

Global Soil Partnership and its activity plan



7th Meeting of the
**Global Soil
Laboratory
Network**
(GLOSOLAN)

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Global Soil Partnership
Land and Water Division

FAO

GLOSOLAN

GLOBAL SOIL LABORATORY NETWORK



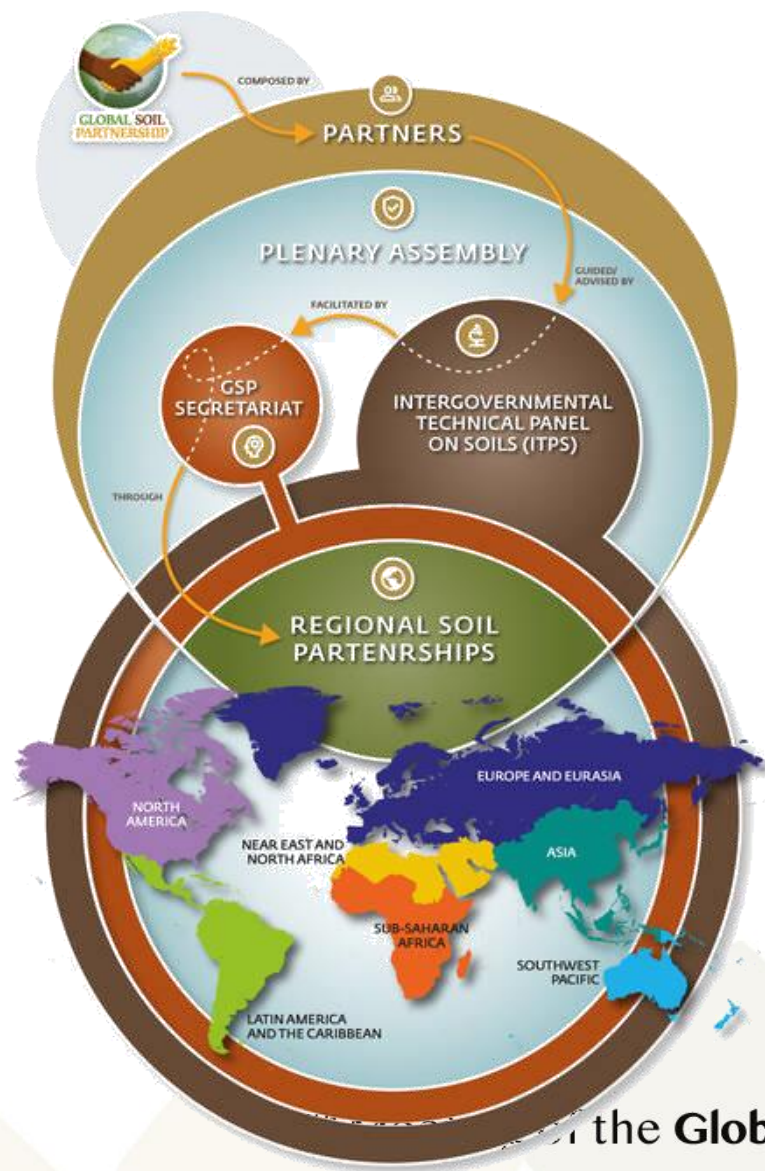
Global Soil Partnership

- Established by FAO Council in 2012
- A mechanism to develop a **strong partnership** and enhance **collaboration** between all stakeholders
- With the common objective of improving **soil governance** and promoting **sustainable soil management**.

