

United Nation Convention to Combat Desertification  
Fourth Conference of the Parties

Bonn, 19 December 2000

**“Down to earth”:  
Soil degradation and sustainable  
development in Europe.  
A challenge for the 21<sup>th</sup> century**

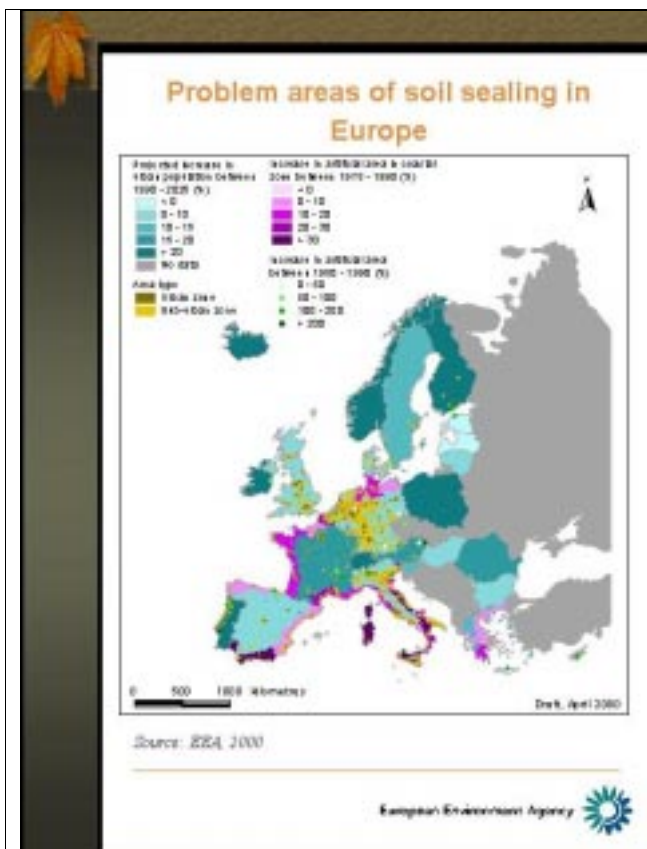
**The Storyline  
ANNEX: Summary of major soil problems**

*Domingo Jiménez-Beltrán*  
Executive Director  
European Environment Agency

*Klaus Töpfer*  
Executive Director  
UNEP

European Environment Agency





### Sealing

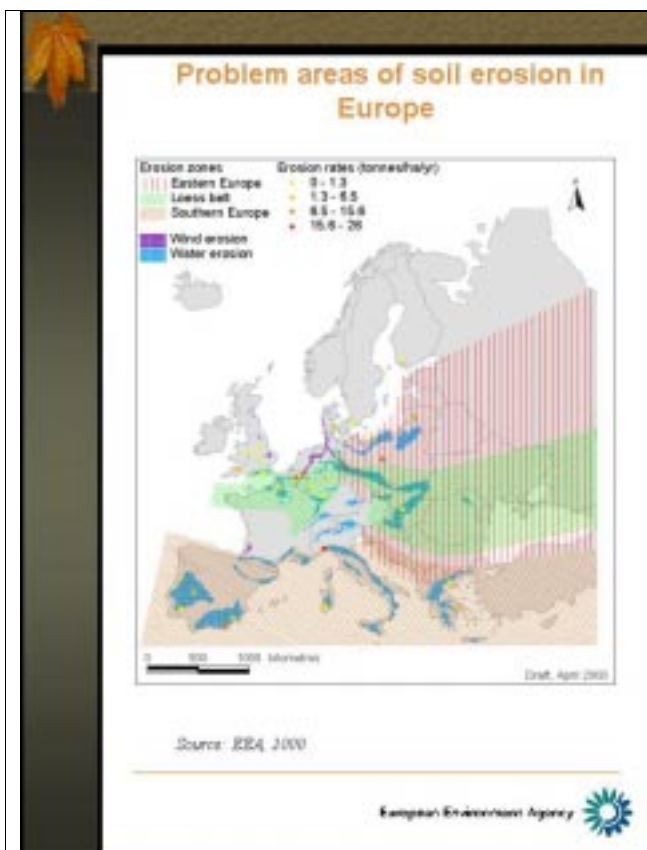
The rates of real soil loss due to surface sealing through growth in urbanisation and transport infrastructure are high in several EU countries, such as the Benelux, Germany and Switzerland.

