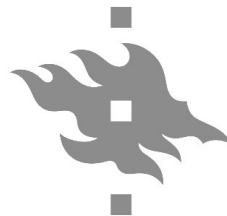# Perspectives of Forest Higher Education in the Asia-Pacific: Capacity needs & future directions

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01 December, 2022

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VITRI

FRAME

University of Helsinki   Viikki Tropical Resources Institute (VITRI)

Presentation outline

1. Global Assessment of Forest Education (FAO, 2022)

2. Regional Assessment of Forest Education in Asia & the Pacific (FAO et al., 2021)

➔ Background

➔ Methods

➔ Key findings

➔ Recommendations

3. Synthesis & conclusions

4. Breakout group discussion: Reflections on your HE institutions

5. Group discussion & reflections: Relevance & role of FRAME & future directions for teaching & learning in the context of SFM, bioeconomy & lifelong learning

1. Global Assessment of Forest Education

Rekola, M., Sharik, T.L. 2022. Global assessment of forest education – Creation of a Global Forest Education Platform and Launch of a Joint Initiative under the Aegis of the Collaborative Partnership on Forests (FAO-ITTO-IUFRO project GCP /GLO/044/GER). Forestry Working Paper No. 32. Rome, FAO.

Available at:
https://doi.org/10.4060/cc2196en

1. Global Assessment of Forest Education

BACKGROUND

Global Forest Education Project (2019 - 2021)

Aim to assess the goals, achievements & gaps of forest education at all levels of formal education in order to catalyse & enhance efforts in forest education from local to global levels.

➢ Food & Agriculture Organization of the United Nations (FAO)

➢ International Union of Forest Research Organizations (IUFRO)

➢ International Tropical Timber Organization (ITTO)

Scope of report

- Covers education & training related to forests, trees outside forests and other wooded land
- Includes education delivered through programmes of forestry & forest sciences as well as programmes of broader scope
- Covers all levels of formal education: primary, secondary, technical & vocational education & training (TVET), universities & colleges

