



Food and Agriculture
Organization of the
United Nations

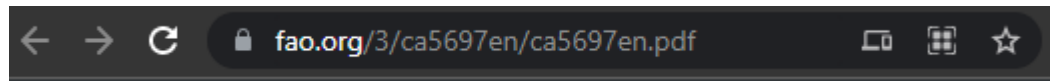
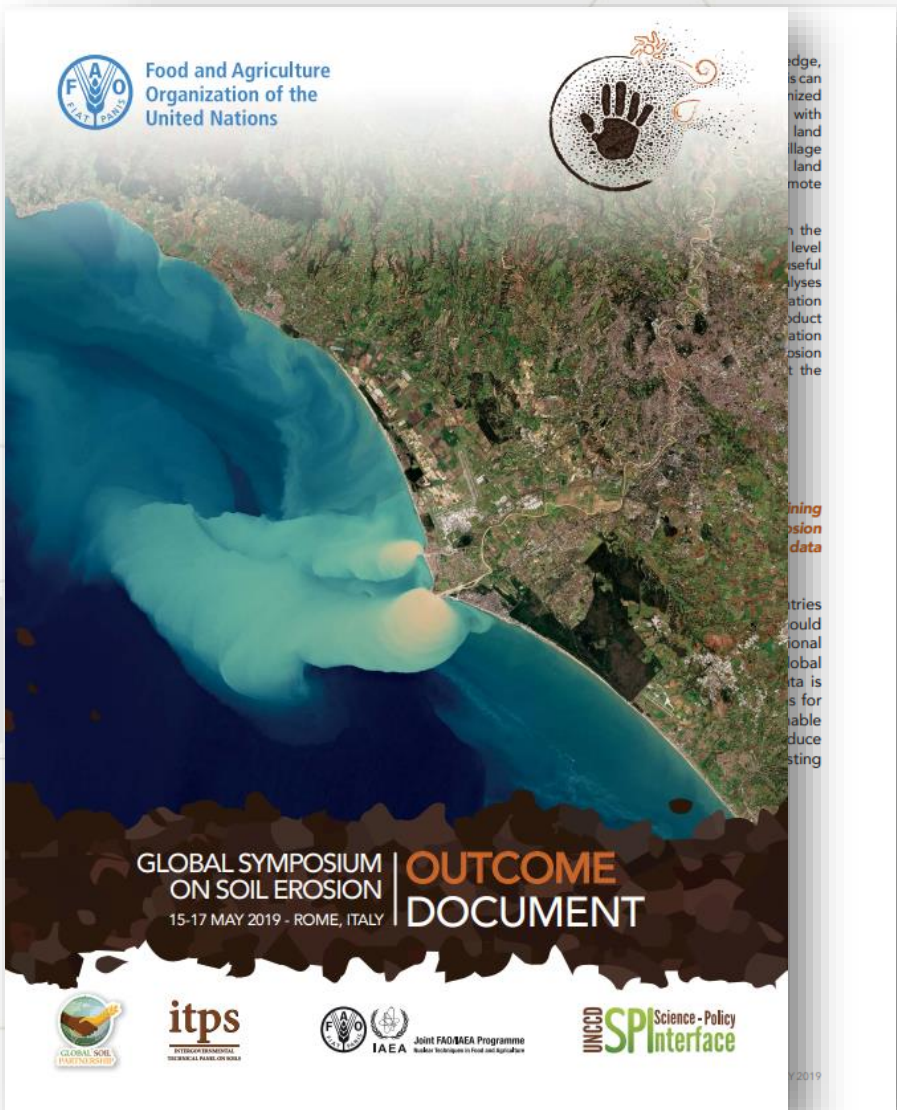
7th Meeting of the International Network of Soil Information Institutions (INSII)

09-10-11
November
2021

Online
meeting

GSERmap





GSER'19 OUTCOME DOCUMENT

7th Meeting of the International Network of Soil Information Institutions (INSII) | 09-10-11 November 2021





RECOMMENDATIONS



THEME 1: SOIL EROSION ASSESSMENT TOOLS AND DATA; CREATION, CONSOLIDATION AND HARMONIZATION

Expected outcome

The specific outcome for theme 1 was to propose a country driven process to produce a Global Soil Erosion Map (GSEmap) which would be able to include the three major soil erosion drivers (water, wind and tillage) following a multi-phased approach, with:

- **Phase 1:** Global scale products that are globally consistent, thus allowing for comparison between geographic regions and for identifying hotspots
- **Phase 2:** National scale products that will follow a semi-standardized and uniform methodology allowing the incorporation of available national data
- **Phase 3:** National scale products based on field or on-screen visual interpretation of soil erosion signs achieved through monitoring programs

