

Updated World Soil Charter

Mandate from the GSP Plenary Assembly

“There is an urgent need to update the vision and guiding principles as spelled out some 30 years ago by FAO Member Countries in the World Soil Charter (FAO, 1981). The 13 principles listed in the charter are still valid, but need to be updated and revised in light of new scientific knowledge gained over the past 30 years, especially with respect to new issues that emerged or were exacerbated during the last decades, like soil pollution and its consequences for the environment, climate change adaptation and mitigation and urban sprawl impacts on soil availability and functions. New priorities for action as well as follow-up activities should be identified, taking stock of past experiences and learning from the failures and mistakes that have resulted in a still persistent global problem of soil degradation and unsustainable use of available soil resources”

1 Preamble

Soils are fundamental to life on Earth but human pressures on soil resources are reaching critical limits. Careful soil management is one essential element of sustainable agriculture and also provides a valuable lever for climate regulation and a pathway for safeguarding ecosystem services and biodiversity.

The outcome document of the United Nations Conference on Sustainable Development held in Rio de Janeiro (Brazil) in June 2012, “The Future We Want”, recognizes the economic and social significance of good land management, including soil, particularly its contribution to economic growth, biodiversity, sustainable agriculture and food security, eradicating poverty, the empowerment of women, addressing climate change and improving water availability.

2 Principles

1. Soils are a key enabling resource, central to the creation of a host of goods and services integral to ecosystems and human well-being. The maintenance or enhancement of global soil resources is essential if humanity’s overarching need for food, water, and energy security is to be met in accordance with the sovereign rights of each state over their natural resources. In particular, the projected increases in food, fibre, and fuel production required to achieve food and energy security will place increased pressure on the soil.
2. Soils result from complex actions and interactions of processes in time and space and hence are themselves diverse in form and properties and the level of ecosystems services they provide. Good soil governance requires that these differing soil capabilities be understood and that land use that respects the range of capabilities be encouraged with a view to eradicating poverty and achieving food security.
3. Soil management is sustainable if the supporting, provisioning, regulating, and cultural services provided by soil are maintained or enhanced without significantly impairing either the soil functions that enable those services or biodiversity. The balance between the supporting and provisioning services for plant production and the regulating services the soil provides for water quality and availability and for atmospheric greenhouse gas composition is a particular concern.
4. The implementation of soil management decisions is typically made locally and occurs within widely differing socio-economic contexts. The development of specific measures appropriate for adoption by local decision-makers often requires multi-level, interdisciplinary initiatives by many stakeholders. A strong commitment to including local and indigenous knowledge is critical.
5. The specific functions provided by a soil are governed, in large part, by the suite of chemical, biological, and physical properties present in that soil. Knowledge of the actual state of those

properties, their role in soil functions, and the effect of change – both natural and human-induced—on them is essential to achieve sustainability.

6. Soils are a key reservoir of global biodiversity, which ranges from micro-organisms to flora and fauna. This biodiversity has a fundamental role in supporting soil functions and therefore ecosystem goods and services associated with soils. Therefore it is necessary to maintain soil biodiversity to safeguard these functions.
7. All soils – whether actively managed or not- provide ecosystem services relevant to global climate regulation and multi-scale water regulation. Land use conversion can reduce these global, common-good services provided by soils. The impact of local or regional land-use conversions can be reliably evaluated only in the context of global evaluations of the contribution of soils to essential ecosystem services.
8. Soil degradation inherently reduces or eliminates soil functions and their ability to support ecosystem services essential for human well-being. Minimizing or eliminating significant soil degradation is essential to maintain the services provided by all soils and is substantially more cost-effective than rehabilitating soils after degradation has occurred.
9. Soils that have experienced degradation can, in some cases, have their core functions and their contributions to ecosystem services restored through the application of appropriate rehabilitation techniques. This increases the area available for the provision of services without necessitating land use conversion.

3 Guidelines for Action

The overarching goal for all parties is to ensure that soils are managed sustainably and that degraded soils are rehabilitated or restored.

Good soil governance requires that actions at all levels – from States, and, to the extent that they are able, other public authorities, international organizations, individuals, groups, and corporations – be informed by the principles of sustainable soil management and contribute to the achievement of a land-degradation neutral world in the context of sustainable development.

All actors and specifically, each of the following stakeholder groups are encouraged to consider the following actions:

Actions by Individuals and the Private Sector

- I. All individuals using or managing soil must act as stewards of the soil to ensure that this essential natural resource is managed sustainably to safeguard it for future generations.
- II. Undertake sustainable soil management in the production of goods and services.

Actions by Groups and the Science Community

- I. Disseminate information and knowledge on soils.
- II. Emphasize the importance of sustainable soil management to avoid impairing key soil functions.

Actions by Governments

- I. Promote sustainable soil management that is relevant to the range of soils present and the needs of the country.
- II. Strive to create socio-economic and institutional conditions favourable to sustainable soil management by removal of obstacles. Ways and means should be pursued to overcome obstacles to the adoption of sustainable soil management associated with land tenure, the rights of users, access to financial services and educational programmes. Reference is made to the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Forests and Fisheries in the Context of National Food Security adopted by the Committee on World Food Security in May 2012.
- III. Participate in the development of multi-level, interdisciplinary educational and capacity-building initiatives that promote the adoption of sustainable soil management by land users.
- IV. Support research programs that will provide sound scientific backing for development and implementation of sustainable soil management relevant to end users.
- V. Incorporate the principles and practices of sustainable soil management into policy guidance and legislation at all levels of government, ideally leading to the development of a national soil policy.
- VI. Explicitly consider the role of soil management practices in planning for adaptation to and mitigation of climate change and maintaining biodiversity.
- VII. Establish and implement regulations to limit the accumulation of contaminants beyond established levels to safeguard human health and wellbeing and facilitate remediation of contaminated soils that exceed these levels where they pose a threat to humans, plants, and animals.
- VIII. Develop and maintain a national soil information system and contribute to the development of a global soil information system.



- IX. Develop a national institutional framework for monitoring implementation of sustainable soil management and overall state of soil resources.

Actions by International Organizations

- I. Facilitate the compilation and dissemination of authoritative reports on the state of the global soil resources and sustainable soil management protocols.
- II. Coordinate efforts to develop an accurate, high-resolution global soil information system and ensure its integration with other global earth observing systems.
- III. Assist governments, on request, to establish appropriate legislation, institutions, and processes to enable them to mount, implement, and monitor appropriate sustainable soil management practices.