1. Global Assessment of Forest Education
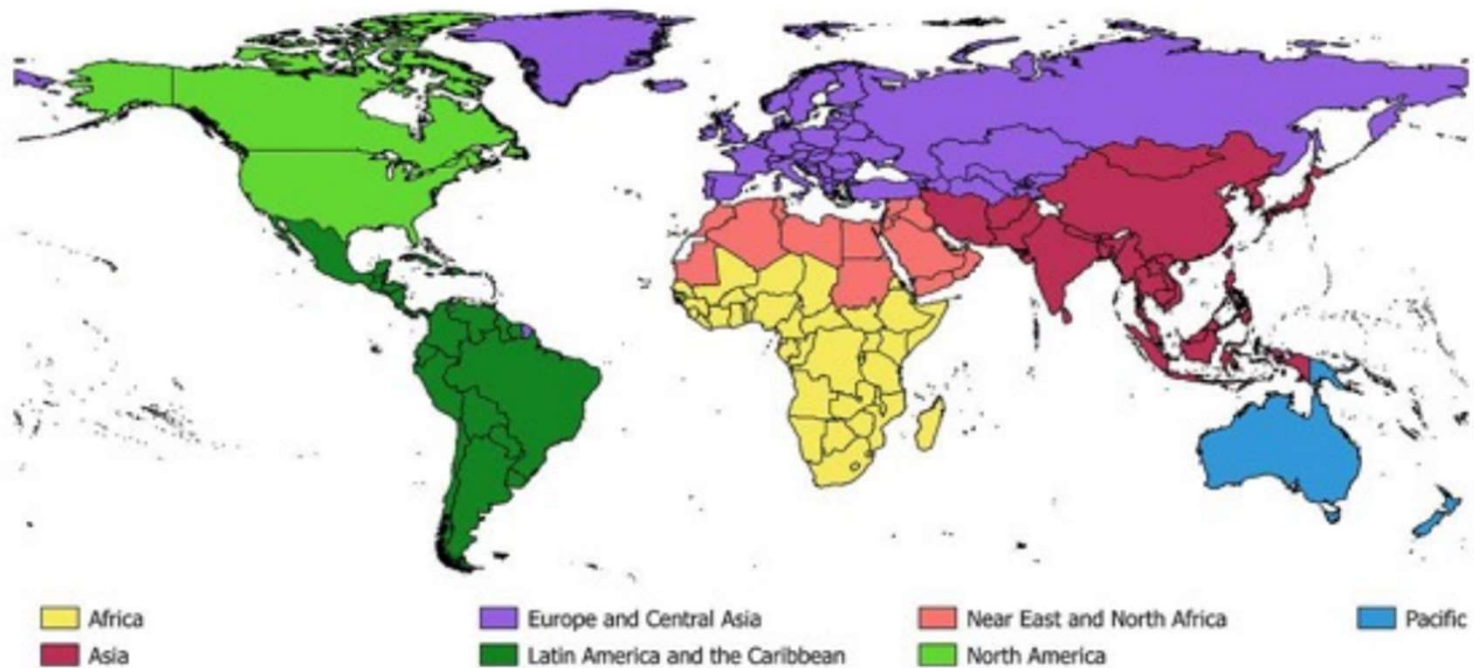
METHODS

2020 Global Forest Education Survey

- Six regional assessment reports
- supplemented by literature review
- International Conference on Forest Education in 2021
- 2,741 respondents:
➢ professionals working in organizations, government agencies & the private sector;
➢ teachers & school administrators from all levels of formal education
➢ students and recent graduates of TVET and University & College forest programs

1. Global Assessment of Forest Education

Figure 3. Six regions in the global forest education survey

Africa | Europe and Central Asia | Near East and North Africa | Pacific
Asia | Latin America and the Caribbean | North America

1. Global Assessment of Forest Education

Respondents by target group (statistical sampling bolded) and regions and countries (snowball sampling)

	Professionals	Teachers	Students	Total	Percentage of total (%)
1 Africa (AF)	136	117	129	382	14
2 Asia and the Pacific (AP)	180	145	113	438	16.2
3 Europe	170	173	118	461	17
4 Latin America and the Caribbean (LAC)	274	333	289	896	32
4 Near East and North Africa (NENA)	34	36	5	75	2.8
6 North America (NA)	144	159	186	489	18
Total	968	963	840	2 741	100.0

1. Global Assessment of Forest Education

KEY FINDINGS - 1

Gaps & challenges with the content of forestry curriculum

Poor coverage of social & cultural values of forests, better coverage of biophysical dimensions of forests

- ➢ Forest resources & forest ecology had best coverage
- ➢ Lack of coverage of forest services & cultural & social issues such as gender, race/ethnicity, & traditional & indigenous knowledge
- ➢ Generic skills lacking for graduate students (master's & PhD) ; e.g. communication, critical thinking & collaboration

Teaching approaches & students' exposure to forests.

Students had limited opportunities for field experience, internships & practical training

1. Global Assessment of Forest Education
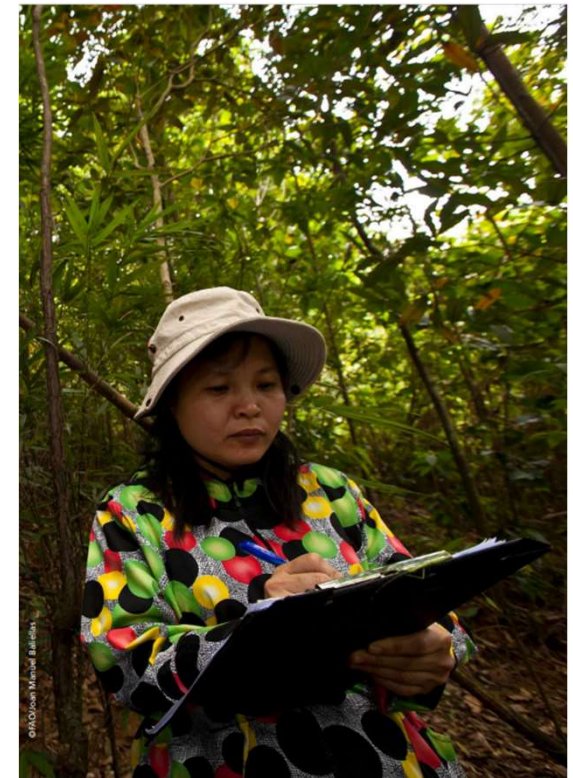
KEY FINDINGS - 2

Gender & Diversity of students

➢ Females & ethnic minorities more hesitant to enroll in forest higher education

➢ Gender affects job prospects: ability to find a job & types of jobs offered (esp. for women)

Digital readiness

Digital tools are viewed positively, but rarely used effectively

➢ Digital tools are valued as learning tools, but infrequently used

➢ Perception that digital tools cannot replace field education.

