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Desertification (Government focal point(s): Ministry of Environmental Protection, Physical Planning and Construction)

- Strategic planning frameworks for the protection and sustainable management of natural resources in deserts and areas affected by desertification, their integration into national development strategies and/or action plans.
- Inter-ministerial/institutional coordination mechanism for anti-desertification programmes.
- Improved use of and local access to climate and weather information, forecasts, early warning and information networking to combat desertification.
- Comprehensive database development on desertification, land degradation and human condition, incorporating physical and socio-economic parameters.
- Research and dissemination on ways of reducing water loss from soils, on increasing the water absorption capacities of soils and on water harvesting technologies in desertification affected areas.
- Desertification and land degradation impact assessment

The Republic of Croatia signed the UN Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, in 1994, and the Croatian Parliament ratified it near the end of 2000. It came to force in January 2001 when the Republic of Croatia became the 169th Party to the Convention.

The Ministry of Environmental Protection, Physical Planning and Construction (MEPPPC) (www.mzopu.hr) is the central government body in charge of the implementation of the Convention.

It should be noted that Croatia is among a small number of Parties to the UNCCD in which specific features of two Regional Implementation Annexes are observed: of Regional Implementation Annex IV for the Northern Mediterranean and Regional Implementation Annex V for Central and Eastern Europe within which focus is placed on activities for the prevention of land degradation.

By its decision of November 7, 2002, the Croatian Government established the National Committee to Combat Desertification. There are 14 members of the Committee – representatives of competent Ministries, scientific institutions, NGOs and companies. The basic task of the Committee is the monitoring and participation in the preparation and implementation of a National Action Programme (NAP). Within the framework of the 2003 NCB, 5 Expert Working Groups have been in charge of 5 key thematic fields: climate, soil, water, forests and agricultural management systems.

In 2003 the NCB started to work on the preparation of a project under the title „**National Action Programme to Mitigate the Effects of Drought and Combat Land Degradation**” and its adoption is planned by the end of 2007.

In the preparation of professional background documents of status analysis and sectoral and thematic recommendations more than 30 experts from various scientific and professional institutions and representatives of NGOs are involved.

Furthermore, part of the guidelines and measures to combat land degradation and mitigate the effects of drought has already been incorporated into strategies, programmes and legislation on environmental protection, agriculture, forestry, water, nature conservation and biological diversity, etc.

Currently additional changes and adjustments are carried out within the process of Croatia's approximation and integration into the EU.

Furthermore, Croatia is a Party and signatory country to numerous international contracts on environment, out of which the following are pointed out: Espoo Convention on Transboundary Environmental Impact Assessment, Convention on Transboundary Effects of Industrial Accidents, UN Framework Convention on Climate Change,

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UN Convention on Biological Diversity, Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, Convention on Long-Range Transboundary Air Pollution, Vienna Convention for the Protection of the Ozone Layer, Barcelona Convention for the Protection of the Mediterranean Sea against Pollution, European Landscape Convention, etc.

Fragile drylands have not been singled out in Croatia so far, and consequently, the processes of land degradation which lead to desertification, have not been considered collectively. Moreover, they have not been defined as a factor which could seriously endanger the establishment/implementation of sustainable development in Croatia.

Although integral data on the type and intensity of the land degradation process still need to be collected, an assessment of the state as prepared for the development of the First National Report on the Implementation of the UNCCD in the Republic of Croatia (2006) is given in the table below.

Types of land degradation

Type of degradation	Period 2000 -2005 year	
	million ha	% perfect of total
High real risk of erosion caused by water; agricultural land	0.75	13.25
High real risk of erosion caused by water; woodlands	0.75	13.25
Salinization	0.11	2.00
Acidification		
-total	1.6	28.27
- extreme geogenic	0.04	0.70
- combined pedogenic/geogenic	0.31	5.48
- combined pedogenic/anthropogenic	1.35	23.85
Mined and mine suspected areas	0.12	2.12

In the period since 2001, when Croatia became involved in activities under the UNCCD, numerous changes were noted and have partly been monitored. This particularly refers to the growingly frequent occurrence of draught all over the country and numerous forest fires. From the standpoint of desertification danger, the current condition is not prosperous in the Adriatic – karst area where erosion on a broad area takes away soil from the geological surface. Forest fires which regularly occur in the period of summer drought, contribute to the process. On the areas affected by fire, soil erosion is more frequent than on agricultural land. For example, the area of central Istria is affected by erosion to a catastrophic extent due to its geological composition – flysh stratum of high erodibility. The amount of eroded soil material there reaches up to 100 - 200 t/ha/yr. The situation is similar in the Neretva Delta because water brings high amounts of sediments from Bosnia and Herzegovina.

