

CONCEPT NOTE

Launch of the International Network on Soil Biodiversity in the framework of the Global Soil Biodiversity Observatory

Background

Despite the clear importance of soil biodiversity in the provision of essential ecosystem services for life on Earth and human well-being, its proper use and management is yet to be fully realised.

Soil biodiversity is emerging as an alternative nature-based solution to global challenges and not only as a research/academic field.

There has been substantial progress in knowledge about the global distribution of soil biodiversity and its functions, and it is estimated that 25% of biodiversity in soil provides many benefits. However, around 1 percent of soil organisms have so far been identified and soil biodiversity loss remains one of the main global threats in many regions of the world. Nature-based solutions developed through scientific understanding offer the best route to achieve human well-being, tackle climate change and protect the environment. Yet, nature and biodiversity are in crisis, we are losing species at a rate a thousand times greater than at any other time in recorded human history and one million species face extinction. We must take advantage of this momentum and the great interest and concern that exists about soil biodiversity loss, to implement sound policies and actions for the conservation, management and sustainable use of soil biodiversity.

Efforts have been made by different stakeholders including the Convention on Biological Diversity (CBD) in establishing the International Initiative for the Conservation and Sustainable Use of Soil Biodiversity, and the Global Soil Biodiversity Initiative (GSBI) who seek to promote expert knowledge on soil biodiversity in environmental policy and sustainable land management to protect and enhance ecosystem services. Materials have been developed by the European Commission (EU) and the GSBI, who prepared the Global Soil Biodiversity Atlas, the first global overview of soil biodiversity, and the [Global Soil Partnership](#) (GSP) in promoting sustainable soil management and

coordinating the Report on the [State of Knowledge of Soil Biodiversity: Status, Challenges, and Potentialities](#) as well as its [Summary for policy makers](#) and organizing the [Global Symposium on Soil Biodiversity \(GSOBI21\)](#), both in close collaboration with the aforementioned initiatives and with the active participation of 300 scientists from around the world for the global report and more than 5000 participants -representing more than 160 countries- for the symposium.

The main output of the GSOBI21 was the [Outcome Document](#), an agenda for action with specific recommendations aimed to support the development of policies and actions to encourage the full use/management of soil biodiversity in the various land-use sectors. In this framework, the establishment of the Global Soil Biodiversity Observatory (GLOSOB) and its International Network, are key steps to fully realize the potential that soil biodiversity can bring to humans and the environment.

Global Soil Biodiversity Observatory

How can we protect and conserve something that we do not fully know? The establishment of the GLOSOB is a timely response by the international community to improve knowledge about soil biodiversity and to monitor the impact that human activities have on soil biodiversity and on the ecosystem services that soil provides. The GLOSOB will aim to monitor and forecast the condition of soil biodiversity and soil health and will serve as the framework for developing policies, promoting good practices, and developing national capacities on the state-of-the-art tools and methods on soil biodiversity and soil health assessment and maintenance. The GLOSOB will also contribute to strengthening knowledge on all soil biodiversity groups (microbes, and micro, meso, macro, and megafauna) by addressing monitoring, and sustainable use, and conservation of soil biodiversity as well as the inclusion of soil biodiversity in economic assessments and policies.

The GLOSOB will be supported by a scientific arm, the **International Network on Soil Biodiversity (NETSOB)**, who will provide the necessary expertise and ensure that GLOSOB is based on the best available scientific knowledge.

The International Network of Soil Biodiversity

The NETSOB aims to bring soil biodiversity experts and existing initiatives together in order to become the critical mass that contributes to the implementation of the GLOSOB.

In this context, the launch of the NETSOB will set the scene towards the establishment of the GLOSOB.

The work of NETSOB will contribute to the achievement of the Sustainable Development Goals, as well as the implementation plan of the International Initiative for the Conservation and Sustainable Use of Soil Biodiversity.

The NETSOB and GLOSOB will be facilitated by FAO's Global Soil Partnership in the context of various arms such as the Global Soil Laboratory Network ([GLOSOLAN](#)) and Global Soil Information System ([GLOSI](#)) to monitor and forecast the condition of soil biodiversity and soil health.

How will the NETSOB work?

- The NETSOB will be open to scientists, researchers, international organizations, institutions, decision makers and any other relevant stakeholders with expertise in the assessment, mapping, monitoring and sustainable use of soil biodiversity. All participants from GSOBI21 and all existing initiatives are welcomed.
- Experts will actively contribute to the development and implementation of the NETSOB work plan as well as the development and consolidation of GLOSOB.
- The NETSOB will address four main technical working group (WG): GW-1 on measurement, assessment and monitoring of soil biodiversity; GW-2 on sustainable use, management, and conservation of soil biodiversity; GW-3 on the economics of soil biodiversity; and GW-4 on policies and legal instruments related to soil biodiversity.
- The experts will join four technical working groups (WGs) that will address the four themes to be addressed by NETSOB.

- The NETSOB will meet once a year to review and agree on the work plan. WGs can meet more regularly to advance the different activities as needed.

Governance

- The governance of the NETSOB will be composed of a Chair, four Vice-chairs (one per each WG), and the GSP Secretariat as facilitator of the process.
- The GLOSOB work will be guided by the GSOBI21 Outcome Document and the Plan of Action of the [International Initiative for the Conservation and Sustainable Use of Soil Biodiversity](#).
- The Chair and Vice-chairs will be appointed during the first meeting of the network and will run for two years against agreed terms of reference.