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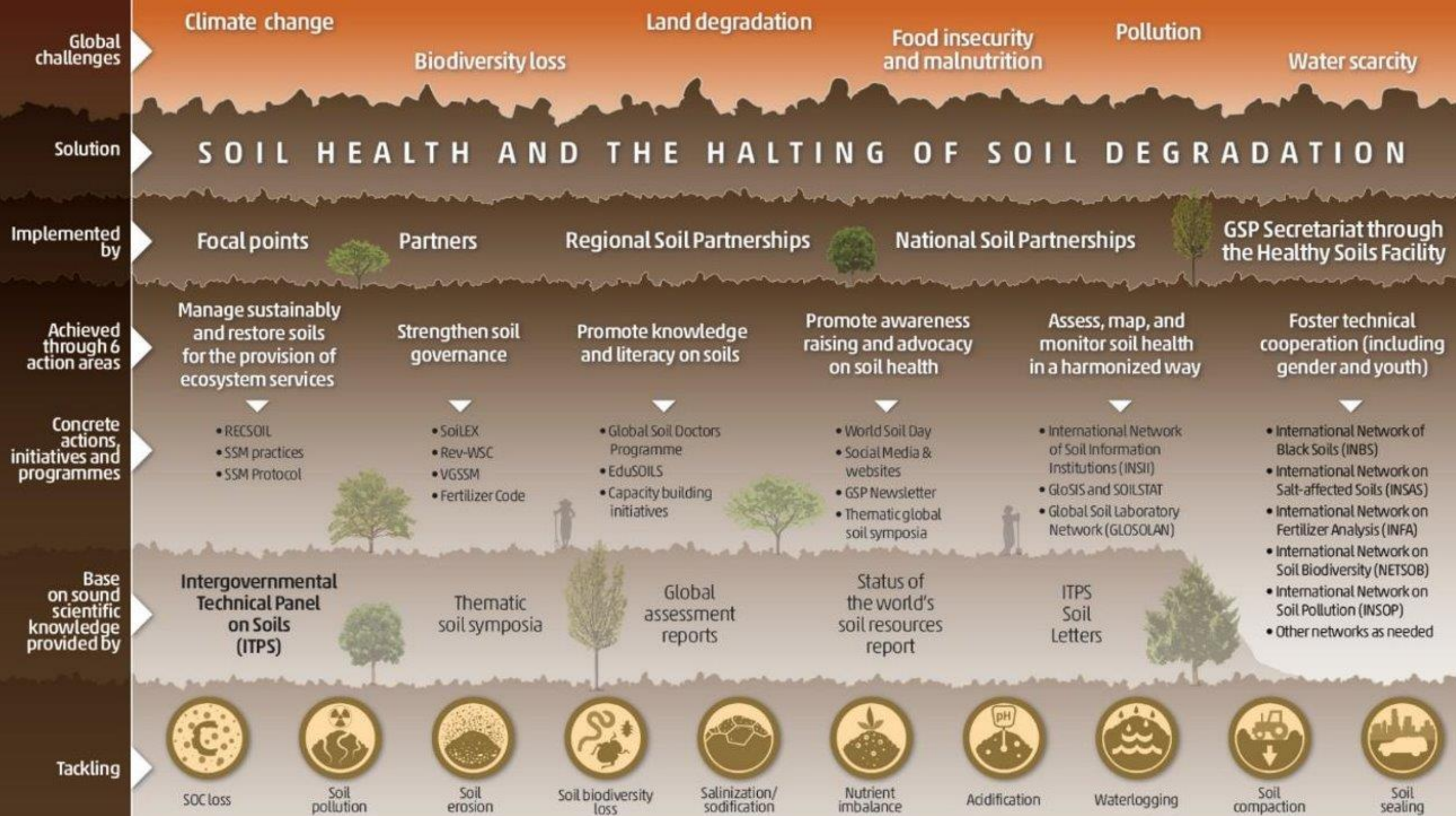
<http://www.fao.org/global-soil-partnership/en/>





- 164 focal points appointed directly by FAO Members and over 500 partners worldwide
- 7 regional partnerships
- 4 sub-regional partnerships within Europe: Eurasia, Alpine, Pyrenean, Western Balkans
- 14 national soil partnerships (Brazil, Colombia, Costa Rica, Cuba, Italy, Mongolia, Malawi, Nicaragua, Philippines, Portugal, Slovakia, Slovenia, Thailand, and Ukraine)





1

Assess, map, and monitor soil health in a harmonized way



- International Network of Soil Information Institutions (INSII)
- GloSIS and SOILSTAT
- Global Soil Laboratory Network (GLOSOLAN)



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Global Soil Laboratory Network (GLOSOLAN)

Established in 2017 to **build and strengthen the capacity of laboratories in soil analysis** and to respond to the need for harmonizing soil analytical data.

- Almost 1 000 laboratories registered
- 6 Regional Soil Laboratory Networks established
- Establishment of National Soil Laboratory Networks ongoing

Main areas of work:

1. Standard Operating Procedures (5 SOPs in 2019, 10 SOPs in 2020, +13 SOPs to be harmonized in 2021)
2. Quality Assurance/Quality Control (2 regional proficiency tests in 2018, 2 global proficiency test in 2019 and 2021)
3. Capacity building: Training & Equipment (equipment to 18 labs)
4. Promotion of new technologies: soil spectroscopy

