



Food and Agriculture
Organization of the
United Nations

Working Group Meetings **International Network** **on Soil Biodiversity** NETSOB

7-10 February 2022 | 14:00 hrs CET

Lucrezia Caon, Filippo Benedetti

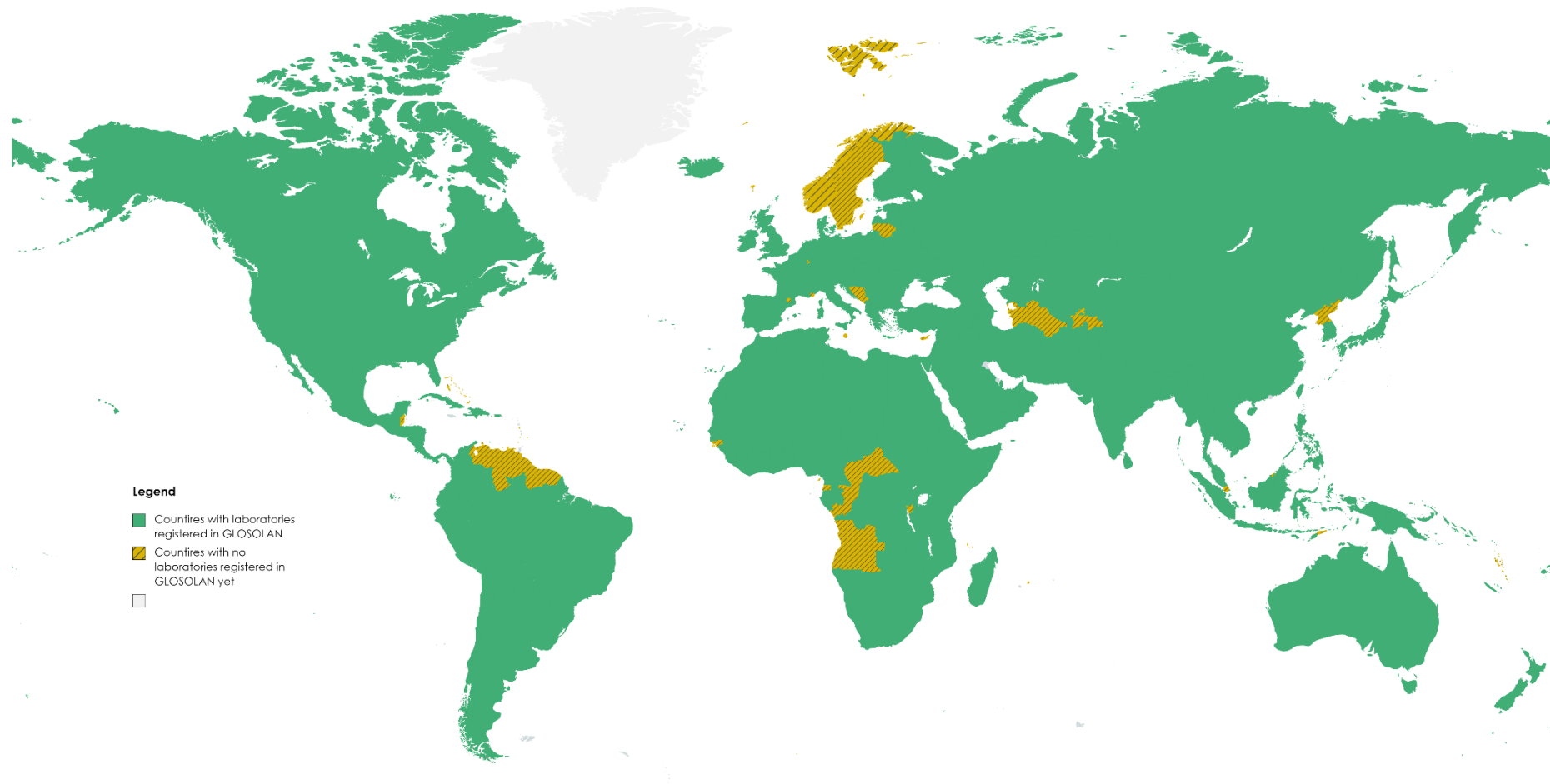
Global Soil Partnership (GSP) Secretariat