➢ Digital learning limited by internet accessibility, inadequate equipment & unskilled teachers.

1. Global Assessment of Forest Education

KEY FINDINGS - 3

Workplace readiness

University graduates are on average moderately prepared to enter the workforce.

➢ gaps in curricula

➢ insufficient opportunities for practical training, including in forests

➢ insufficient digital readiness

➢ some limitations in educational resources

General developments & trends

Enrolment trends vary; i.e. some programmes are declining in number of new students whereas enrolment is increasing elsewhere.

➢ Negative images are often attached to jobs in rural areas and forestry.

1. Global Assessment of Forest Education

RECOMMENDATIONS

1. update curricula to reflect the modern understanding of the values & uses of forests, new technologies used in the forest sector, & the changing demands of the job market;

2. increase the focus on issues such as:
➢ social issues (forest livelihoods, forests & gender, race & ethnicity; indigenous knowledge);
➢ other region-specific topics & skills

3. support enrolment of women and ethnic minorities

4. develop internships, part-time & other work-experience programs with employers active in forest sector
➢ systems to ensure that students benefit & gain practical workplace experience needed.

5. support & incentivize professional training to equip teachers to provide high quality forest education, including, modern digital technology.
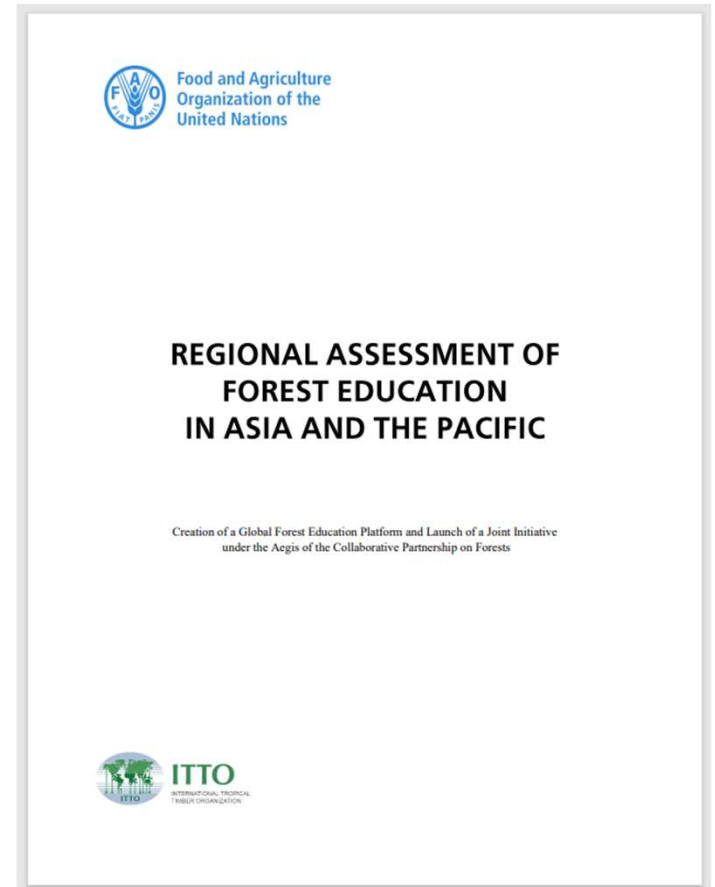
2. Regional Assessment of Forest Education in Asia & the Pacific

Shanahan, M., Saengcharnchai, S., Atkinson, J. and Ganz, D. 2021. Regional Assessment of Forest Education in Asia and the Pacific. Rome, FAO.

