Food and Agriculture Organization of the United Nations

GLOBAL SOIL PARTNERSHIP

Implementation Plan for **Pillar One** of the Global Soil Partnership

Promote sustainable management of soil resources for soil protection, conservation and sustainable productivity

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Abbreviations

GSP	Global Soil Partnership
ITPS	Intergovernmental Technical Panel on Soils
P1WG	Pillar 1 Working Group
PoA	Plan of Action
RIP	Regional Implementation Plan
RSPs	Regional Soil Partnerships
SSM	Sustainable Soil Management
SWSR	Status of the World's Soil Resources
VGSSM	Voluntary Guidelines on Sustainable Soil Management
WOCAT	World Overview of Conservation Approaches and Technologies
WSC	World Soil Charter

Executive Summary

Pillar 1 is tasked by the Global Soil Partnership (GSP) with the promotion of sustainable soil management (SSM), thereby increasing the global area under sustainable management. This implementation plan was developed by the Pillar 1 Working Group to provide actions over a five-year period (2018-2022) for the five recommendations made in the Pillar 1 Plan of Action, which was endorsed by the GSP Plenary Assembly in June 2014. These recommendations are addressed through four activities, which were developed to provide global coordination and facilitation of regional and national activities, as detailed in seven Regional Implementation Plans. In addition, actions contained in this document were developed with cognizance of the overall goals of the GSP, as well as requests from the GSP Plenary Assembly.

Sustainable soil management was defined in the revised World Soil Charter (WSC) as: a set of activities that maintain or enhance the supporting, provisioning, regulating, and cultural services provided by soil without significantly impairing either the soil functions that enable those services or biodiversity. All activities in this document adhere to this definition and enable its application. To move from definition to implementation, a guidance document on assessment has been developed by the ITPS to specify how soil management practices can be evaluated according to the revised WSC definition. Through the activities contained in this implementation plan, this guidance will facilitate the assessment of SSM practices according to local, national and regional priorities and contexts by the Regional Soil Partnerships. Using the assessment protocol, a database of SSM management practices will be compiled, drawing from existing databases, as well as relevant practices not currently catalogued.

Enhanced implementation of SSM will be achieved by identifying appropriate SSM practices and systems for all land uses and working with land managers to implement them at appropriate scales. Relevant data and information from these SSM practises will be included in the GSP's Global Soil Information System, since the practises will include critical characteristics such as, land use, pedoclimatic zone, soil threats and/or others. In addition, maps will include metadata on broad site characteristics, the SSM practices and systems implemented, the barriers to widespread adoption and expanding of SSM implementation, and the stakeholder-engagement process. Ultimately, the aim is to ensure the up-scaling of these projects, as well as the development and implementation of new SSM projects where applicable. This will be achieved by developing comprehensive SSM project proposals which would include aspects on: the potential barriers to SSM adoption and how these would be addressed; how relevant policies can and will be supported; aspects of capacity building prior to and during project implementation; and monitoring of SSM management impacts on soil functions and ecosystem services.

1 Introduction

The Global Soil Partnership (GSP) was established in 2012 to improve the governance of soil resources to guarantee agriculturally productive soils for a food secure world. Under the GSP, Pillar 1 is tasked with the promotion of sustainable management (SSM) of soil resources to increase the global area under such sustainable management. Its specific tasks are: 1) the identification and implementation of SSM practices and systems, and 2) the identification and development of solutions to the barriers preventing the adoption of SSM at regional and national scales. Through the work of the other pillars, the successful implementation of identified SSM practices will be disseminated and monitored, and the technical and policy barriers to adoption addressed through the provision of targeted research.

This implementation plan was developed by the Pillar 1 Working Group (P1WG), which is composed of representatives of each of the nine regional Soil Partnerships. The WG was supported in their work by the GSP Secretariat and the Intergovernmental Technical Panel on Soils (ITPS).

Implementation of Pillar 1 actions build on the foundation laid by previous work of the GSP and its scientific support group, the ITPS, as set out below.

