Biodiversity data nodes

- digitization and integration of biodiversity data -

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Outline

- Context
- Situation& products
- Perspectives

Context

- Many data gathered in the last decades (BIOTA & other research programs) for few purposes (thesis, report, publications, etc.)

- Data collected were partially analysed and then forgotten: waste of energy, time and money!!

- No easy access to these data for better analysis (vegetation and species dynamique, impact of human activities or global change)

Context

- Difficulties for comparison between regions and for a broad view of problems and solutions

- Loss of many opportunities for better understanding of processes due to lack or reduced accessibility to biodiversity data

Solution = Data nodes

- Digitization and keeping biodiversity data for sustainable use

Solution = Data nodes (following)

- Organization of data for easy online access and extraction for stakeholders, decision makers...

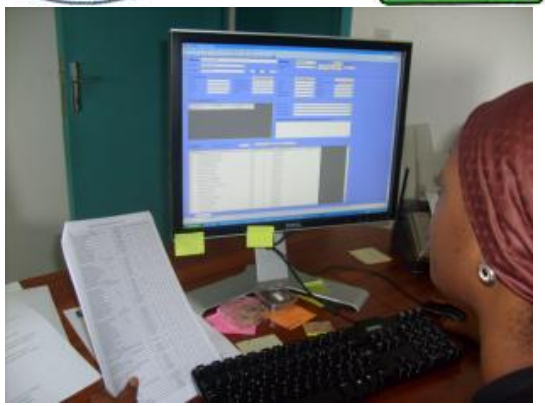
- Creation of a tool for development and conservation plans

- Creation of a tool for teaching and sensitizing (awareness)

Where are we in this process?

- BIOTA West
- BIOTA East
- BIOTA South & Morocco

West African local Data nodes



Frankfurt

Implementation

- Common standards for database solutions

- Training and workshops

Capacity building (workshops)

BIOTA teams (Benin, Burkina Faso, Cote d'Ivoire) + Niger & Senegal

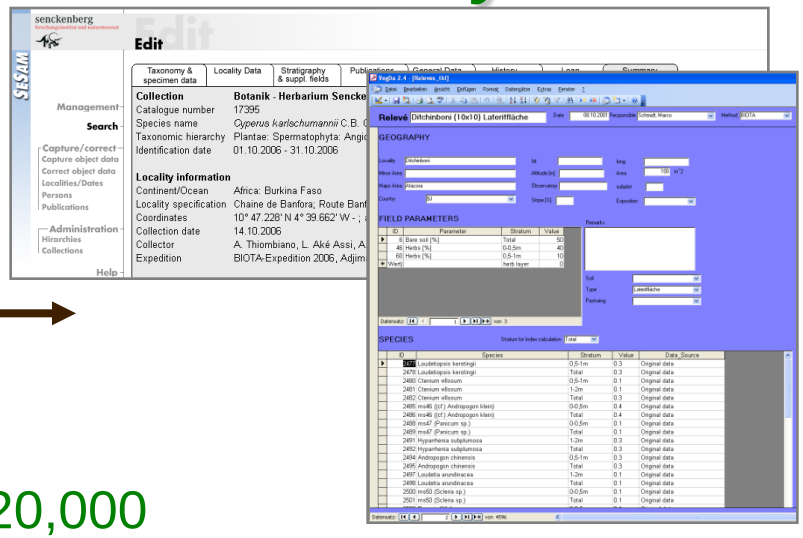
Frankfurt (2007)

Ouagadougou (2008)

Cotonou (2009)

What was learnt?

