



## How a Massive Open Online Course ForGEDI can address students' motivations, hesitations, and obstacles in forestry-related sectors

**Todora Rogelja<sup>1</sup>, Ida Wallin<sup>2</sup>, Barbara Öllerer<sup>3</sup>, Theresa Klara Loch<sup>4</sup>, Rattiya S. Lippe<sup>5</sup>, Tara L. Bal<sup>6</sup>, John Boakye-Danquah<sup>7</sup>, Stephen Wyatt<sup>8</sup>**

<sup>1</sup>University of Padova (UNIPD), Department of Land, Environment, Agriculture and Forestry, Italy, todora.rogelja@unipd.it

<sup>2</sup>Southern Swedish Forest Research Centre, Swedish University of Agricultural Sciences (SLU), Sweden

<sup>3</sup>Institute of Forest, Environmental and Natural Resource Policy, BOKU University, Austria

<sup>4</sup>International Forestry Students Association (IFSA)

<sup>5</sup>Forests and Society Department, Thünen Institute of Forestry, Germany

<sup>6</sup>College of Forest Resources and Environmental Science, Michigan Technological University, USA

<sup>7</sup>University of Saskatchewan, School of Environment and Sustainability, Canada

<sup>8</sup>School of Forestry, University of Moncton, Canada

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### Extended summary

As the forestry sector undergoes rapid technological change, such as the adoption of remote sensing, data analytics, precision forestry techniques (Venanzi et al. 2023), and soft skills (Mayor et al. 2022), it is essential to build a workforce that is both technologically skilled and diverse in gender, ethnicity, and perspectives (Hanewinkel and Peyron 2014). This need for diversity is crucial not only for sustainable forest management, but also for fostering innovation and resilience in the sector. Thus, strategies must focus on attracting a diverse workforce to foster innovation (Ludvig et al. 2024) and resilience in forestry practices (Corona 2019).

Globally, forests support the livelihoods of over 1.5 billion people, yet the forest sector remains hazardous (ILO 2019, p.2) and predominantly dominated by men. A recent estimate (period: 2017-2019) revealed that at least 33 million people were employed in the forest sector worldwide (FAO 2022). Approximately 77% of the workforce is in the informal economy, often lacking social protections and safety standards (Lippe et al. 2022; Lippe et al. 2023). In Europe, women represent only 23% of students in higher forestry education and make up 3–32% of the workforce (UNECE and FAO 2020), occupying limited leadership roles (Böhling et al. 2021).

In 2014, a survey conducted by (Bal et al. 2020) found greater hesitancy of women and people of colour to enrol in forestry-related degree programs compared to their white man counterparts and the number of women undergraduate students is declining (based on US data of Bal et al. 2023). Testimonies from the IFSS Workshop held in 2023 exposed that female students are exposed to gender stereotyping, sexism, patriarchy, micro-aggressions and similar (Mack et al. 2023). Further on, the research from Canada shows that young professionals from minority backgrounds report challenges such as non-recognition of credentials, biased recruitment practices, discrimination due to physical characteristics and sexual harassment (Boakye-Danquah et al. 2023).

Triggered by the IFSA Open Letter in Gender and Forest Education (IFSA 2021), an international cohort developed the first Massive Open Online Course (MOOC) on Forest Gender Equality, Diversity, and Inclusion Forestry-related Sectors (ForGEDI) under the IUFRO Task Force on

Gender Equity and Forestry (ForGEDI MOOC 2024). Launched in April 2024, the course offers a comprehensive curriculum that combines theoretical insights, case studies on gender barriers, and practical tools in 12 learning hours structured in three weeks. Aimed at students, educators, businesses, and policymakers, ForGEDI provides open access to the latest GEDI research and best practices. Aligned with SDGs 4 (Quality Education), 5 (Gender Equality), and 10 (Reduced Inequalities), the course seeks to reduce educational gaps and foster diversity and inclusivity in forestry. With more than 1,400 enrolled participants in the first six months, the course's impact is already becoming evident: participants report a high level of satisfaction, with 97% of respondents stating they acquired new skills and knowledge, and 85% applying what they learned to their work environments (based on 87 responses).

In conclusion, ForGEDI MOOC underscores the need for gender-aware reforms in forestry education and policy, ensuring a more equitable and resilient workforce capable of meeting future challenges. The course represents a proactive response to the gender and diversity challenges in forestry. By mainstreaming GEDI principles and providing accessible education, it supports the development of a diverse, skilled workforce ready to address the sector's evolving environmental and technological demands. ForGEDI's mission to create inclusive learning environments and workplaces is a critical step towards ensuring a sustainable and equitable future in forestry for all.

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