

# Plone development in UNEP Country Environmental Profiles

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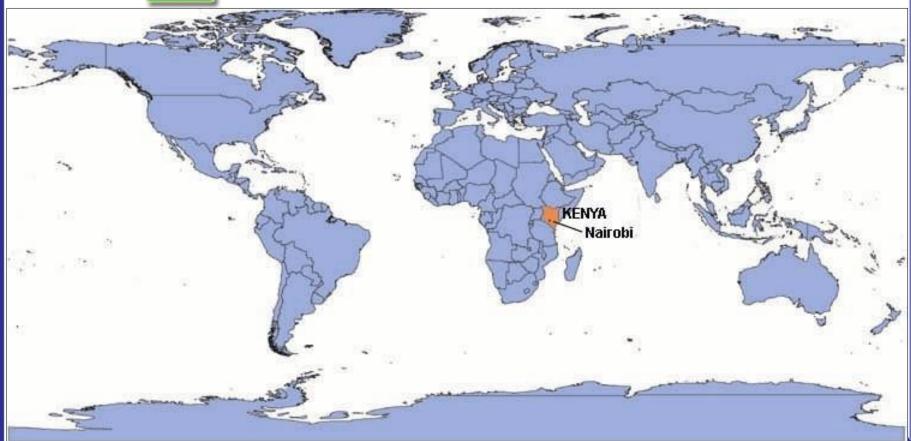


# United Nations Environment Programme (UNEP)

- Founded in 1972 (Stockholm Conference on the Human Environment)
- Legislative Authority = UNGA resolution 2997 (XXVII)
- ❖ 4 components of UNEP Secretariat, Governing Council, Fund, Environmental Management Group
- Catalytic and coordinating role on environmental issues
- Headquartered in Nairobi, Kenya with 6 regional offices and various outposted programmes



#### **UNEP Location**







#### **Mandates**

#### **UNGA Resolution 2997 (XXVII)**

- Keep under review the world environmental situation in order to ensure that emerging environmental problems of wide international significance receive appropriate and adequate consideration by Governments.
- Promote the contribution of the relevant international scientific and other professional communities to the acquisition, assessment and exchange of environmental knowledge and information.
- Build capacity and promote technology support for undertaking national and engaging in international processes for monitoring, assessment and early warning.



# Plone Development Sites within UNEP/GEF

- http://countryprofiles.unep.org Country Environmental Profiles
- http://www.iwcam.org Integrating Watershed and Coastal Area Management (IWCAM) to strengthen the commitment and capacity of the participating countries to implement an integrated approach to the management of watersheds and coastal areas
- http://mea-synergy.unep.org Multilateral Environmental Agreements (MEA) Synergies is to strengthen the capacity of African countries to undertake global environmental management by incorporating poverty alleviation strategies
- http://www.wiolab.org Addresses some of the major environmental problems and issues related to the degradation of the marine and coastal environment resulting from land-based activities (LBA) in the Western Indian Ocean (WIO) region.
- http://www.iwlearn.net Sharing best practice and experience from projects of the International Waters portfolio of the Global Environment Facility (GEF)
- http://www.ecomundus.org An information discovery tool to locate environmental data and information held by UNEP partners and other institutions





### Plone Development Sites within UNEP

- http://cogen.unep.org Cogeneration for Africa aims to assist a number of industries to become self sufficient in terms of power generation and consumption, and also to generate additional electricity which may be available for purposes such as rural electrification
- http://stapgef.unep.org Scientific and Technical Advisory Panel (STAP) STAP provides strategic scientific and technical advice to the GEF on its strategy and programs
- http://greeningtea.unep.org Objective of the proposed Small Hydro Power (0.2MW - 5MW) Program is to reduce electrical energy use in tea processing industries while increasing power supply reliability and reducing Greenhouse Gas emissions through the removal of barriers
- http://slm.unep.org Sustainable Land Management (SLM) website provides users with relevant and updated information on land degradation.
- http://dnipro.iwlearn.org UNDP-GEF Dnipro Basin Environment Program
- http://dgef.unep.org Website of UNEP's Division of the GEF





