

# Digital Biodiversity Data for EIA Decision-making

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# The Context...

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- ◆ **Biodiversity records generated in every EIA project are considered important as they help in regulating development and mainstreaming biodiversity.**
- ◆ **However, these data/ records are seldom captured in forms and formats that make them accessible, re-usable and the databases interoperable.**

# The Context...

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- ◆ **Discovery of data at local, national, regional and global levels is an issue as '*metadata catalogues*' are not existing or are digitally not available.**
- ◆ **Data transformation tools for making EIA biodiversity data inter-operable/ exchangeable as per globally accepted standards are also not readily available.**

# But, where is the DATA?

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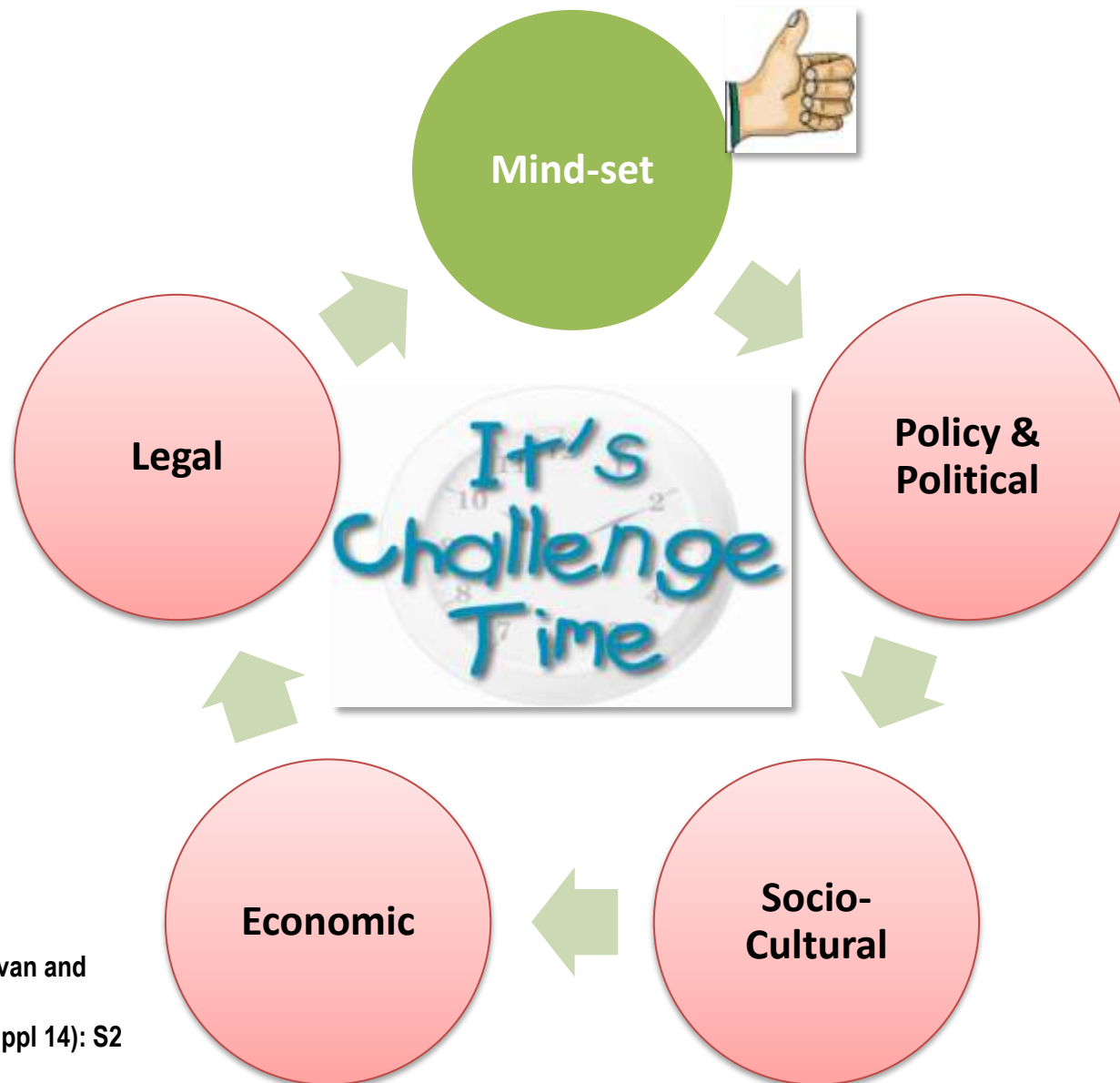


