Digital Biodiversity Data for EIA Decision-making

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The Context…

♦ **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 inter-operable.**

The Context…

- 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.
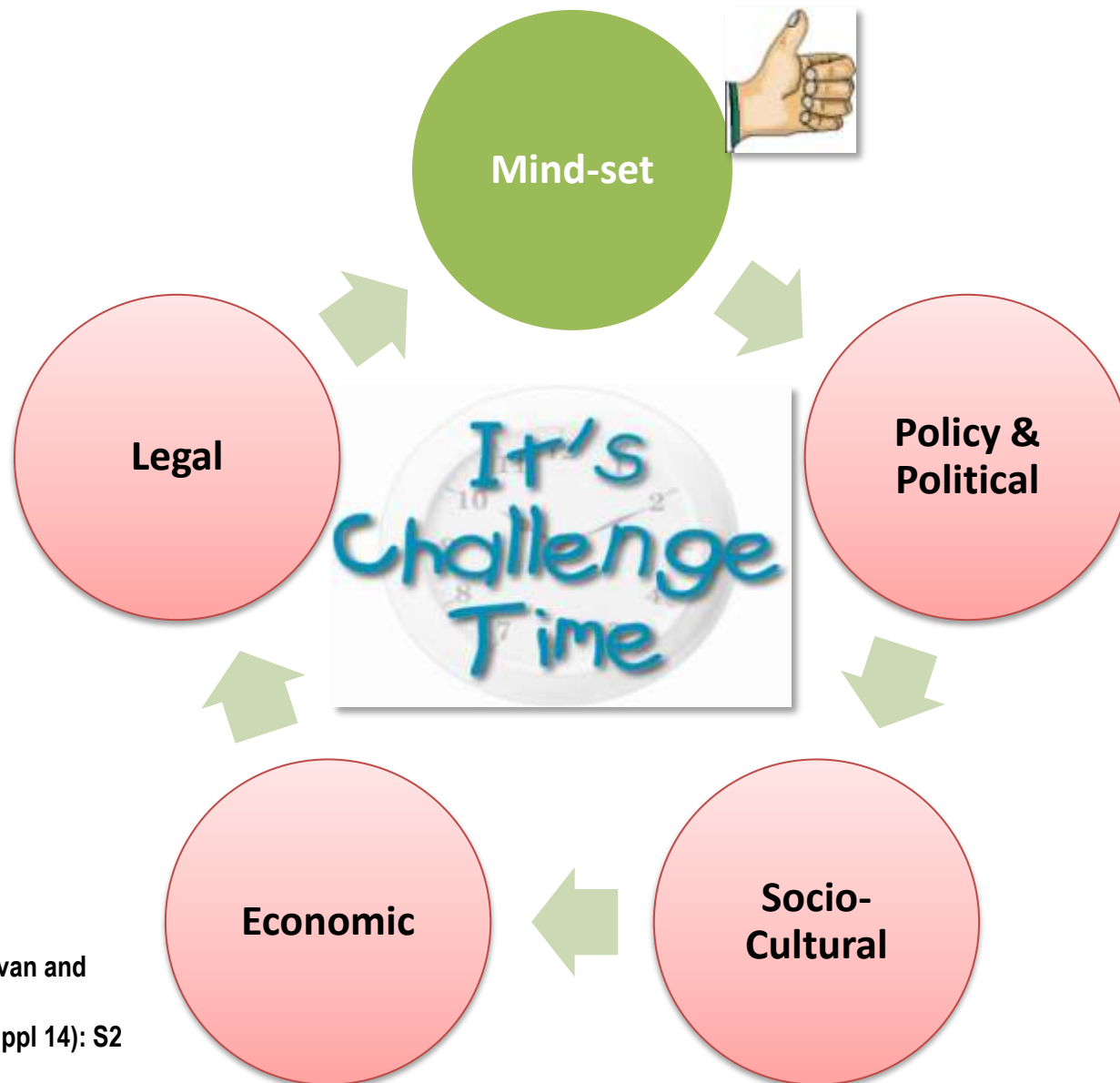
But, where is the DATA?

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

Data Publishing: It's challenging!

