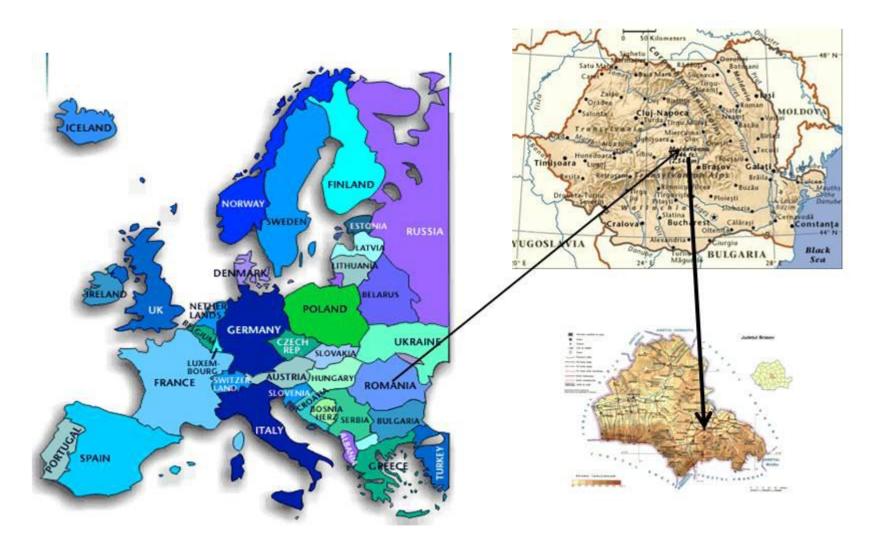
# FORESTRY HIGHER EDUCATION IN ROMANIA: STATUS AND CHALLENGES

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# Geographical location



#### Forestry Background:

#### Main forestry features:

- Stable/slight increase in forest area: 6.9 million ha (70% broadleaves)
- Volume of wood stock: 2.2 billion m3
- More than 3.8 billion Euro annual export value of wood and wood products (including furniture -2.19 billion Euro)

#### Post 1990 main trends in Romanian forestry:

- Significant changes in the political and economic system (centralised – decentralised)
- Significant changes in forest ownership (state dominant – diversified ownership)

## Higher Education Background:

- Historical evolution of forestry higher education:
  - 1883-1948: 1 location: Bucharest
  - 1948-1953: 3 locations: Bucharest, Campulung Moldovenesc and Brasov
  - 1953-1990: 1 location: Brasov
- Nowadays: 8 universities which provide forestry education:
  - 7 state universities + 1 private university
  - 2 faculties + 6 departments
  - 656 BSc students, 217 MSc students and 18 PhD students enrolled in the first year (2017)
  - 472 BSc graduates, 182 MSc graduates and 7 PhD graduates in 2017

## Main Features of Forestry Higher Education:

# Changes after 1990: Framework changes

- Changes in universities: de-centralisation and "liberalisation" of higher education (accompanied by underfunding)
- Z.Technological development (especially internet)
- 3.Internationalisation (ex. Tempus, Erasmus + etc.) accompanied by brain-drain

#### Field specific changes

- 1.International trends in forestry: productivism, biodiversity conservation, climate change, social responsibility
- 2.Fundamental changes in the forestry sector: political, institutional, ownership
- 3.Bologna process (from Forest Engineer+ PhD to BSc+MSc+PhD)

## Impact of Changes in Forestry Higher Education:

#### Framework Changes

- Changes in universities: decentralisation and "liberalisation" of higher education (accompanied by underfunding)
- Technological development (especially internet)
- Internationalisation (ex. Tempus, Erasmus+ etc.) accompanied by brain-drain

#### **Impact**

- Establishment of new forestry programs in several universities
- Significant increase in the number of forestry students/graduates
- Development of part-time/long distance forestry programs
- Topics or programs (BSc, MSc, PhD) in English
- Reduced attractiveness of forestry programs among highschool graduates

## Changes in Forestry Higher Education:

## Field Specific Changes

- International trends in forestry: productivism, biodiversity conservation, climate change, social responsibility
- Fundamental changes in the forestry sector: political, institutional, ownership
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#### **Impact**

- New topics in the curricula:
  - biodiversity conservation, certification, impact of climate change, IT applications, GIS
  - forest policy, forest law and economics, governance, soft skills (communication etc.)
- Uncorrelation of the higher education degrees with the job market
  - BSc is not addressing the forestry practice needs
  - Too many graduates
- Fewer jobs in forestry more jobs in forestry/environment/land use related fields

# Opportunities for Forestry Higher Education:

Compared to Western Europe, forestry education in Romanian (as well as in other CEE countries) has a stronger profile in the higher education system (stand alone forestry faculties in universities)

Stronger capacity to influence the university/higher education systems, decisions/policies

Forestry faculties should promote more the employment opportunities of their graduates both in forestry and other related fields: environmental protection, national parks, rural development, game management, land use etc.

# **THANK YOU!**

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