**The joint working group on soil biological analysis:
GLOSOLAN and NETSOB collaboration**



Global Soil Laboratory Network (GLOSOLAN)

Established in 2017 to harmonize soil laboratory methods and data, and to build the capacity of laboratories in soil analysis

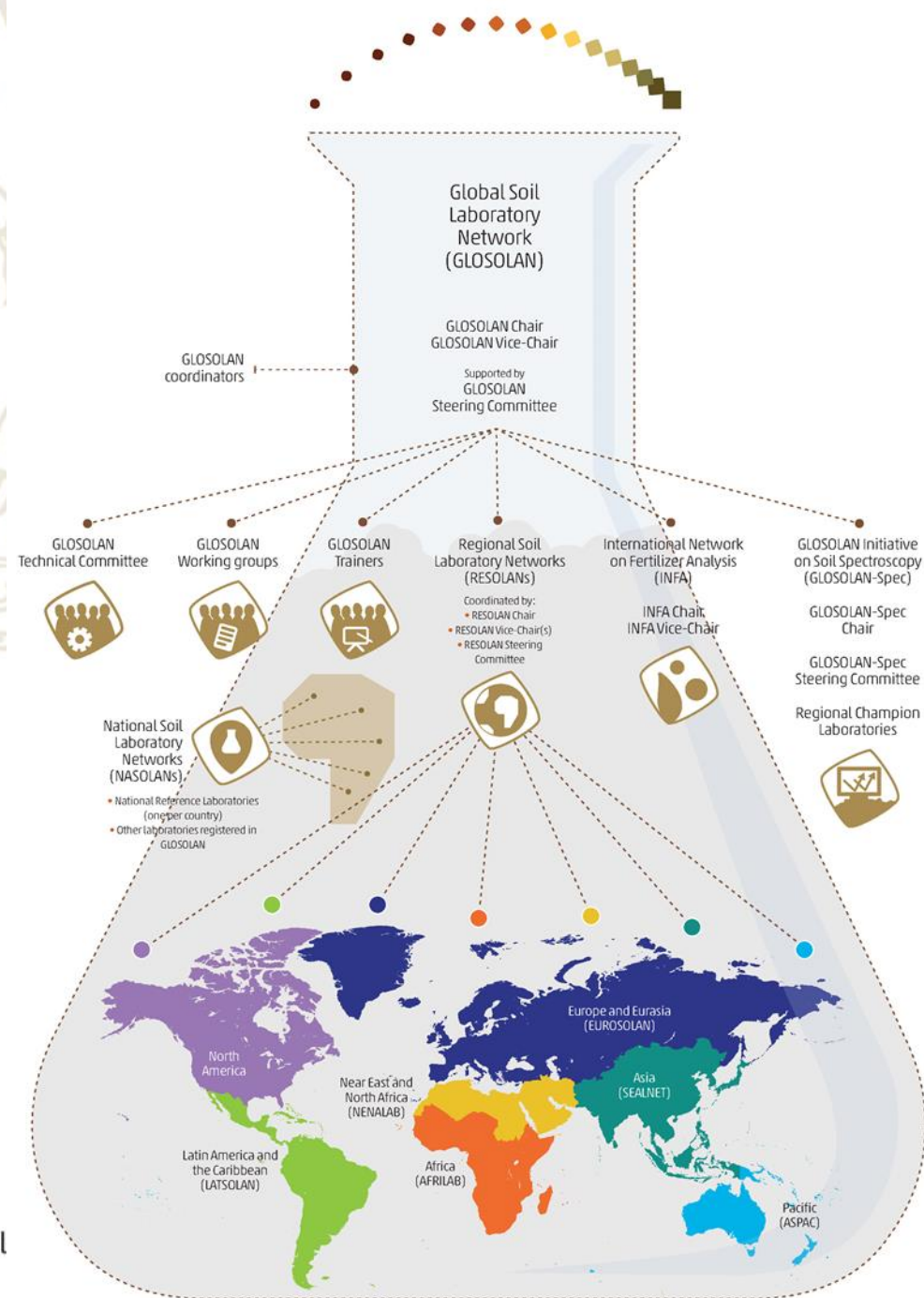


GLOSOLAN areas of work

- Execution of **external quality control** (proficiency testing)
- Training on the execution of **internal quality control**
- Harmonization of **Standard Operation Procedures (SOPs)**
- **Training** on the implementation of GLOSOLAN SOPs
- Training on **laboratory health and safety**
- Training on **equipment** use, maintenance and purchasing
- Establishment of a donation/bartering system
- **Soil spectroscopy**
- **Fertilizers analysis**



Launch of the **International Network on Soil Biodiversity** in the framework of the GI



Transition to soil biology

AN (2021 work plan) because the network
physical properties first
on laboratories capacities and needs 2020:
biological analysis

- # Transition to soil biology
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Table 3. Type soil analysis performed by laboratories at regional level (numbers indicate the number of laboratories).

	Africa	Asia	Eurasia	Europe	Latin America	NENA	North America	Pacific
Total number of countries completing the survey	35	19	10	30	27	13	1	7
Soil chemical analysis	100 %							
Soil physical analysis	80 %							
Soil biological analysis	44 %							

GLOSOLAN contribution to soil biology

- Harmonization of Standard Operating Procedures (**SOPs**) – 2021:
 - Soil respiration rate
 - Microbial biomass C and N by chloroform fumigation-extraction
 - Microbial enzyme activities

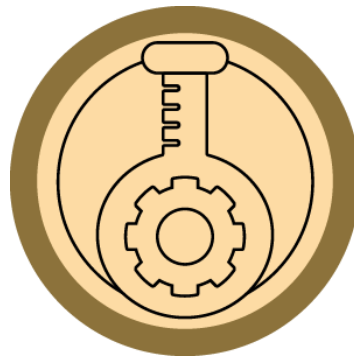


