



## DEWA~Europe/GRID-Geneva Quarterly Bulletin No. 1 - 2004

Volume 6, Issue 1, May 2004

UNEP/Global Resource Information Database-Geneva

### DEWA~Europe Contributes to UNDP Report on “Reducing Disaster Risk”

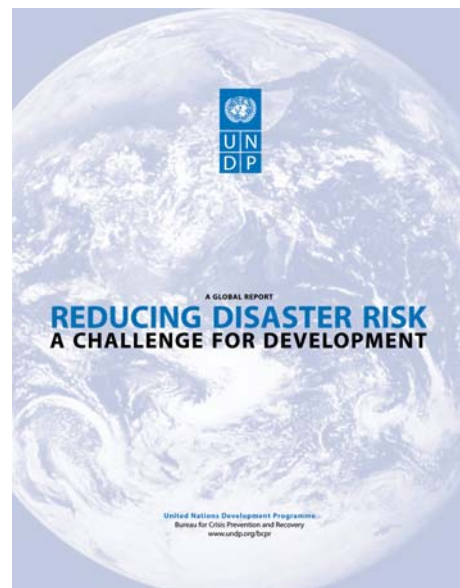
Last February, UNDP released a new report – “Reducing Disaster Risk: A Challenge for Development” – an extensive study of global trends in exposure, risk and vulnerability to natural disasters. During the last three years, GRID-Geneva has been analyzing global data on natural disasters and contributed in a major way to this publication.

The report, prepared by a UNDP-led team of internationally-recognized specialists, analyzes global data from the past two decades and concludes that much of the destruction and many deaths caused by natural disasters in poor countries could be averted by better planning, underpinned by systematic risk analysis.

Between 1980 and 2000 approximately 1.5 million people died in earthquakes, volcanic eruptions, tropical storms, droughts and other natural dis-

asters. With better preparedness, many if not most of these lives could have been saved, the study contends. The report’s newly developed Disaster Risk Index provides clear proof of the link between poverty and vulnerability to such disasters.

UNDP’s Bureau for Crisis Prevention and Recovery (BCPR) has drawn up this global report with the aim to shed light on the linkages between development and disasters. The increasing impact of natural disasters on development and the acknowledgement of development paths as determinant factors of disaster risk are the two main issues addressed in this Report. It promotes disaster risk reduction by identifying appropriate development policies, integrating both disaster risk management and actions targeting the eight Millennium Development Goals achievement. ■



Data visualization has been designed by  
GRID-Geneva and is available online from:  
<http://gridca.grid.unep.ch/undp/>

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Competencies and Services of  
DEWA~ Europe/GRID-Geneva

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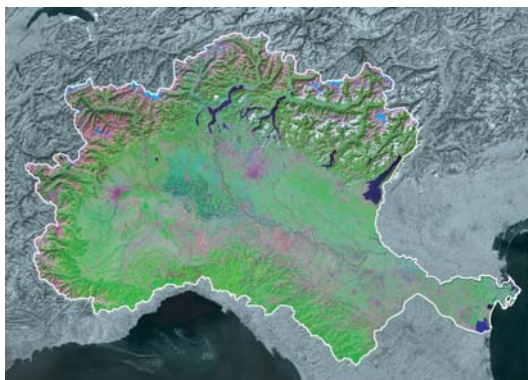
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### New Publication “Freshwater in Europe - Facts, Figures and Maps”

The commemoration of the International Year of Freshwater in 2003 stimulated numerous water-related activities at all levels world-wide. DEWA~Europe has now capitalised on its activities and data available on freshwater for the pan-European region and produced a new report: “Freshwater in Europe - Facts, Figures and Maps”.

This publication is an overview, through a set of graphics, maps and other illustrations, on the state of Freshwater in Europe and Central Asia. The review has been compiled in support of UNEP’s reporting work on freshwater.



PO Watershed - Landsat Satellite Image.

Few Europeans suffer from important shortages of water and poor water quality experienced by people in many other parts of the world. However, although many parts of Europe are currently well-provided with freshwater, the water resources are unevenly distributed between and within countries. Pressures resulting from human activities affect the quality of water resources in many areas of Europe, and thus drinking water quality is still of concern.

Water stress exists in many places in Europe, resulting in serious water shortages, flooding, pollution and ecosystem damage. Climate change may also play a role, especially in coastal areas where flooding may disrupt sanitation infrastructure and thereby contaminate watercourses.

