

# GOFE

## Global Outlook on Forest Education

IUFRO-IFSA Joint Task Force (JTF) on Forest Education

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Tiusanen

# Rationale & Background

A central diagram consisting of four dark green rounded rectangular boxes with white borders, arranged in a diamond shape. The boxes are interconnected by a light green, semi-transparent arrow-like shape that points from the top-left and top-right boxes towards the bottom-left and bottom-right boxes. The text inside the boxes is white and bold.

**Globalization**

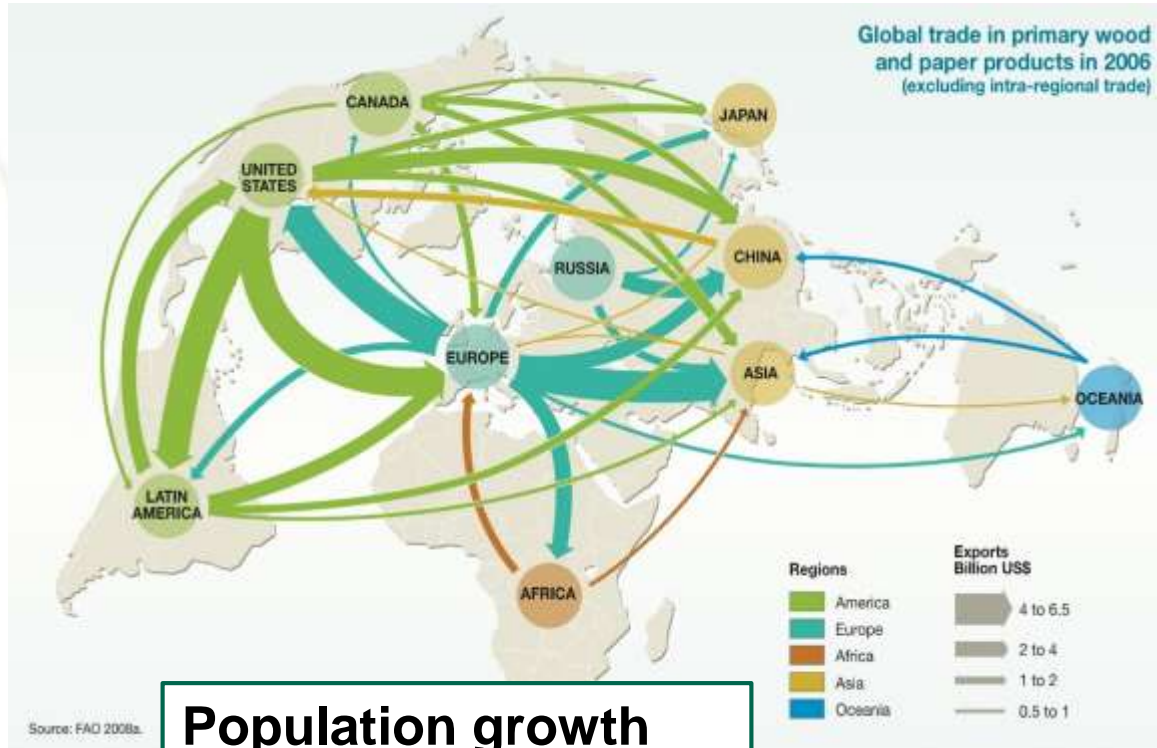
**Green  
economy /  
Bioeconomy**

**Information  
technology**

**Structure of  
forest  
education**



# Globalization



**Population growth**  
**Emerging economies**  
**Scarcity**  
**Env. degradation**

e.g. Nikolakis & Innes (2014)