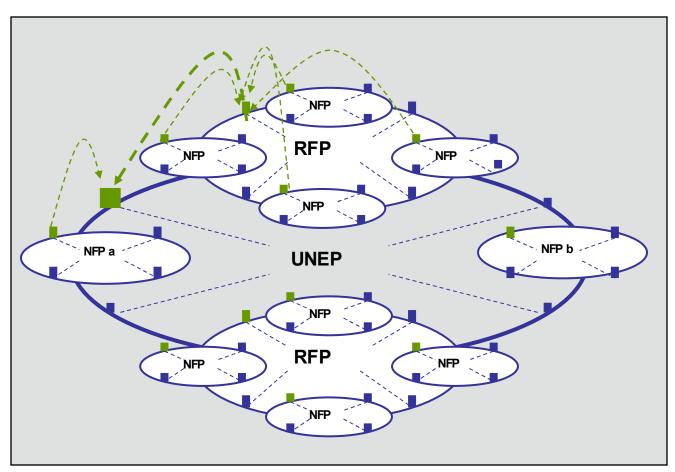
### **Country Profiles: The Vision**

An integrated information service on environmental matters, provided by a national network of key information providers and major user groups, that is freely accessible to the user community.





### **Country Profiles: National Networks**







# **Country Profiles: Communications Objectives**

- To inform national and international users about environmental issues in the respective countries
- To raise the visibility of environmental data & information from national institutions and present it in a systematic, coherent way
- To engage national institutions with the international environmental community
- To encourage each Government to examine their environmental governance structure and present a succinct overview of it
- To raise environmental awareness nationally and globally
- Strengthen links with the SOE reporting community
- To encourage partners' contribution to UNEP's Programme of Work





### **Content of Country Profiles**

#### Main elements (modules)

- General Information
- Environmental Governance
- State of the Environment
- Themes
- Indicators
- Systems and networks
- Projects
- Environmental Management





#### **Content Sources**

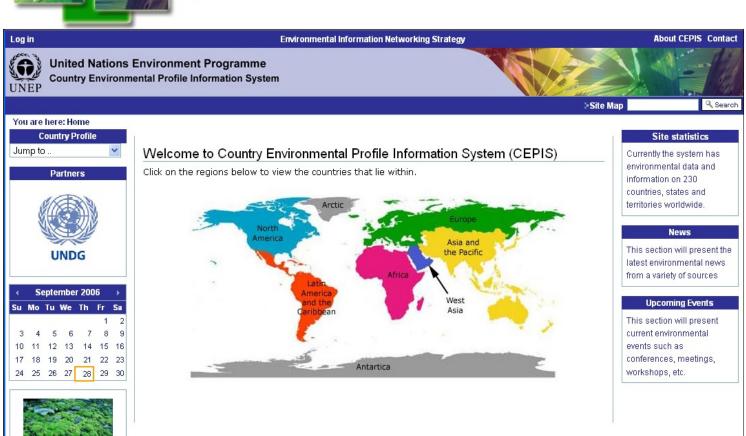
- UNEP, UN and international organizations that maintain information on countries
- Country level contributors (Government, NGOs, scientific institutions)
- Web services (mxmProxyTool) to harvest content from authoritative websites

Note: All sources are acknowledged.





#### http://countryprofiles.unep.org





### **Sample Country Homepage**



Su Mo Tu We Th Fr Sa 3 4 5 6 7 8 9 10 11 12 13 14 15 16

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24 25 26 27 28 29 30



How would you rate this site? Excellent Good Average O Below Average Poor > Vote

The Republic of South Africa is bordered on the north by Namibia, Botswana, Zimbabwe, Mozambique, and Swaziland; on the east and south by the Indian Ocean; and on the west by the Atlantic Ocean. Lesotho forms an enclave in the south-eastern part of the country. It stretches 1 500 km from east to west and 1 000 km from north to south, and has an area of 1 221 040 km2.

An interior plateau occupies about two-thirds of South Africa. The Great Escarpment, a semicircular series of cliffs and mountains, rims the Plateau and drops steeply to the coastal regions. The escarpment reaches over 3 375 meters above sea level at Champagne Castle in the Drakensberg mountain range in the east.

