"International and EU Soil Protection Strategies: Status and future Perspectives"

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European Commission
Policies for a Sustainable Use of the Soil Resource

• National
  – USA, Germany, United Kingdom, etc. . .

• Trans-national (regional)
  – Alpine Convention
  – Euro-Mediterranean Partnership
  – EU Thematic Strategy for Soil Protection

• Global
  – UNFCCC
  – CBD
  – UNCCD
Soil protection policies are established when there is a perceived threat by the affected population:

**Do we have a soil degradation problem?**
1935 US “Dustbowl”
US Soil Conservation Act 1935

Dorothea Lange - Migrant Mother (1936)
US Soil Conservation Act 1935

- Recognition of the problem
- Establishment of the US Soil Conservation Service
- Participatory approach with strong local partnership (Soil Conservation Districts)
- Establishment of technical guidelines
- Implementation of soil conservation measures
- Monitoring of results
National Soil Protection Policies in Europe (partial list)

- 1907 Establishment of the Icelandic Soil Conservation Service
- 1987 Dutch Soil Protection Act
- 1989 Italian Soil Protection Act
- 1992 Czechoslovakian Soil Protection Act
- 1993 French National Soil Remediation and Clean-up Policy
- 1997 Hungarian National Environmental Programme
- 1998 Federal German Soil Protection Act
- 2004 Soil Action Plan of England and Wales
Phases in the soil policy of three EU countries

(Veenman, 2006)
European initiatives from 1952 to 2006

- 1952 First meeting of European Soil Survey Organizations, Ghent, Belgium
- 1955 Working Party on Soil Classification and Survey, FAO
- 1959 First draft Soil Map of Europe (1:2,500,000 scale)
- 1972 European Soil Charter adopted by Council of Europe
- 1985 Soil Map at 1:1,000,000 scale of the European Communities published by the European Commission
- 1986 Digital version of the EC Soil Map
- 1994 Creation of the Soil Information Focal Point (SIFP) at JRC
- 1996 Creation of the European Soil Bureau at the JRC
- 1998 Bled Protocol on Soil Protection signed within the Alpine Convention
- 1998 Workshop “Soil Protection Policies within the EU”, Bonn, Germany
- 1999 First European Soil Forum, Berlin, Germany
- 2001 Workshop “The Support of Soil Science Research to the European Sustainable Development”, Uppsala, Sweden
- 2001 Second European Soil Forum, Napoli, Italy
- 2002 6th Environment Action Programme includes a strategy for soil protection
- 2003 Revised European Charter for the Protection and Sustainable Management of Soil adopted by Council of Europe
- 2004 Reports from Technical Working Groups Established under the Thematic Strategy for Soil Protection, EUR 21319
- 2004 VitalSoil Conference by Dutch Presidency, Scheveningen, The Netherlands
- 2005 Extended stakeholder consultation on the Soil Strategy
- 2006 Soil Thematic Strategy adopted by the European Commission
European Soil Database: WRB classification

http://eusoils.jrc.it
EU Thematic Strategy for Soil Protection adopted by the European Commission on the 22nd of September 2006


http://ec.europa.eu/environment/soil/index.htm
110TH CONGRESS
2D SESSION

S. RES. 440

Recognizing soil as an essential natural resource, and soils professionals
as playing a critical role in managing our Nation’s soil resources.

IN THE SENATE OF THE UNITED STATES

JANUARY 31, 2008

Mr. BROWN (for himself, Mr. VONNOCH, Mr. GRASSLEY, Mr. SALAZAR, Mr.
FEINGOLD, Mr. CONRAD, and Mr. HARKIN) submitted the following reso-
lution; which was referred to the Committee on Agriculture, Nutrition,
and Forestry

JUNE 23, 2008

Committee discharged; considered and agreed to

RESOLUTION

Recognizing soil as an essential natural resource, and soils
professionals as playing a critical role in managing our
Nation’s soil resources.
This Collaboration Agreement will, in particular, have the following objectives:

a) to work cooperatively in the development of methodologies relating to **Digital Soil Mapping (DSM)** that can benefit both programs;

b) to improve the co-ordination and effectiveness of co-operation efforts between the US and the European Commission in the field of **soil quality evaluation** and **soil conservation**;

c) to cooperate fully in the development of the **GlobalSoilMap.net** project;

d) to promote mutual interest and co-operation in understanding and resolving soil quality and conservation issues, in particular related to
   - Methodologies for delineation of risk zones of soil degradation processes
   - Soil quality monitoring
   - Soil water regime monitoring and applications
   - Soil organic carbon management (based on long term field experiments)
   - Nitrogen management and environmental protection
   - Development of digital soil mapping techniques;

e) to deepen the understanding of the scientific, economic and social issues relating to the normal and sustainable functions of soils.
Global Soil Protection Legal Frameworks

- **1982** World Soil Charter, FAO/UNEP
- **1994** United Nations Framework Convention on Climate Change (UNFCCC)
- **1995** Convention on Biological Diversity (CBD)
- **1996** United Nations Convention to Combat Desertification (UNCCD)
  - Annex IV (Mediterranean countries)
  - Annex V (Central and Eastern European countries)
- **1998** Draft Soil Convention, Tutzing Initiative
- **2000** IUCN World Conservation Congress Resolution on Soils
- **2005** Iceland Declaration on the Conservation and Sustainable Use of Global Soil Resources
- **2006** Proposal by ISRIC of the establishment of a World Soil Council
Global soil protection policies: Synergies between the 3 Rio Conventions

SOIL PROTECTION

UNFCCC

CBD

UNCCD
Wheat prices have recently increased to reach record levels in August 2007 (+78% vs. August 2006) …
OECD estimates of international prices for agricultural commodities (wheat, maize, Vegetable oils).

(source: OECD, GreenWeek, Brussels, 2007)
World population: 1750 – 2050

Further growth, but at drastically declining rates

Source: UN, 2003
Fuel or food?

- Area requirement for current biofuel share (2004)
- Area requirement for 10% biofuel share

(18% of arable land for 5.75% biofuel share)
Global Soil Resources are limited
Human Impact in Europe
Rapid urbanization of the rural population

1990 = 100

Built-up area
Population

% Urban population

% Built-up area

Group
AC
EU15

BG
CZ
LV
LT
PL
RO
SK
MT
AT
BE
DK
FI
FR
DE
GR
LU
NL
ES
UK
Major Challenge for Future of the Planet Earth

How to move towards a sustainable global system?

6.7 billion people, 1000 nations, 200 countries

Source: 3DNWorld web-site
Thank you for your interest!

“Unity in diversity”