# Green economy / Bioeconomy



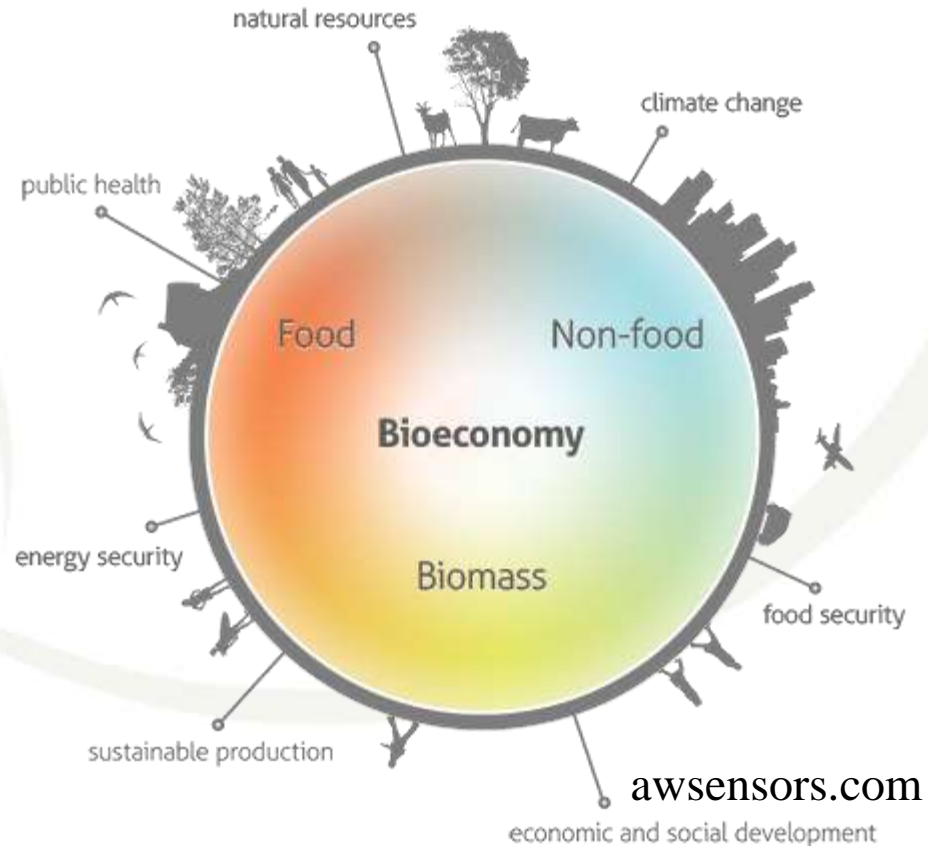
**BEFORE**

**NOW / FUTURE?**

**Forestry**

**Agriculture**

**Energy**



awsensors.com

**International Union of Forest Research Organizations**

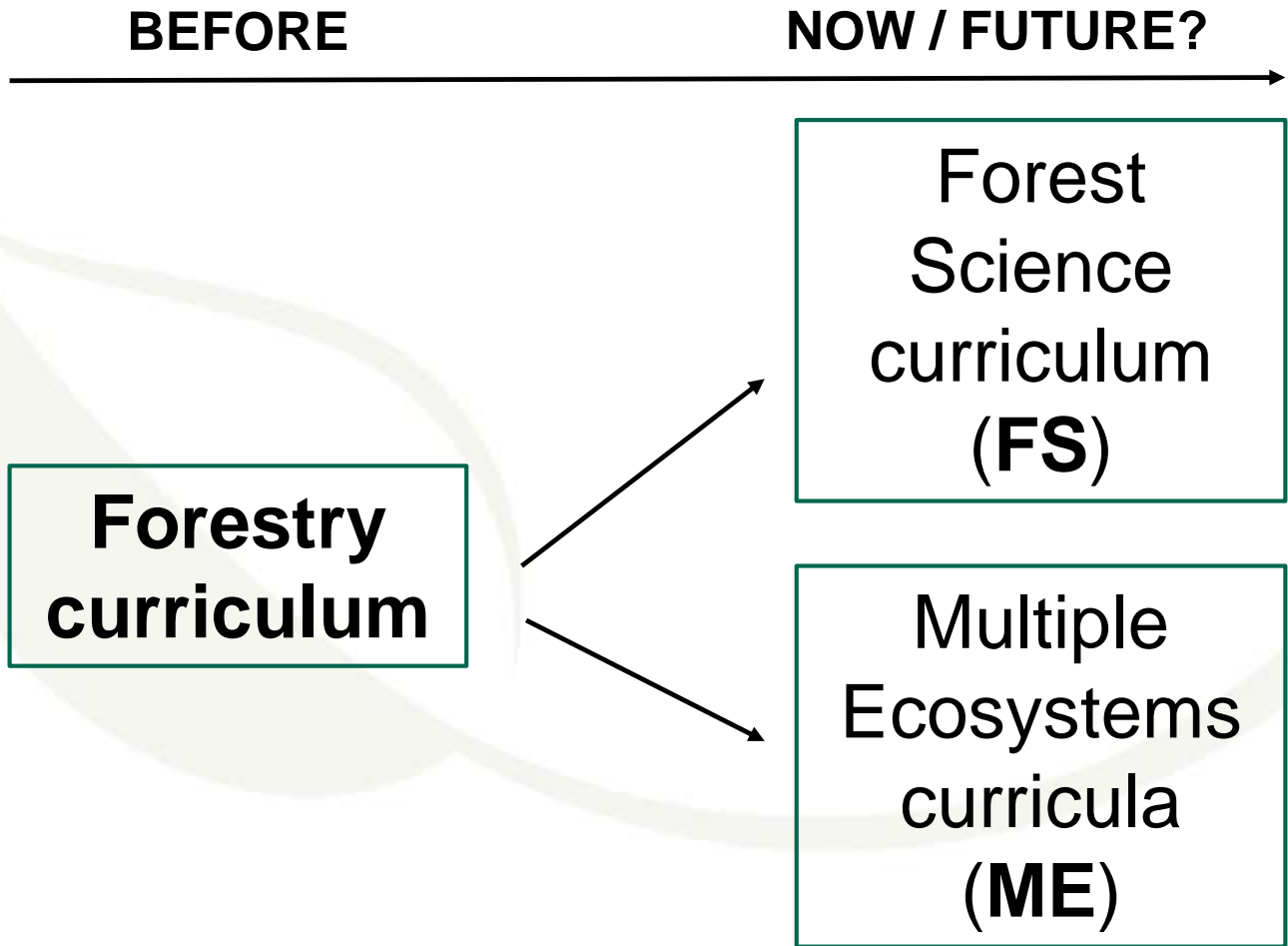
Union Internationale des  
Instituts de Recherches  
Forestières

Unión Internacional  
de Organizaciones de  
Investigación Forestal

Internationaler  
Verband Forstlicher  
Forschungsanstalten



# Structure of Forest Education



e.g., O'Hara and Salwasser (2015)

