COUNCIL OF EUROPE
COMMITTEE OF MINISTERS

RECOMMENDATION No. R (92) 8

OF THE COMMITTEE OF MINISTERS TO MEMBER STATES

ON SOIL PROTECTION

(Adopted by the Committee of Ministers on 18 May 1992
at the 476th meeting of the Ministers' Deputies)

The Committee of Ministers, under the terms of Article 15.*b* of the Statute of the Council of Europe,

1. Recalling Resolution No. 1 of the 5th European Ministerial Conference on the Environment (Lisbon, 1987) on the protection and management of the natural heritage in rural areas, and Resolution No. 1 of the 6th European Ministerial Conference on the Environment (Brussels, 1990) concerning soil protection;

2. Referring to the previous work undertaken at the Council of Europe, at both parliamentary and inter-governmental level, including the European Soil Charter, the European Regional/Spatial Planning Charter, Assembly Recommendation 1048 (1987) on the consequences for agriculture of current soil degradation, Resolution 182 (1987) on soil protection of the Standing Conference of Local and Regional Authorities of Europe and the various technical studies undertaken by the Steering Committee for the Conservation and Management of the Environment and Natural Habitats;

3. Bearing in mind the many activities undertaken in this field by other international organisations, both governmental and non-governmental;

4. Referring in particular to the action of the European Community which has devised environmental, agricultural and forestry policies applicable in its member states, which also take soil conservation into account;

5. Referring to the introduction of specific or non-specific national legislation on soil in most Council of Europe member states;

6. Recalling that soil is a basic and limited natural resource for human life as well as for plant and animal species, and that it is and will remain the main support for human activities; consequently, soil should be managed with specific care;

7. Considering that the biological, physical and chemical characteristics of soils must be preserved in order that they may properly perform their ecological, technical, industrial and socio-economic functions;

8. Observing that the causes of soil degradation are increasing and entailing damage which can be remedied only in the long term, if at all, such as soil loss through erosion, mining, sealing with concrete, contamination by heavy metals and by long half-life radioactive compounds and advanced acidification;

9. Alarmed by the speed at which soil resources have deteriorated in recent years, largely owing to population pressure, socio-economic development and the consequences thereof, which place heavy strains on soil;

10. Emphasising the urgent need for co-ordinated international action on soil in order to secure accurate information, the necessary research and adequate monitoring with a view to ascertaining as precisely as possible the present state of and any changes in soil, particularly with regard to pollution,

Recommends that the governments of member states:

I. be guided as soon as possible by the definition and the functions as well as by the principles appended to this recommendation when framing and/or implementing their soil protection policy, in view of the very real causes of damage and loss of the soils as presented in Appendix A;

II. at national level undertake the necessary research, facilitate information exchange, conduct scientific observation and evaluation in order to combat soil loss, soil degradation, reduction of ecological habitats and species biodiversity, caused by human activities such as those contained in Appendix B;

III. establish national surveys in order to determine the present state of soil degradation, including an assessment of causes and impact, monitor and control changes in soil and restore damaged soils;

IV. adopt legislative and/or administrative measures for the purpose of including an analysis of the effects on soil in any impact study;

V. strengthen international co-operation on soil protection as presented in Appendix C.

Appendix A

Soil protection policy

1. *Definition of soil*

Soils are integral parts of the earth's ecosystems and are situated at the interface between the earth's surface and the bedrock. They are subdivided into successive horizontal layers with specific physical, chemical and biological characteristics and different functions.

From the standpoint of the history of soil use and from an ecological and environmental point of view, the concept of soil also embraces porous sedimentary rocks and other permeable materials, together with the water which these contain and reserves of underground water. Soils so defined may reach considerable depths and therefore, in some contexts, include the concept of land.