Available at:
https://www.fao.org/3/cb6215en/cb6215en.pdf

Food and Agriculture
Organization of the
United Nations

**REGIONAL ASSESSMENT OF
FOREST EDUCATION
IN ASIA AND THE PACIFIC**

Creation of a Global Forest Education Platform and Launch of a Joint Initiative
under the Aegis of the Collaborative Partnership on Forests

ITTO
INTERNATIONAL TROPICAL
TIMBER ORGANIZATION

2. Regional Assessment of Forest Education in Asia & the Pacific   BACKGROUND

This report presents findings of the regional assessment for Asia-Pacific, one of 6 regions included in the 2020 Global Forest Education Survey

At the regional level, a recent report by FAO, RECOFTC (Associate Partners in FRAME), and the International Timber Trade Organization (ITTO)

2. Regional Assessment of Forest Education in Asia & the Pacific   <u>METHODS</u>

2020 Global Forest Education Survey

- One of six regional assessment reports

- scientific & grey literature

- 435 respondents in 35 out of 44 counties in the region:

➢ professionals working in organizations, government agencies & the private sector;

➢ teachers & school administrators from all levels of formal education

➢ students and recent graduates of TVET and University & College forest programs

- 62 expert contributions made during a regional consultation on the findings (Feb 2021)

- International Conference on Forest Education in 2021

2. Regional Assessment of Forest Education in Asia & the Pacific   KEY FINDINGS - 1

"Significant gaps in forest education threaten to undermine efforts to limit climate change, conserve biodiversity & achieve sustainable development"

Widespread challenges with the content of forestry curriculum

Needs modernization to encompass a broad range of topics & skills that go far beyond the narrow scope of classical forestry courses:

➢ increasing coverage of NTFPs & socio-economic issues relating to forests
➢ interdisciplinary approaches
➢ boosting skills relevant to engaging with communities, managing projects, & working collaboratively.

Lack of student exposure to forests

➢ through field trips or practical work

2. Regional Assessment of Forest Education in Asia & the Pacific   KEY FINDINGS - 2

Graduates lack of workplace readiness

➢ Lack of practical experience & pathways to forest-related jobs.

➢ unfamiliar with modern approaches & lack relevant knowledge and skills

➢ lack of experience in forests

➢ knowledge gaps of tools & practical skills

➢ gaps in "soft skills" such as facilitation & communication

➢ limited understanding of social issues such as gender, social inclusion & forest governance.

Forest jobs

➢ Students need internships & part-time forest jobs to fill the knowledge & skills, but such opportunities are rare.

➢ Gender affects job prospects: ability to find a job & types of jobs offered (esp. for women)

➢ Forest jobs suffer from a negative image.

2. Regional Assessment of Forest Education in Asia & the Pacific KEY FINDINGS - 3
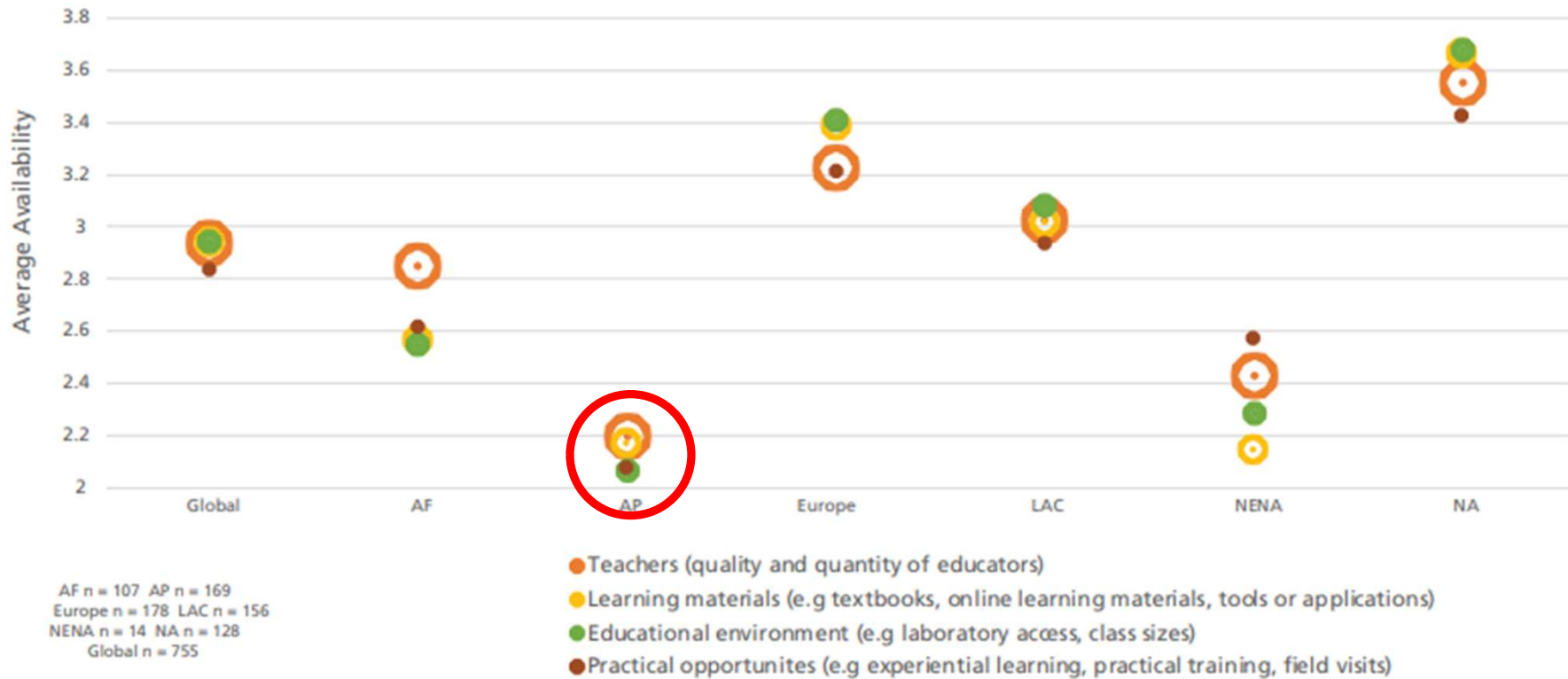
Digital tools are viewed positively, but rarely used effectively