# Aim of the Global Outlook on Forest Education (GOFE)

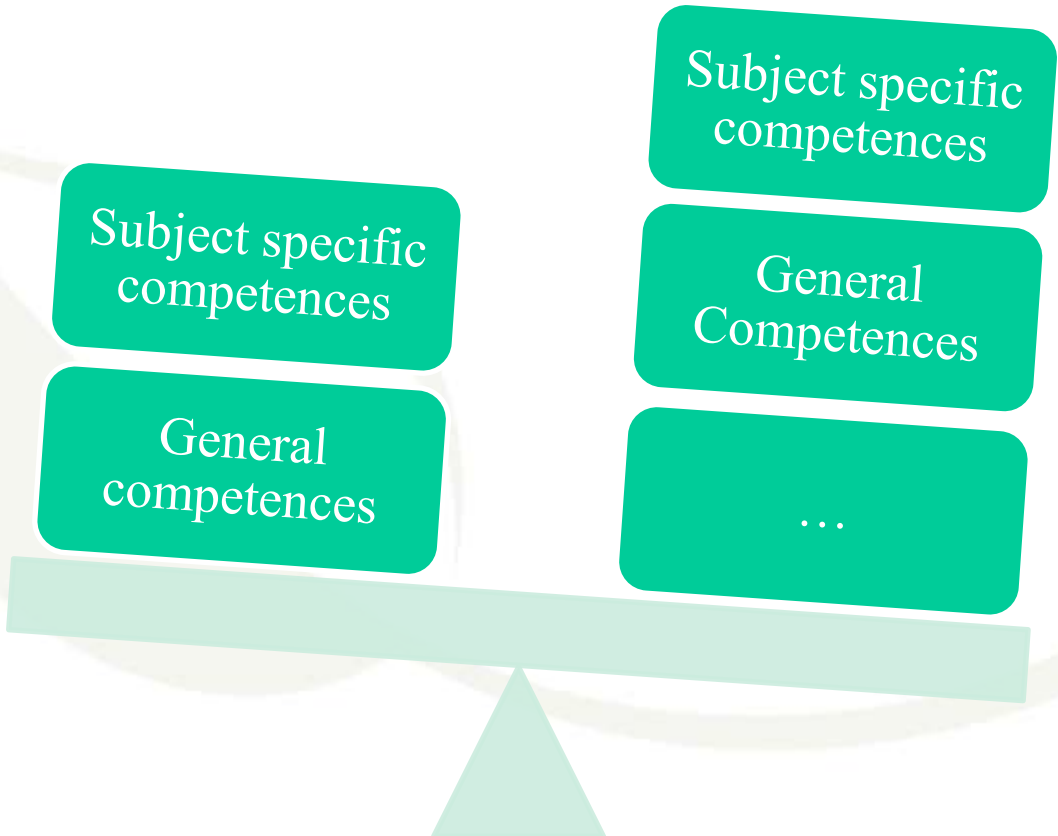
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1. To analyse **competences** from forest science (**FS**) centred curricula and multiple ecosystems curricula (**ME**)
2. To make a comprehensive **gap analysis** of an international scale using up-to-date scientific methods
3. To analyse the possibilities of new learning methods and approaches, especially those related to **e-learning** and LLL.



Curriculum

Working life





Curriculum

Working  
life

Subject specific  
competences

General  
competences

Subject specific  
competences

General Competences

...

## Gap analysis

Differences between competences earned from education and needed in working life

**FS vs. ME**  
Curriculum

?

**Forest related**  
vs. **Other jobs**

Subject specific  
competences

General  
competences

Subject specific  
competences

General Competences

...

## Gap analysis

Differences between competences earned from education and needed in working life

# A new way to analyse competences

## Behavioral Event Interview (BEI)

How to distinguish between competencies of average and top performers?

Criterion sampling using  
**Behavioral Event Interviews:**

*„I know it when I see it.“*



# Behavioral Event Interview

- **Procedure:**

- Panel to determine top performers (5-10%)  
from average = typical (subsequent 10-25%)
- BEI interviews (15-25) are held
  - Identify three professional successes and three failures
  - "Situation, hindrances, action, result, evaluate"
- "Blind" coders assess frequency and complexity  
to form data driven competency criteria
- Statistical analysis for model construction  
based on combinations of various competencies

# Behavioral Event Interview

- **Previous validations have found:**
  - Strong validity across different regions
  - Reducing the effect of ethnic or cultural biases
  - Effective in predicting long-term life outcomes
  - Competencies accumulate into "tipping points"

**Table 2.** Association of executive success with a competency algorithm based on Behavioral Event Interviews

Performance predicted by competency algorithm	U.S. samples <sup>a</sup>				Overseas samples <sup>b</sup>			
	Initial		New		Europe		Asia	
	<i>N</i>	Top performer (%)	<i>N</i>	Top performer (%)	<i>N</i>	Top performer (%)	<i>N</i>	Top performer (%)
High <sup>c</sup>	12	100	17	65	11	82	7	86
Lower	17	29	25	20	8	13	9	11

Source: McClelland 1998

# GOFE Process



Feb

- Recruitment of teams (professors and students)