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GLOSOLAN contribution to soil biology

- Writing of **guidelines** on sample collection, transporting and storing guidelines
- Collection of **soil import regulations** worldwide (SIMPLE Database)
- **Connecting** with networks on soil biodiversity (SoilBON, Fields4Ever, etc.)



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Issues faced

- Low number of laboratories performing the analysis of soil biological parameters
- Few experts on soil biological analysis in the network



Delay in finalizing SOPs harmonization,
preparation of training material on the topics, etc.



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Decision made during the 5th GLOSOLAN meeting (Nov. 2021)
and the 1st NETSOB meeting (Dec. 2021):

Establish a JOINT WORKING GROUP
among the two networks (NETSOB and GLOSOLAN)
already > 30 experts, first meeting: 3rd week of February



*Argentina, Australia, Bangladesh, Belgium, Brazil, China,
Gabon, Germany, India, Iran, Iraq, Italy, Mexico,
Netherlands, Niger, Philippines, Portugal, South Africa,
South Sudan, Spain, Sri Lanka, Turkey, Uganda, Ukraine,
United Kingdom, USA, Zimbabwe*



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Joint working group

Working group tasked to:

- Revise and finalize the SOPs GLOSOLAN worked on in 2021;
- Decide which **SOPs** GLOSOLAN will harmonize every year;
- **Lead** the harmonization process;
- Prepare **training material** (including videos) and organize **webinars** on the analysis of soil biological parameters;
- Provide **technical support** to GLOSOLAN members as needed;
- Raise the **awareness** of laboratories on the **importance** of measuring soil biological parameters.



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