



Food and Agriculture  
Organization of the  
United Nations

## Item 2

# Governance

*By Ms. Lucrezia Caon, GLOSOLAN  
Coordinator, GSP/FAO*

**GLOSOLAN**  
**2<sup>nd</sup> Plenary meeting**  
**on spectroscopy**

2 - 4 November 2021



# ***1<sup>st</sup> Plenary Meeting on Soil Spectroscopy (September 2020) | Decision to have:***

- 1 Technical working group led by 1 or more leader(s)
- Regional Champion laboratories



## **Terms of Reference**

### **GLOSOLAN's Technical Working Group on Soil Spectroscopy**

#### ***Background***

Spectroscopy is the study of the interaction between matter and electromagnetic radiation. It is based on the principle that molecular vibrations and electronic transitions associated with soil constituents absorb light while interacting with radiation. Soil spectroscopy is a method that has the potential of more rapidly and cost-effectively measuring soil properties in the lab and in the field. Soil spectral analysis estimates soil properties by calibrating conventional reference measurements, like wet chemistry soil tests, to the spectral signatures. The potential of spectral technology in soil mapping and monitoring is tremendous as it is fast, cost-effective, environmentally friendly, nondestructive, reproducible and repeatable. Numerous soil properties can be directly calibrated to near- and mid-infrared spectra (MIR) due to the fact that spectral signatures respond to soil mineral and organic composition.

In April 2020, GLOSOLAN officially launched its initiative on soil spectroscopy that was consolidated through the organization of the first plenary meeting on soil spectroscopy on 23-25 September 2020. For the first time since the discovery of this technology, institutions and experts from around the world are now joining efforts to use this technology to support decision making on soil protection globally.

#### ***Composition and governance***

The technical working group will act under the umbrella of the Global Soil Laboratory Network (GLOSOLAN) and under the direction of the GLOSOLAN Chair and vice-Chair. The GLOSOLAN Coordinator will provide support as a facilitator.

The technical working group is led by one or more leader(s) working in coordination with the GLOSOLAN Chair, GLOSOLAN vice-Chair, and GLOSOLAN Coordinator at the Global Soil Partnership. The term for the leader(s) is two years after election. The appointment of the working group leader(s) and the extension of their mandate to a second term will take place during the annual plenary meeting on spectroscopy.

## ***1<sup>st</sup> Plenary Meeting on Soil Spectroscopy (September 2020)*** Decision to have:

- 1 Technical working group led by 1 or more leader(s)
- Regional Champion laboratories



- 3 working groups** were established:
- 1 general working group
  - 1 working group to work on the global soil spectral calibration library
  - 1 working group to work on the soil property estimation service

- 3 leaders** were appointed:
- Richard Ferguson (USDA)
  - Fenny van Egmond (ISRIC)
  - Keith Shepard (ICRAF)