Recommendation 1

Create an expert and multi-stakeholder working group to develop the methodology and guidelines for the preparation of the Global Soil Erosion map

Proposed calendar of action is the following:

- 2019 – Phase 1 (Top-down): The global soil erosion sensitivity maps (water, wind and tillage) will be prepared using global datasets to be used for identifying hot spots. These maps will explore the spatial pattern of potential soil erosion sensitivity globally, identifying possible hot spots and allowing comparisons among different geographical areas.
- 2020 – Phase 2 (Country-driven): National scale maps describing soil erosion risk

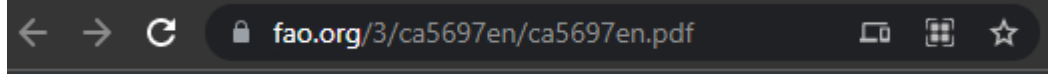
to the best of the country knowledge, available methods and input data. This can be done by combining the harmonized global soil erosion sensitivity maps with high detail national information on land use, land management practices, tillage operations (tillage intensity) and land use pressure indices derived by remote sensing data.

- 2021 onwards - Phase 3 (Action on the ground): While the first and second level products would provide information useful for global and national-scale analyses for eventually designing conservation practices, the third level product approach will generate new information on the occurrence of various soil erosion processes or adding information at the frontiers of tools and methods.

Recommendation 2

Organize capacity development and training for countries to develop national soil erosion assessment, as well as the necessary data management and monitoring facilities

This applies to all FAO member countries in need of such capacity. Priority should be given to countries lacking national information on soil erosion and using global datasets with focus on areas where data is missing. Developing monitoring systems for water, wind and tillage erosion would enable countries to obtain proper data and reduce the uncertainties and inaccuracy in existing global data.



GSER'19 OUTCOME DOCUMENT





Recommendation 1

Create an expert and multi-stakeholder working group to develop the methodology and guidelines for the preparation of the Global Soil Erosion map

Proposed calendar of action is the following:

- 2019 – Phase 1 (Top-down): The global soil erosion sensitivity maps (water, wind and tillage) will be prepared using global datasets to be used for identifying hot spots. These maps will explore the spatial pattern of potential soil erosion sensitivity globally, identifying possible hot spots and allowing comparisons among different geographical areas.
- 2020 – Phase 2 (Country-driven): National scale maps describing soil erosion risk to the best of the country knowledge, available methods and input data. This can be done by combining the harmonized global soil erosion sensitivity maps with high detail national information on land use, land management practices, tillage operations (tillage intensity) and land use pressure indices derived by remote sensing data.

2021 onwards - Phase 3 (Action on the ground): While the first and second level products would provide information useful for global and national-scale analyses for eventually designing conservation practices, the third level product approach will generate new information on the occurrence of various soil erosion processes or adding information at the frontiers of tools and methods.

to the best of the country knowledge, available methods and input data. This can be done by combining the harmonized global soil erosion sensitivity maps with high detail national information on land use, land management practices, tillage operations (tillage intensity) and land use pressure indices derived by remote sensing data.

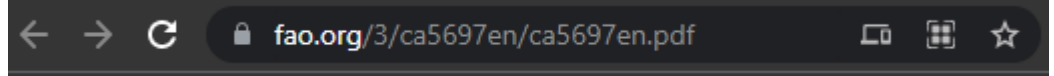
- 2021 onwards - Phase 3 (Action on the ground): While the first and second level products would provide information useful for global and national-scale analyses for eventually designing conservation

Recommendation 2

Organize capacity development and training for countries to develop national soil erosion assessment, as well as the necessary data management and monitoring facilities

This applies to all FAO member countries in need of such capacity. Priority should be given to countries lacking national information on soil erosion and using global datasets with focus on areas where data is missing. Developing monitoring systems for water, wind and tillage erosion would enable countries to obtain proper data and reduce the uncertainties and inaccuracy in existing global data.