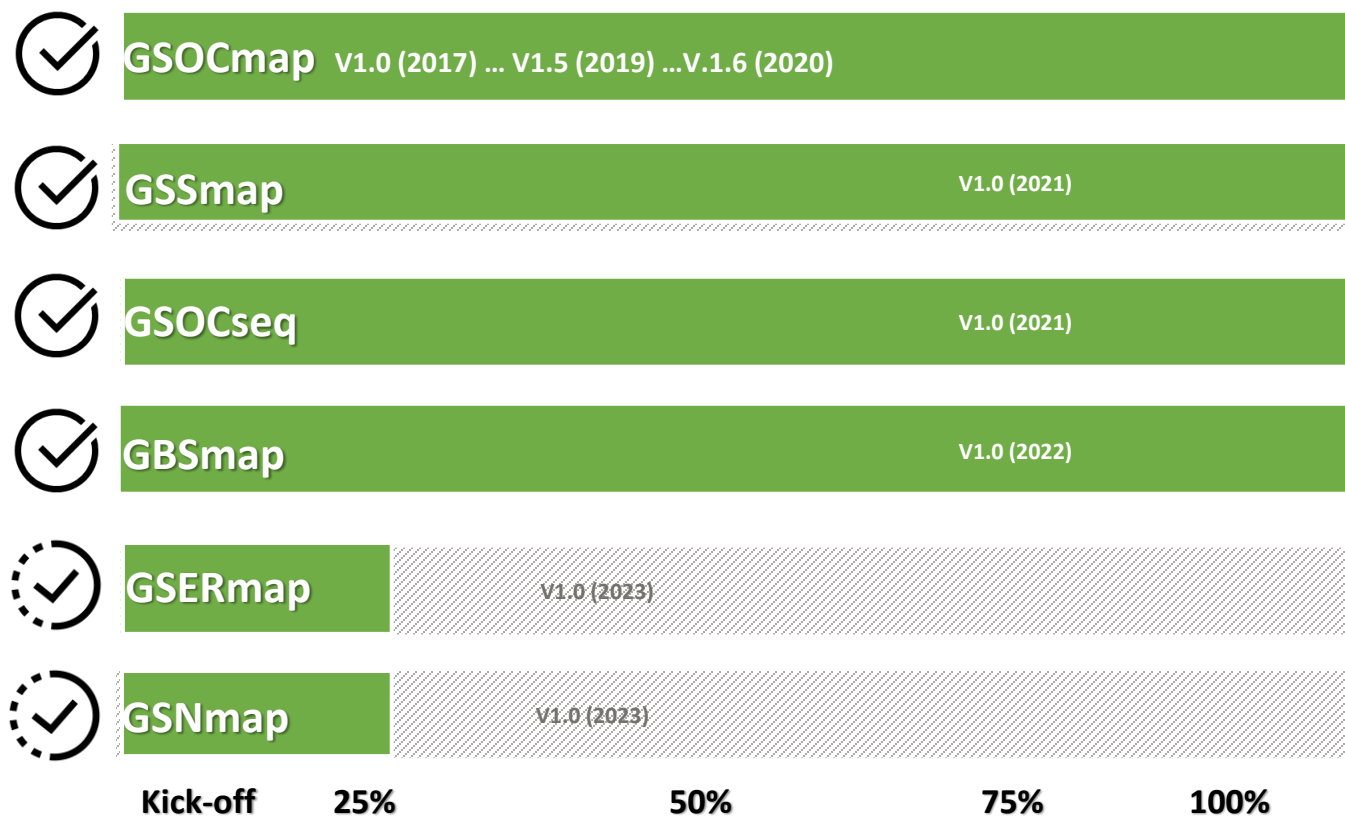
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Global Soil Information System - GloSIS

- **DECENTRALISED** - Infrastructure bringing together soil information collected by (national) institutions in a decentralized way. GloSIS is to be a federation of soil information systems (**System of Systems**).
- **NATIONAL OWNERSHIP** - Source institutions **retain** their data and **control access**.
- **FAIR data** - Data sharing to be governed by own **data policies**. Make soil information **findable, accessible, interoperable, reusable within country** to inform local and national (policy) decisions
- **LIGHTWEIGHT & AFFORDABLE** - Implementation is **lightweight**, cheap to deploy, “simple”.
- **OPEN SOURCE** - Based on **open-source** software. No License fees, no recurring payments
- **COUNTRY DRIVEN** - Should **empower** countries (and other data providers) to develop their national soil information system as a center for national soil information.

GloSIS Country Driven Global Datasets

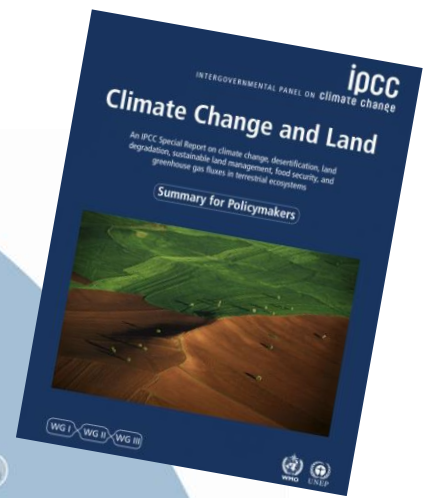
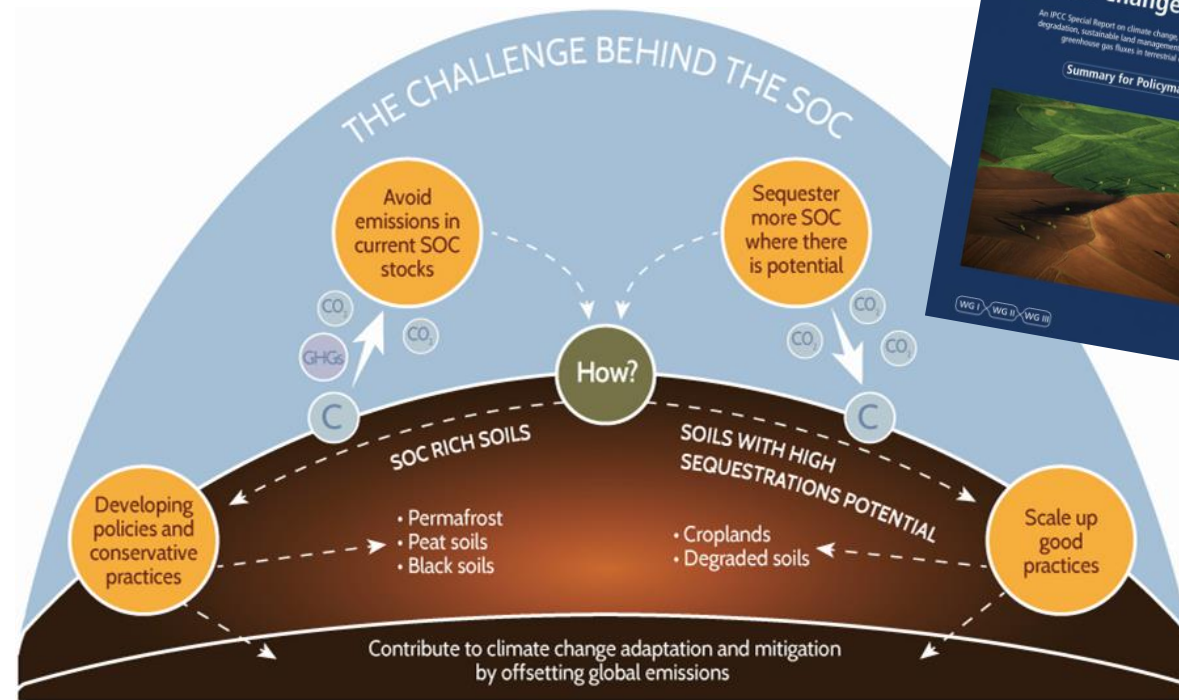


