

GlobalSoilMap.net



A Global Project

Knowledge of the world's soil resources is fragmented and dated. There is a need for accurate, up-to-date, and spatially referenced soil information as frequently demanded by many stakeholders, including policymakers, the climate change community, farmers, other land users, and scientists. This need coincides with an enormous leap in technologies that allows for accurate collection and prediction of soil properties for pressing issues such as food security, climate change, water scarcity, biodiversity conservation, and urban sprawl.

A global consortium of scientists is collaborating to make a new digital soil map of the world using state-of-the-art and emerging technologies. This initiative, which will map most of the ice-free land surface of the globe over the next five years, will provide a soil information system consisting of the primary functional soil properties at a grid resolution of 90 by 90 meters. This information will be supplemented by interpretation and functionality options that will assist in improved governance and better decision making on a range of global issues. *GlobalSoilMap.net* will be freely available, web-accessible, and widely distributed and used.

In November 2008, an \$18 million grant was obtained from the Bill and Melinda Gates foundation and the Alliance for a Green Revolution in Africa (AGRA) to map most of sub-Saharan Africa. Work has already begun on sampling and analyzing soil across the region.

Global Cooperation for *GlobalSoilMap.net*

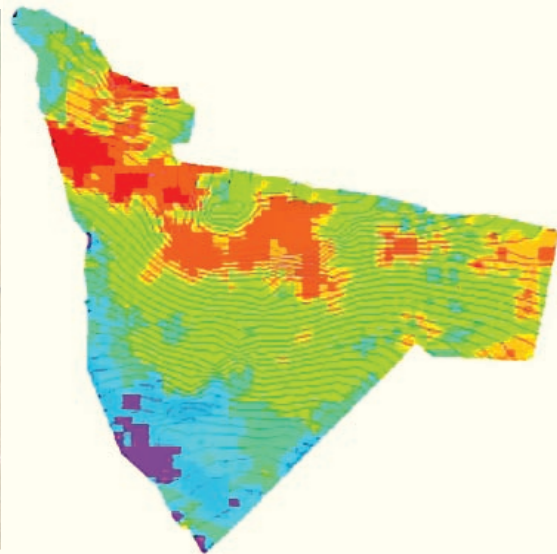
Creating *GlobalSoilMap.net* requires cooperation among scientists around the world. The project is designed around nodes in every continent to allow for the exchange of information and dissemination of data.

These nodes, which are centers of excellence in soil information and agricultural development, offer a unique approach. First, *GlobalSoilMap.net* will foster the south-to-south and north-to-south technology exchange and testing that is only feasible by using a global approach. For example, the technical skills for digital soil mapping in North America, Australia or Europe may greatly enhance the success of mapping in Africa or South Asia. Moreover, working through the consortium will avoid the piecemeal approach that results in incompatible outputs across the world. With *GlobalSoilMap.net*, data will be presented in a cohesive format, allowing for comparison and analysis between and among continents.



Nodes that lead *GlobalSoilMap.net*

- Sub-Saharan Africa: Tropical Soil Biology and Fertility Institute (TSBF-CIAT), Kenya and Tropical Agriculture Program and CIESIN, the Earth Institute (EI) at Columbia University, USA.
 - North America: Geospatial Development Center, Natural Resources Conservation Service (NRCS), US Department of Agriculture, USA.
 - Latin America and the Caribbean: Brazilian Agricultural Research Corporation (EMBRAPA), Brazil.
 - Europe and Eurasia: Joint Research Centre, European Commission, Italy
 - Oceania: Commonwealth Scientific and Industrial Research Organization (CSIRO), University of Sydney, Australia
 - East Asia: Institute of Soil Science, Chinese Academy of Sciences, PR of China.
 - Central & West Asia - North Africa: Institute for Digital Soil Mapping, Amman, Jordan.
- ISRIC – World Soil Information in the Netherlands is the global coordinator of this initiative.



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The *GlobalSoilMap.net* project aims to make a new digital soil map of the world using state-of-the-art and emerging technologies for soil mapping and predicting soil properties at fine resolution. This new global soil map will be supplemented by interpretation and functionality options that aim to assist better decisions in a range of global issues such as food production and hunger eradication, climate change, and environmental degradation. It is an initiative of the Digital Soil Mapping Working Group of the International Union of Soil Sciences (IUSS) and is led by academic and research centres in all continents.

www.globalsoilmap.net

