

## Some JRC Data Portals and web-sites

### I      **Developed on JRC own resources**

#### **General**

ACP Observatory for Sustainable Development (ACP Portal)

<http://acpobservatory.jrc.ec.europa.eu/>

Driven by and responding to the needs of EC services and ACP Countries and Regions, the JRC is building the observation, monitoring, modeling and analytical capacity of the ACP Observatory for Sustainable Development. The web-site (still under development) allows through a single portal to access all the relevant scientific information produced or analysed by the JRC in support to development policies and programs of the EC, the Member States, the beneficiary countries, regions and Institutions and the donors community. In 2009 a significant effort is foreseen on to improve the quality, the architecture and the interactivity with the users.

Data Portals of the Institute for Environment and Sustainability

<http://ies.jrc.ec.europa.eu/>

The web-site hosts a large number of unique scientific databases. Most of them are mainly referred to Europe but some provide relevant information on third countries. Among them, 1) the **Global Land Cover 2000 Database**, showing for the first time ever the complete land cover of the entire planet with a 1km resolution. Following an easy registration procedure the data can be downloaded free of cost; and 2) the **Global Burnt Area 2000 Database**, showing maps and statistics of the areas burnt globally for the year 2000, using 1km resolution satellite imagery provided by the SPOT-Vegetation system. Regional and global products for the year 2000 as well as monthly products can be downloaded at no cost.

Data Portals of the Global Environmental Monitoring (GEM) Unit

<http://gem.jrc.ec.europa.eu/>

Starting from 01/2009, the web-site will host all the products and database of the GEM Unit on "Forests" (including the **Maps of the Tropical humid forests of Africa, Latin America and South-East Asia**), "Fire", "Land cover", "Biodiversity", "Marine environment" and "Land surface products".

#### **Biodiversity**

Assessment of African Protected Areas (PAs)

<http://gem.jrc.ec.europa.eu/>

The web-site provides detailed and updated information on the 741 African PAs and is recognized by IUCN and by the conservation community as the most complete conservation assessment web-site currently available on Africa. The objectives are 1) to provide easily accessible scientific information for Park managers in order to support effective management; 2) to support decision-makers in identifying and fixing priorities for biodiversity conservation in Africa. Both assets and threats are described for each of the 741 African PAs. The importance for conservation is analysed in terms of presence of species (mammals, birds and amphibians) and of habitat irreplaceability in the country and in the eco-region. The threats are analysed in terms of population pressure and

agricultural pressure in buffer zones around the PAs. For each country and eco-region, the user can rank the PAs according to their vulnerability and their importance for conservation purposes. GIS maps (Google Earth), meteorological and phenological information updated every 10 days, situation and trend charts are also available. An “alert system” is also available for unusual environmental events based on rainfall, fires, surface water and vegetation condition.

### **Coastal and Marine Waters**

#### **African Marine Information System (AMIS)**

<http://amis.jrc.ec.europa.eu/>

Recently developed at the JRC, the web-site provides the users with relevant bio-physical information for water quality assessment and resource monitoring in the coastal and marine waters around Africa. AMIS is a simple and easy-to-use mapping tool application, developed for the publication and dissemination of African marine information via the web. The System includes basic navigation and interrogation tools to select any regions of interest and perform statistical analysis on the data.

### **Environmental information**

#### **GEOLAND**

<http://www.gmes-geoland.info/>

The Geoland 2 is a GMES (now KOPERNIKUS) FP 7 coordinated project involving 50 different partners and addressing environmentally relevant issues such as water quality, nature protection, food security and the Kyoto-process.

### **Soil**

#### **Soil Atlas of Africa**

[http://eusoils.jrc.ec.europa.eu/library/maps/africa\\_atlas/index.html](http://eusoils.jrc.ec.europa.eu/library/maps/africa_atlas/index.html)

The Soil Action of JRC/IES is collaborating with the African Union, ISRIC – World Soil Information, FAO (Land and Water Development Division), the Africa Soil Science Society and individual African and European soil scientists to produce a Soil Atlas of Africa. The atlas aims to bring together a range of information on the properties and characteristics of different soil types in Africa in a clear and informative manner to raise awareness amongst the general public and policy makers of the key role that soil plays in sustaining society and the environment (planned publication late 2009/2010). The atlas builds on a joint JRC/ISRIC initiative to develop an digital on-line archive of soil maps for Africa. These valuable resources, often difficult to find, remote from potential users and kept in poor conditions are being preserved in an on-line digital archive are made available to users through the ACP-Observatory Portal.