1.1 Pillar 1 Plan of Action and recommendations

A global **Plan of Action**[1] for Pillar 1 was endorsed by the GSP Plenary Assembly in July 2014, highlighting that SSM should be promoted and implemented in all land uses. The Plan states that the challenges associated with SSM should be assessed and addressed in terms of the economic, technical, social, political, investment and partnership challenges. To achieve this, the following five recommendations were made:

1. Appropriate SSM practices and systems should be identified for all land uses at regional and national levels using existing knowledge, adapted according to site characteristics and land user needs, considering cost-benefit analyses and social impacts. These practices and systems should be implemented at appropriate scales to restore and maintain soil functions and ecosystem services.
2. In light of the primary importance of food security, sustainable agricultural production should be supported by balanced soil fertility management using a range of available nutrients and appropriate physical management practices without causing negative environmental impacts.
3. All barriers preventing the implementation or adoption of SSM practices and systems should be assessed and policy and technical solutions proposed to create an enabling environment for sustainable soil management.
4. A monitoring system should be developed to measure the progress of implementation of SSM practices and systems.
5. The GSP should facilitate the development of a capacity building strategy amongst all stakeholders to promote the adoption of SSM.

These recommendations are addressed through four global level activities and related actions as presented in Section 3 of this implementation plan. These activities were developed to provide global coordination and facilitation of regional and national activities to ensure SSM implementation and create an enabling environment for implementation. The actions provided in this implementation plan were developed with cognizance of the overall goals of the GSP, priority activities at regional level as developed to date in the Regional Implementation Plans (RIPs), as well as requests from the GSP Plenary Assembly.

[1] Pillar 1 Plan of Action available online at http://www.fao.org/3/az898e

1.2 Other GSP documents guiding and supporting Pillar 1

The **revised World Soil Charter** (WSC) defined SSM as: *a set of activities that maintain or enhance the supporting, provisioning, regulating, and cultural services provided by soil without significantly impairing either the soil functions that enable those services or biodiversity*. The Charter further provides guidelines for action by different stakeholders to ensure that soils are managed sustainably and that degraded soils are rehabilitated or restored, calling for action at all levels (FAO, 2015).

The ecosystem services provided by the soil and the soil functions that support these services are specified in the introductory section of the **Status of the World's Soil Resources** (SWSR) report (FAO and ITPS, 2015). The seven soil functions that are under threat are:

1. Biomass production, including agriculture and forestry,
2. Storing, filtering and transforming nutrients, substances and water,
3. Biodiversity pool, such as habitats, species and genes,
4. Physical and cultural environment for humans and human activities,
5. Source of raw materials,
6. Acting as a carbon pool, and
7. Archive of geological and archaeological heritage.

The major ecosystem services provided by soil and the specific soil functions that enable those services are summarized in Table 1. The SWSR report further provides a comprehensive overview of the 10 main threats to the soil functions that support the delivery of ecosystem services: soil erosion, contamination, organic carbon loss, salinization, acidification, waterlogging, sealing, compaction, loss of soil biodiversity, and nutrient imbalance. The severity and trend of each of the ten threats was assessed for each of the eight FAO regions (Africa South of the Sahara, Antarctica, Asia, Europe and Eurasia, Latin America and the Caribbean, Near East and North Africa, North America, Southwest Pacific).

Table 1. Ecosystem services provided by the soil and the soil functions that support these services (adapted from the SWSR).

Ecosystem service	**Soil functions**
Supporting services: Services that are necessary for the production of all other ecosystem services; their impacts on people are often indirect or occur over a very long time	
Soil formation	• Weathering of primary minerals, formation of clay minerals and release of nutrients • Accumulation and transformation of organic matter • Creation of structures (aggregates, horizons) for gas and water flow and root growth • Creation of charged surfaces for ion retention and exchange
Primary production	• Medium for seed germination and root growth • Supply of nutrients and water for plants
Nutrient cycling	• Transformation of organic materials by soil organisms • Retention and release of nutrients on charged surfaces
Regulating services: benefits obtained from the regulation of ecosystem processes	
Water quality regulation	• Filtering and buffering of substances in soil water • Transformation of contaminants