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OF THE  
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Existing biodiversity data is scattered & locked up in individual and institutional cupboards

# Data Publishing: It's challenging!

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Source: Adapted from Chavan and Ingwersen (2009).  
BMC Bioinformatics 10 (Suppl 14): S2

# Impediments to data publishing

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**Lack of  
Data Publishing Framework**

*Chavan and Ingwersen (2009). BMC Bioinformatics 2009, 10 (Suppl 14): S2*

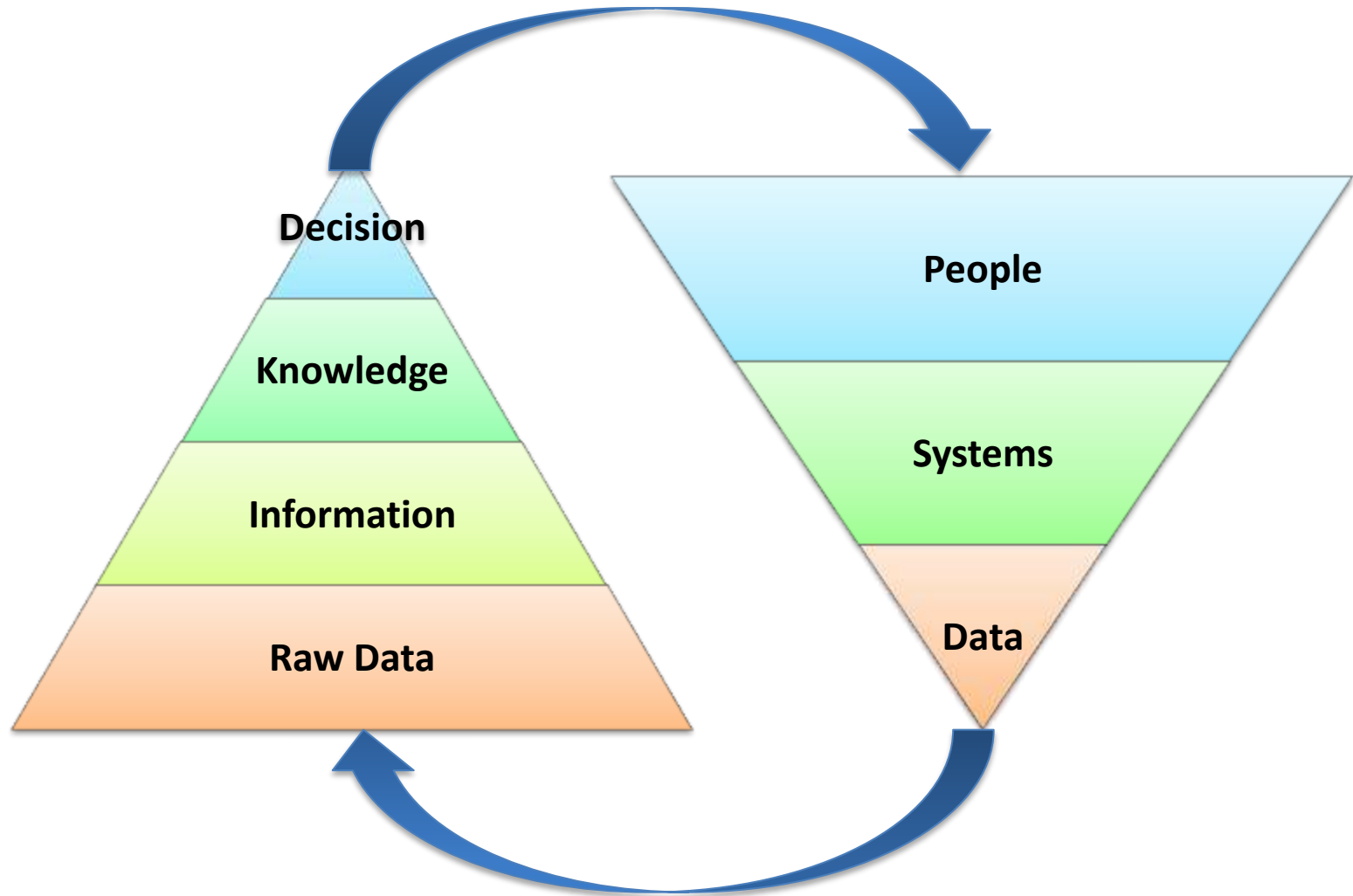


**Lack of data  
publishing  
culture and  
incentives**



# Data to Decision Making

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# **Development of an EIA Biodiversity Data Publishing Framework:**