The Plateau slopes gradually downward to the north-west from the Great Escarpment. It has three sub-regions. The High Veld occupies the entire Plateau except for the north-western and north-eastern corners. It lies mostly between 1 200 and 1 800 meters above sea level and is a continuation of the largely of flat, grass-covered land that extends through central Africa. In places, flat-topped mountains rise above the plain. The Middle Veld, in the north-western plateau, averages between 600 and 1 200 meters above sea level. It is flat and dry. The Transvaal Basin forms the Plateau's north-eastern part. It is largely a rolling grassland with scattered thorn trees, averaging less than 1 200 m above sea level.

A narrow coastal strip extends along the south-east coast from Mozambique to the Cape Mountains Region. The Cape Mountains extend from the coastal strip to the Namib Desert. Between the mountains and the Great Escarpment lie two dry plateaus -- the Little Karoo and the Great Karoo.

The Namib desert lies along the Atlantic Ocean north of the Cape Mountains Region and extends into Namibia. The Kalahari desert lies north of the Middle Veld and extends into the country of Botswana.

The chief rivers are the Orange, Vaal, and Limpopo. The Orange is the longest, stretching about 2 100 km from Lesotho, where it is called the Sengu, to the Atlantic. The Vaal rises in the north-east, near Swaziland, and flows about 1 200 km south-westward to its confluence with the Orange. The Limpopo rises further north, flowing north-eastward to the Botswana border and then eastward along the Botswana and Zimbabwe borders until it enters Mozambique, where it empties into the Indian Ocean. Many shorter rivers flow south to the Indian Ocean, including the Sondags, Great Fish, and Kei in the Eastern Cape, and the Tugela in KwaZulu-Natal.

South Africa generally enjoys a warm temperate climate. Average temperature ranges in January are 21° to 27° C in Durban, 14° to 26° C in Johannesburg, and 16° to 26° C in Cape Town. In July the temperature ranges are 11° to 22° C in Durban, 4° to 17° C in Johannesburg, and 7° to 17° C in Cape Town. Of course, temperatures are significantly cooler in the higher mountains. Rainfall is unpredictable. Much of the country has an annual rainfall of less than 600 mm with as little as 200 mm in desert areas. Rain falls primarily in summer between October and April, although the extreme south-west has a Mediterranean climate with westerly winds from the Atlantic bringing winter rainfall, mostly between June and September.

#### Hot Issues

This section will show the latest environmental issues prevalent in that country

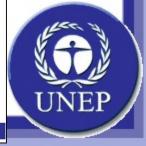
This section will present the latest environmental news. from a variety of sources

#### Upcoming Events

This section will present current environmental events such as conferences, meetings, workshops etc

#### Send a Query

This feature will allow any user to send a query to the members of the national environmental information network of that country



### Country Profile Navigation



You are here: Home → South Africa → General Information

# South Africa Country Profile Jump to .. General Information Geographic landscape Political system Socio-economic status Natural resources Environmental governance State of the environment Themes

Systems and Networks
Projects

Indicators

Environmental Management



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#### General Information

→ Up one leve

This objective of this section of the country profile is to provide a general overview of the geographic landscape, political system, socio-economic status and natural resource base of each country. Most of this information is harvested from authoritative sources on the web. According to the Brundtland Report, (a 1987 report from the United Nations), sustainable development is a process of developing (land, cities, business, communities, etc) that "meets the needs of the present without compromising the ability of future generations to meet their own needs".

One of the factors that it must overcome is new irremental degradation but it must do so while not forgoing the needs of economic development as well as social equity and justice. Several United Nations texts, most recently the 2005 World Summit Outcome Document, refer to the "interdependent and mutually reinforcing pillars" of sustainable development as economic development, social development, and environmental protection.

For some, the issue is considered to be closely tied to <u>economic growth</u> and the need to find ways to expand the <u>economy</u> in the long term without using up <u>enatural capital</u> for current growth at the cost of long term growth. For others, the concept of growth itself is problematic, as the resources of the <u>enatural capital</u> for the enature.

