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Federal Ministry of Education and Research

FONA Research for Sustainable Development BMBF

SUSTAINABLE LAND MANAGEMENT

- An International Research Programme based on 12 regional projects in 4 continents

Axel Paulsch (Institute for Biodiversity)

ibn

www.sustainable-landmanagement.net

SUSTAINABLE LAND MANAGEMENT

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- Research programme developed by the **BMBF**
- Aims to produce **new knowledge for effective decision making** in the area of land and natural resource management
- Integrates science and practice in order to develop **new strategies** and **system solutions** based on examples from selected regional case studies

- Duration: **2010 to 2016**
- Budget approx. **115 Mio. €**

SUSTAINABLE LAND MANAGEMENT

Research Programme

RESEARCH AREAS

(1) Interactions between land management, climate change and ecosystem services
(2) Innovative system solutions for sustainable land management

GENERAL OBJECTIVES

- Focus on regions severely affected by climate and structural-demographic changes
- Generating the knowledge needed for decision making at regional levels
- Development of technologies, system solutions and policy strategies that can be implemented as policies and transferred to comparable regions
- Involvement of regional and local stakeholders

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Source: SuLaMa

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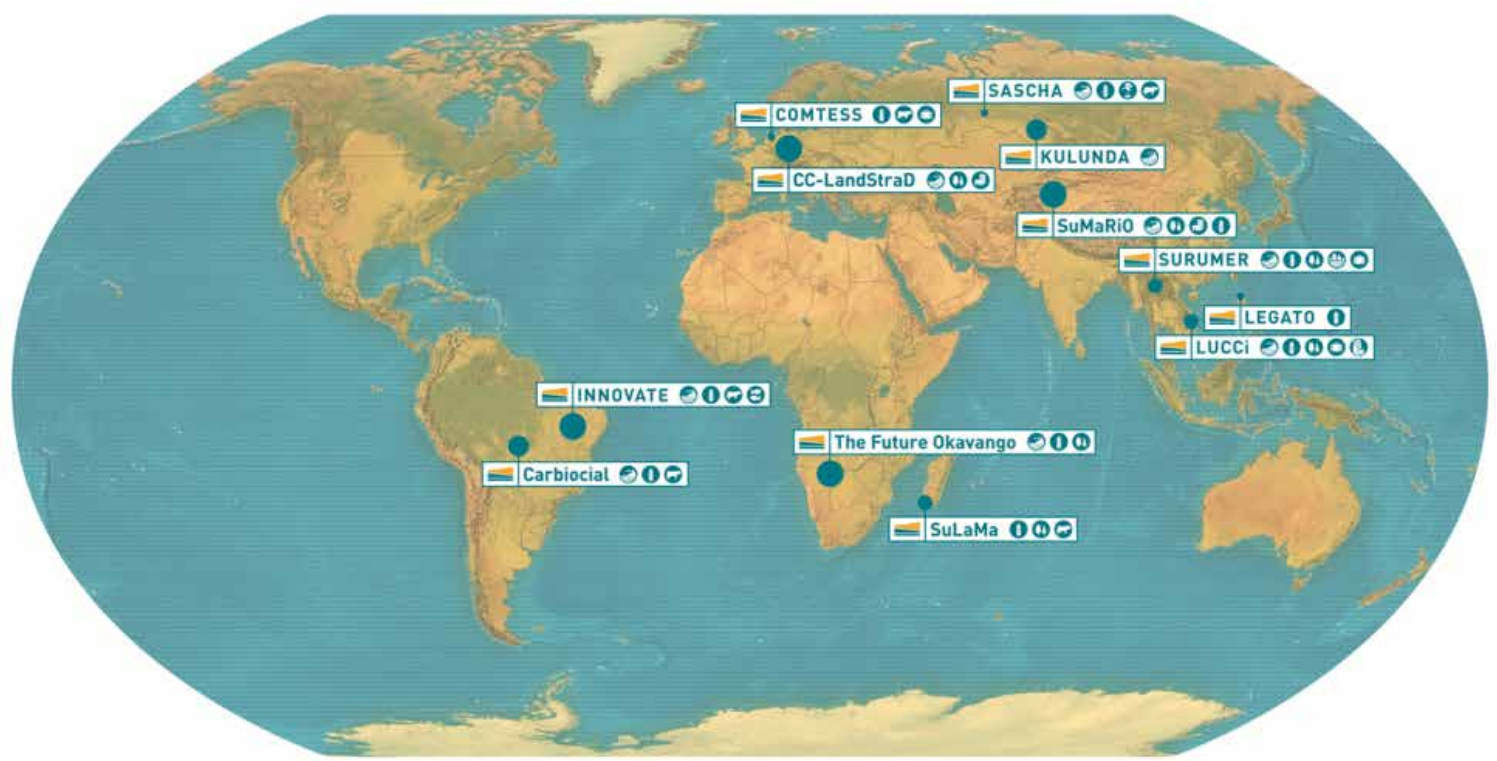
Source: J. Settele