Digitization and Storage of biodiversity data

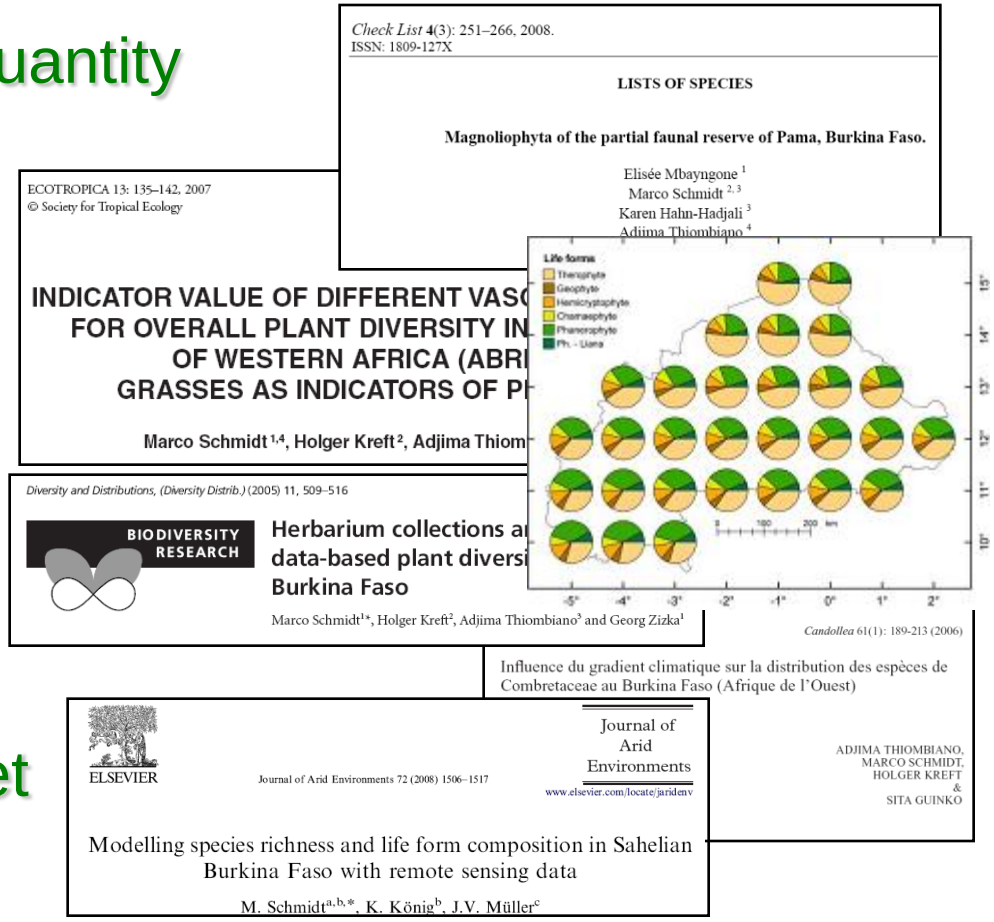


Presently digitised
Collection data: >20,000
Observation data: >110,000

- Digitization of current fieldwork and “revive“ old published data sets (theses, reports, etc.)
- Data security, sustainability
- Facilitate data exchange
- Facilitate analyses covering several datasets and disciplines

First products

- Publications improvement (quantity and quality)
- Checklist of Burkina Faso (→ Poster Dressler et al.)
- Biodiversity Atlas of West Africa (→ Presentation Kampmann et al.)
- Plant determination tool



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West African Plants
A PHOTO GUIDE

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West African Plants - A Photo Guide

This interactive photographic guide shall help you to identify higher plants from West African ecosystems. It contains images of ferns and seed plants taken in the field. You can browse through a taxonomic hierarchy and / or search according to selected characters you observe on your plant.

Please cite this site as follows:

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Data base currently contains
Photos 3973
Illustrated species 788

BIOTA SUN senckenberg UNIVERSITÄT FRANKFURT AM MAIN

Biodiversity data node in EAST Africa

Kenya's GBIF country node: National Museums of Kenya (NMK)

➢**Set up of an improved IT infrastructure**

- structured cabling of NMK Nat Hist Depts
- technical network equipment (servers, software, client licenses etc.)

➔Improved NMK intranet

Biodiversity data node in EAST Africa

Kenya's GBIF country node: National Museums of Kenya (NMK)

➢ **Data harmonization**

- **SPECIFY** for zoological files such as Access, FileMaker, Excel or Word

- **Visual Plants** for botanical files such as BRAHMS, LEAP, API or Access (NMK, Makerere Univ).