It is recognised at all levels - national and international - that pursuit of the objective of sustainable development requires implementation of resolute strategies for stimulation of economic growth, a strengthening of social cohesion and environmental protection, with particular attention to making sure that economic growth is able to underpin environmental and social objectives. The complexity of these challenges calls for a holistic approach on the part of policy-makers and civil society.

Human activities are increasingly contributing to environmental change, which affects the ability of the environment to provide goods and services in support of human well-being and development. The poor are disproportionately impacted by such environmental change. It is therefore critically important for humanity to watch the environment in a systematic way in order to be able to adequately and effectively mitigate or adapt to environmental change. Environmental information and data are, however, often scattered and inadequate. This is hampering progress towards environmental management, including implementation of multilateral environmental agreements and internationally agreed goals and targets for sustainable development.

The human-environment interaction analytical approach is built on the driver, pressure, state, impact and response (DPSIR) framework shown in the figure below. It is multi-scalable and indicates generic cause-and-effect relations within and among:

- Drivers: Sometimes referred to as indirect or underlying drivers or driving forces, they refer to fundamental processes in society which
  drives activities having a direct impact on the environment.
- Pressures: Sometimes referred to as direct drivers, include the social and economic sectors of society (also sometimes considered as
  drivers). Human interventions may be directed towards causing a desired environmental change and may be subject to feedback in terms
  of environmental change, or could be intentional or unintentional byproducts of other human activities (i.e., pollution).
- State: Environmental state also includes trends, often referred to as environmental change, which could be both natural and human induced. One form of change, such as climate change, may lead to other forms of change such as biodiversity loss (a secondary effect of greenhouse gas emissions). Multiple pressures could leave the environment more vulnerable, leading to cumulative change and, in some cases, sudden and disruptive change.
- Impacts: Environmental change may positively or negatively influence human well-being (as reflected in international goals and targets) through changes in ecological services and environmental stress. Impacts may be environmental, social and economic, and contribute to the vulnerability of people. Vulnerability to change varies between groups of people depending on their geographic, economic and social circumstances, exposure to change and capacity to mitigate or adapt to change. Human well being, vulnerability and coping capacity are dependent on access to social and economic goods -and services and exposure to social and economic stress.
- Responses: Responses consist of elements among the drivers, pressures and impacts which may be used for managing society in order to alter human/environment interactions. Drivers, pressures and impacts that can be altered by a decision maker at a given scale are referred to as endogenous factors, while those that cannot are referred to as exogenous factors. Responses are at different levels: for example, environmental laws and institutions at the national level, and multilateral environmental agreements and institutions at the regional and international levels. Responses address issues of vulnerability of both people and the environment, and provide opportunities for enhancing human well-being.

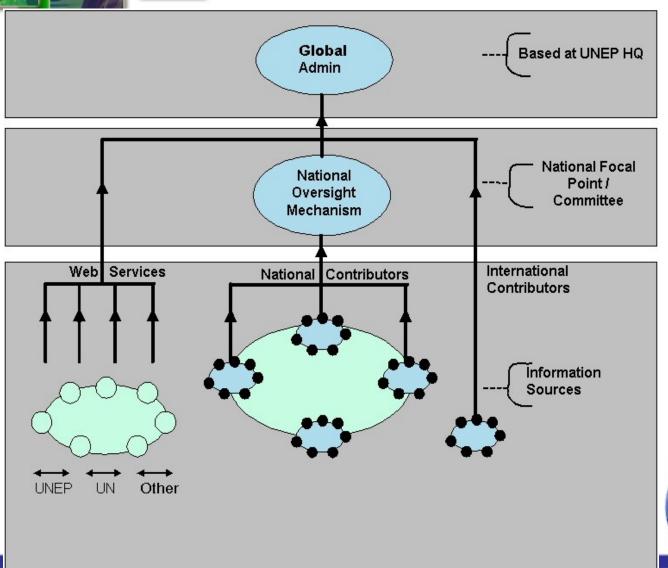
 All content on one page (useful for printing, presentation mode etc.)



