Integrated Land Use Systems

2024 Course

Chair of Silviculture, Faculty of Environment and Natural Resources

universität freiburg

April 19 – May 17 2024

Freiburg im Breisgau, Germany

Integrated Land Use Systems

Contemporary consumption patterns, climate change and other global trends are placing increasing pressure on agricultural and forestry production in many parts of the world. The classic intensification approach to increase food and biomass yields by using genetically altered cultivars, mechanization and automatization, and by applying pesticides and fertilizer has led to undesirable results. Negative environmental and social outcomes include soil degradation, eutrophication, decline in freshwater availability, loss of biodiversity, as well as land-use conflicts, loss of employment, and rural-urban migration.

Integrated Land Use Systems (ILUS), which combine different types of land use practices are advocated as alternative land use options to overcome the environmental and social ailments listed above. Many examples can be provided for integrated and diversified land use resulting in the provision of a wider range of ecosystem services, a lower vulnerability to the risks of market volatilities, weather calamities and climate change. Despite this recognition, however, ILUS are still poorly known and understood, and not equally promoted as agricultural intensification, for instance, by extension services.

By joining the course Integrated Land Use Systems you will learn about cases of ILUS from different corners of the world. You will learn to understand how different ILUS have developed, what are their ecological, economic, social and cultural strengths and vulnerabilities, and how ILUS constitute options to address contemporary development, agricultural pollution, and climate change challenges.

Target group

The module is designed for international graduate students, consultants and land use professionals, as well as for young scientists working in the field of forestry, agricultural, and environmental sciences, geography, rural development, land use planning, landscape ecology and other related fields of natural resource management. The programme is open for applications from all countries.

Integrated Land Use Systems have fewer negative impacts on water, soils and the atmosphere. They mobilize natural processes to optimize production.

Course aim

The participants understand and apply the Integrated Land Use System concept and related scientific knowledge.

Excursions will be organized to the surroundings of Freiburg to provide practical insights about the relevance, potentials and challenges related to the application of ILUS. Based on this input, the participants will develop their group work, the latter of which will be presented and discussed towards the end of the module.

After completing the course students can

- Describe and classify different types of ILUS
- Analyse the performance and potential of ILUS with respect to environmental, economic and sociocultural considerations
- Understand prevalent policies and their interactions with economic and sociocultural conditions
- Relate ILUS to major societal challenges, including food security, economic growth, watershed protection, biodiversity conservation, and climate change adaptation
- Critically reflect on the implications of ILUS for sustainable land use and rural livelihoods

Top quality research, excellent instruction, and departments with tradition make the University of Freiburg one of the most attractive institutions of higher education in Europe.

Dates and location

- Application deadline: 29.03.2024
- Course dates: 29.04 – 17.05.2024
- Freiburg University. Faculty of the Environment and Natural Resources Tennenbacher Straße 4, D-79085 Freiburg im Breisgau

Course fee

- 600.- Euro
- The fee covers lectures, study materials, copies, access to learning platform, field trips, and lunches during working days

Application and condition of admission

https://www.waldbau.uni-freiburg.de/news_events/ILUS

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