

GLOBAL SOIL PARTNERSHIP 10th Plenary Assembly



 $rac{\mathbf{23-25}}{ ext{May } 2022}$

International Network on Soil Biodiversity (NETSOB) and establishment of the Global Soil Health and Biodiversity Observatory (GLOSOB)

George Brown, Embrapa (Brazil)





NETSOB Objectives

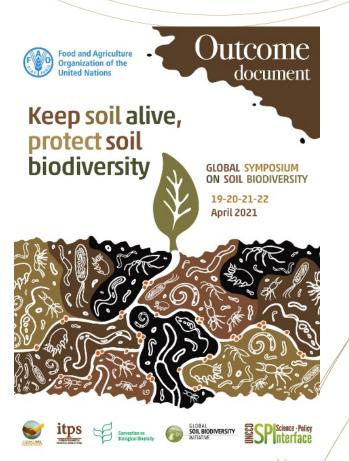
- Support establishment of a **Global Soil Health and Biodiversity Observatory**;
- Evidence for decision-making in the field and at the policy level for sustainable use and conservation of SBD;
- Strengthen knowledge on soil biodiversity;
- Development of internationally accepted bioindicators;
- Contribute to monitoring of soil biodiversity status and loss;
- Promote sustainable use of soil biodiversity and overall soil health;
- Contribute to adoption of good practices that enhance availability and safety of food;
- Identify knowledge gaps and foster cooperation in soil biodiversity research.





Key activities and working groups of NETSOB

Coordination: Peter de Ruiter (WUR) & Rosa Cuevas Corona (FAO)

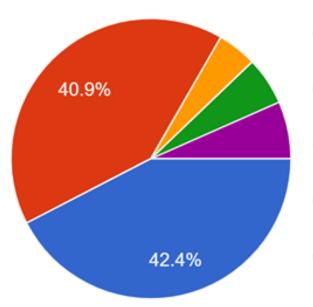


- WG-1: Develop guidelines for measuring, assessing and monitoring (MAM) soil biodiversity (Brown & Guerra)
- WG-2: Develop a field manual on soil biodiversity management that addresses soil biodiversity loss/conservation (Lindo & Battigelli)
- WG-3: Develop the methodology for the economic valuation of soil biodiversity (González & Montanarella)
- WG-4: Assess effective policies and legal instruments to curb soil biodiversity loss (Bagnara & Malorgio)





Participation: 922 NETSOB members from around the world



- 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
- GW-4 on policies and legal instruments related to soil biodiversity
- I only wish to receive the news and updates from NETSOB

Registration form:

https://forms.gle/rdGLCPcADQW3sST96





Towards a global observatory...

Global survey 2696 responses 139 countries **1351** institutions

March 10-31, 2022



- 1) General information;
- 2) Microbes and microbial activity;
- Microfauna (including Protists);
- Mesofauna;
- Macrofauna;
- Megafauna;
- Community level/functional assessments of soil biodiversity;
- Soil biodiversity inventory/monitoring activities;
- Ecosystem services, applications, and threats to soil biodiversity;
- 10) Education/Communication activities; and
- 11) Public policies related to soil biodiversity.

Who is doing what, where when, how? + Policy issues...



Survey respondents:

Q5: Gender: Female 37%, male 61%

Q6: Representation: Europe and Eurasia 39%, Asia 22%, LAC 17%

Q10: Type of organization: Educational 52%, research 35%, government 25%

Q13: Level of work: Local 57%, national 56%, regional 30%, global 19%

Q14: Main land use system studied: Annual crops 52%, native vegetation 40%

Q11: Applied aspects : Agricultural/forestry/pastoral management 75%, environmental awareness/tools 25%





Some key answers

Q91: Does your country have national soil inventory on soil biodiversity?

Yes 24%, No 31%, Don't know 45%

Q92: Main biota involved:

Microbes 78%, microfauna 46%, mesofauna 45%, macrofauna 46%, megafauna 25%

Q108: Main practical applications of soil biodiversity assessed: Bioindicators to assess soil health 57%, nutrient cycling 43%, other ES...

Q110: What barriers to implement better soil biodiversity uses/applications: Lack of financial resources 65%, Lack of information/knowledge 63%, policy/institutional constraints 42%

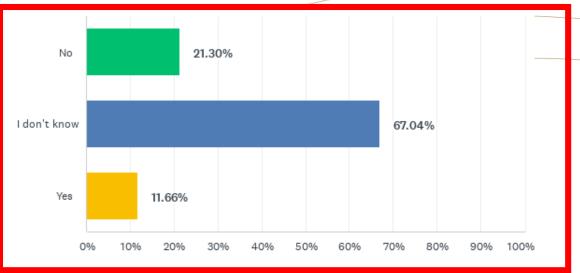


Global Soil Health and Biodiversity Observatory (GLOSOB)

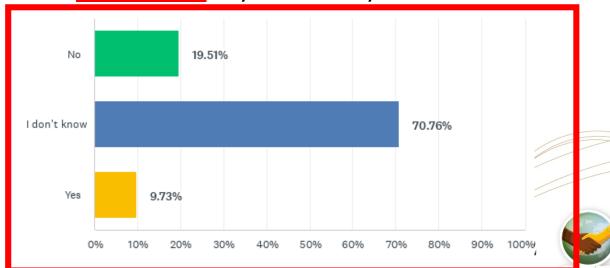
 Monitor and forecast soil biodiversity and soil health and the framework for serve developing policies, promoting good practices, and developing national capacities on the state-ofthe-art tools and methods on soil biodiversity and health soil assessment and maintenance.

 \mathbf{O}

Q122: International legal instrument **to protect soils** that is relevant to soil biodiversity?



Q121: National measures to protect soil biodiversity in your country?





Requests to the Plenary Assembly

- Welcome the establishment of NETSOB and support its work plan;
- Encourage countries and stakeholders to join NETSOB and participate in its different activities to strengthen knowledge on the measurement, assessment, monitoring and sustainable use of soil biodiversity; and
- Welcome the establishment of the Global Soil Health and Biodiversity Observatory (GLOSOB) and encourage Members and resource partners to support it.





GLOBAL SOIL PARTNERSHIP 10th Plenary Assembly

Thank you for your attention!

Peter de Ruiter

Peter.deRuiter@wur.nl

Rosa Cuevas Corona

Rosa.CuevasCorona@fao.org

George Brown

george.brown@embrapa.br





Rosalina González
Luca Montanarella
Gian Luca Bagnara
Giulio Malorgio
Zoe Lindo
Jeff Battigelli
Carlos Guerra