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***India and South Africa Pilot Projects***



# Objectives of the Pilot Projects

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## South Africa:

Develop a suite of tools, standards, processes, best practices and hosting environments to facilitate easy and efficient discovery, archiving and publishing of biodiversity data contained in EIAs

## India:

- ◆ Adapt the technical infrastructure of the South African project with appropriate customization for the Indian context,
- ◆ Evolve policy support and induce socio-cultural changes required for rapid uptake and use of such a framework
- ◆ Develop EIA best practices and document lesson-learnt
- ◆ Establish 'EIA biodiversity data publishing facilities in India and South Africa

# The EIA tool forms part of the portfolio of data, tools and support offered by SANBI.

<http://biodiversityadvisor.sanbi.org/>

Biodiversity richness for all South Africans



## Biodiversity Advisor



Helping you find the right biodiversity information from SANBI's websites

[Biodiversity Advisor home](#)

### BIODIVERSITY ADVISOR

- Home
- About
- Environmental assessment (e.g. EIAs)
- Land-use planning
- Systematic biodiversity planning
- Species distribution modelling
- Research & taxonomy
- Access to information
- Contact

## Welcome to SANBI's Biodiversity Advisor

The Biodiversity Advisor revolutionizes access to information on South Africa's biodiversity.

The Biodiversity Advisor helps you use SANBI's online biodiversity information resources for decision-making, planning and research [more...](#)

### On this site...



Research & Taxonomy



### SABIF Georeferencing Workshop 4 - 8 April 2011

SABIF is inviting applications for participation in a Biodiversity Georeferencing training workshop. Four leading international experts in the field will facilitate the workshop. See [SABIF website](#) or contact [Paula Hathorn](#) 021 799 8885.

### Quick links

SANBI's online information resources:

- [Biodiversity GIS \(BGIS\)](#)
- [Plants of southern Africa \(POSA\)](#)
- [South African Biodiversity Information Facility \(SABIF\)](#)
- [SANBI's Integrated Biodiversity Information System \(SIBIS\)](#)
- [DEA Environmental Indicators Website](#)

[More information](#) about these websites

Find out more [about each section of this website](#)

# Salient outcome of the pilot projects

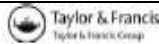
## Development of EIA Biodiversity data publishing portals



## Documentation:

- Best practice guide
- User manual
- Technical docs

*Impact Assessment and Project Appraisal*  
2012, 1–9, iFirst Article



### Improving access to biodiversity data for, and from, EIAs – a data publishing framework built to global standards

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# Lessons Learnt: Pilot Projects

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## For Resource managers and biodiversity experts

- ◆ Improving baseline knowledge of the ecosystems of a particular site, region or country;

## For EIA practitioners

- ◆ Enable free and open access to the biodiversity data, which is essential for biodiversity-inclusive EIA
- ◆ Help gain recognition through citations of work

## For Regulatory agency

- ◆ Ensure generating good quality data liable for checks by others in subsequent EIAs
- ◆ Enhance the quality, impact predictability, verifiability and transparency of EIAs for informed decision-making

# Challenges?

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- ◆ Collation of information from a very large number of reports with inconsistent formats and variability in focus, scale and quality of information
- ◆ Mobilization of data from paper formats to digital formats - huge effort
- ◆ Creation of one central repository of EIA data ~ technological challenge
- ◆ Inadequate coordination between various data holders at the country levels
- ◆ Problem of mindset with respect to data sharing

# Key Strengths?

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- ◆ Easy to use, adaptable and low-cost replication of infrastructure in other regions/countries and thematic areas.
- ◆ Endorsed by the national government, non-governmental organizations and the private sector
- ◆ Uptake and use by the environmental assessment professionals.



# Data Publishing Guide

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**IAIA**



## Improving EIA practice: Best Practice Guide for publishing primary biodiversity data

Version 1.0



August 2011

***Thank you...***