All GloSIS Data Products are;
country-driven, continuous,
participatory, progressive
and iterative, multi-stakeholder
oriented, and based on and guided by
the best available science, rigorous
collection and analysis of appropriate
data, and consideration of
experiences and good practices
within, and outside, countries.

2 Manage sustainably and restore soils for the provision of ecosystem services

▼

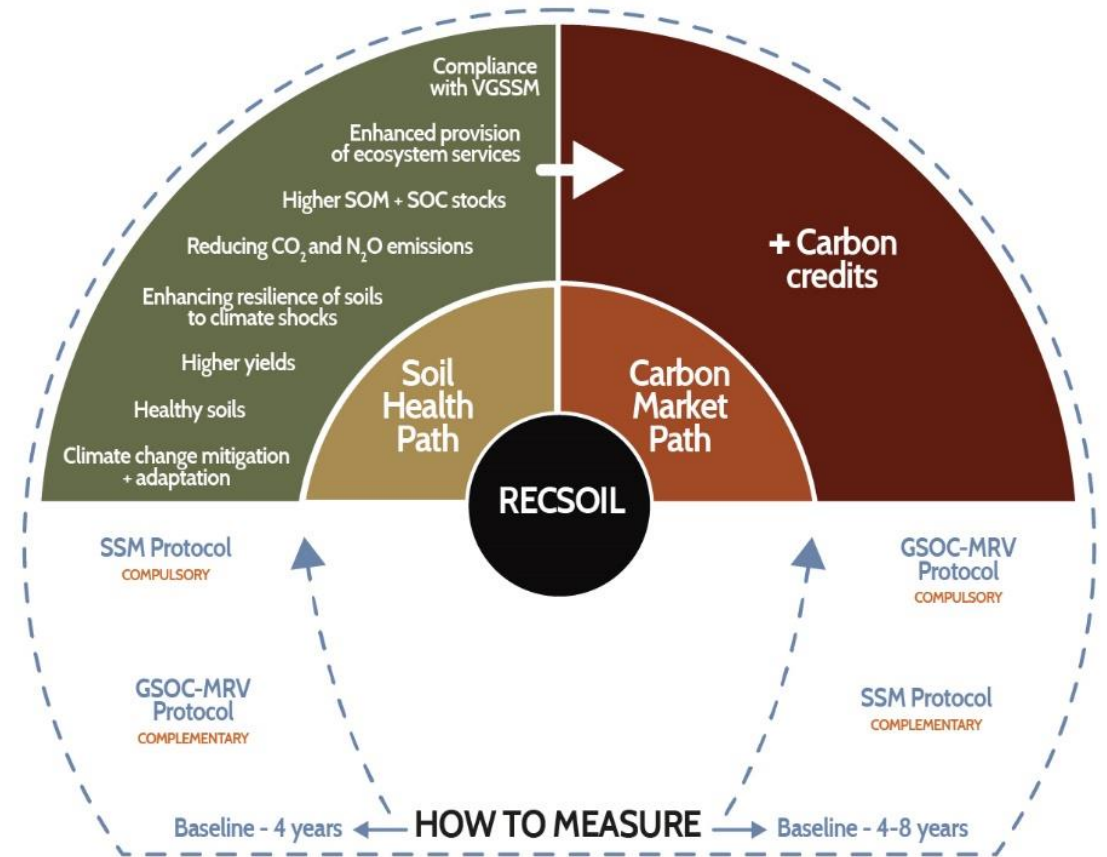
- RECSOIL
- SSM practices
- SSM Protocol



When adopting Sustainable Soil Management Practices, we provide multiple benefits including: reducing GHG emissions, maintaining and enhancing carbon sinks and building resilience.