➢ Digital tools are valued as learning tools, but infrequently used

➢ Warning that digital tools cannot replace practical experience in forests.

➢ digital learning is limited by internet accessibility, low levels of digital literacy, inadequate equipment or unskilled teachers.

Low level of resources dedicated to forestry education

Figure 21. Availability of resources in forest degree programmes at the master's and PhD level

AF n = 107 AP n = 169
Europe n = 178 LAC n = 156
NENA n = 14 NA n = 128
Global n = 755

● Teachers (quality and quantity of educators)
● Learning materials (e.g textbooks, online learning materials, tools or applications)
● Educational environment (e.g laboratory access, class sizes)
● Practical opportunites (e.g experiential learning, practical training, field visits)

2. Regional Assessment of Forest Education in Asia & the Pacific   RECOMMENDATIONS

Recommendations for universities

● Improving curricula

● ToT: training teachers

● increasing student exposure to forests & forest careers

➢ strengthening links between educational institutions & employers

➢ increasing availability of internships & part-time jobs

● promote international exchanges among faculty & students of university & college forest programmes

● establish partnerships with other educational institutions to share resources & give students access to facilities in partner colleges & universities;

● Encourage engagement with alternative forms of education

● Addressing gender & social inequalities

● Improving access to digital learning tools

● Improving the image of forest-sector careers.

Synthesis & conclusions

Addressing these recommendations will help shape humanity's responses to current & future global challenge

Forest education requires considerable investments, reforms & revitalization to achieve this
- Now is the time to ensure that forest education gets the attention it needs

What happens to forests in this decade & the next will significantly influence global progress in tackling national & global challenges

For forests to fulfil their potential, it is essential to have good quality, holistic forest education, & societies that understand & value forests, & respect the work of people in forest-related jobs.

 The dawn of a new era for forest education? So much depends on it!

Breakout group discussion

Break out into small groups based on your own institutional affiliation

15 minutes to discuss reflections on your HE institutions status/performance in the context of the key findings & addressing the recommendations

One representative from each group to provide brief summary of the group's discussion

Group discussion & refelections
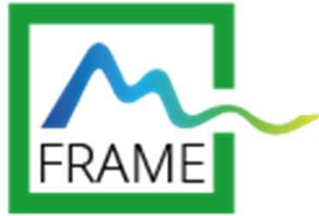
Forests, Climate Change Mitigation and Adaptation:
Higher Education Cooperation in Mekong Region

- **Relevance & role of FRAME, &**
- **Future directions for teaching & learning** ➔ in the context of SFM, bioeconomy & lifelong learning

- What are the key challenges of forestry education development

Open discussion, individual thoughts, reflections, questions

Website:
https://www2.helsinki.fi/en/researchgroups/viikki-tropical-resources-institute

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Thank you

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