2. *Functions of soil*

Ecological functions

a. Biomass production: this function is the basis of human and animal life, since it ensures the supply of food, renewable energy and raw materials.

b. Filtering, buffering and transforming actions for the protection of the environment in general and the protection of groundwater and the food chain from pollution in particular.

c. Ecological habitat and genetic reserve: ecologically sound habitats are essential for the survival of plant and animal organisms. The genetic heritage of these organisms is one of the most important factors in man's survival.

Functions linked to human activity

a. Physical medium: soil is the spatial base for socioeconomic activities such as agriculture and forestry, technical and industrial structures.

b. Source of raw materials, supplying water, clay, sand, gravel, minerals, etc.

c. Cultural heritage landscape, and concealing palaeontological and archaeological treasures.

3. *Reversible and irreversible damage to which the soil can be subjected*

a. Reversible damage means effects that can be offset by nature or by technological or biological measures. These include compacting, crusting, moderate salinisation, alkalisation and acidification.

b. Irreversible damage means effects which cannot be remedied or which can be remedied only in the very long term. These include soil loss through erosion, sealing by concrete or on account of other uses, mining, pollution by persistent organic or inorganic compounds, long half-life radioactive compounds and advanced salinisation, alkalisation and acidification.

4. *Fundamental principles*

a. Soil protection should be declared to be of general public interest and integrated in environmental protection and long-term development policies.

b. Soil should be recognised by states as a common heritage and a natural non-renewable resource of vital importance to present and future generations of mankind. All soil use should take account of its multiple ecological functions, as the importance of its preservation for the community as a whole transcends private interests associated with its use.

c. Soil protection should always be taken into consideration in all other policies such as, for example, agricultural, forestry, industrial, transport, town planning and spatial planning policy.

d. Every soil protection policy should be accompanied by a procedure permitting the information of and participation by the public.

5. *Soil management principles*

a. Soil should be regarded as a limited resource; the spread of erosion, urbanisation, transport and traffic infrastrutures and waste disposal necessitates a long-term view of soil management. (Resolution No. 1 of the Lausanne Conference, 20 to 21 October 1988, and Recommendation No. R (89) 15 on rational use of land: basis and limiting factor of our development).

b. Integrated soil management requires the co-ordination of soil quality measures and, if necessary, the setting-up of appropriate bodies to ensure that such co-ordination takes place.

6. *Operational (or functional) principles*

a. *Ensuring the compatibility of the soil's many functions*

Soil or land use should allow the soil to perform several functions at once.

It is essential to maintain (or restore) the soil's ecological functions as a filter, buffer and transformer and as a biological habitat and genetic reserve alongside uses associated with human activities.

b. *The reversibility rule*

Whenever possible, land use should cause only reversible changes in the soil.

This principle particularly concerns agriculture and forestry and also human recreational activities and the use of land for temporary infrastructures.

Appendix B

Human activity

1. Soil compacting and crusting of agricultural land due to unsuitable techniques.
2. Pollution by acidifying substances which reduce soil fertility and increase the mobility of heavy metals.
3. Pollution by toxic substances through the accumulation of toxic organic or inorganic substances.
4. Contamination by radioactive substances.
5. Salinisation.

6. Changes to the water balance of soil, landscapes and sites owing to technical measures such as the abstraction of water, the drainage of wetlands, etc.

7. Soil erosion caused by ill-conceived agricultural and forestry developments or other uses.

Appendix C

International co-operation on soil protection

1. The harmonisation at European level of the methods for quantifying soil loss and soil degradation, and for assessing their causes and repercussions; also for controlling changes in soil and for restoring it.

2. The exchange of information among European states and the relevant international organisations on:

a. national laws and measures which have been adopted or which are in the process of adoption;

b. current research, the findings of completed research and the various observations recorded;

c. the costs of the measures which have been adopted and any useful data such as the impact of soil degradation.

3. The implementation of a concerted research programme which pays special attention to the analysis of damage to the soil, detailed monitoring of soil deterioration and the restoration of soil damaged by toxic inorganic and organic substances, radioactive products or advanced acidification.