



Food and Agriculture  
Organization of the  
United Nations

# Global Soil Partnership

## Global Soil Partnership, promoting sustainable soil management beyond 2015

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GLOBAL SOIL  
PARTNERSHIP

# Soil functions

Soils deliver ecosystem services that enable life on Earth



# Soil foundation of nutrition

**Role of 18 nutrients necessary to plant growth and to human health**

Soil degradation leads to the loss of soil micro and macronutrients

Nutrient-poor soils are unable to produce healthy food with all the necessary nutrients for a healthy person

Over 2 billion people suffer from micronutrient deficiencies

Sustainable soil management is required for boosting healthy soils for healthy food and healthy people

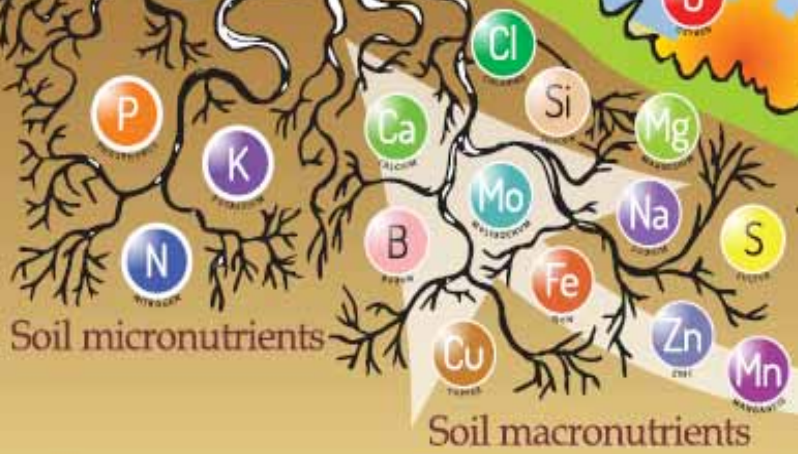
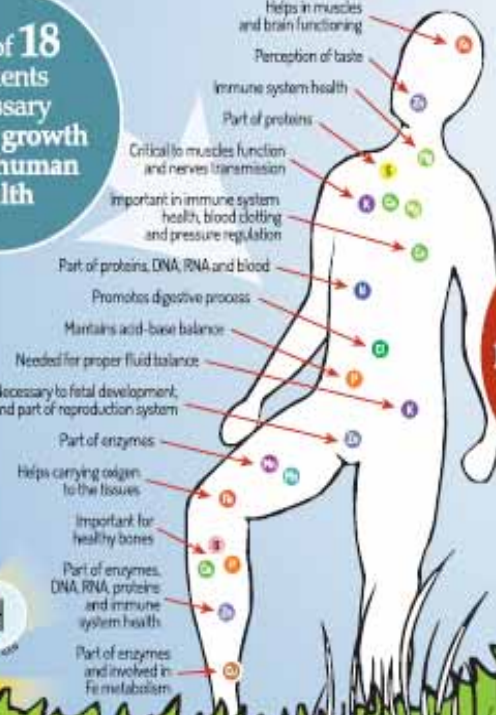
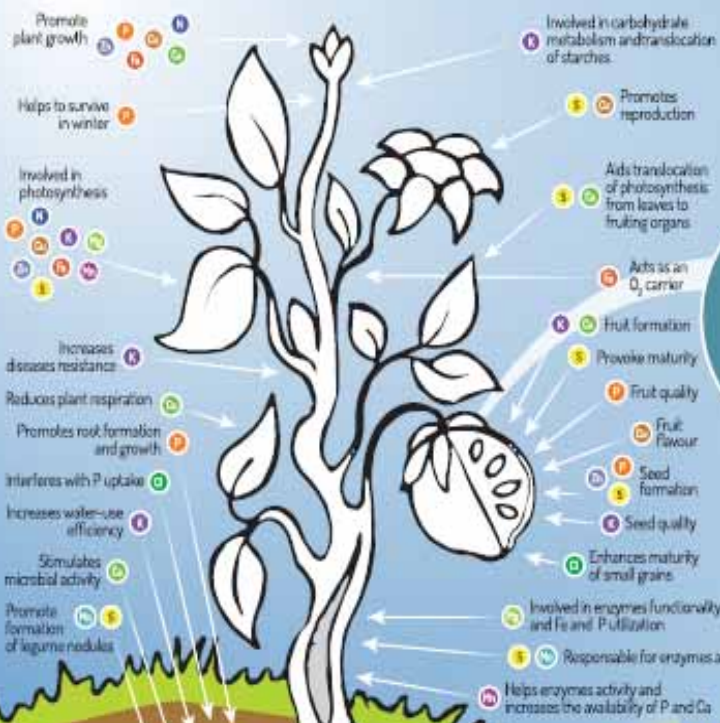
ensure crop rotation

