

• a system of **accumulation and transfer of credits** (ECTS)

• **mobility** of students and teachers

• cooperation with regard to **quality assurance** (see 4. Future challanges)

• the **European dimension in higher education**: increase the number of modules and teaching and study areas where the content, guidance or organisation has a European dimension

EU co-operation in education and training

6 pillars:

• **Erasmus Mundus**: enhancing quality in higher education through scholarships and academic co-operation worldwide;

• **Co-operation with industrialised countries**: enhancing the quality of higher education mainly through **joint study programmes with US, Can, Aus, J, NZ and SK**;

• **Jean Monnet**: promoting teaching and research on **European integration**;

• **Tempus**: building co-operation between the EU and **neighbouring regions**;

• **Edulink**: capacity-building and regional integration in higher education in **ACP** (Africa, Caribbean and Pacific) states and regions;

• **Alfa**: supporting co-operation between higher education institutions in the EU and **Latin America**

2. International Master Courses related to forest resources

High Education Initiatives (HEIs) in Europe

a. Multi-HEIs international programs

b. Bi-lateral international programs

e.g.: NOVA / CARe-FOR-US PhD course on governance in urban forestry & urban greening

c. International programs run by one single institution

e.g.

MSc Mountain Forestry by BOKU

d. Short international courses

e.g. NFZ - Summer School 2012 Forest Economics in a Changing Environment (FORECE)

International specialized MSc in Europe

Erasmus Mundus programme:
- MSc of European Forestry (2nd edition)
- MSc SUTROFOR (2nd edition)
- MSc SUFONAMA (2nd edition, starting 2012-13)
- MSc MEDfOR (1st edition, starting 2012-13)

- PhD FONASO (Forest & Nature for Society)

| European Union

Other initiatives:
- MSc Forestry and Environmental Engineering
- MSc FOPER → MSc FOPER (2nd phase)
- MSc EUROFORESTER → FORPEC
- …

Forest and Environmental Engineering
www.helsinki.fi/internationalprogrammes/masterprogrammes/cbu_fee.html

FOPER
www.foper.org

Euroforester
www.slu.se/en/education/masters-studies/programmes/euroforester/

A summary view

- Remarkable progress towards a common European educational area (Bologna process)

- Forest sciences: more advanced in the internalization process

- Start-up: a leading role of Scandinavian forest schools (DK, FIN, S); now a more enlarged cluster of universities

- A prevalence of forest economics and policies

- Many initiatives related to the cooperation with Eastern European countries

3. Governance issues related to the Int MSc courses dealing with forestry

The objectives of the Erasmus Mundus programme (in brief)

- **Action 1:** Supporting the creation of **consortia** of high level education institutions in EU

- **Action 2:** Providing **scholarships** to high-qualified graduate students and scholars from third countries to facilate their participation in the courses

- **Action 3:** Facilitating the creation of **high-quality partnerships** between EU and third-country higher education institutions

- **Action 4:** **Improving accessibility** and enhance the profile and visibility of higher education in the European Union.

Erasmus Mundus MSc in agriculture, forestry and veterinary: 18 courses out of 131; 4 in Forestry + 1 PhD program (34)★

Title of Masters Course	Course Website
AFEPA - European Master in Agricultural, Food and Environmental Policy Analysis	http://www.uclouvain.be/afepa
AGRIS MUNDUS - MSc in Sustainable Development in Agriculture	http://www.agrismundus.eu
New EM-SANF - Erasmus Mundus Master Course Sustainable Animal Nutrition and Feeding	http://www.emsanf.eu/UK/
EMAE - European Master in Applied Ecology	http://www.master-emae.org
EMBC - Erasmus Mundus Master of Science in Marine Biodiversity and Conservation	http://embc.marbef.org
EMFOL - Food of Life	http://www.emfoodoflife.eu/
EUMAINE - European Master of Science in Nematology	http://www.eumaine.ugent.be/
euSYSBIO - erasmus Mundus Master's Course in euSYSBIO Systems Biology	www.kth.se/eusysbio
Food ID - European Master Food Identity	www.masterfoodidentity.com
FIPDes - Food Innovation and Product Design	http://www.fipdes.eu
IMHS - International Master in Horticultural Sciences	www.imahs.unibo.it
IMRD - International Master of Science in Rural Development	http://www.imrd.ugent.be
New MEDfOR - Mediterranean Forestry and Natural Resources Management ★	http://www.medfor.eu
MScEF - Master of Science in European Forestry	http://www.europeanforestry.net
SUFONAMA - Sustainable Forest and Nature Management ★	www.sufonama.net
SUTROFOR - Erasmus Mundus Masters Course in Sustainable Tropical Forestry ★	http://www.sutrofor.eu/
VINIFERA EuroMaster - European Master of Science of Viticulture and Enology ★	http://vinifera-euromaster.eu
VINTAGE - Master International Vintage, Vine and Terroir management	http://www.vintagemaster.com

★ : involving University of Padova

SUTROFOR, SUFONAMA and MEDfOR

Sustainable Tropical Forestry (SUTROFOR)

Sustainable Forest and Nature Management (SUFONAMA)

Mediterranean Forestry and Natural Resources Management (MEDfOR)

Associated partners
(→ thesis work)

- Non-EU universities (e.g.: UBC)

- International Research institutions (e.g.: CIFOR)

