

**AGENDA PAPER** 

| FAO Global Soil Partnership                                       | Meeting Number: 7  |
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| International Network of Soil Information<br>Institutions (INSII) | Location: Online   |
|   | Date: 9-11 November 2021   |
| Agenda Item No  | VII  |
| Agenda Item   | Creating Synergies: INSII & GLOSOLAN<br>towards a country-driven global soil<br>spectral library and estimation services |

# Background

With the support of its partners, GLOSOLAN aims to:

- To support the development of all types of soil spectroscopy at national, regional, and global levels. To achieve this objective, this initiative will be supervised by a group of experienced scientists to ensure that all activities are science based.
- 2. To support countries in establishing their own soil spectral laboratories and national soil spectral libraries with standardized methods and decentralized estimation services. To achieve this objective, GLOSOLAN will be using a country-driven approach and invest in capacity building activities at the national or regional level.
- 3. To continuously support the development of the global spectral estimation services by encouraging countries to share part of existing national soil spectral libraries on a voluntary basis.
- 4. Support the development of standards and protocols for soil spectroscopy, including but not limited to soil sample preparation, measurement protocols, quality assurance, and data analysis and modelling.



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# The establishment of global spectral free estimation services

The priority of GLOSOLAN-Spec is to support countries to establish their own soil spectral laboratories and their national soil spectral libraries with an estimation service. Once national soil spectral libraries are established, GLOSOLAN will connect them for the purpose of establishing global spectral free estimation services for the different spectral techniques. The development of such global spectral free estimation services will be voluntary:

With the support of its partners, GLOSOLAN will first start to establish a global spectral estimation service based on current available open data resources and existing estimation platform.

- A country can decide whether they are willing to join the development of global spectral estimation services or not, if not, GLOSOLAN will continue to support countries for further development of their capacities as described above. Countries can also decide to join the development of global spectral estimation service at any time and without a particular contribution.
- A country can decide how much data to share for the establishment of global spectral estimation service.
- A country can decide whether the shared data will be an open resource or only use for the global estimation service. The condition of using such dataset for research and other purposes should be discussed and documented.
- The shared soil spectral library from countries will be hosted by GLOSOLAN only for providing estimation service purposes. GLOSOLAN only hosts such dataset under the framework of GSP data policy, and the country should have a full data license.

## **Key issues**

- How the dry chemistry data produced by GLOSOLAN members would become available to INSII and used for modelling and mapping. To date, INSII develops data products mostly using wet chemistry data.
- How national, institutional spectral libraries and estimation services would be part of the national soil information systems and eventually connected to GloSIS.

#### **Required** action

• NA

## **Resource implications**



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Preparation and consultation

• NA

# Attachments

• NA