reduce erosion

keep soil surface covered

minimize tillage

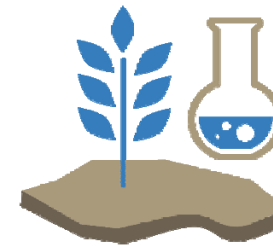
increase soil organic matter content



# Saving our soils and promoting its sustainable management



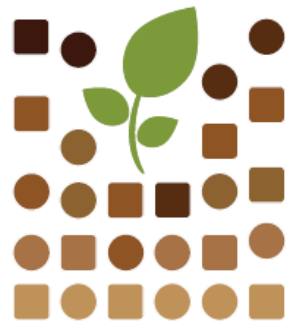
effective  
education &  
extension  
programmes



scientific  
research



## sustainable soil management



Soil  
Information  
Systems



effective  
policies and  
governance

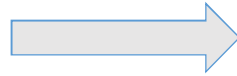


# Response from FAO and its members



**GLOBAL SOIL  
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- 194 Member countries  
> 350 non-state partners



**An Agenda for Action**



**To promote Sustainable Soil  
Management**



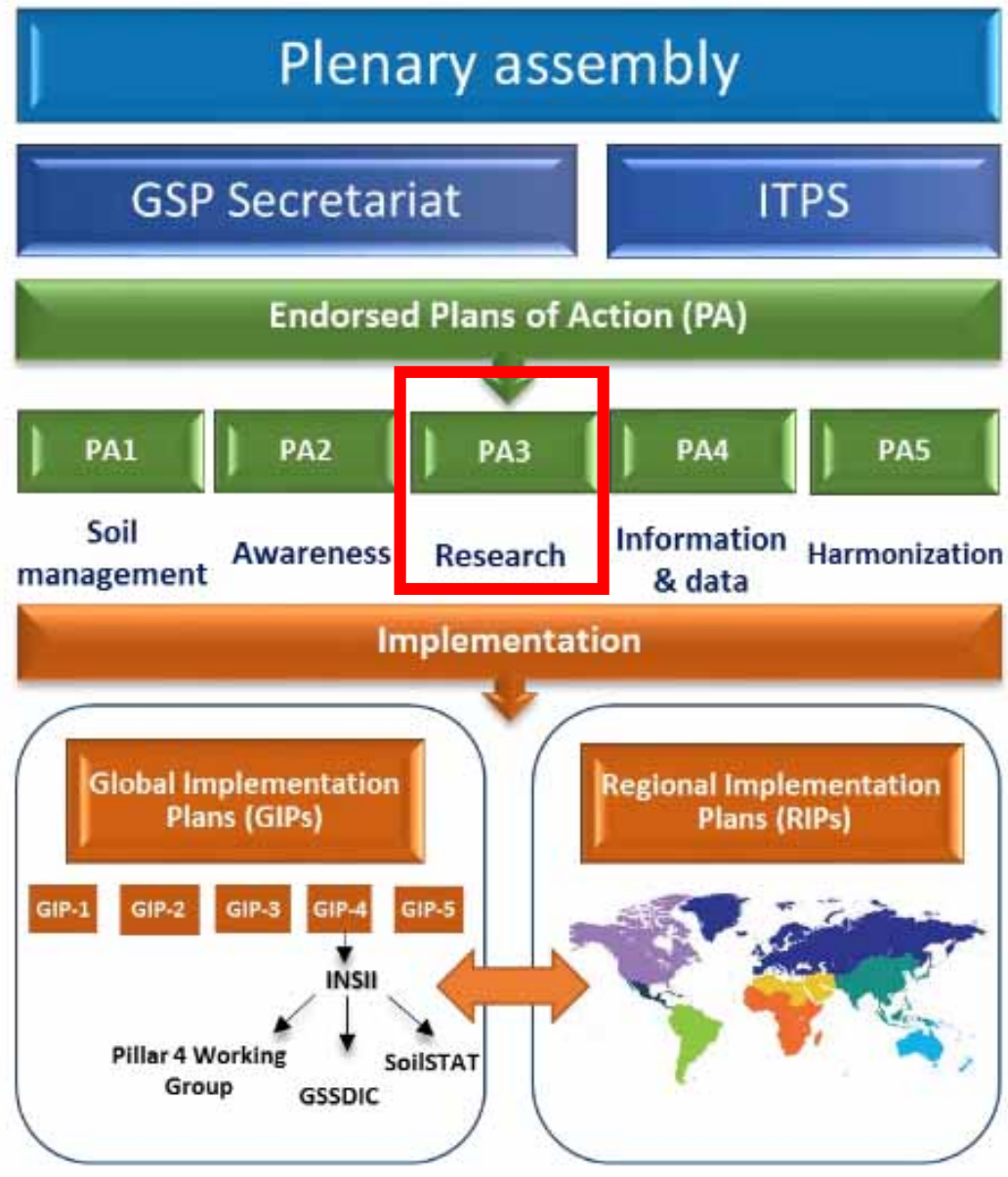
- Pillar 1: Sustainable soil management
- Pillar 2: Awareness raising/education/technical cooperation
- Pillar 3: Targeted soil research
- Pillar 4: Soil data and information
- Pillar 5: Harmonization