Biodiversity data node in EAST Africa

Kenya's GBIF country node: National Museums of Kenya (NMK)

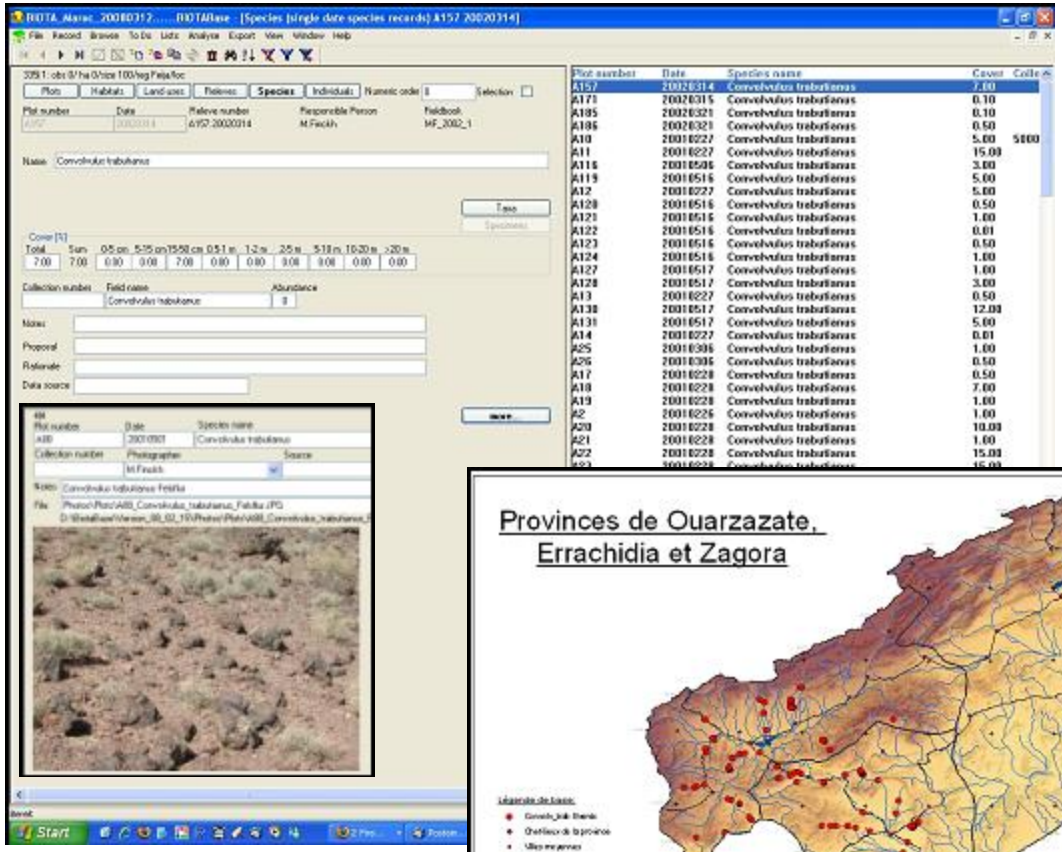
➢Integration of digitization process into daily curatorial workflow of permanent staff at all Nat Hist Depts

- Pro-active data capture of BIOTA voucher specimens
- Retro-active data capture of NMK collections

➔ Improved and accelerated data acquisition at a high quality level

Biodiversity data in BIOTA-South and Morocco

- Queries for multipurposes
- Thematic maps



Where do we want to go?

- Scientist responsibility: inform and give better tools to decision makers for better management of our planet!

- We have to collect, analyse & stock securely data for sustainable use by future generations

Where do we want to go?

