

GSP Pillar 4 „Global Soil Information“



Working Group on Soil Information

Rainer Baritz

on behalf of the working group

GSP Pillar 4 „Global Soil Information“

“Enhance the quantity and quality soil data and information: data collection (generation), analysis, validation, reporting, monitoring and integration with other disciplines”

Workshop

“Towards Global Soil Information: Activities within the GEO Task Global Soil Data”

Rom, 20th March to 23rd March 2012

- Status and needs of Global Soil Information
- Tools for polygon-based soil mapping (e-SOTER)
- Tools for Digital Soil Mapping
- The way-forward for Global Soil Information

Working Group on Soil Information



GLOBAL SOIL
PARTNERSHIP



Working Group on Soil Information

Tasks

- governance/structural organization
- global soil information and users needs
- collection of primary soil data and development of spatial data products including accuracy issues.
- reporting on global soil health: soil capacity and functions.
- global monitoring network
- archives, references and standards

Members

Africa: Martin Yemefack

Asia: Ganlin Zhang

Europe: Rainer Baritz

Latin America/Caribbean Group (GRULAC): Aracely Castro

Middle East/N.Africa (MENA): Rachid Moussadek

North America Jon Hempel

Oceania/Pacific: Neil McKenzie

Secretary: Ronald Vargas (FAO)

Schedule

Working Group on Soil Information

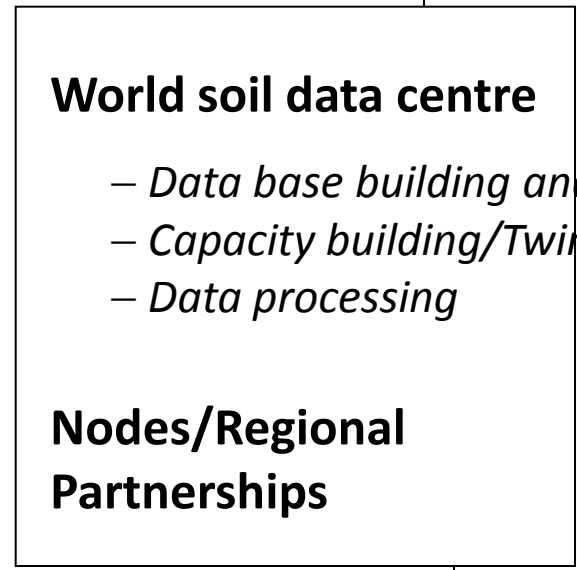
1. First draft by 11/05/2012 (delayed: 14.06.2012)
2. Consultation by 01/06/2012 (within the group and FAO: ongoing)
3. Revised draft including plan of action by 30/08/2012
4. Consultation by 01/12/2012
5. Submission to GSP and Panel of International Science Advisors
15/12/2012

Spatial data infrastructure

World Soil Viewer
World Soil Thesaurus
World Soil Data Search Engine
World Soil Sample Archive
World Soil Method Catalogue

Board with FAO, nodes, stakeholders from other pillars

Technical support
IUSS WG SIS
(network information systems)



Reporting: Global Soil condition report

Modern Technology WG

national and regional partners

Global Soil Profiles
Revised HWSD
New World Soil Map
100 m property maps

Short term (2012 - 2013)

I. Network building: world soil data centre, nodes, technical working group

governance structure to be elaborated: advisory board: FAO, each node, representative of other GSP pillars, UNEP, IUSS WG SIS, etc. Criteria for data centre selection (work tasks, responsibilities, funding?)

II. Manuals/cookbook, concepts, design

Reference material for implementing world soil data base building

Short term start, continued

III. Data collection and step-wise integration

Data harvesting, metadata catalogue, world soil map catalogue
Covariate mapping (land forms, parent material)

IV. Capacity building and training

V. Revised and updated harmonized global soil data base 1:1Mio

[Europe and China 1:1 Mio exist; Russia may require extended campaign to revise, e.g. using eSOTER]

Short term (2012 - 2013)

Integrate existing data sets: Australia, USA and Canada

Mid term (2012 -2015)

Recent SOTER: Central Africa

Existing SOTER: Southern and Eastern Africa, Latin America and the Caribbean

Existing soil maps (e.g. Europe)

→ Revise existing maps for “interoperability” introduce core harmonization level (scale, SMU definition), probably revise using standard “covariates); include, and Russia

New eSOTER: gap filling: West Africa (without Senegal and Gambia), South Asia

→ Apply eSOTER

Extend WISE

↓
SMU attributes

Integrate spatially and by content

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↑
Technical guidance paper with content definitions and geometric concept (soil regions, SMU building) (see short-term)

End products: HWSD 1:1 Mio including properties for representative soil map units, soil functional maps (1km raster)

Long term (2016 -2018)

VI. New high-resolution global soil data base 100 m

- Revised HWSD 1Mio as ancillary data set for upscaling
- Extended WISE
- New RS technology
- Uncertainty assessment



Product: 100 m soil attribute maps for the world as aimed by the GlobalSoilMap consortium