# Global Soil Partnership



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## Pillar 3:

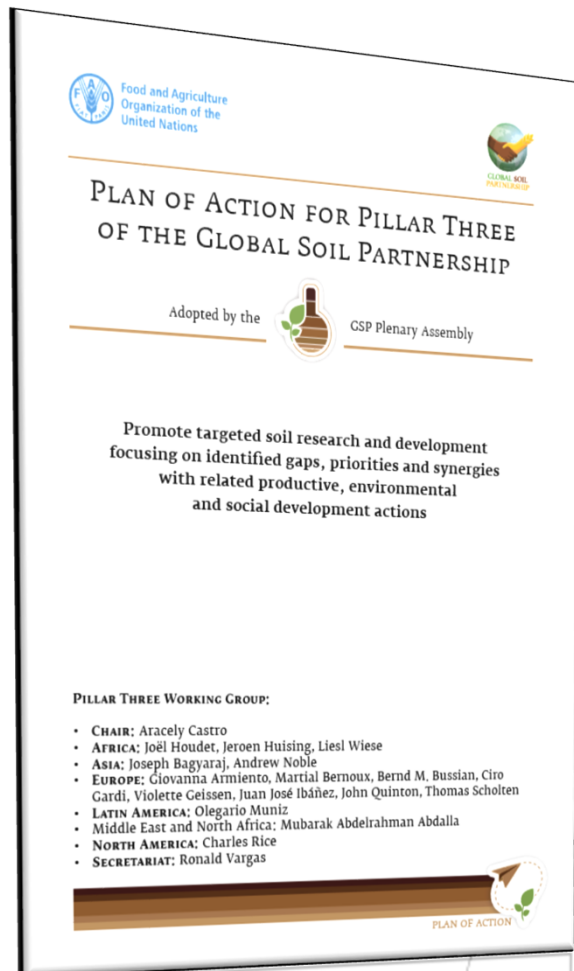
**Promote targeted soil research and development focusing on identified gaps, priorities and synergies with related productive, environmental and social development actions**

### **Global Plan of Action developed to:**

- Increase understanding of soil processes and functions
- Determine how to efficiently manage soils
- Understand the geographic distribution of soil functioning



# Pillar 3 Action Plan



## 4 Recommendations:

1. Evidence of return on investment in soil research
2. Encourage inter- and transdisciplinary R&D
3. Capitalize on existing R&D to ID global, regional and local emerging priorities
4. Foster synergy between research, end-user communities and donor agencies