### **Desertification**

#### **European Drought Observatory (EDO)**

<http://edo.jrc.ec.europa.eu> (prototype under development, fully developed by 2012)

The web-site will give online access to timely and consistent information on drought monitoring, detection, forecasting, and assessment in Europe as a contribution to the preparedness and early warning aspect of an integral management of natural hazards. Drought information at continental, national, and regional scale is provided in

collaboration with national and regional drought observatories of EU Member States and neighbouring countries. Expansion to Africa of the system is foreseen.

#### **DESERT**

<http://desert.jrc.ec.europa.eu>

The DESERT Action aims to provide support to DG Development for the implementation of the United Nations Convention to Combat Desertification (UNCCD), through provision of scientific support and development of adequate tools for the implementation of policies and programs related to drought and desertification in Africa. A new "Desertification assessment" will be carried out and will result in the compilation of a "Desertification atlas of the world".

#### **Food security**

##### **MARS Bulletins**

<http://mars.jrc.ec.europa.eu/>

The MARS web site of G03 Unit of JRC provides access to all the crop monitoring and yield forecast Bulletins, regularly issued by this Unit, on Europe and Mediterranean Basin, Central Asia and Russia, south America (Mercosur & Bolivia) and the Horn of Africa. Specific *ad hoc* bulletins and analyses are also issued on request and in specific situations (Drought in Moldova, DPRK, etc)

##### **MARS OP**

<http://www.marsop.info/>

The "MARS Operational" online portal provides access to a number of remote-sensing vegetation parameters over Europe and various areas of interest, produced in the frame of the MARS Crop Yield Forecasting System: 10-daily and monthly vegetation state parameters derived from SPOT-VEGETATION, NOAA-AVHRR and MODIS. The archive exists since 1989 and includes NDVI, SAVI and DMP.

##### **FOODSEC**

<http://cidportal.jrc.ec.europa.eu/home/idp/thematic-portals/foodsec-imageserver/>

This portal provides an access to a number of global information derived from the ECMWF atmospheric model (European Centre for Medium-Range Weather Forecast). The 10 daily information is available at the level of a 0.5 degree grids, in near-real-time (current year) and for more than 40 years.

#### **Crisis management**

##### **Global Disaster Alert and Coordination System**

<http://www.gdacs.org/>

The system provides near real-time alerts about natural disasters around the world and tools to facilitate response coordination, including media monitoring, map catalogues and Virtual On-Site Operations Coordination Centre. Currently funded by an AA with DG ENV and the Monitoring Information Centre (coordinating EU response for disasters).

### Global Crisis Atlas

<http://globalatlas.jrc.it/>

The Global Crisis Atlas is a catalogue of maps (pdf & jpeg) at country or regional level, organized in themes (i.e conflict maps, ethnic maps, aid maps, damage assessment maps...). It's intended to increase the awareness of geographic and crisis related issues, to provide the basis for information management in possible crisis situations and planning project. Currently funded via the 'Stability Instrument', through an AA with DG RELEX.

### Map Request Service

<http://maprequest.jrc.ec.europa.eu/>

External Relations DG's staff needing geospatial information for "Security" related issues can request thematic maps to better assess existing situations on field. The request needs to be introduced through the above address.

### **Millennium Development Goals**

#### MDG Dashboard

<http://esl.jrc.it/dc/>

The Millennium Development Goals Dashboard visualises and analyses the 50+ MDG indicators in a very communicative format, including colour-coded maps, correlations and many other features. This multilingual tool is freely accessible to the public and provides over 50 MDG indicators for approximately 200 countries and 16 years (1990-2006) based on the official United Nations MDG database. In October 2008, JRC started regular SysLog training courses, organised on behalf of DG AIDCO and several dates are planned for 2009.

### **Efficient Aid**

#### TRansparent AID (TR-AID) (not open access)

TR-AID is an information gathering system that is being developed to support sharing of information across major international donors with the aim to using aid funds most effectively and avoid double-funding. Data is currently being compiled from Commission databases, open sources, third-party databases, and international official aid activity databases. The application is accessible through a secure webserver only and cannot be accessed from the open web. The website has been developed with own resources, in close connection with AIDCO.