Adoption of good practices by farmers for maintaining and enhancing SOC stocks and reducing GHG, and boosting soil health and co-benefits (ecosystem services).



ratory Network (GLOSOLAN) | 21-23 November 2023



3

Promote knowledge and literacy on soils

- Global Soil Doctors Programme
- EduSOILS
- Capacity building initiatives



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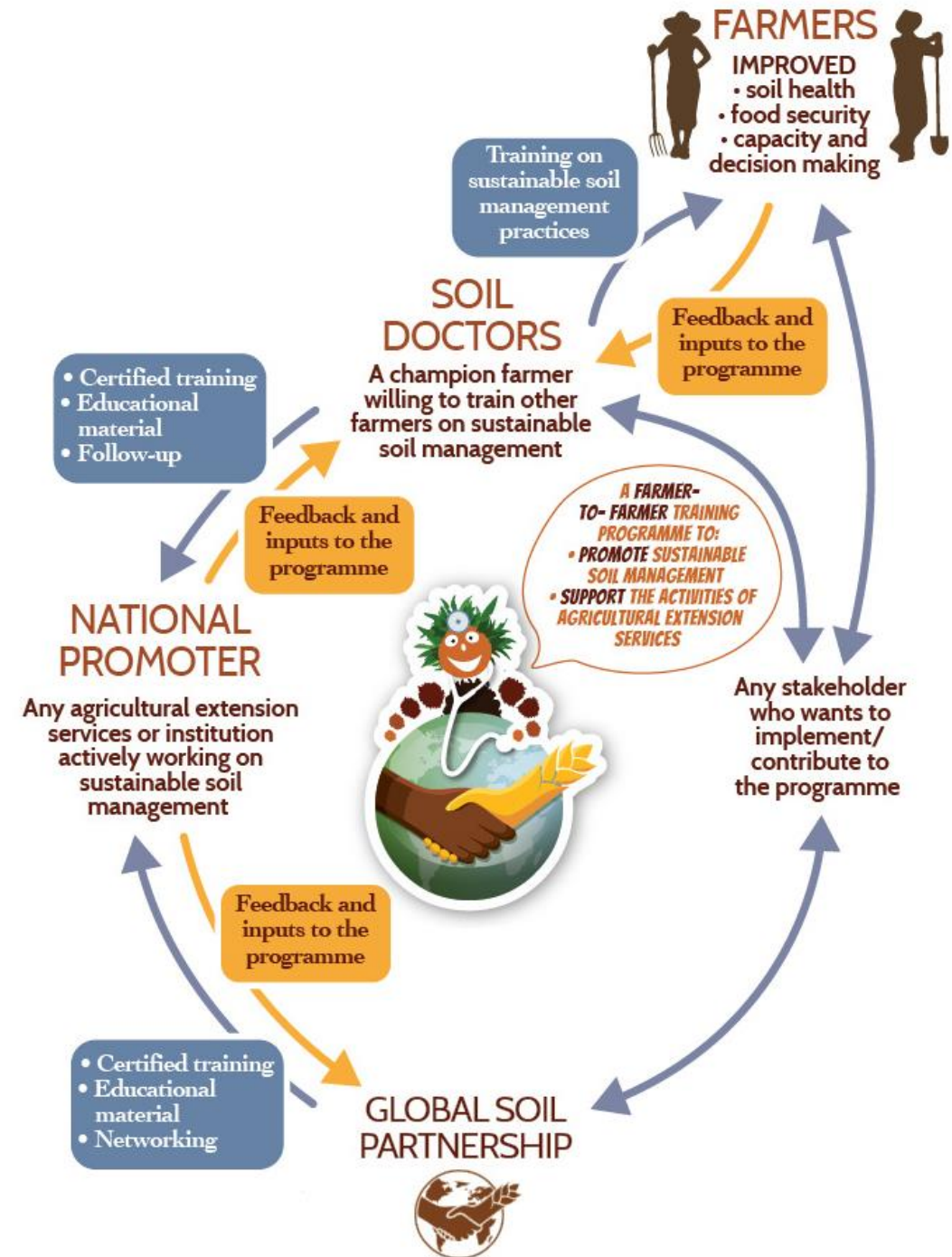


The Global Soil Doctors

A **farmer-to-farmer training** initiative to be implemented by local promoters, with the GSP support, on a volunteer basis

Champion farmers – the Soil Doctors - receive training on SSM practices and general soil knowledge and transmit this knowledge to other farmers in the community

The Soil Doctors are provided with a toolbox:





+ 5 000 experts trained on digital soil mapping and soil lab procedures
+ 1 000 farmers trained on SSM



4

Foster technical cooperation (including gender and youth)



- International Network of Black Soils (INBS)
- International Network on Salt-affected Soils (INSAS)
- International Network on Soil Biodiversity (NETSOB)
- International Network on Soil Pollution (INSOP)
- Other networks as needed