GLOBAL SYMPOSIUM ON SOIL EROSION | 15-17 MAY 2019



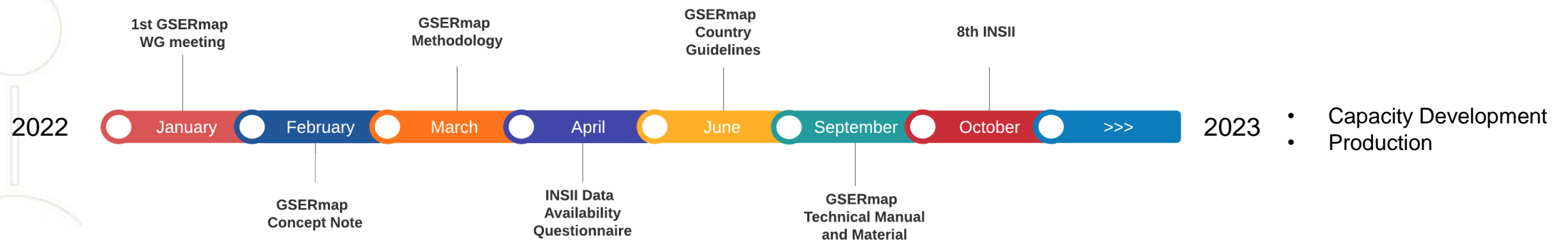
GSER'19 OUTCOME DOCUMENT

Information Institutions (INSII) | 09-10-11 November 2021



R.1 - Create an expert and multi-stakeholder working group to develop the methodology and guidelines for the preparation of the Global Soil Erosion Map (GSERmap)

- 25 Scientist/experts expressed their interest to be in the working group during GSER'19
- The list to be expanded (INSII, ITPS ...)
- Kick-off in January 2022



R.2 - Organize capacity development and training for countries to develop national soil erosion assessment, as well as the necessary data management and monitoring facilities

7th Meeting of the International Network of Soil Information Institutions (INSII) | 09-10-11 November 2021





Food and Agriculture
Organization of the
United Nations

7th Meeting of the International Network of Soil Information Institutions (INSII)