**11 regional champion laboratories** were identified by election (ref. Regional Soil Laboratory Networks (RESOLANs))

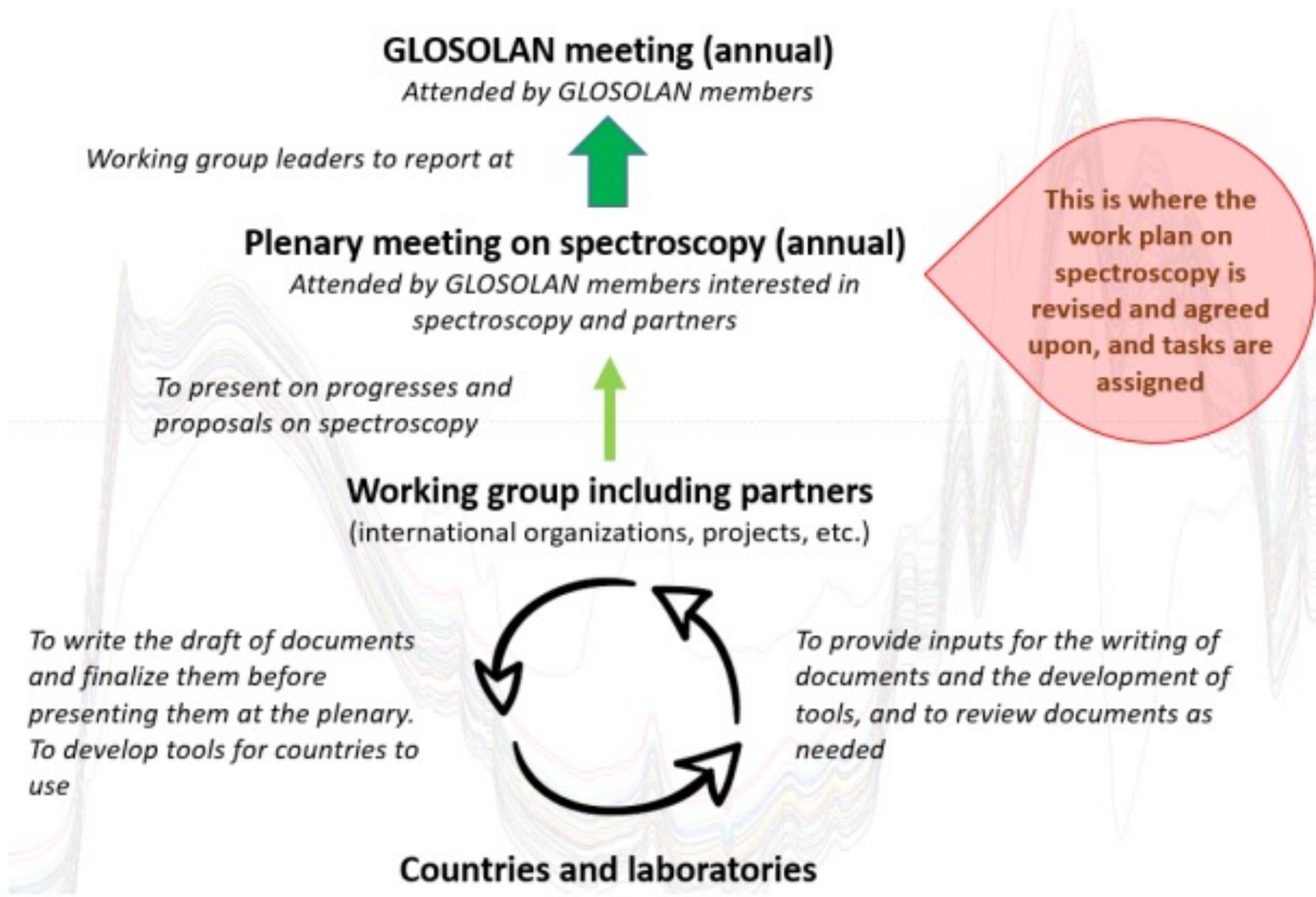


Figure 1. Operating procedures.

# 2020-2021 | Lessons learnt

1. The current governance does not cover all soil spectroscopy related activities in the working groups well.
2. A few working groups' meetings were organized but no follow-up actions were taken. This might result in a loss of interest of experts in the working groups in the GLOSOLAN Initiative on Soil Spectroscopy.
3. Activities tended to be centralized within the working group leaders and on few specific objectives.



## 2<sup>nd</sup> Plenary Meeting on Soil Spectroscopy

Decision document GLO/I/2021: Review the governance of the GLOSOLAN Initiative on Soil Spectroscopy. To be discussed on 2 and 4 November 2021.

### Background

The first plenary meeting on soil spectroscopy of the Global Soil Laboratory Network (GLOSOLAN) was virtually organized by the Global Soil Partnership (GSP) on 23-25 September 2020 on the online platform Zoom. During the meeting, GLOSOLAN members agreed for the Soil Spectroscopy Initiative (GLOSOLAN-Spec) to be represented by one or more working group leader and to count on the support of a working group organized in sub-groups based on the GLOSOLAN work plan for soil spectroscopy (Terms of Reference for these positions available in Annex III of the [meeting report](#)). In this regard, in 2020-2021, the following sub-groups were established:

- General working group on soil spectroscopy: tasked to answer general questions and requests for help from GLOSOLAN members. This working group should be involved in the review of technical documents and training materials.
- Working group on the development of the global soil spectral calibration library: tasked to technically advise and support the development of the library
- Working group on the development of the global soil property estimation service: tasked to technically advise and support the development of the estimation service.

However, in 2020-2021, GLOSOLAN noticed that the current governance does not cover all soil spectroscopy related activities in the working groups well. A few working groups' meetings were organized but no follow-up actions were taken. This might result in a loss of interest of experts in the

# GLOSOLAN-Spec proposal

- **1 GLOSOLAN-Spec Chair** to work in coordination with the GLOSOLAN Chair, the GLOSOLAN vice-Chair, and the GLOSOLAN Coordinators
- **1 Steering Committee**
- **1 working group**

No changes are proposed to the position and TORs of the Regional Champion Laboratories

GLOSOLAN 2<sup>nd</sup> Plenary meeting on spectroscopy | 2 - 4 November 2021



# GLOSOLAN-Spec Chair

**November 2:** review and endorsement of the TORs.

Presentation of the candidates that applied for the position and that meet the selection criteria in the TORs.

*Is there anyone else that feels like applying for the position?*

**November 3:** follow ups by email

**November 4:** presentation of the candidates and elections



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# Quick review of the Terms of Reference for the positions

## GLOSOLAN-Spec Chair | Presentation of the candidates

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**Prof. Eyal Ben-Dor**

*Tel Aviv University | TAU Head of the  
Department of Geography*



## GLOSOLAN-Spec Chair | Presentation of the candidates

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**Ir. Fenny van Egmond**  
*World Soil Information (ISRIC)*  
*Wageningen University*



# Identification of the members of the Steering Committee

1. The GLOSOLAN Coordinator will make a call for experts to express an interest in joining the Steering Committee
2. Members of the Steering Committee will be selected based on the criteria in the TORs:
  - Be top experts on the topic of soil spectroscopy;
  - Represent institutions with a major regional or global role on soil spectroscopy;
  - Have time to commit to implement the GLOSOLAN work plan on soil spectroscopy; and
  - Not have any conflict of interest in regards to the objectives, data, information of the Global Soil Partnership, GLOSOLAN, and the Soil Spectroscopy initiative

# Working group composition

1. Members of the working group | Selection criteria in the TORs:
  - Be experts on the topic of soil spectroscopy;
  - Have time to commit to implement the GLOSOLAN work plan on soil spectroscopy;
  - Not have any conflict of interest in regards to the objectives, data, information of the Global Soil Partnership, GLOSOLAN, and the Soil Spectroscopy initiative.
2. The GLOSOLAN Coordinators will ask the current members of the working group to complete a short survey:
  - Do you still want to be in the working group?
  - How much time can you commit to GLOSOLAN?
  - Main area of expertise?
  - Do you have any conflict of interest?
3. Call for experts that wish to join the working group. Request to complete the same survey



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**Thanks for your attention**



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