GLOSOLAN
Global Soil Laboratory
Network



INBS
International Network
of Black Soils



INSAS
International Network
of Salt-Affected Soils



INSII
International Network
of Soil Information
Institutions



NETSOB
International Network
on Soil Biodiversity



INSOP
International Network
On Soil Pollution

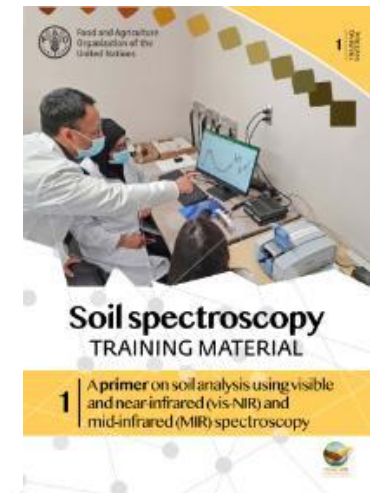
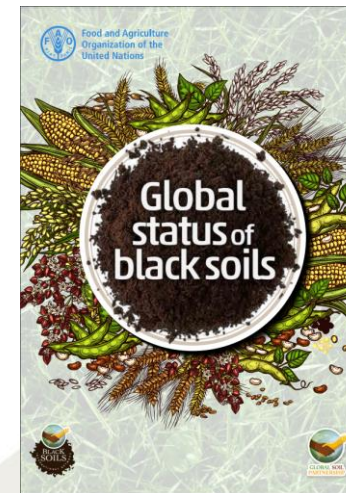
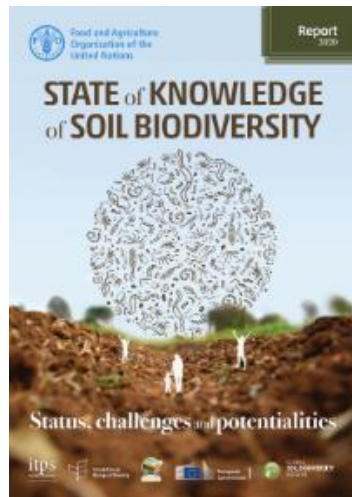


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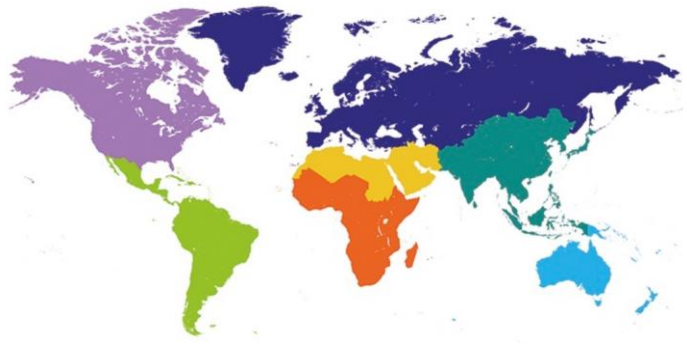
Technical Networks

- Promote the exchange of experiences, technologies and knowledge
- Develop knowledge products, technical guides, methodologies, etc.
- Address knowledge gaps and provide solutions targeted to global, regional and national problems.



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Regional Soil Partnerships: Actions

- Cooperation with the FAO regional offices
- Information about the regions, participation to the GSP activities
- Identification of the different actors at national and regional level
- Mobilization of resources to implement regionally relevant activities
- Organization of events on prioritized topics of regional interest
- Technical support (SDG reporting) and procurement facilitation

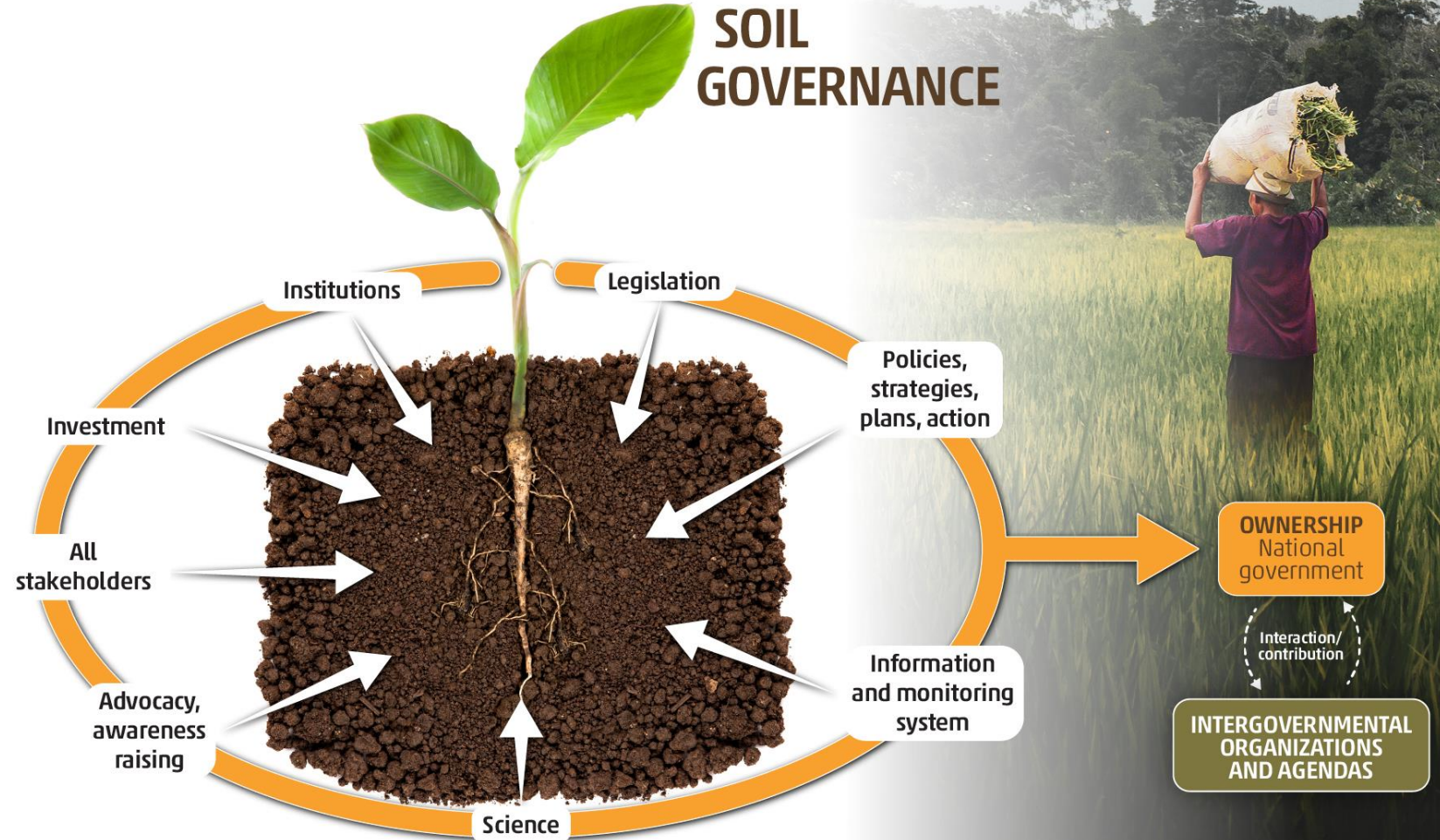
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5