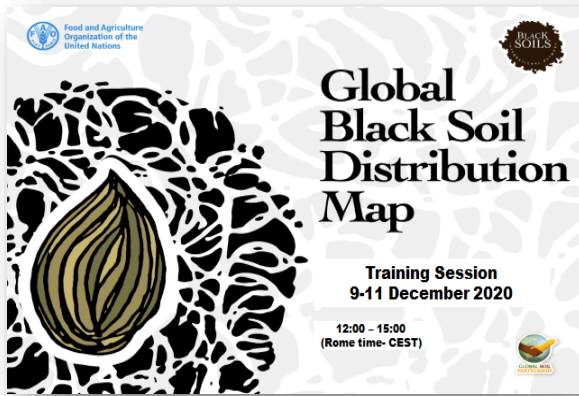
09-10-11
November
2021

Online
meeting

GBSmap

Global Black Soil Distribution Map



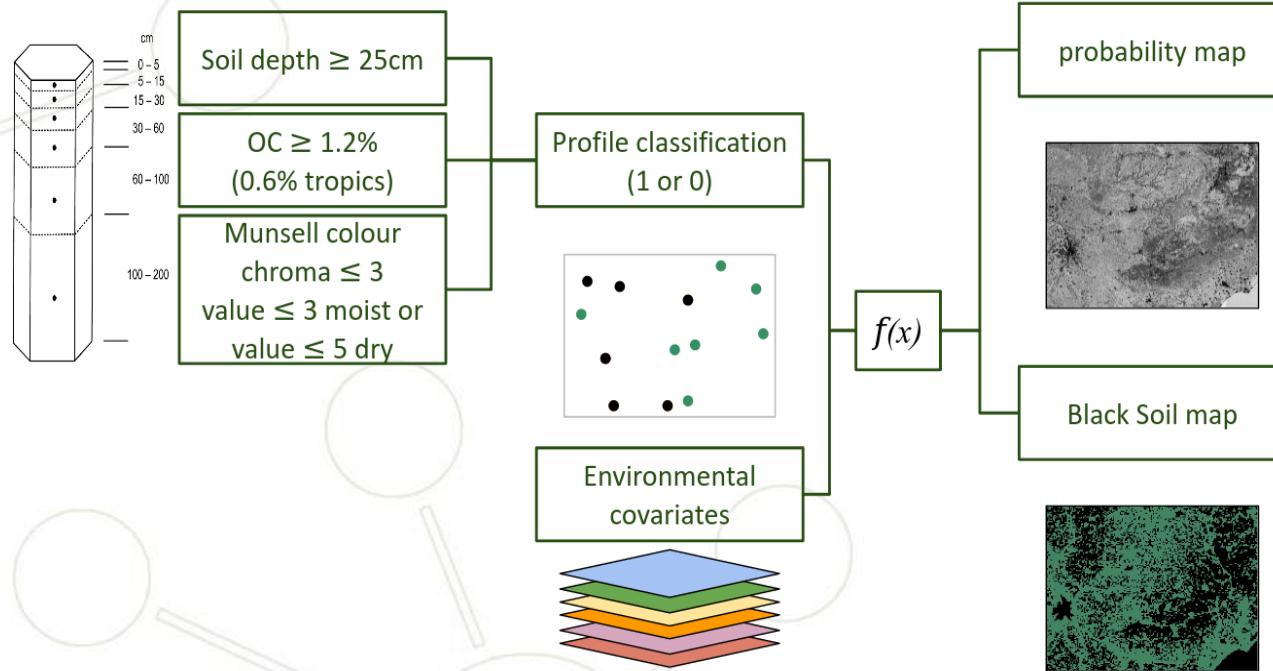


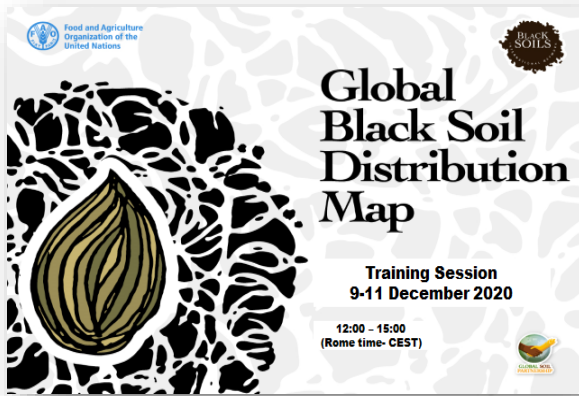
Bottom up approach for mapping Black Soils

International Network of Black Soils

July 1st, 2020

Mapping Black Soils



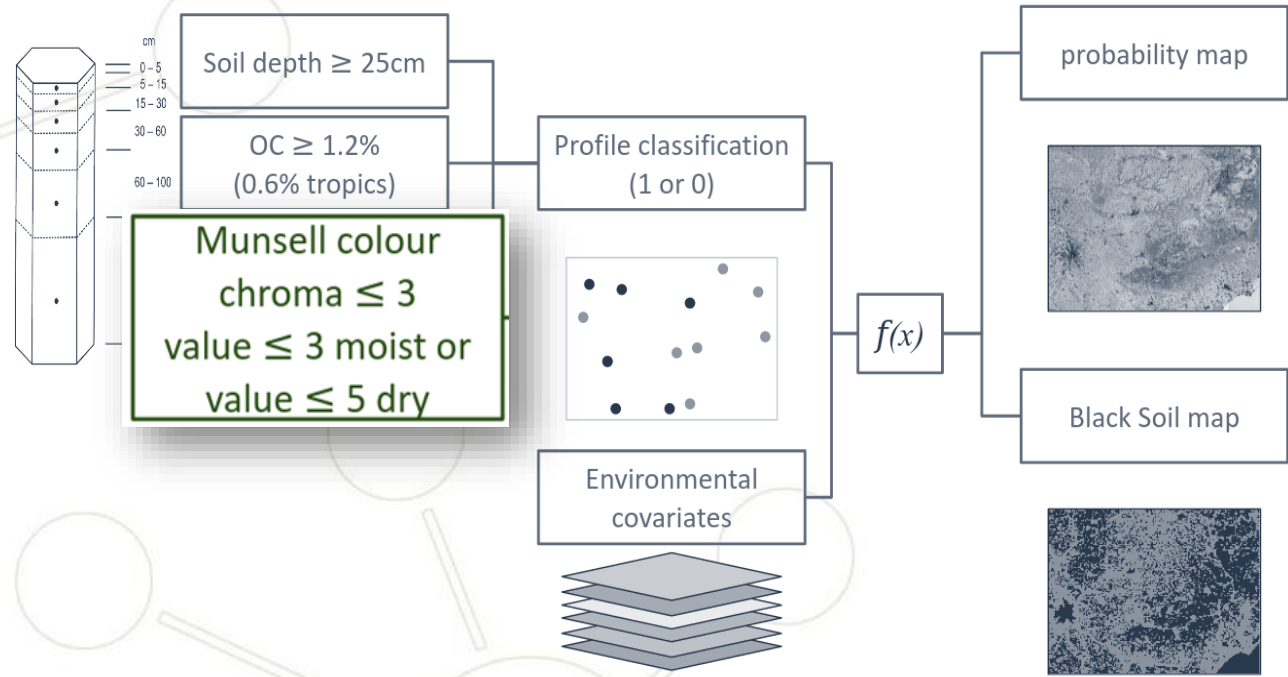


Bottom up approach for mapping Black Soils

International Network of Black Soils

July 1st, 2020

Mapping Black Soils





Food and Agriculture
Organization of the
United Nations

7th Meeting of the International Network
of Soil Information Institutions (INSII)
09-10-11 November 2021