Water supply regulation	• Infiltration and retention of water within the soil • Drainage of excess water out of soil and into groundwater and surface water
Climate regulation	• Regulation of CO_2, N_2O, and CH_4 emissions • Land-sea thermal exchange and heat regulation
Erosion regulation	• Retention of soil on the land surface
Provisioning Services: products ('goods') obtained from ecosystems of direct benefit to people	
Food supply	• Providing water, nutrients, and physical support for growth of plants for human and animal consumption
Water supply	• Retention and purification of water
Fibre and fuel supply	• Providing water, nutrients, and physical support for growth of plant growth for bioenergy and fibre
Raw earth material supply	• Provision of topsoil, aggregates, peat, raw material for construction, etc.
Surface stability	• Supporting human habitations and related infrastructure
Refugia	• Providing habitat for soil animals, birds etc.
Genetic resources	• Source of unique biological materials
Cultural services: nonmaterial benefits which people obtain from ecosystems through spiritual enrichment, aesthetic experiences, heritage preservation and recreation	
Aesthetic and spiritual	• Preservation of natural and cultural landscape diversity • Source of pigments and dyes
Heritage	• Preservation of archaeological records

Based on the material in the SWSR report, the ITPS identified four priorities for action, with the following of particular relevance to the work under Pillar 1:

1. Sustainable soil management can increase the supply of healthy food for the most food insecure among us. Specifically, we should minimize further degradation of soils and restore the productivity of soils that are already degraded in those regions where people are most vulnerable.

2. The global stores of soil organic matter (e.g., soil organic carbon and soil organisms) should be stabilized or increased. Each nation should identify locally appropriate soil organic carbon (SOC)-improving management practices and facilitate their implementation. They should also work towards a national-level goal of achieving a stable or positive net SOC balance.

3. Compelling evidence exists that humanity is close to the global limits for total fixation of nitrogen and regional limits for phosphorus use. Therefore, we should act to stabilize or reduce global industrial nitrogen (N) and phosphorus (P) fertilizer use while simultaneously increasing fertilizer use and use efficiency in regions of nutrient deficiency. Increasing the

efficiency of N and P use by plants is a key requirement to achieve this goal, including the use of biological N fixation through legumes and other plant-microbe interactions.

In 2016, the FAO endorsed the **Voluntary Guidelines for Sustainable Soil Management** (VGSSM) that specifies a set of characteristics that would indicate that SSM is being practiced (FAO, 2016).

Based on the foundation of the documents cited above, the ITPS has developed a **Guidance Document for the Assessment of SSM** that directly supports the Implementation Plan of Pillar 1 (addressing action 1.1 in the Logical Framework presented below). This document was approved by the ITPS at its Eighth Plenary Session in April 2018 and is included as an annex to this Implementation Plan.

1.3 How does Pillar 1 relate to the other four Pillars of Action?

The five GSP Pillars of Action are highly interdependent and all are focused on the objective set by the revised WSC stating that: "The overarching goal for all parties is to increase the area under sustainable soil management and the area of soils rehabilitated or restored" (FAO, 2015. p.5) The main focus of the five Pillars within the context of SSM implementation are as follows:

Pillar 1: Promote sustainable management of soil resources for soil protection, conservation and sustainable productivity.

- Identify SSM practices and systems relevant for the specific land use, as well as barriers to adoption, and promote implementation of SSM.

Pillar 2: Encourage investment, technical cooperation, policy, education, awareness and extension in soil.

- Harness human and capital resources required to implement SSM and remove barriers to adoption.

Pillar 3: Promote targeted soil research and development focusing on identified gaps, priorities and synergies with related productive, environmental and social development actions.

- Provide key natural science and socio-economic research data to bridge knowledge gaps that limit implementation of SSM.

Pillar 4: Enhance the quantity and quality of soil data and information: data collection (generation), analysis, validation, reporting, monitoring and integration with other disciplines.

- Provide authoritative data to assess progress in global implementation and adoption of SSM.

Pillar 5: Harmonization of methods, measurements and indicator for the sustainable management and protection of soil resources.

- Improve and standardize methods that provide reliable and simple indicators for the promotion and adoption of SSM.

1.4 Stakeholders and stakeholder engagement

Enhanced global implementation of SSM can only be achieved through the support of all stakeholders and partners. Global activities will be facilitated by the GSP Secretariat with key support from the Regional Soil Partnerships (RSPs) to ensure regional participation and impact. The Regional Soil Partnership Secretariats and RSP governance approaches are therefore the next level of support and facilitation. The RSPs are further represented through the regional Pillar 1 Chairs who form part of the Pillar 1 Working Group (P1WG). At national level, the GSP focal points represent a major stakeholder group responsible for national participation in regional and global GSP activities, including those under Pillar 1. As necessary, actions at regional and national level will be further supported by FAO regional and national offices.