Strengthen soil governance

- Soilex
- Rev-WSC
- VGSSM
- Fertilizer Code



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6

Promote awareness raising and advocacy on soil health



- World Soil Day
- Social Media & websites
- GSP Newsletter
- Thematic global soil symposia



+ articles in the main world newspapers

FAO, la mappatura dei nutrienti del suolo in America Centrale e nell'Africa sub-sahariana, per un uso più efficiente dei fertilizzanti



Investing in smallholder farmers

By DANIEL ESSIET — On Jul 27, 2022

ALARABIYA news

THE NATION

MIRAGE

entro il 2050 potrebbe essere a rischio il 90% del suolo fertile della Terra (VIDEO)

Fao e Global Soil Partnership promuoveranno la mappatura dei nutrienti del suolo in America centrale e nell'Africa subsahariana [28 Luglio 2022]

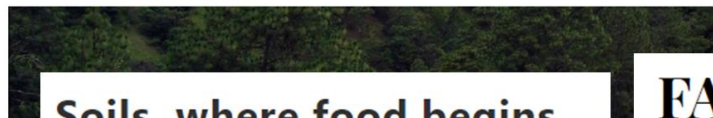
Il 95% del cibo globale viene prodotto nel suolo. I suoli hanno la capacità di immagazzinare, trasformare e riciclare i nutrienti dei quali gli esseri umani hanno bisogno per sopravvivere. Dei 18 nutrienti essenziali per le piante, 15 sono forniti dal suolo, se è sano. Secondo la Fao, è probabile che entro il 2050 sarà a rischio ben il 90% del prezioso terreno terrestre. Ogni 5 secondi nel mondo viene eroso suolo fertile per l'equivalente di un campo da calcio. Il problema è che ci vogliono circa mille anni per creare solo pochi centimetri di terreno.

Il Global Symposium on Soils for Nutrition, organizzato da Fao e Global Soil Partnership e che termina domani, sta discutendo proprio della fertilità dei suoli globali e dei modi per migliorare la disponibilità di nutrienti del suolo per le colture senza danneggiare l'ambiente. Il meeting è stato



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FAO warns 90 per cent of Earth's topsoil at risk by 2050



Soils, where food begins

FAO to boost soil nutrient mapping



nation relevant to soil analysis.