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

Impediments to data publishing

**Lack of
Data Publishing Framework**

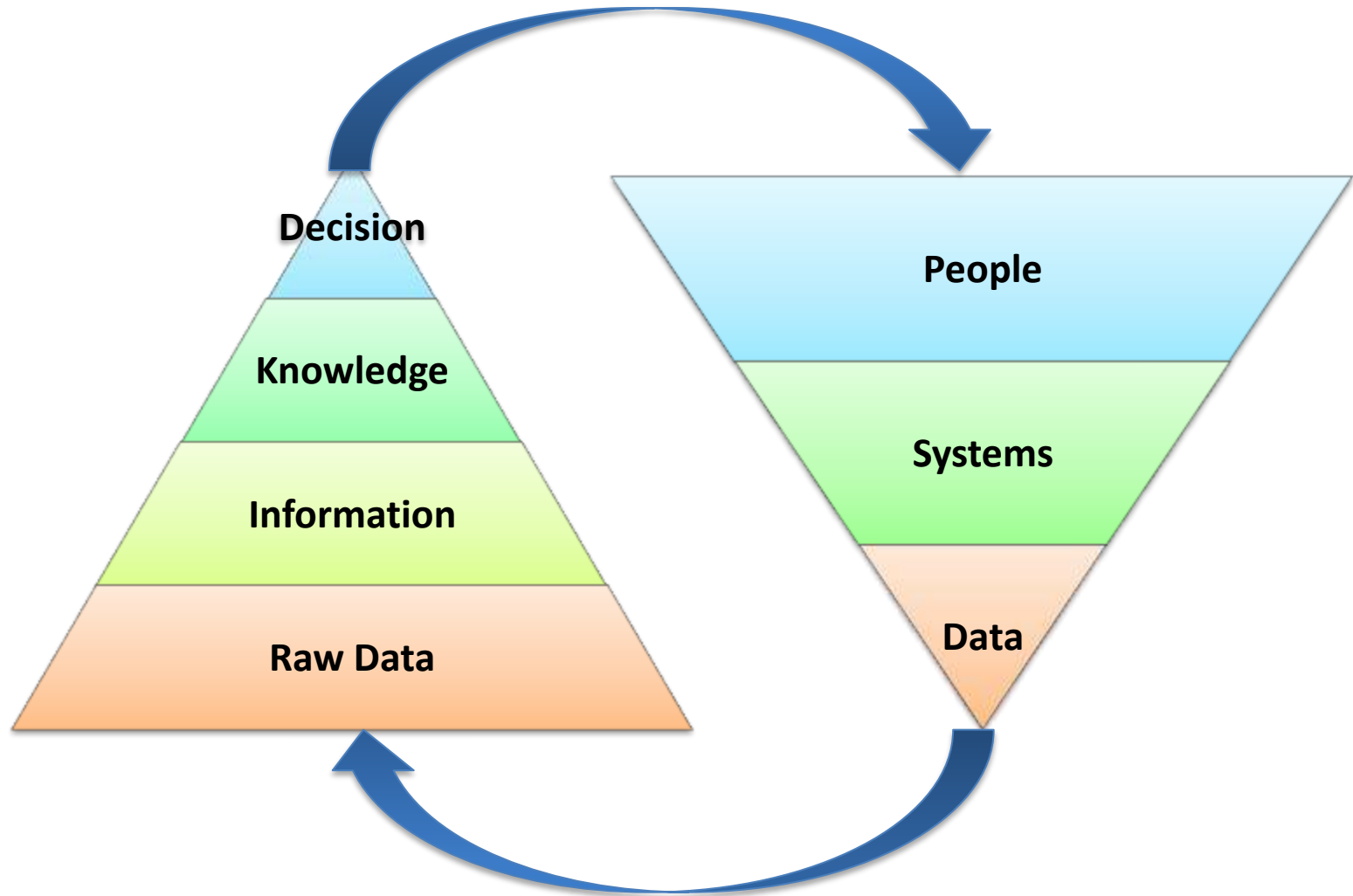*Chavan and Ingwersen (2009). BMC Bioinformatics 2009, 10 (Suppl 14): S2*

Lack of data publishing culture and incentives

Data to Decision Making

Development of an EIA Biodiversity Data Publishing Framework:

India and South Africa Pilot Projects

Objectives of the Pilot Projects

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/
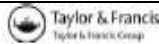
Salient outcome of the pilot projects

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

Taylor & Francis
Taylor & Francis Group

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

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?

- **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?

- **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

IAIA

GBIF
www.gbif.org

Improving EIA practice: Best Practice
Guide for publishing primary biodiversity
data
Version 1.0

August 2011

Thank you...