The roles of other key stakeholders in the implementation of SSM is envisaged as follows:

Roles of Individuals and the Private Sector:

1. All individuals using or managing soil are called to demonstrate stewardship of the soil by participating in SSM assessment and, if necessary, changing management practices to achieve SSM.
2. The private sector is called to acknowledge the importance of SSM and reward implementation of SSM through its procurement processes.

Roles of Groups and the Science Community:

1. Disseminate information about SSM and promote its importance.
2. Work with individuals and groups of land managers to assess and implement locally-relevant SSM.
3. Conduct relevant research to address gaps in SSM and remove barriers to implementation.

Roles of Government:

1. Incorporate the principles and practices of SSM into policy guidance and legislation at all levels of government, ideally leading to the development of a national soil policy and legislation.
2. Strive to create favourable socio-economic and institutional conditions to support SSM by removal of obstacles and potential barriers to adoption.
3. Participate in and encourage the development of multi-level, interdisciplinary educational and capacity-building initiatives that promote the adoption of SSM by land users.
4. Support and initiate research programs that will provide sound scientific backing for development and implementation of SSM relevant to end-users.
5. Gather data on implementation of SSM and contribute this to the Global Soil Information System for monitoring and reporting purposes.

Roles of International Organizations:

1. Facilitate the compilation of data and dissemination of reports on the rate of global adoption of SSM.
2. Where appropriate, secure funds to facilitate regional and national-level assessment and implementation of SSM.
3. Compile global-level synthesis of advances in SSM and disseminate these to regional and national groups.

All GSP partners, especially those involved in SSM implementation and related activities are invited to participate in the implementation of this plan to ensure optimal collaboration and combined efforts to increase the global area under SSM to support sustainable development.

2 Implementation

The main aim of Pillar 1 implementation is to identify successful SSM practices at global, regional and national levels for any given land use and enhance their implementation while creating an enabling environment for optimal SSM implementation by addressing the barriers to adoption. These actions are necessary to ensure that global soils can optimally perform their key functions and provide essential ecosystem services. The five recommendations contained in the Pillar 1 Plan of Action are cumulatively addressed through four activities as briefly described below, along with relevant actions

as listed in the Logical Framework Matrix in section 3. Implementation of these activities and actions is proposed for a five-year period (2018-2022).

2.1 Develop and make available information on best practices for SSM under different land use systems

In order to promote and implement SSM under Pillar 1, and the GSP in general, a clear understanding is needed of which soil management practices could be considered sustainable. A clear set of best SSM practices is essential in the way forward to increasing the global area of soils under sustainable management. The first action to this end is to develop a guidance document for SSM assessment that allows users to determine whether soil management practices are sustainable according to the revised WSC definition.

This guidance document was developed with the understanding that it will be refined to enable the assessment of SSM practices according to regional and national priorities and contexts. The aim of the guidance document is to broadly outline how an assessment of SSM could be conducted as a starting point for regional and national refinement. The global methodology will not provide a comprehensive assessment guide, but rather unpack and explain the technical implication of the SSM definition and its application. This would include perspectives on the type of questions to be answered during assessment and the use of suitable indicators. More comprehensive SSM assessment methodologies and associated indicators should then be developed at regional and national levels.

As the specific assessment protocols (global/regional/national) become available, a database of best SSM practices will be compiled at global level and refined for regional and sub-regional levels. Such a database will draw from existing databases (e.g., WOCAT's[2] Sustainable Land Management Data Base), as well as from relevant SSM practices not listed in existing databases to be sourced through GSP partners. Furthermore, an assessment methodology of soil management practices would naturally include the use of appropriate indicators and metrics. This links directly to the implementation of GSP activities under Pillar 5 on the harmonization of methods, measurements and indicators for the sustainable management and protection of soils and will be implemented accordingly.

2.2 Identify regions where SSM practices are successfully implemented for up-scaling

The Pillar 1 Plan of Action recommended the identification of appropriate SSM practices and systems for all land uses at regional and national levels and implementing them at appropriate scales to restore and maintain soil functions and ecosystem services. In order to account for landscape and climate heterogeneity, SSM practices and systems should be identified and adapted for implementation in, amongst others, different biomes, landscapes, watersheds, land uses, land cover types, and farm types or scales. In addition, SSM practices and systems should be adapted to relevant site characteristics and land user needs, considering the cost-benefit analyses and social impacts of their implementation. Site characteristics should include available information on climate, landscape, access to water and especially soil characteristics.