There has been little progress in the integrated management of water resources. In recent decades, several legal instruments have been prepared and adopted at different levels. Important changes in water management are expected in the coming years, following implementation of recent directives. However, civil society has been criticizing the privatisation of water resources and resistance to such actions is growing. ■

## Early Warning on Emerging Environmental Threats

At the end of January, DEWA~Europe launched a new series of publications "Early Warning on Emerging Environmental Threats".

In a deliberately journalistic style but based on cutting-edge scientific information, the briefs are aiming at explaining the causes and the consequences of a wide range of problems threatening global to local ecosystems and the human environment. The content of the publications will be based as much as possible on GRID-Geneva products (map, graphs, analyses), but also refer to competent institutions in the relevant domain.

While it is a challenge to reduce often complex issues to four pages, the Early Warning briefs are a powerful tool to inform and have a large benefit for public and policy-makers' awareness. The publications are made available as hard copies, in English and French, at GRID-Geneva and the press office of the International Environment House in Geneva. It is also distributed through postal mailing and from the DEWA~Europe website, in PDF format.

The first issue of the publication depicts the impacts of *Caulerpa taxifolia*, a genetically altered seaweed which is colonising large areas of the marine

environment in an uncontrollable way. The green alga, mutated by exposure to chemicals and ultraviolet light, has shown dangerous capabilities allowing it to adapt, colonise, and threaten multiple biotopes. Accidentally released into the Mediterranean Sea around 1984, it has now colonised more than 30 000 ha around the Mediterranean basin. It has also been spotted in southern Australia and on the west coast of the United States, where various methods are being tested to eradicate this seaweed to avoid its uncontrolled spread as in the Mediterranean Sea.

The second issue covers the human, environmental and economic impacts of the extreme drought and heat wave that hit Europe in the summer of 2003, that had adverse effects such as the death of thousands of vulnerable people, the destruction of large areas of forests by fire, and effects on water ecosystems and glaciers. For example, Alpine glaciers lost 10% of their mass in just one summer, and the total economic losses in Europe are estimated to exceed 13 billion Euros. This Early Warning brief concludes that the heat wave that hit Europe in the summer of 2003 could be



Three new Early Warning on Environmental Threats publications.

seen as one more warning of impacts from a warmer climate on populations and ecosystems.

The following issue will focus on global wildfires, again taking the year 2003 as an example since burnt areas covered vast extents during that period. It will be followed by a study on world-wide overfishing and its threats on fish populations. A special issue will be released concerning the diminishing size of Lake Balkhash in Kazakhstan, as it may be heading for the same disaster as seen in the Aral Sea region. ■

## GEO Data Portal Widens its Circle to French-speaking Audiences

The Global Environmental Outlook (GEO) Data Portal has now matured into the major reference database tool for use in the GEO reporting process at global and regional levels. UNEP's GEO is a comprehensive environment assessment process, based on sound scientific facts and figures, and resulting in a series of environmental reports. GEO uses a participatory approach and builds on an extensive network of thematic and regional collaborating centres around the world. The GEO Data Portal provides this user community with easy access to harmonized data and information for analytic purposes and report preparation. Regional versions of the Data Portal have recently been initiated to further support use by GEO and related environmental reporting at regional levels, and to better capture data sets available from (sub-)regions and countries.

In order to further improve the accessibility of the GEO Data Portal and reach wider audiences around the world, a new bilingual - English and French - version of the website has now been launched. That is, most of the website and data contents have been translated from English into French during the first months of 2004 and put online. This work was done in-house by DEWA~Europe/GRID-Geneva, underlining its francophone niche within the overall GRID network.

The French version is accessible by means of a button on the homepage, giving the possibility to change the language of the Data Portal. What on the website seems just an easy click, in reality has been quite an achievement in terms of translation efforts and technical programming. For example, nearly all webpages and modules within the Portal are bilingual, while the database can be

searched by using French keywords. However, not all contents and details have been made available in the French language at this stage. For instance, the documentation and other meta-data for each data set have been left in the original version only, as this is considered to add little value and would be beyond the current scope and resources. ■



French version of the Geo Data Portal, now available online.

## Launch of the GEO Year Book

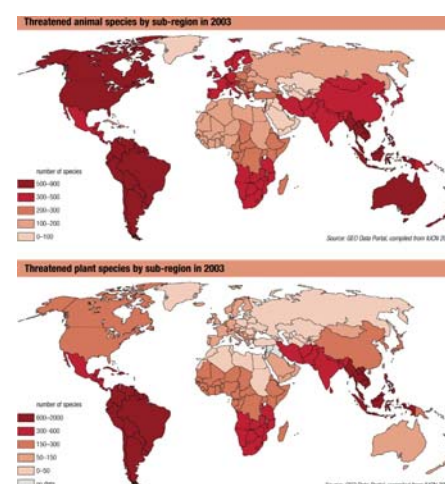
The GEO Year Book was launched on 29 March 2004 at the UNEP GC/GMEF in Jeju, Korea.