# Research Activities



- Conducted in collaboration with other initiatives/organizations
- Regional implementation through Regional Soil Partnerships
- Strong targeted research focus on sustainable soil management
  - For food security and nutrition, climate change adaptation and mitigation, ESS, and disaster risk management



# Research implementation



- Focused on addressing the 10 major soil threats
  - Soil erosion, loss of SOC, nutrient imbalance, loss of soil biodiversity, soil acidification, salinization, waterlogging, compaction, sealing and capping, soil contamination
- Eurasia:
  - Five countries implementing soil salinity research
- Implementation relies strongly on country-level support



# New research soil topics in the agenda

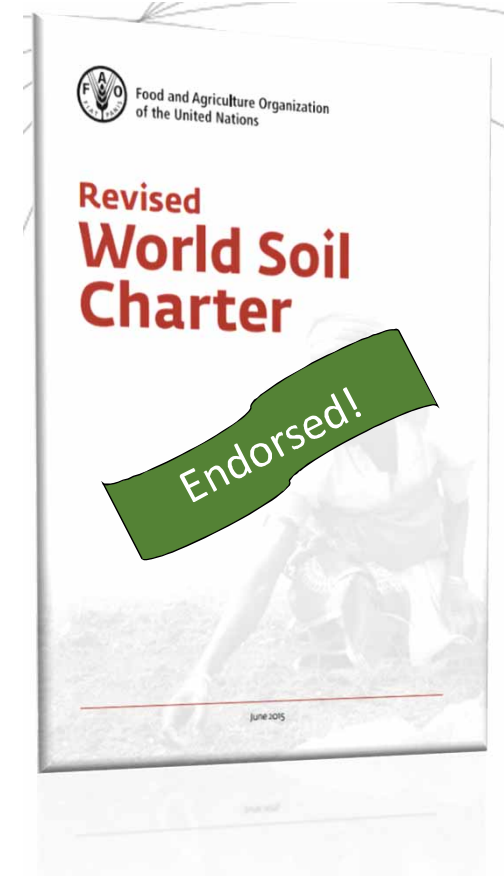
- Soils and Antimicrobial resistance
- Soil borne plant diseases
- Soil contamination and human health
- Monitoring of soil condition for decision making
- .....



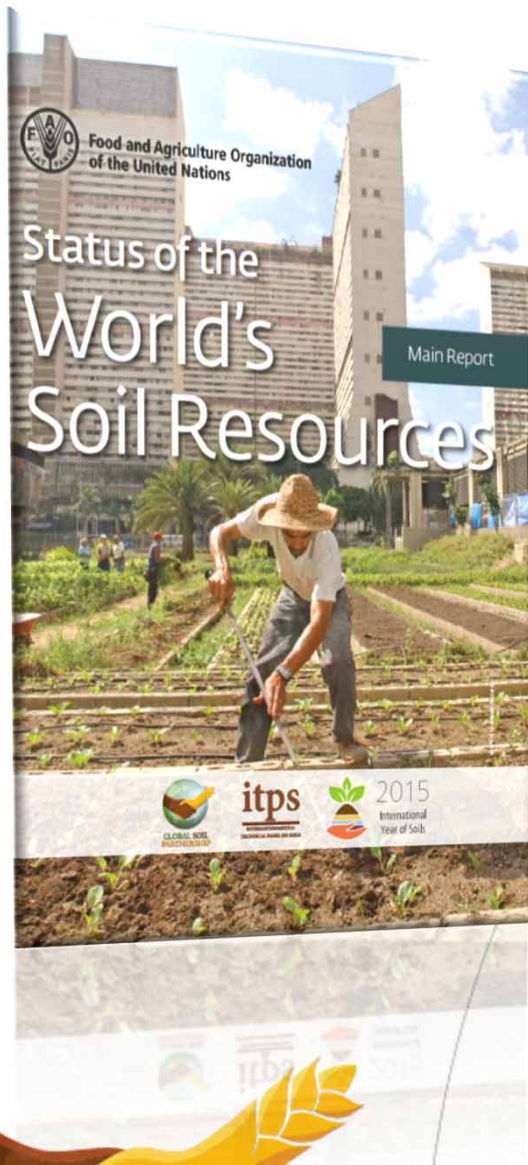
# Revised World Soil Charter

**Overarching goal:** Ensure that soils are managed sustainably and degraded soils are rehabilitated or restored

- SSM Definition
- Multi-level, interdisciplinary initiatives by many stakeholders
- Calls on governments to support research programmes that will provide sound scientific backing for development and implementation of SSM relevant to end-users