As described in Section 2.1, global, regional and national practices will be identified and compiled in a SSM best practice database. A further step will be to identify SSM success stories and ensure their up-scaling (i.e., expanding, replicating, adapting and sustaining successful implementation) for greater impact and implementation.

To achieve this, case studies at regional and national levels should be identified where SSM is successfully implemented. Successful implementation will be determined using the assessment protocol described in Section 2.1. At the same time, potential barriers to the wider adoption of SSM practices and systems being implemented should be assessed and documented. This would include the identification of some unsuccessful projects to understand the reasons for failed implementation and/or adoption. In order to build stakeholder networks for implementation, the relevant stakeholders

[2] WOCAT – World Overview of Conservation Approaches and Technologies

involved in existing projects will be documented. Case studies should be mapped based on areal extent and characteristics identified at regional level such as land use pedoclimatic zone, soil threats and/or others. In addition, maps should include metadata on the site and soil characteristics, the SSM practices and systems implemented, the barriers to up-scaling, and the relevant stakeholders. This will enable monitoring of where areas under SSM are increasing or decreasing and soil data and information generated should link directly to the Global Soil Information System (linked to implementation under Pillar 4).

2.3 Implement the revised World Soil Charter and Voluntary Guidelines for Sustainable Soil Management

The revised WSC was developed to inform decision-making at the global scale and foster the implementation of SSM at regional and national levels. It updated the vision and guiding principles endorsed in the first version of the Charter, published in 1981, which no longer reflected the world soil situation and needed updating. As a first step in utilizing the revised WSC, current activities by and within GSP partners will be assessed in support of the principles contained in the Charter. Results from the survey will be used to evaluate the impact of GSP initiatives and support the planning of future activities. Such a survey will constitute the first in a series of reviews of country performance in implementing actions of the revised WSC.

Similarly, following its endorsement by the 155th session of the FAO Council in December 2016, the VGSSM require active global implementation. The VGSSM focus mostly on agriculture and elaborate the principles outlined in the revised World Soil Charter, considering the evidence provided in the SWSR report. The guidelines aim to provide general technical and policy recommendations on SSM to a wide range of committed stakeholders. In this context, the VGSSM are of voluntary nature and are not legally binding. The first step in implementing the VGSSM entails the organization of regional and national awareness and capacity development workshops. The purpose of these workshops would be to: 1) familiarize various stakeholders of its scope, added value and potential impacts in terms of supporting sustainable development through SSM and 2) encourage stakeholders to promote, support and utilize the guidelines. Furthermore, due to the general and broad nature of the VGSSM, various stakeholders and GSP partners requested the development of technical SSM manuals for each of the 10 major soil threats addressed. These manuals will be developed by working groups to provide technical information on soil management to address the relevant soil threats within specific geographic and/or regional contexts (as determined by the working groups).

Once technical SSM manuals are available, it is envisaged that capacity development trainings/workshop will be needed to develop regional and national SSM implementation capacities. In addition, ensuring the inclusion of soil governance in national policies and legislative frameworks according to the guidance and principles of the VGSSM will require active collaboration with governments and other institutional organizations. These actions are included in this implementation plan, but with the understanding that it would be implemented as part of Pillar 2 activities and associated budget.

2.4 Develop and implement comprehensive projects for SSM

Ultimately, actions under Pillar 1 should lead to increased implementation of comprehensive SSM projects and a larger global area under SSM. To achieve this, comprehensive project proposals will be developed to implement SSM practices. Project proposals would include those aimed at up-scaling existing successful projects (locally, nationally and/or regionally), as well as new concepts to develop innovative and comprehensive SSM projects. To ensure integrated and comprehensive projects, the following aspects should be included (not an exhaustive list):

- The potential barriers to SSM adoption and how these would be addressed;
- How relevant policies can and will be supported;
- Aspects of capacity development prior to and during project implementation;

- Needs assessments at various levels to ensure adaptation of existing practices to local contexts;
- Knowledge exchange and development of decision support systems; and
- Monitoring of SSM management impacts on soil functions and ecosystem services.