These countries are already so intensively urbanised that there is little space available for further expansion.

In the Mediterranean countries, urbanisation has been especially rapid in the coastal zones of southern Spain, the Mediterranean islands, southern France and Italy, and this process is linked with the development of tourism.

These pressures are likely to remain or increase in the coming years.

Soil sealing is also expected to increase within countries with relatively little urbanisation such as Portugal, Finland and Ireland, and in Central and Eastern Europe.

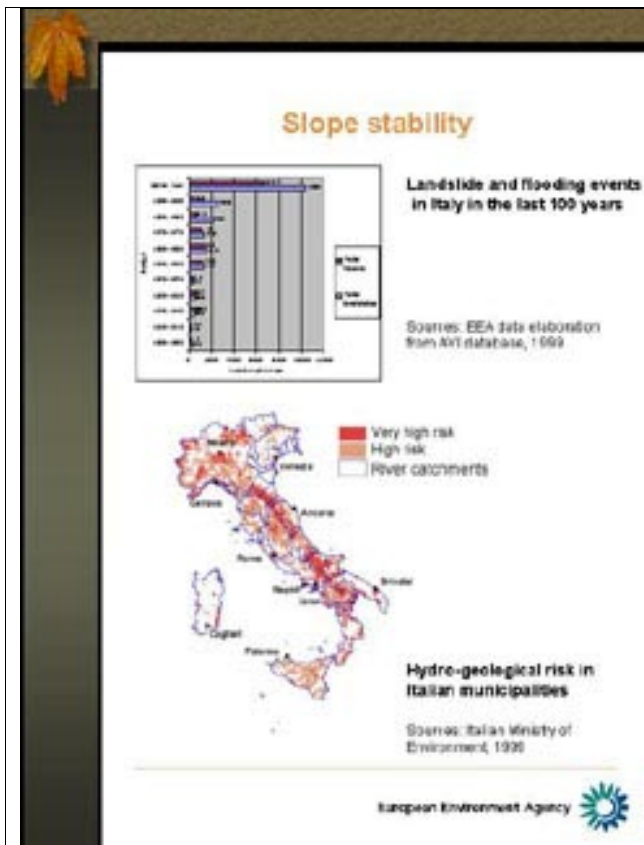


### Erosion

Soil erosion by water and wind is a severe and well-recognised problem in southern Europe, as well as in large areas of central and eastern Europe, where impacts are exacerbated by soil contamination due to former industrial operations.

In Ukraine, for example, 41% (17 million ha) of agricultural land was subjected to water and wind erosion in 1996. In Russia, about 57% of agricultural land is subject to strong erosion.

Although less severe and thus less perceived, erosion is an increasing problem in the agricultural areas of the European northern loess belt, especially in areas where high-quality and easily erodible soils are subject to more intensive agriculture

