



AGENDA PAPER

FAO Global Soil Partnership International Network of Soil Information Institutions (INSII)	Meeting Number: 7
	Location: Online
	Date: 9-11 November 2021
Agenda Item No	III-b
Agenda Item	GloSIS Data Products

Background

INSII has been developing country driven global data products since its establishment.

- I. The first global data product of INSII was **Global Soil Organic Carbon map (GSOCmap)** which was launched in 2017. The GSOCmap has been gradually updated to v1.6. The GSOCmap
 - A. 9th PA requested GSP to perform a major update on GSOCmap to improve;
 1. Temporal harmonisation
 2. Depth
 3. Uncertainty assessment
 4. Validation
 - B. GSP Secretariat will take necessary steps to update GSOCmap to v2.0
- II. **GSOCseq (global Soil Organic Carbon Sequestration Potential Map)**
 - A. The GSOCseq v1.0 was launched in September 2021, during the 9th GSP PA.
 - B. The GSOCseq is the first country-driven global assessment of Soil Organic Carbon Sequestration Potential. The various GSOCseq layers show estimations of topsoil (0-30 cm) soil organic carbon sequestration potential in agricultural areas under four soil management scenarios. The methodology is based on a spatialized version of the process-based Rothamsted Carbon Model (RothC), made available through the open-source R software. Countries are using this software to model their national SOC sequestration potential over agricultural areas 20 years into the future based on a Business as Usual (BAU) scenario and three Sustainable Soil Management (SSM) scenarios that vary in the degree of carbon input to the soil. Alongside this standardized approach, countries are encouraged to further refine the methodology to better suit their environmental condition and available data.



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By fostering and leveraging local expertise, the methodology of the GSOCseq is constantly being extended and improved to better reflect local SOC dynamics.

C. [More information : Agenda Item IV](#)

III. **GSASmap (Global Salt Affected Soils Map)**

A. development started in 2019, the GSASmap v1.0 was launched during the Global Salt Affected Symposium (GSAS'21) on 20 October 2021.

B. [More information : Agenda Item IV](#)

IV. **Global Soil Erosion Map (GSERmap)**

A. GSERmap activity was postponed to times due to ongoing activities (GSASmap, GSOCseq)

B. GSP Secretariat is to start the activity from the beginning of 2022

V. **Soil Nutrients**

A. The 9th GSP PA endorsed the work proposed to assess soil nutrient budget accompanied by a global mapping exercise to be carried out in 2022.

Key issues

- NA

Required action by INSII

- NA

Resource implications

- NA

Preparation and consultation

- Mr Yusuf Yigini (GSP Secretariat)

Attachments

- [Agenda Paper 2021/IV](#)