

# Goal 15

**Target number:** 15.3

**Indicator Number and Name:** 15.3.1 - sub-component on soil organic carbon

**Agency:** FAO

**Has work for the development of this indicator begun?** Yes

**Who are the entities, including national and international experts, directly involved and consulted in developing the methodology/and or data collection tools?**

International Soil Information Institutions of the Global Soil Partnership (GSP); currently 60 countries, to be extended to 135 countries where there are national focal points nominated by governments.

**What is the involvement of or how do you plan to involve National Statistical Systems in the development of the methodology?**

It will be recommended through a methodological specification and good practice recommendation to exchange and clarify the approaches, metadata and results with the national statistical offices. Linkages with these institutions already were formally established through FAO Statistics. Nevertheless, the GSP secretariat will advise to the GSP national soil focal points to address and coordinate action with these institutions.

**Please briefly describe the process of developing the methodology for the indicator**

The GSP, advised by the Intergovernmental Technical Panel on Soils (ITPS), is currently establishing a global soil information system including an indicator-based monitoring system denominated SoilSTAT. This includes soil carbon (concentrations and stocks, status and trends). Currently, it is expected that the system being designed be implemented through the International Network of Soil Information Institutions (INSII). A guidance manual containing the specifications for the indicator will be agreed upon with all partners. According to GSP Pillars on Information and Data and on Harmonisation, all relevant specifications for the development of the global soil data infrastructure will be defined and explained in detail, in coordination with other FAO products and services, and in attention to the use of similar definitions and concepts under the SDG process.

**Please indicate new international standards that will need to be proposed and approved by an intergovernmental process (such as UNSC) for this methodology.**

"IPCC (2006) contains the most relevant definitions, especially with regard to reference values usable for Tier 2 and 3 GHG reporting.

Beyond this, the GSP will agree with all partners on a consistent methodical indicator framework for soils.

With regard to the technical soil infrastructure, data transfer and provision of national reporting data will be standards-based (ISO and OGC for the exchange of digital spatial data sets). An extended ISO 28258 will be the core model for exchanging soil data."

**When do you expect the methodological work on this indicator to be completed?**

2017

**Are data and metadata already being collected from the National Statistical System for one or more components of this indicator?**

Yes

**If yes, please describe:**

Data are already being collected in various countries. The process is domain-specific and hardly communicated with national statistics. FAO intends to mediate this process largely by developing and implementing SoilSTAT as part of the FAOSTATs family but also by other means. FAOSTAT is embedded in a standardized exchange of national agro-environmental data through national designated statistical offices.

**How do you plan to collect the data?**

Obtain data directly from country database/website, Joint survey/compilation with national agency and international entity, Satellite images, remote sensing

**If the indicator involves multiple components from different data sources, please describe how each individual component of the indicator will be collected here.**

The global soil information system will have multiple components. A guidance manual with indicator specifications is expected to be agreed among all countries (currently 135). The system design follows the architecture of modern web-based systems (e.g. GEOSS). However, data repositories will be established for centralized components.

**Is there a process of data validation by countries in place or planned for this indicator?**

Yes

**If yes, please briefly describe:**

Because the system is designed to be country-driven, uncertainty assessments and validation at national level will be recommended. Cross-validation between different approaches is foreseen as well.

**If you have any additional comments that you believe would be helpful to IAEG-SDG members in analysing the work plan and methodological development of the indicator, please provide them here:**

"Among others, with regard to the sub-indicator soil organic carbon, it has been formally agreed between FAO, UNCCD and other partners that the GSP, hosted by FAO, and with regard to the UN-statistical system approaches, will develop operational solutions to the cover soil organic carbon component under the SDG reporting scheme. This will be disseminated at the technical and scientific level in March 2017 during a joint conference organized between the IPCC and GSP-ITPS. Quality assurance of the methodological approach adopted, and products developed will be provided by the GSP scientific Body, the ITPS.

*(As of 3 March 2017)*