UNEP-WCMC and biodiversity informatics in Africa

3rd JRS Project Workshop 2014

Nadine Bowles Newark, United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC)
UNEP-WCMC - Putting biodiversity at the heart of decision-making

• Our team has unrivalled expertise in collating, analysing and interpreting information about biodiversity, and sharing this in engaging, innovative and useful ways.

• We work with partners worldwide to strengthen the capacity of others to manage biodiversity and ecosystem services
In other words...
Current biodiversity data initiatives within UNEP-WCMC

Global Biodiversity Outlook 4

Ocean Data Viewer

Biodiversity Indicators Partnership

National Reporting Toolkit

SPECIES+

protectedplanet.net
Global Biodiversity Outlook 4 and the Biodiversity Indicators Partnership (BIP)

• GBO is the flagship publication of the Convention on Biological Diversity
• Based on data from:
  – national reports
  – scientific literature
  – The Biodiversity Indicators Partnership
• Peer review of draft documents
  http://www.cbd.int/gbo4review/
Overview of trends across 20 Aichi targets
World Database on Protected Areas (WDPA)
World Database on Protected Areas (WDPA)

W (Benin) National Park

W (Benin), Benin

Description

The W Regional Park (French: "W" du Niger) is a major national park in West Africa around a meander in the River Niger shaped like a "W". The park includes areas of the three countries Niger, Benin and Burkina Faso, and is governed by the three governments. Until 2008, the implementation of a regional management was supported by the EU-funded Project ECOPAS (French: Ecosystèmes Protégés en Afrique Soudano-Sahélienne). The three national parks operate under the name W Transborder Park (French: Parc Regional W).

Official Record

- **WDPA ID**: 12201
- **NAME**: W (Benin)
- **ORIGINAL NAME**: W (Benin)
- **COUNTRY / TERRITORY**: Benin
Protected Areas Resilient to Climate Change (PARCC)

• Aims to develop tools to improve resilience of PA networks to the effects of climate change

• Since project inception we have:
  – Reviewed current data and made action plans for data collection
  – Created a bilingual website and data portal
  – Held several regional and national training workshops.
PARCC Project latest reports...

Protected Areas Resilient to Climate Change, PARCC West Africa

A Climate Change Vulnerability Assessment of West African Species

ENGLISH
Jamie Carr, Adrian Hughes and Wendy Foden
IUCN Global Species Programme
1/1/2014

Aires Protégées Résilientes au Changement Climatique, PARCC Afrique de l’Ouest

Evaluation de la connectivité des aires protégées en Afrique de l’Ouest

FRANCAIS
Andy Arnell, Elise Belle et Neil Burgess
UNEP-WCMC
2014

http://www.parcc-web.org/
• Key information on endangered and threatened species
• Helps parties meet international commitments
• Facilitates the effective management of species
• Ensures trade in CITES-listed species is legal, traceable and sustainable
**Panthera pardus**
*(Linnaeus, 1758)*

Chordata • Mammalia • Carnivora • Felidae • Panthera

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**CITES**

**CITES LISTING**

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The **Ocean Data Viewer** supports better decisions...

- Making the best marine and coastal biodiversity information available
- Helps companies avoid or minimize impacts to sensitive areas
- Providing businesses with site-scale biodiversity data for use in environmental impact assessments
... and provides data in support of global policies and decisions

- Highlights relevance to international conventions
- Developed on the request of the Executive Secretary of the CBD
- Demonstrates the importance of data sharing, and is the only comprehensive platform for global marine data
Proteus: Manual of marine and coastal datasets of biodiversity importance

- Review has resulted in the identification of 78 datasets and/or databases and data portals
- Discusses the challenges, gaps and limitations which can be presented by marine data
Since the establishment of IPBES UNEP-WCMC has directly supported both the interim and permanent Secretariats

- Gap analysis to improve the science-policy interface
- Online Catalogue of Assessments
- Technical support for implementation of the Work Programme
National Reporting Toolkit (NRT)