MODULE A: Interaction between land management, climate change and ecosystem services



SUSTAINABLE LAND MANAGEMENT

Organizational Structure

Scientific coordination and synthesis GLUES

- Common development of Scenarios & Models
- Establishing of a common Geodata-Infrastructure
- Scientific synthesis
- Outreach & Products
- Stakeholder integration
- Science / Policy interface

SUSTAINABLE LAND MANAGEMENT

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Institut für Biodiversität
Netzwerk e.V. - Wissenschaft und Wirtschaft
Science and Business Experts Network
Institute for Biodiversity

Target Group: Global decision makers in International Conventions

- Feed scientific results into policy processes like CBD, UNCCD, UNFCCC, IPBES
- Inform project scientists about political decisions and research needs
  - SLM Side event at UNFCCC COP 2011
  - side events at CBD COP 11 and 12
  - Presentations at 2nd and 3rd scientific UNCCD conferences (2013, 2015) and UNCCD COPs (11 and 12)
  - Reports from COP meetings
  - Workshop on participating options in CBD, UNCCD and IPBES meetings

Biodiversity for Sustainable Development
PYEONGCHANG, KOREA 2014
COP12 | MOP7 | IMOP1

Nature Protects if She is Protected
XI Conference of Parties
CONVENTION ON BIOLOGICAL DIVERSITY
HYDERABAD INDIA 2012

2nd Scientific Conference
UNCCD

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HELMHOLTZ CENTRE FOR ENVIRONMENTAL RESEARCH – UFZ

The Future Okavango – Scientific support for sustainable land and resource management in the Okavango basin

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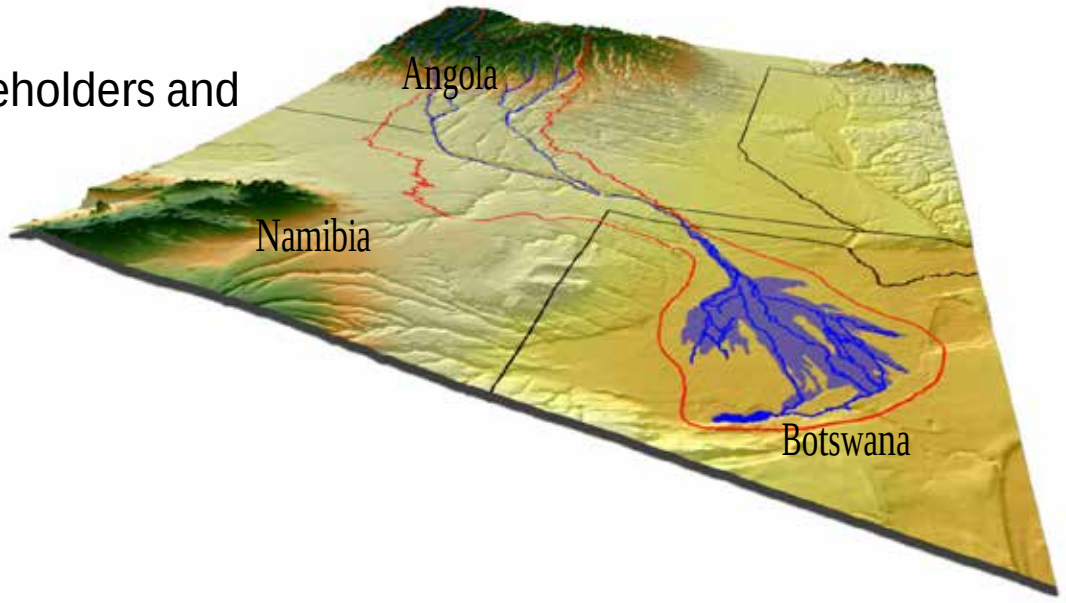
TFO
THE FUTURE OKAVANGO

The **Okavango** is one of the last near pristine aquatic ecosystems on the African continent, and indeed on earth;

understand conditions and mechanisms to integrate the knowledge about ecosystem services into land-use decisions;

provide scientific support to stakeholders and policy makers in resource management processes.



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THE FUTURE OKAVANGO

Okavango Basin Information System (OBIS)

- Objective of OBIS dev't is:
  -give support by data manag't, sharing, analysis & visualization on the Okavango Basin
- Designed as a web-based data repository with full read/write access
- Built upon open software and open standards