The Year Book is an annual Global Environment Outlook (GEO) statement to highlight significant environmental events and achievements during the past year and raise awareness of emerging issues from scientific research and other sources. The GEO Year Book 2003 is the first in the annual series associated with UNEP's flagship report, GEO.

One of the overall objectives of the GEO Year Book is to present in a clear

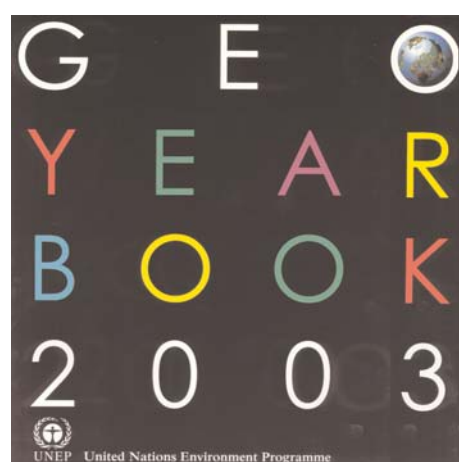
and timely manner an analytical overview of issues and developments which, for better or worse, have most influenced the environment during the year and may continue to be major factors in the years ahead. Based upon a collaborative/comprehensive tracking and stock-taking process established with many partners, the GEO Year Book 2003 includes an overview of major global and regional environmental issues and developments during the course of the past year, a special feature section on freshwater issues, a chapter on emerging issues and new findings, as well as a core set of (GEO) indicators as 'headline trends'. While the availability of reliable, up-to-date global data sets still limits the choice of indicators, these indicators aim to highlight some of the key global and regional environmental issues and trends that have been identified in GEO reports and are to provide a consistent and harmonized overview of major environmental changes on an annual basis, and thereby facilitate tracking of major environmental issues over the years.

The core set of GEO indicators has mainly been selected on the basis of their perceived significance and illustra-



Number of threatened species serves as an indicator of overall threats to biodiversity, extracted from the Geo Data Portal.

tion of the major environmental issues as addressed under the GEO process throughout the years, as well as on the basis of availability of underlying data for regions and sub-regions over the last years and decades. For seven major issues, a total of 20 'headline' indicators are presented. They were extracted from the GEO Data Portal, which is the reference database for GEO assessment and reporting ([geodata.grid.unep.ch](http://geodata.grid.unep.ch)). ■ (See previous article)



Cover of the 2003 GEO Year Book.  
The report is available online from  
[www.unep.org/geoyearbook/](http://www.unep.org/geoyearbook/)

## Capacity Building in IEA for Western NIS Countries

A training workshop sponsored by UNEP/DEWA on "Environmental Information Management and Reporting (EIM&R)" took place at the Ukrainian Land and Resource Management Center (ULRMC) in Kiev, Ukraine, during the week of 26-30 January 2004. The purpose of the workshop was to update participants on UNEP/DEWA's activities in the realm of integrated environment assessment (IEA) in general and the Global Environment Outlook (GEO) process in particular, and train them in the latest techniques for IEA and State of Environment (SoE) reporting, including a number of practical & useful exercises. Approximately 25 participants from the four western NIS countries (Belarus, Moldova, Russian Federation and Ukraine) and eight Ukrainian oblasts were involved in the workshop. The training was jointly provided by staff from DEWA's GRID centres in Arendal and Geneva.

This Workshop constituted one of many training activities held under the banner of UNEP's IEA/GEO process, with the objectives being to inform and educate the western NIS participants in improved means of collecting and analysing environmental information, and communicating the results in various forms appropriate for decision-makers and civil society, including the general public. The Workshop was opened by the Deputy Minister of Environment and Natural Resources (MENR) of the Ukraine, followed by an in-depth presentation of the host centre ULRMC's activities.

Along with a lengthy presentation on the GEO process, related reports and other products from the global to local levels, the Regional Coordinator gave a detailed talk on the GEO Data Portal. Participants expressed their interest in having access to the latter application, as well as following the GEO process

more closely. A representative of the EU's TACIS Programme also made a presentation on the role of public participation. Several of the Workshop's sessions focused on popularising scientific information for the broader public, and the use of communication tools for dissemination of same.