AlKhaleej Today

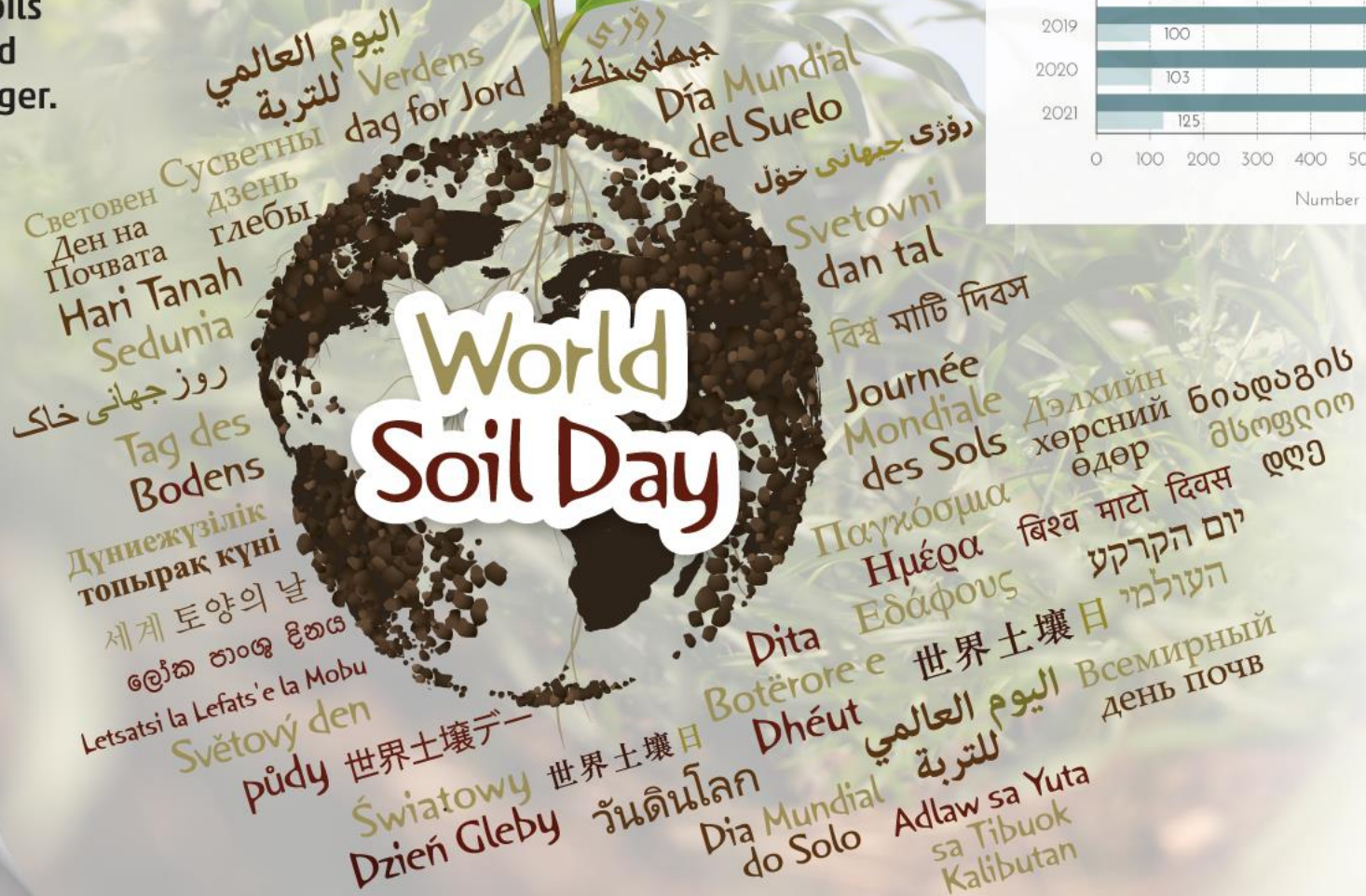
90% of Earth's topsoil at risk by 2050, FAO warns

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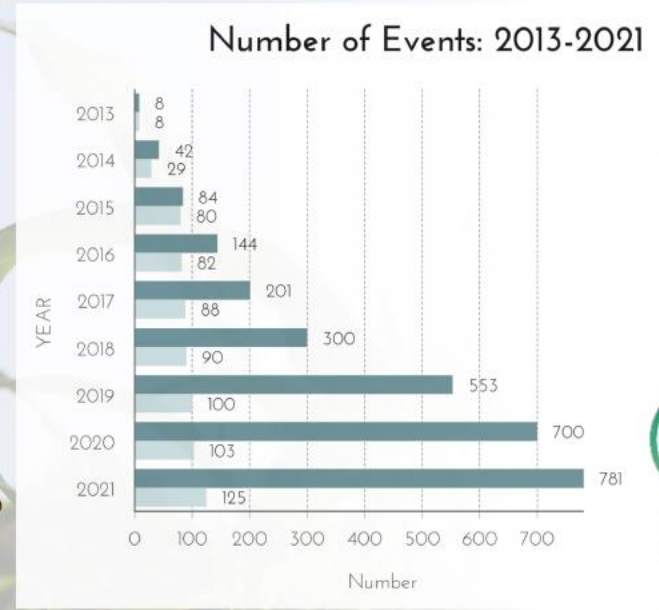


Advocacy and awareness raising on the importance of soils are fundamental tools for consolidating soils in the global agenda.

The International Year of Soils and declaration of UN World Soil Day were a game changer.



2015
International Year of Soils



781 events in 125 countries
1.15 billion users hit and 630 articles



Materials translated in 27+ languages
#WorldSoilDay reach: 330+ M on socials



3 M page sessions on GSP website
Videos: 1 M cumulative views



BBC Podcasts, local TV show
Pro bono ads in markets and rallies

1. Assess, map, and monitor soil health in a harmonized way
2. Foster technical cooperation
3. Manage sustainably and restore soils for the provision of ecosystem service
4. Promote knowledge and literacy on soils
5. Strengthen soil governance
6. Promote awareness raising and advocacy on soil health.



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PARTNERSHIP**

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Food and Agriculture
Organization of the
United Nations



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