Jun  
16

- Kick-off meeting (Physically in Helsinki, Finland + webinar)



Oct

- Data gathering and literature review



Dec

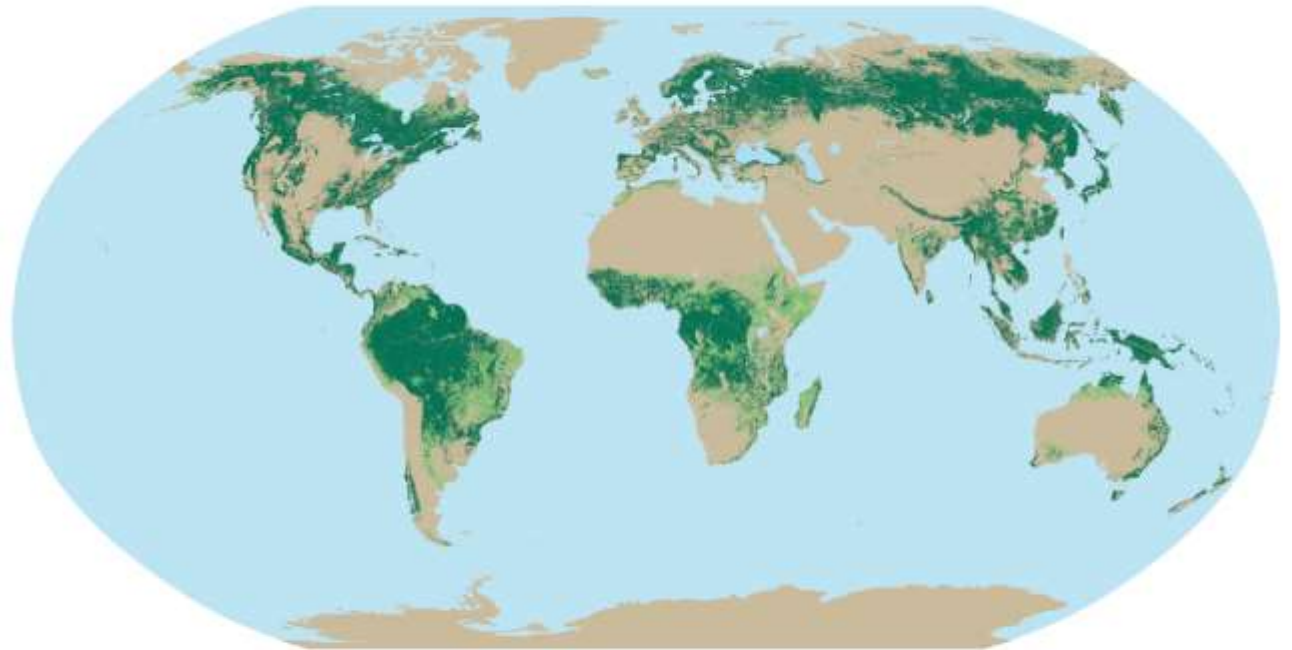
- Interview and surveys

Jun  
17

- Communication of final results at IUFRO 125th Anniversary Congress

# Need for global understanding about forest education

Who is representing your country or region?



Local teams are called for:  
professor(s) + student(s)





Thank you for your attention!

# GOFE

## Global Outlook on Forest Education

More information / join the team:

[www.iufro.org/science/task-forces/forest-education/](http://www.iufro.org/science/task-forces/forest-education/)

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# References

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Nikolakis, W. & Innes, J. eds. 2014. Forests and Globalization: Challenges and Opportunities for Sustainable Development. Routledge.

McClelland, D. C., 1998, Identifying competencies with behavioral event interviews, *Psychological Science* 9, 331–339.

O’Hara, K.L. & Salwasser, H. 2015. Forest Science Education in Research Universities. *Journal of Forestry* 113 (6): 581-584.

Standiford, R.B. 2015. Distance Education and New Models for Forestry Education. *J. For.* 113(6):557–560.

<http://dx.doi.org/10.5849/jof.15-020>