Funding should be actively sourced to implement these proposals and all new projects will be mapped along with the existing successful case studies to be developed under section 2.2 above.

2.5 Role of the Pillar 1 Working Group

The Pillar 1 Working Group consists of a representative from the GSP Secretariat, the ITPS Pillar 1 Chair, as well as nine regional Pillar 1 chairs as nominated by the RSPs with the following responsibilities:

Role of the Pillar 1 Working Group

1. Compilation of regional and global implementation reports for submission to the annual GSP Plenary Assembly.
2. Dissemination of global-level documents and program information to national and sub-national groups.
3. Identification of cross-regional issues and impediments, and transmission of these to the GSP, ITPS and WGs of other Pillars.

Role of RSP Pillar 1 WG Chairs:

1. Identification of national government, NGO, and civil society partners for SSM assessment and implementation.
2. Establishment and chairing of Regional Pillar 1 WG (i.e., national lead partners for SSM assessment and implementation).
3. Facilitating programs (e.g., workshops, field visits, and outreach materials) for assessment and implementation of SSM at national and local scales.
4. Facilitating documentation of successful SSM implementation (e.g., specific practices, area of implementation) and barriers to adoption for reporting to Pillar 1 WG.

3 Logical Framework Matrix

Activity	Product description	Actions	Start date	End date	Stakeholders	Budget
1. Develop and make available information on best practices for SSM under different land use systems	Develop a global protocol to test soil management practices against the SSM definition in the revised WSC and refine the protocol for regional and/or national contexts. Develop a database with best SSM practices.	**1.1** Develop a guidance document on the assessment of whether soil management practices are sustainable according to the SSM definition in the revised World Soil Charter	Q1 2018	Q2 2018	GSP Secretariat ITPS	USD 10,000
		1.2 Compile a global database of best SSM practices assessed using the assessment protocol in Action 1.1, drawing from existing databases, as well as from SSM practices not listed in existing databases.	Q3 2018	Q42019 and continuously updated	GSP Secretariat ITPS RSPs Focal points P1WG	USD 10,000
		1.3 Refine the global guidance to assess SSM practices according to regional and national priorities and contexts	Q4 2018	Q4 2020	GSP Secretariat ITPS RSPs Focal points Regional Pillar 1 Working Groups	USD 500,000
		1.4 Compile regional and local sub-datasets of best SSM practices assessed or implemented using the refined assessment protocol from Action 1.3 above	Q4 2018	Q4 2021 and continuously updated	GSP Secretariat ITPS RSPs All GSP Partners	USD 500,000
2. Identify regions where SSM practices are successfully implemented	Develop integrated regional maps of successful SSM case	**2.1** Identify case studies at regional and national levels where SSM is successfully implemented based on	Q3 2018	Q4 2021 and	GSP Secretariat ITPS	USD 75,000 Budget to be

Activity	Product description	Actions	Start date	End date	Stakeholders	Budget
for up-scaling	studies.	the SSM assessment protocol developed under Activity 1. Include the assessment of: • Barriers to adoption/up-scaling of good practices • Stakeholders involved in existing projects		continuously updated	RSPs National Focal Points International organizations, science community, individuals and the private sector, farmers associations	supplemented by national and regional contributions
		2.2 Map successful projects based on location, aerial extent and specific characteristics to be determined at regional levels, e.g. land use, pedoclimatic zone, biomes, land zoning, soil threats, and/or others. Maps should include metadata on aspects such as: • broad site characteristics, • SSM practices and systems implemented, • potential barriers to up-scaling, • the stakeholders involved in implementation.	Q3 2018	Q4 2021	GSP Secretariat RSPs All GSP Partners	USD 50,000 Budget to be supplemented by national and regional contributions
		2.3 Monitor where areas under SSM are increasing or decreasing, creating direct links to the Global	Q2 2019	Continuous	GSP Secretariat RSPs	USD 200,000 Budget to be