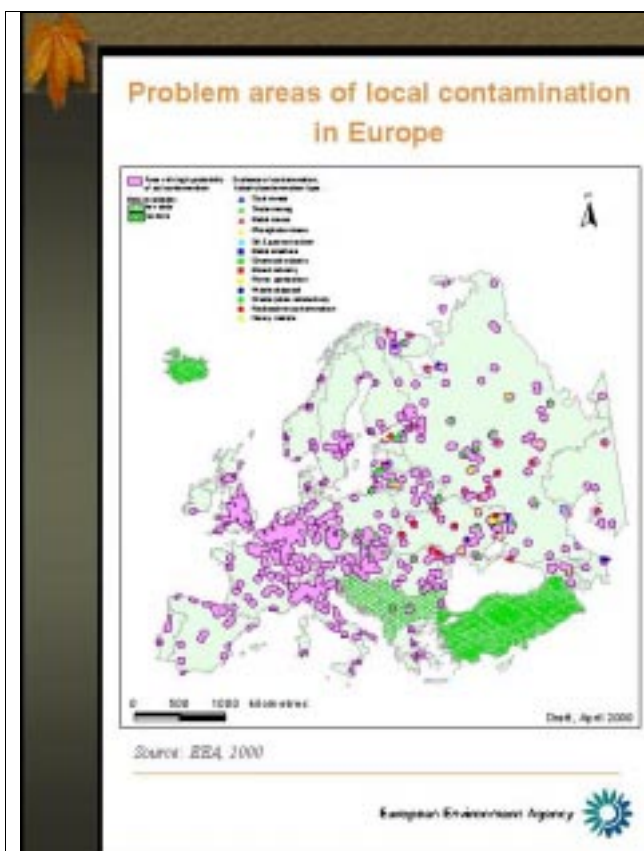


### Slope stability

Soil plays an important role in maintaining slope stability. Soil degradation, soil erosion and soil sealing in particular, can be the direct or indirect cause(s) of catastrophic events. Recent disasters underline the impacts of poor land management and poor use of the soil resource.

In Italy, for example, historical data, only available for 68% of the municipalities, show that nearly 66% of the municipalities have been affected by at least one flooding or landslide event in historical times, and nearly 17000 events have been registered in the last 100 years (AVI historical archive, database version 30-6-99)

More than 50% of the territory has been classified as having a high or very high hydro-geological risk, interesting 60% of the whole population or 34 million inhabitants. (Italian Ministry of Environment, 1999)



### Contamination

Except for acidification, there is no widespread diffuse pollution of Europe's soil. However, contamination is high in restricted areas or hot spots (urban areas and industrial compounds), due to both diffuse and localised sources.

The intensity of agricultural chemical use is highest in the lowlands of western Europe: Denmark, the Netherlands, Belgium, Luxembourg and the north of France. In Europe's eastern region, problems of diffuse soil contamination are greatest in Azerbaijan, Belarus, Moldova, Russia and Ukraine.



**Acidification** through deposition from the air is a continuing problem, but it is not expected to increase further in Western Europe due to the success of policies developed over the past 30 years. However, soils under severely acidified conditions are difficult if not impossible to rehabilitate. In central and eastern European countries, the problem may still worsen before improving. Acidification is occurring mainly in north-western and central Europe.

**Desertification**



Desertification, as a gradual and progressive reduction of the capacity of soil to support vegetation, animal communities and human activities, is threatening parts of Southern and Central-Eastern Europe.

European Environment Agency

### Desertification

Desertification is an extreme example of how ongoing soil degradation can lead to the gradual and progressive reduction in the capacity of the soil to support human and animal communities, vegetation and economic activities and how soil degradation can have social and political impacts. A correct response to the problem would therefore involve different levels of actions, at the local, national and global levels, as well as actions to integrate environmental policies into sectoral policies.

Desertification is not only a problem of regions of the world subjected to an arid climate (drylands), but it is currently threatening parts of southern and central-eastern Europe. Extensive areas in the Mediterranean region have become so severely degraded that they are no longer capable of supporting any profitable cultivation, resulting in land abandonment and depopulation.

 <h2 style="text-align: center;">What is being done?</h2> <h3 style="text-align: center;">Data gaps</h3> <ul style="list-style-type: none"><li>• A mass of data exists at the local level, but little data are of direct use for policy purposes. Data are gathered by several organisations.</li><li>• There are important gaps and access to relevant data and information is difficult.</li><li>• There is a lack of harmonisation of monitoring and data collection activities at the national and regional levels.</li><li>• Data flows between data collectors and the organisations responsible for reporting have not been established at the national and European levels.</li></ul> <hr/> <p style="text-align: center;">European Environment Agency </p>	<h3><b>Data gaps</b></h3> <p>On the basis of the few data available, only a general assessment of the conditions of soil in Europe is possible to date.</p> <p>In fact there are important gaps, and access to relevant data and information is difficult.</p> <p>Since soil has many users, data on soil have been gathered by different organisations for different purposes.</p> <p>Few data can be directly used for policy purposes and most cover small geographical areas.</p> <p>These gaps in the available information limit the ability to produce a more complete assessment.</p>
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