

78th UNEP/UNESCO/BMU International Short Course on Soil and Land Resources for Sustainable Development (SC78) | 10.10. - 05.11. 2019

Motivation

Soils and land form the basis for agricultural development, essential ecosystem functions, food security and hence are vital to terrestrial life on Earth. Soil is, in the time scale of a human lifespan, a non-renewable natural resource.

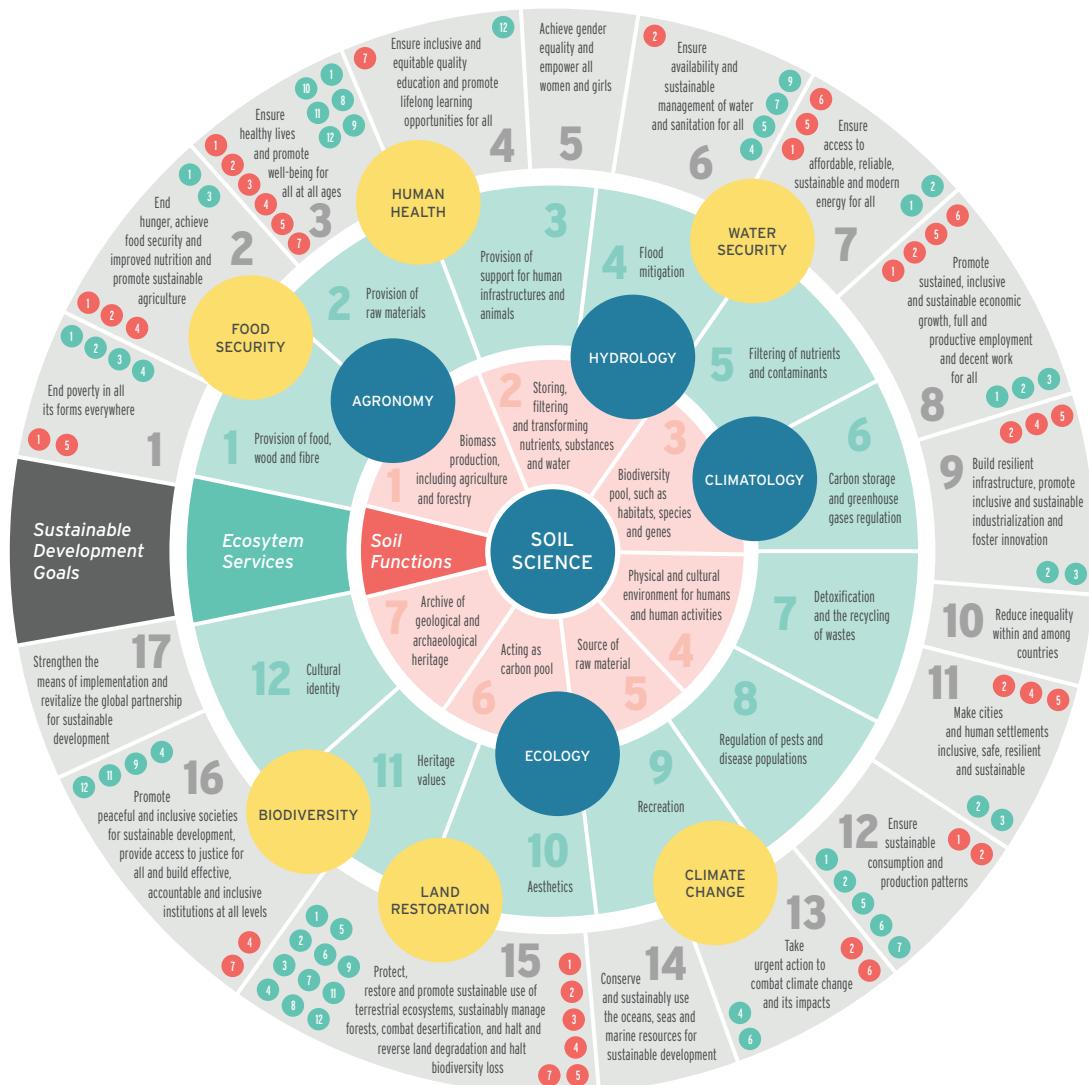


Fig. 1: The importance of soils and soil science for realising the global goals for sustainable development of the United Nations (Keesstra et al., SOIL, 2, 111-128, 2016)

This resource does not receive enough attention, even though with the current rate of soil degradation future generations might be unable to meet their needs. Already now at least a quarter of the usable Earth surface is adversely affected by strong degradation to an extent which is substantially reducing its capacity for providing products and services that are vital for human wellbeing. While the world population in the past four decades grew from 3 to over 7.4 billion people and is expected to exceed 9 billion in 2050, the agricultural area increased by only 8%, mainly through the transformation of forest into arable land. The pressure on land resources is escalated by urbanisation and changing climate patterns.

At the international level, for example in the UN Agenda 2030, the FAO and the UN Convention to Combat Desertification, the connected challenges of soil degradation, land scarcity and food security have been recognised as global development and environment issues. To face the threat, we need to take concerted actions towards sustainable land use and management practices in each country.

Objectives

This short course addresses the main concepts of land resources and soil management and their importance for securing the provision of goods and services for people and ecosystems. The training addresses concepts for sustainable land management, taking the water, energy and food security nexus into consideration.



Fig. 2: Learning about soil monitoring during a field visit with experts from the Saxon State Office for Environment, Agriculture and Geology, Agricultural Teaching and Testing Institute Nossen

Internationally experienced facilitators will shed light on minimising land degradation, rehabilitating degraded land, and increasing resilience, for instance, when facing climate variability and change.

Complementary to analysing local levels, complex regional and global processes will be presented. Participants will deal intensively with the connections between land use and nutrient cycles in the context of watersheds and at a global level, including the interdependencies with energy generation and waste management.

Practical case studies and the cross-sectoral dialogue between scientists, practicing land managers and policymakers will empower participants to develop new approaches for their areas of responsibility and provides opportunities for expanding a helpful professional network beyond the course duration.

Target groups

This short course is designed for managers and decision makers with a strong occupational background in environmental protection focusing on soil and land use (e.g. in agriculture and forestry, geography, soil science, watershed management, regional planning, etc.). A first university degree (BA, BSc, e.g.), good communication skills in English language and the nomination by the delegating institution are mandatory.

Application and participation

Qualified professionals are welcome to apply for this training between 04 March and 18 April 2019 on CIPSEM's online application portal.

Our International Steering Committee selects the 21 participants of this course by July 2019. Participants stay in our comfortable private studio apartments and receive a stipend to cover basic living expenses. Flights, health insurance etc. will be provided. Our course office provides further manifold assistance. Participants successfully completing this course will be awarded a Certificate of Proficiency in Soil and Land Resources for Sustainable Development.

For more information, please visit www.tu-dresden/cipsem

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