Discussions were also held with staff of ULRMC concerning their (and Ukrainian MENR) previously expressed interest in becoming a national centre of the GRID network. In this regard, a new DEWA policy is under development and should be ready by mid-2004. In the meantime, ULRMC staff and the IEA/GEO workshop trainees were encouraged to participate in relevant UNEP and DEWA-sponsored processes, such as the newly-launched Carpathians Environmental Outlook. ■



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### Calendar of Events

(April - June 2004)

**4-8 April**

GEO-LAC Data Portal Meeting, DEWA/LAC, Mexico.

**7 April**

13th DEWA~Europe/GRID-Geneva "Partnership" Advisory Board Meeting, Bern, Switzerland.

**14-15 April**

Inter-agency/Inter-governmental Partnership on Ecoinformatics Environmental Thesaurus/Terminology Workshop, Geneva, Switzerland.

**19-20 April**

GLOBEcover Users Planning meeting at ESA/ESRIN, Frascati, Italy.

**26-29 April**

GEO Reporting and Human Vulnerability discussions, Nairobi, Kenya.

**6 May**

2nd Earthwatch GMES Service Element (GSE) Information Day, ESA/ESRIN, Frascati/Rome, Italy.

**6-7 May**

Meeting of ad-hoc "Experts Group" for the Carpathian Framework Convention, Bolzano, Italy.

**10-18 May**

National consultations on launch of the UNEP-UNDP-OSCE "Environment & Security" initiative in Caucasus region, Yerevan, Armenia; Tbilisi, Georgia; Baku, Azerbaijan.

**4 June**

Geneva celebrations of the World Environment Day. Roundtable on the Global Water Crisis: From Mountain to Sea. Strategies, International Environment House, Geneva, Switzerland.

**14-18 June**

DEWA Strategies, GEO-4 Planning and Regional Coordinators Meeting, Nairobi, Kenya.

## Competencies and Services of DEWA~Europe/ GRID-Geneva's activities

DEWA~Europe/GRID-Geneva's principal activity is to provide high-quality environmental data and information, to underpin UNEP's review of the state of the environment and provide early warning on emerging environmental threats. At the same time, GRID-Geneva offers technical services and develops value-added environmental products to support the work of other entities on a case-by-case basis.

Over the years, the office has compiled an extensive archive of geo-spatial and tabular databases, and is currently using state-of-the-art information technology to make them accessible to the global community through Internet-based applications. Just to name a few, the office has been responsible for the complete design, data gathering and formatting, and on-line interface of the GEO Data Portal. The UNEP.Net system includes GRID-Geneva's socio-economic, urban and European portals. DEWA~Europe has also been a key partner in the development of the Swiss meta-data catalog known as Envirocat. The statistical analysis and on-line data of the newly released UNDP report "Reducing

Disaster Risk" were made possible thanks to GRID-Geneva's expertise in the latest technologies in user-friendly graphic visualization. The above-mentioned projects required expertise in a wide numbers of ICT tools such as Linux/UNIX, Apache, PHP, MySQL, Postgresql, IIS, SVG, JGraph, Internet Maps Servers, ESRI, MapInfo, etc.

At the same time, DEWA~Europe's know-how in such tools as geographic information systems (GIS), remote sensing and modeling provides valuable knowledge and better insights for decision-makers. For example, the latest satellite imagery analysis consisted in exposing chlorophyll concentration of Lebanon's coastal waters using SeaWiFS and Landsat TM sensors. The PreView - IMS Project, has been recognized by the international scientific community as a powerful and innovative modelling tool to identify risk and human vulnerability to natural hazards in relation to socio-economic and physical factors.

If you think that GRID-Geneva could assist your projects in some way, please feel free to contact our office through: [info@grid.unep.ch](mailto:info@grid.unep.ch)

### GRID-Geneva's Latest Outputs

**Wildland Fires, a double impact on the planet.** Early Warning on Emerging Environmental Threats, four pages, full color. International distribution. (English and French).

**Impacts of summer 2003 heat wave in Europe.** Early Warning on Emerging Environmental Threats, four pages, full color. International distribution. (English and French).

***Caulerpa Taxifolia*.** Early Warning on Emerging Environmental Threats, four pages, full color. International distribution. (English and French).

**Major European Watershed Maps.** Produced for report: "Freshwater in Europe: Facts, Figures and Maps".

**aml Program to facilitate selection of colors from color tables** and the duplication of tables (50 to 100 tables, approximately 7 500 to 15 000 colors).