Activity	Product description	Actions	Start date	End date	Stakeholders	Budget
		Soil Information System (linked to implementation under Pillar 4)			All GSP Partners	supplemented by national and regional contributions
3. Implement the revised World Soil Charter and Voluntary Guidelines for Sustainable Soil Management	Develop and implement an online survey to assess GSP partners' performance against the revised WSC. Organize regional and national capacity development workshops to disseminate and develop capacity on the VGSSM. Technical SSM manuals for the major soil threats. Capacity development on specific soil threats and SSM soil management actions to address these threats (implement through GSP Pillar 2) Soil governance integrated in national policy and legislative frameworks (implement through GSP Pillar 2)	**3.1** Assess the performance of GSP partners against the revised World Soil Charter	Q2 2018	Q4 2018	GSP Secretariat ITPS RSPs and all partners	National and regional contributions through time spent by partners to complete an online questionnaire
		3.2 Disseminate the VGSSM through regional and national awareness and capacity development workshops to encourage stakeholders to promote, support and apply the guidelines.	Q3 2018	Q2 2020	GSP Secretariat ITPS RSPs	USD 200,000 Budget to be supplemented by national and regional contributions through the provision of workshop facilities and manpower to support arrangement and implementation of workshops
		3.3 Develop technical SSM manuals for each of the ten major soil threats identified in the SWSR. These manuals will be developed by working groups to provide technical information on soil management to address the relevant soil threats. The geographic or regional contexts of these manuals will be determined by the respective working groups.	Q1 2018	2022	GSP Secretariat ITPS RSPs P1WG Participation of various GSP partners through expert working groups	USD 75,000 Budget to be supplemented by national and regional contributions
		3.4 Link with implementation under Pillar 2 to implement capacity	Q4 2018	Continuous	GSP Secretariat RSPs	Budget to be covered through

Activity	Product description	Actions	Start date	End date	Stakeholders	Budget
		development training/workshops on specific soil threats and SSM practices to address these threats			Focal Points Nationally nominated participants	implementation under Pillar 2
		3.5 Link with implementation under Pillar 2 to collaborate with governments and other international organizations to integrate soil governance for soil protection	Q4 2018	Q4 2020 And continuous	GSP Secretariat RSPs Focal Points	Budget to be covered through implementation under Pillar 2
4. Develop and implement comprehensive projects for SSM	Develop project proposals for comprehensive SSM implementation projects. Establish SSM implementation projects in all regions.	**4.1** Develop comprehensive project proposals to implement SSM practices. Projects would include • those aimed at up-scaling existing successful SSM projects as identified under Activity 2 above (up-scaling locally, nationally and/or regionally), and • new concepts to develop innovative and comprehensive SSM projects. To ensure integrated and comprehensive projects, the following aspects should be included (non-exhaustive list): • barriers to adoption and how to overcome them, • the development of relevant	Q3 2018	Q4 2020 Continuously develop proposals over the longer term	GSP Secretariat RSPs All GSP Partners	USD 100,000 Budget to be supplemented by national and regional contributions

Activity	Product description	Actions	Start date	End date	Stakeholders	Budget
		policy support, • capacity development before and during implementation, • needs assessments to adapt SSM practices, • Knowledge exchange and development of decision support systems, and • monitoring of SSM management impact on soil functions and ecosystem services.				
		4.2 Implement SSM projects in all regions, ensuring involvement of all relevant stakeholders.	Q2 2019	Continuous	GSP Secretariat RSPs All GSP Partners	USD 15,000,000 Budget to be supplemented by applying for project funding that cannot be channelled through FAO

4 Implementation timeline

Activity	Actions	2018				2019				2020				2021				2022			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1. Develop and make available information on best practices for SSM under different land use systems	**1.1**																				
	1.2																				
	1.3																				
	1.4																				
2. Identify regions where SSM practices are successfully implemented for up-scaling	**2.1**																				
	2.2																				
	2.3																				
3. Implement the revised World Soil Charter and Voluntary Guidelines for Sustainable Soil Management	**3.1**																				
	3.2																				
	3.3																				
	3.4																				
	3.5																				
4. Develop and implement comprehensive projects for SSM	**4.1**																				
	4.2																				

5 Total budget

Activity	Budget
1. Implement the revised World Soil Charter and Voluntary Guidelines for Sustainable Soil Management	USD 275,000
2. Develop and make available information on best practices for SSM under different land use systems	USD 1,020,000
3. Identify regions where sustainable soil management practices are successfully implemented for up-scaling	USD 325,000
4. Develop and implement projects for sustainable soil management practices	USD 15,100,000
Total Activities	**USD 16,720,000**

6 References

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