### **Nuclear issues**

#### **Renewable Energies**

ACP countries have large and impoverished rural populations, where the electric grid will be unlikely extended because of low consumption and economical barriers. Renewable Energies have the capability of bringing electricity to the population of rural zones in developing countries without introducing the economic dependencies of diesel generators.

<http://nuclearsafeguards.jrc.it/>

The Nuclear Safeguards (NUSAF) unit provides research, technology, instruments, technical services and training to support various national and international organizations involved in this quest.

#### Solar resource in Africa

<http://re.jrc.ec.europa.eu/pvgis/apps3/pvest.php?lang=en&map=africa>

Regarding the solar energy resource, a useful tool has been developed for Africa using Meteosat data coupled with the PVGIS web applications users are enabled to calculate the performance of solar energy systems in Africa, Mediterranean Basin and South-West Asia. A location can be chosen either by browsing/zooming and clicking on a map, choosing a country and city from a list, or by directly setting latitude/longitude values.

#### Rural electrification

[http://acpobservatory.jrc.ec.europa.eu/Portals/0/WG4\\_vfinalAugust2008.pdf](http://acpobservatory.jrc.ec.europa.eu/Portals/0/WG4_vfinalAugust2008.pdf)

Design of support schemes to support implementation of renewable energies in mini-grids: New Feed-in-tariff model adapted to isolated areas in Developing Countries. The web-site is under development.

#### Assessment of bio-energy

<http://re.jrc.ec.europa.eu/biof/>

Assessment of the role of bio-energy in promoting sustainable development, social stability and improving global competitiveness.

#### Energy end-use efficiency

<http://re.jrc.ec.europa.eu/energyefficiency/>

Support development of technical guidelines for energy efficiency, by improving the design of renewable energy systems in developing countries using energy efficient appliances and lighting manufactured locally.

## **II Developed with the financial support of “development funds”**

### **General**

#### AIDCO Knowledge Management Platform (AIDCO-KM)

To be developed, prototype available by May 2009. This will be a web-based communication and information system facilitating thematic communication between EC staff and their partners (MS, Donor community, NGOs, relevant Institutions, etc.). Distributed by virtual working groups, this web-based system allows sharing information, data, messages and documents in a dynamic and interactive way, between the communities of users in different thematic areas.

### **Forests**

#### FORAF – OFAC

<http://www.observatoire-comifac.net/>

The Observatory of the Forests of Central Africa, developed by the FORAF project, is the official monitoring system of the Congo Basin, owned by the COMIFAC (Conference Ministerielle). The web-site provides knowledge database on physical and ecological issues, human backgrounds, biodiversity, forest logging, stakeholders and legislation, as well as monitoring systems on deforestation, forest logging and biodiversity conservation.

**Water**

Water Knowledge Management Platform (WKMP) (<http://wkmp.net/new>)

This is a web-based information system, which is under development, for sharing data and information about the projects implemented in the developing countries (funded by the EC and other international donors).

**Water and Energy**

European Union Water Initiative - EUWI (<http://www.euwi.net> - under development)

European Union Energy Initiative - EUEI (under development)"

Both are web-based information systems to improve and facilitate communication between stakeholders (EC, MS, Donor community, NGOs, relevant Institutions, etc.) in Water and Energy communities.

**WEIRS**

"Global Evaluation and Analysis of the Water and Energy Facilities in Dev Countries" (under development).

WEIRS will include the development of a GIS web-based tool for the spatial analysis of EC Water and Energy Facilities projects. The EU-WEIRS System will allow the assessment of effectiveness and efficiency of projects and activities funded by the EC Water and Energy Facilities.

**Biodiversity**

PASTIS ([http://www.tem.jrc.it/EU\\_development\\_policy/activities/PASTIS.htm](http://www.tem.jrc.it/EU_development_policy/activities/PASTIS.htm))

The web-site provides both spatial and technical information on all the Natural Resources programmes and projects funded by the EC (EDF and thematic budget line). It also plays a role of archive as it allows to store and to easily access all the information produced in the frame of the projects (reports, publications, maps, etc.). Regularly updated until 2006, the web-site is currently not accessible. Update and reactivation are foreseen by the end of 2009.