# Status of the World's Soil Resources Report

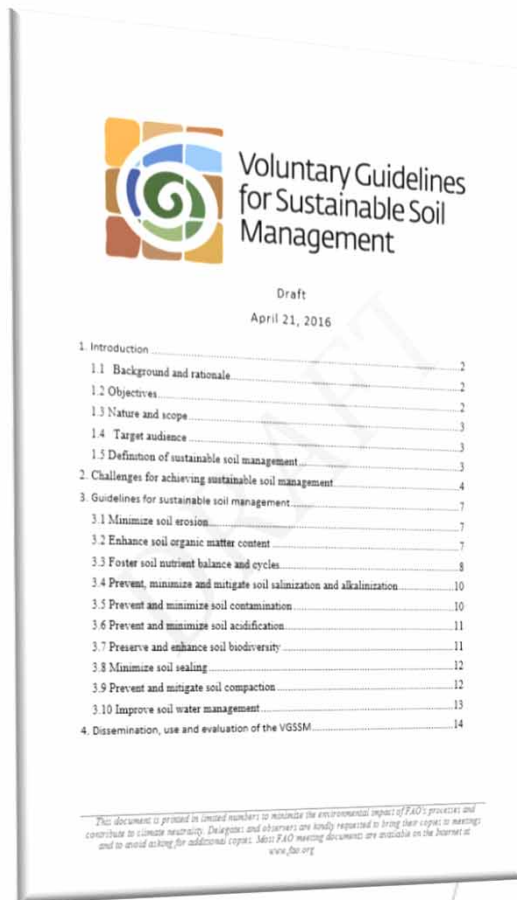


- “Baseline” to track the status of the world’s soils
- Revised version envisaged for 2020
  - **Global Soil Information System**

Minimize further degradation of soils, restore productivity and ESS of degraded soils



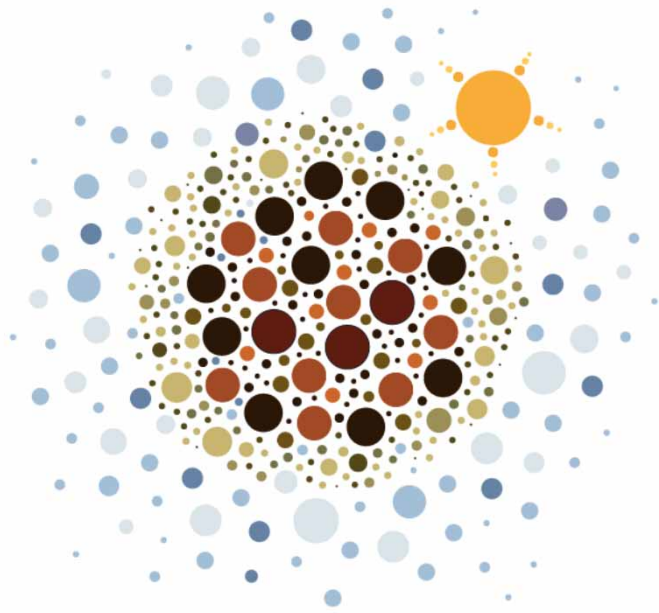
# Voluntary Guidelines for Sustainable Soil Management



- Accepted by recent COAG
- Submitted for endorsement by FAO Council
- Objectives:
  - Present generally accepted principles to promote SSM
  - Calls for fostering and strengthening targeted soil research
- Implementation tool







Develop a global SOC map by  
Dec 2017 as baseline



In support of **SDG Indicator  
15.3.1**

Through support and involvement of  
**FAO member countries**





Thank you!