- International organizations (e.g.: Food and Agriculture Organization)

- NGOs (e.g.: Mediterranean Forest Owners Association, World Wildlife Fund Mediterranean Office)

General structure

- **120 ECTS**: 60 (1st year – 2 semesters) + 30 (2nd year – 1 semester) + 30 for the thesis

- **1st year in one university** (general topics) + **2nd year of specialization** in another partner university with thesis work, preferably with an associated partner

- A **common field course** (between the 1st and the 2nd year for SUTROFOR and SUFONAMA, between the 1st and the 2nd semester for MEDfOR); 9-15 ECTS

- **Double or** preferably a **joint degree**

- Some common **on line courses** (Research methodologies, Climate change economics and policies, Field course preparation)

Pros & Cons

a. Benefits for students and scholars

b. Benefits for the university institutions

c. Problems in governance

a. Benefits for students and scholars (1/2)

- EU students included in groups of **10-20 highly qualified international students** selected out of more than 900 students world-wide. Scholarships for non-EU students (21,000 € per year)
- Excellent students → their **skills and enthusiasm is carried on to "local" students** – motivations to improve programmes
- Action 3 scholarships for **financing thesis work abroad**
- **Scholarships** for third-country scholars and for short-term missions (1-3 months) for EU **universities staff**
- Compulsory **Joint Summer Module**
- **International network**, alumni association of all EM students/universities

a. Benefits for students (2/2): employability

- **Legal recognition**: still an open process. Individual governments of **EU countries** remain responsible for their education systems and are free to **apply their own rules**, including whether or not to recognise academic qualifications obtained elsewhere

  … but a student gets 2 Master titles recognized at least by 2 countries + the DS (=very transparent picture of his/her qualification)

- **Market recognition**: apparently good employment position (in international organizations, NGOs, companies, … while public sector is suffering for the budget cuts) and many PhD positions

b. Internal governance-related benefits for partner universities

- An important and **strong international network**
- **Excellent students and ambassadors** : positive image for the institution (and for the forestry sector)
- **Industrial partnerships** for sponsoring scholarships (academic-private sector collaboration)
- Spin-off for further **EU applications**

c. Internal governance-related problems for partner universities

- **Administration**
  - Heavy administrative burden: selection procedure, financial agreements, administrative manuals, etc.
  - Erasmus Mundus Secretariat is costly and EU grant for administration is limited
  - How to avoid 5 partners dancing 5 different dances – overcoming national administrative barriers
  - You need a strong institutional commitment

- "One for all, and all for one": keeping **all partners satisfied**
- Students are excellent but **high demanding**

4. Future challenges

A summary view

- Still very dynamic, unstable and not consolidated experiences
- With a continuous process of integration, challenging problems to be considered:
  - **Financial sustainability**: how to survive after the start-up phase?
  - Students' **enrollment fees**: no easy a common teaching policy without a common fee policy
  - **Employability** evaluation
  - **Quality Assurance** control of teaching contents and students services

Quality Assurance

ENQA
The European Association for Quality Assurance in Higher Education disseminates information, experiences and good practices in the field of QA)in higher education to European QA agencies, public authorities and higher education institutions

ESG
Standards and Guidelines for Quality Assurance in the European Higher Education Area

EQAR
The European Quality Assurance Register for Higher Education, established in 2008 to increase the transparency of quality assurance in higher education across Europe

Governance: future challenges

- Mobility → transparency (international accreditation) → increased competition; in this open market for HEIs is still there a room in Europe for so many universities teaching forestry?

- From the teaching focused on wood value chain to a vision of forests as multifunctional resources: are forest HEIs loosing their identity? (not mentioning e-learning and the risk to loose a traditional role of teaching institution)

- A possible solution for MSc and PhD programmes: a network of top quality universities offering high specialized compact courses? (e.g.: watershed management, forest monitoring, CSR, landscape planning, bio-energy, …)

New developments

- From international MSc courses to joint PhD programmes
  - SUTROFOR + SUFONAMA → FONASO PhD programme
  - FOPER PhD programme
  - …
- From teaching to research networks:
 - Newforex research programme (7th EC FP)

New developments: ERASMUS for ALL

The new EU programme for education, training, youth and sport proposed by the EC on November 2011

Key figures: Erasmus for All (2014-2020)	
Overall budget	€19 billion (includes €1.8 billion for international cooperation)
Overall mobility opportunities	5 million people
Higher education	2.2 million students
Staff mobility	1 million teachers, trainers, youth workers and other staff
Vocational education and training	735 000 students
Volunteer and youth exchange schemes	540 000 young people
Master's degree loan guarantee scheme	330 000 students
International students	135 000 students
Joint degree grants	34 000 students
Cooperation targets:	
Strategic Partnerships	More than 20 000 linking together 115 000 institutions
Knowledge Alliances	200 set up by 2000 higher education institutions and businesses
Sectoral Skills Alliances	200 set up by 2000 education and training providers and businesses

Only if we cope with these challenges we can have people staying at our universities that, describing their past experience, can state - like Galileo Galilei after his staying at University of Padova - *"I spent there the most productive and nice years of my life"*
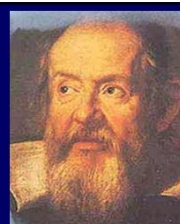
СПАСИБО!

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