Themes
- Energy and Minerals
- Air
- Biodiversity
- Coastal and Marine resources
- Coastal

Biodiversity

Biodiversity is the degree of variation of life.[1] This can refer to genetic variation, species variation, or ecosystem variation[1] within an area, biome, or planet. Terrestrial biodiversity tends to be highest near the equator... (Read more)

- Terrestrial protected areas (% of total land area)
  - BAD: 16.9%

- Fish species, threatened
  - GOOD: 21 species

Coastal and Marine resources

Coastal erosion is the wearing away of land and the removal of beach or dune
National Reporting Toolkit (NRT)

90 % Elec+gas Good
Refers to data collected up to 31 Dec 2010

% of households using gas or electricity for cooking

A report on gas use increases

% of households using gas or electricity for cooking

Metadata

Category
Energy and Minerals

Most recent data collected
1 Jan 2010

Oldest data collected
1 Jan 2001

Frequency
yearly Up to date

Source

Indicator definition
Download PDF
UNEP-WCMC and biodiversity information in Africa

International workshop on data and information management to underpin natural capital assessments and ecosystem resilience (Pretoria – May 2014)
FROM DATA TO DECISIONS

A NATION’S TOTAL WEALTH CONSISTS OF:

- Built Capital
- Social Capital
- Natural Capital
- Biologic Capital
- Ecosystems

DATA IS MOVED FROM THE FIELD TO A ECO SYSTEM CAPITAL ACCOUNT

5 KEY REQUIREMENTS TO GOOD DATA SHARING:

1. DATA NEEDS TO BE COLLECTED AND IN A USEFUL FORMAT.

2. HUMANS NEED THE WILL TO SHARE.

3. INDICATORS NEED TO BE ACCESSIBLE AND ANSWER THE RIGHT QUESTIONS.

4. REPORTING NEEDS TO BE FAST AND LISTENED TO.

5. TECHNOLOGY NEEDS INFRASTRUCTURE TO ALLOW DATA MOVEMENT.

MAKING SURE THE RIGHT INFORMATION REACHES THE RIGHT PEOPLE...

...TO BUILD A PICTURE OF WHAT IS NEEDED TO POWER A GREEN ECONOMY.
Mobilizing Africa's Policy-Relevant Biodiversity Data

Biodiversity data is relevant to all areas of African policy making...
- Public health
- Dengue fever, etc...

"But..."

We need better data

Is this up to date?!

We currently waste time and money collecting useless data

Total data collected

Mobilized data

Moving forward, we are...

Identification of constraints and training needs

Policy-relevant data

Building a toolkit for mobilizing policy-relevant data

Developing an online hub of relevant information

Setting national priorities for data mobilization across the continent

Data mobilization to effective policy

Good data management leads to a virtuous cycle

Donors more forthcoming

Clear, relevant data
UNEP-WCMC and biodiversity information in Africa – Moving forwards

• Biodiversity data management
  – Supporting decision making
  – Aichi Targets reporting
  – Data management systems
  – Capacity development
  – NBSAPs
UNEP-WCMC and biodiversity information in Africa – Moving forwards

• Mainstreaming of biodiversity data into decision making
  – Identifying barriers
  – Acquisition and sharing of data
  – Embedding into policy frameworks
UNEP-WCMC and biodiversity information in Africa

BRIGHT FUTURE AHEAD
Thank you

http://www.unep-wcmc.org/
http://www.cbd.int/en/gbo4
http://www.bipindicators.net/
http://www.ipbes.net/
http://www.parcc-web.org/
http://www.speciesplus.net/
http://www.protectedplanet.net/
http://data.unep-wcmc.org/
http://www.eubon.eu/
EU BON and GEO BON

• The Group on Earth Biodiversity Observations Network (GEO BON)
• EU BON - Building the European Biodiversity Observation Network

• Integration of biodiversity information systems from on-ground to remote sensing data, for addressing policy and information needs in a timely and customized way.