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#### **Technical Administration**







#### **Priority Tasks for CEPIS**

- ❖ Implement the technical administration system (UNEP).
- \* Expand the current peer review exercise.
- ❖ Identify and engage authoritative international sources that can provide harvested content.
- Identify and engage national focal points to maintain oversight of all national content.
- Identify and engage national contributors of specialized content.



#### **Priority Tasks for CEPIS**

- Ensure that national environmental information networks have ownership of their own profile.
- Strengthen capacities of national contributors (within the framework of Bali Strategic Plan).
- ❖ Launch the Country Environmental Profile Information System at GC 24.
- Promote the system at national and international levels.





### Bali Strategic Plan for Technology Support and Capacity-building (BSP)

- Endorsed at 23rd session of UNEP GC/GMEF
- Country driven
- Focuses on national environmental priorities and needs (not wish-lists of all capacity building and technology support needs)
- Provides strategic direction for UNEP's TS and CB activities in function of national or regional needs and the implementation of international agreements
- Provides a basis for UNEP to play a more substantive role in UNDG and for enhancing its cooperation with UNDP, GEF, MEA's, other UN organisations, international financial institutions, bilateral donors, non-governmental organisations, civil society and private sector.



BSP - Section F: <u>Information for Decision-making</u> calls for a number of actions:

- strengthen national capacities for data collection, research, analysis, monitoring and integrated environmental assessment;
- developing institutional capacities, staff training and support for appropriate and adaptable technologies and methodologies;
- support for assessments of environmental issues of regional and subregional importance and for the assessment and early warning of emerging environmental issues;
- support for scientific exchanges and for the establishment of environmental and inter□disciplinary information networks; and
- promotion of coherent partnership approaches



**BSP - Section F: Information for Decision-making** 

#### (UNEP/DEWA services):

- 5. Management of regional and sub-regional environmental assessments in developing and economies in transition country regions as well as provision of support to the participation of these countries in broad assessment processes through coverage of participation expenses, partnerships and fellowships;
- 7. Provision of free access to data and information on environmental challenges and emerging issues derived from assessments, indicators, scientific assessments, earth observations and information networks;
- 9. Development and dissemination i.a. through a web-based learning platform of tools, guidelines, methodologies and best practices in data collection, analysis, monitoring, integrated environmental assessment, early warning and information networking and training in the use of those tools and methodologies;



**BSP - Section F: Information for Decision-making** 

(UNEP/DEWA services):

- 5. Advisory services and missions responding to requests from Governments to enhance their institutional and technical capacity in data collection, research, analysis, monitoring, integrated environmental assessment, early warning and information networking;
- 7. Support to developing countries and countries with economies in transition for the development of and participation in networks and partnerships of global, regional, national and specialized institutions to strengthen the infrastructures for data collection, research, analysis, monitoring, assessment, information exchange and South-South and North-South cooperation, and contribute to institutional and technical sustainability of capacity-building efforts.



### Bali Strategic Plan for Technology Support and Capacity Building

Some identified needs in developing countries



Preparing SOE Reports & Outlook Scenarios Information Policy Involve decision makers

Data
Collection &
Management
Metadata
Standards



Partnership
development & networking
-national & international
Links with donors
Project Development
Institutional
strengthening

ICT Capacity
Hardware &
software training
Internet
connectivity

Website
Development &
Information Sharing
Platforms
- Communication
outreach

GIS, Image Processing, mapping metadata Remote Sensing





#### **North-South Partnerships**

- \* Reference Section F of the Bali Strategic Plan
- European Environment Agency (EEA) regional and national networking structures
- EU Joint Research Centre (JRC) data and information management + scientific exchanges
- Yale University & scientific publishers on-line access to research on environment (OARE)
- ❖ ESRI Geographic Information Systems development
- ❖ ???? E-learning platform





# Web-related Issues in National Environmental Authorities

- Lack of ICT capacity equipment, staff, training, knowhow, tools, standards, etc
- ❖ Inadequate substantive content on sites publicity materials (e.g. annual report, brochures)
- Lack of an archival culture difficult to locate electronic files/content resources
- Protective ownership of content resources (when available)
- Continuous staff turnover legacy ICT solutions neglected and not maintained
- Challenge can Plone development community provide a turnkey solution?



### Thank you!

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