One of the consequences of economic development is also permanent soil loss due to the expansion of urban areas, communications, airports, hydro-accumulation and other infrastructure facilities. In the period of the most intensive construction and economic development in the second half of the 20th century the daily soil loss was around 20 ha. Today less than 1 % of the total area lies under various facilities.

Tourism development significantly increases pressures on space, all natural resources and infrastructure of the Adriatic area, and particularly soil compaction in motor camps and the entire coastal and island area. The consequences thereof are apparent weakening of the conditions of certain plant species, their gradual recession and degradation. On agricultural and forest soils all over the country a decrease in humus content and biological soil activity has been established, and as a consequence thereof processes of soil structure corruption and surface crust development. Those processes are often followed by erosion caused by water. Furthermore, increased humus mineralization brings to increased emission of the greenhouse gas CO₂. The process of soil acidification is being intensified as well, particularly in farmlands in the Pannonian region. Soil salinization due to a frequent use of water for irrigation which contains a high amount of salt, can often be noticed in the Basin of Vrana Lake and the Neretva River Basin.

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Before the completion of the preparation of the NAP, which will clearly define the measures, time limits and participants in the implementation of programmes and projects, the following activities for the purpose of the implementation of the Convention should be emphasized:

- National Project of Irrigation and Land and Water Management in the Republic of Croatia (NAPNAV) is a project of the Government of the Republic of Croatia which was launched in 2004; its aim is, by organising irrigation and concentration of agricultural land and introducing income crops, to ensure the conditions for the application of new technologies, which should result in better utilisation of natural resources for more efficient agricultural production, and finally bring about the development of rural areas. Under this project, within four years from the project implementation period, irrigated areas should expand from the current 7 200 hectares of irrigated land to a minimum of 30 000 hectares.
- Project of capacity building for the prevention of forest fires, implemented under FAO – TCP/CRO/3001;
- Project Development of a Soil monitoring programme in the Republic of Croatia with a pilot project (LIFE05 TCY/CRO/000105); the objective of the Project is development of the Permanent Soil Monitoring Programme as a baseline document for collecting soil data in a harmonised format. The Programme will define the parameters required for the establishment of a System for the permanent monitoring of agricultural and forest soils and of polluted areas, and it is financed with EU LIFE III funds.
- Project CORINE Land Cover 2000 Croatia ([CORINE -COoRdination of INformation on the Environment](#)) implemented under EU LIFE III;
- During 2003 and 2004, with financial assistance from UNEP/GEF, the project National Capacity Self Assessment for Global Environmental Management – NCSA) GEF NCSA GF/2740-03 (GF/3010-03) was realised, with the aim of Assessment of Capacities for implementation of three UN conventions - UNCCD, UNCBD and UNCCC; project continuation is under preparation.

The development of the NAP and certain activities have been financed by the [Ministry of Environmental Protection, Physical Planning and Construction](#), i.e. National Budget. On the other hand, the activities and projects indirectly related to the UNCCD are financed by the Fund for Regional Development, recently established Fund for Environmental Protection and Energy Efficiency etc. The financial means for the implementation of some international projects have been obtained and requested from GEF, WB and EU programmes and pre-accession funds.

Since 2006 a project has been implemented for the establishment of a basic list of soil and land indicators. The list of indicators consists of: previously used indicators, indicators from the list of the European Environment Agency and the IRENA. Upon NAP adoption, the supplemented list of indicators related to land degradation and draught, and the list of indicators on progress of UNCCD implementation will be incorporated into the national list of indicators.

The Croatian Environment Agency (CEA – www.azo.hr) has been conducting this project as a part of the project for the establishment of the Environmental Information System (EIS).

EIS is developed at the national level and contains information systems of particular thematic areas like air, waste, soil, biological diversity, and subareas like air quality, waste dump cadastre etc, while at the international level it comprises the EIONET (European Environment Information and Observation Network) and other potential networks like EMERALD, Natura 2000, Environment Watch. It uses the harmonized methodology of calculation based on the national list of indicators (DSPIR), and tools and covers like Corine Land Cover (CLC).