- Strengthen capacity building for more management and analysis of data
- Data harmonisation between regions (workshops, training courses, etc)
- Exchange, joint analyses for better comparison between regions
- Products for stakeholders: local checklists, land use maps

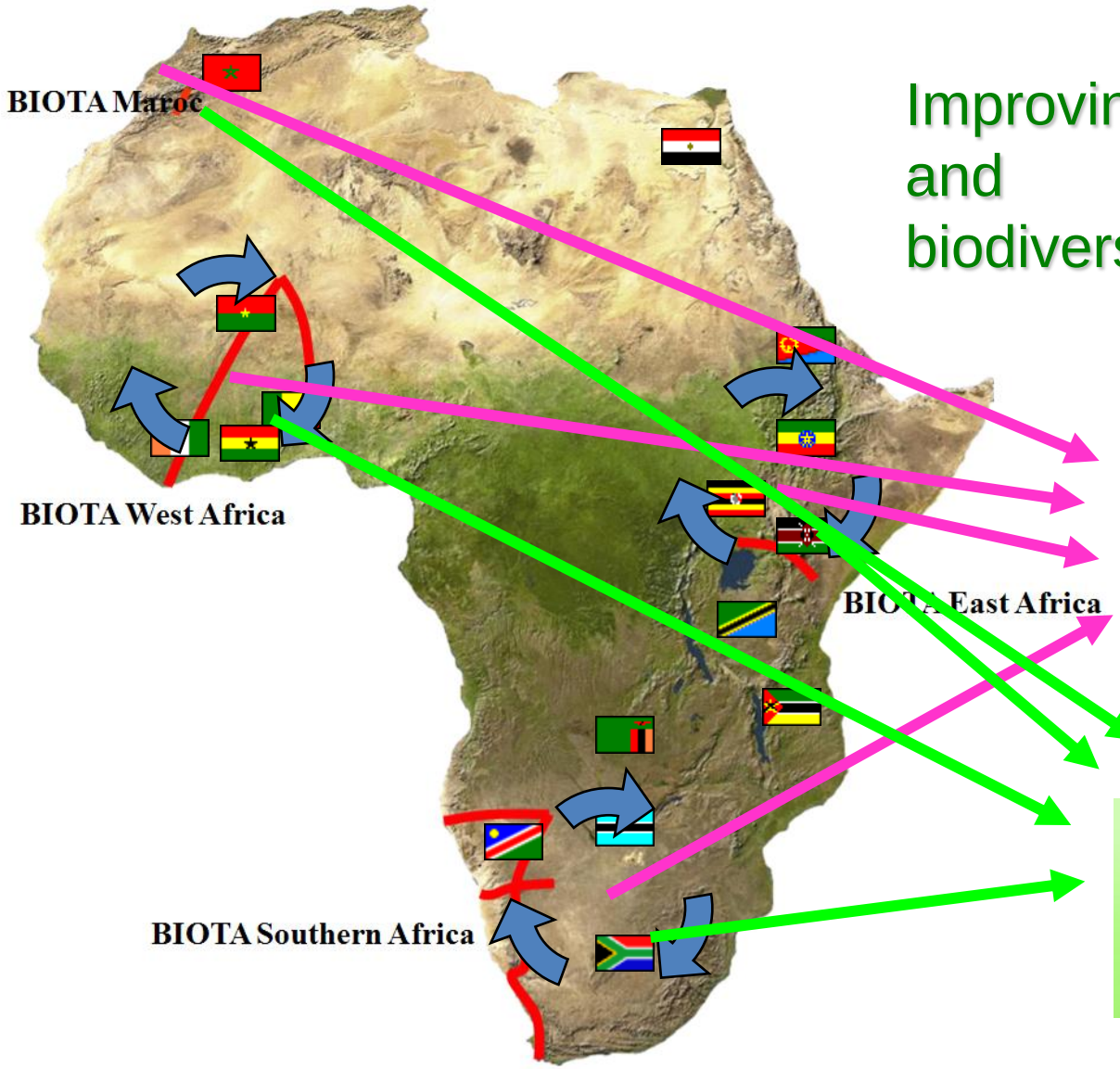
Our vision…

- National level: capacity building for more qualified staff

- Regional level: effective establishment of an active data nodes network (West, East, South)

- Continental level: Africa data nodes provide data to BIOTA data centre and GBIF

Africa data nodes center



Improving exchange and access to biodiversity data

BIOTA

Data center

GBIF

Thank you for your attention,

And BMBF for funding

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