à **http://www.future-okavango.org/obis**

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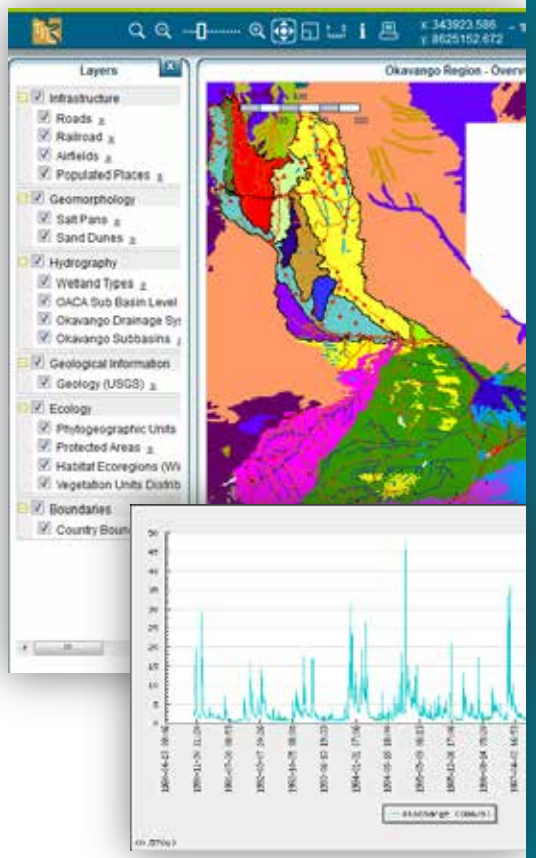
THE FUTURE OKAVANGO

OBIS Data Types

- Geospatial data
  (thematic maps, remote sensing imagery)
- Stations and time series (climate, discharge)
- Study sites and observations (vegetation, soil, ...)
- Metadata (who, what, when, where, why)

Target Group regional decision makers:
OCACOM, National administrations, Protected Areas Managers



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TFO
THE FUTURE OKAVANGO

Participatory research to support sustainable land management on the Mahafaly Plateau in southwestern Madagascar

SUSTAINABLE LAND MANAGEMENT

SuLaMa

SuLaMa - Introduction

- Semi-arid zone characterized as one of the most unique and biologically diverse drylands on earth with a very high rate of endemism
- Among the economically and climatically most disadvantaged areas of Madagascar
- High level of non-sustainable land use, high illiteracy rate, limited livelihood options
- Society characterized by traditional customs and strong social cohesion

SUSTAINABLE LAND MANAGEMENT

SuLaMa

Target group local decision makers: small scale farmers, pastoralists, community elders

Feeding the gathered data and information into the formulation of land-use scenarios

Identification of possible scenarios through screening of existing data and information

Feedback workshops on possible scenarios with local population to identify realistic scenarios with high likelihood of implementation

SUSTAINABLE LAND MANAGEMENT

SuLaMa

Sustainable Management of River Oases along the Tarim River Xinjiang, P.R. China

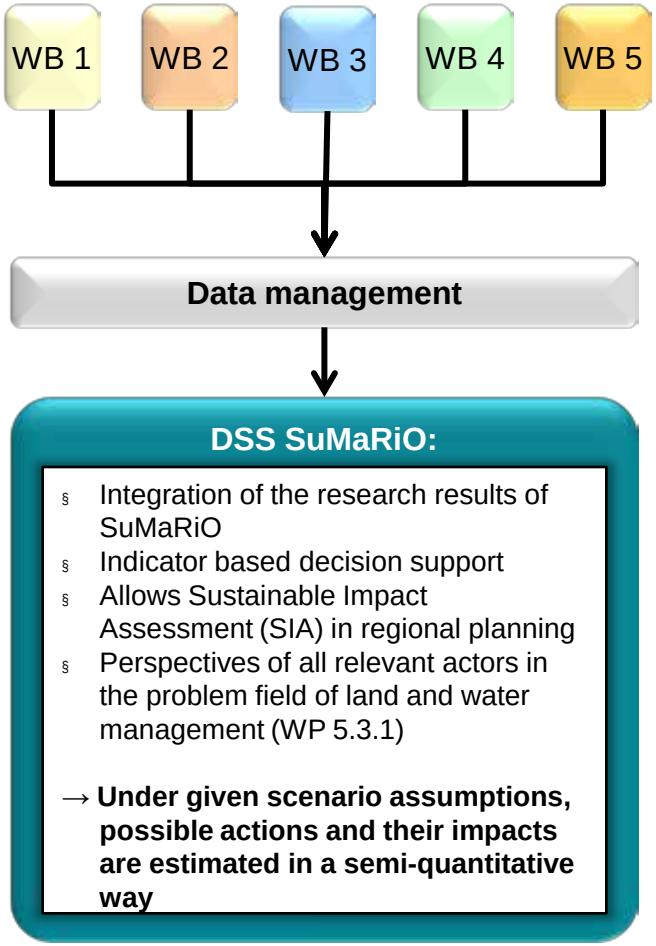
SUSTAINABLE LAND MANAGEMENT

SuMaRiO




Target group organized decision makers: farmer cooperatives, large scale farmers, town administrations

Decision support system



Source: M. Hinnenthal, Universität der Bundeswehr München, Germany

Data on biophysical and socio-economic factors

Data on climate change

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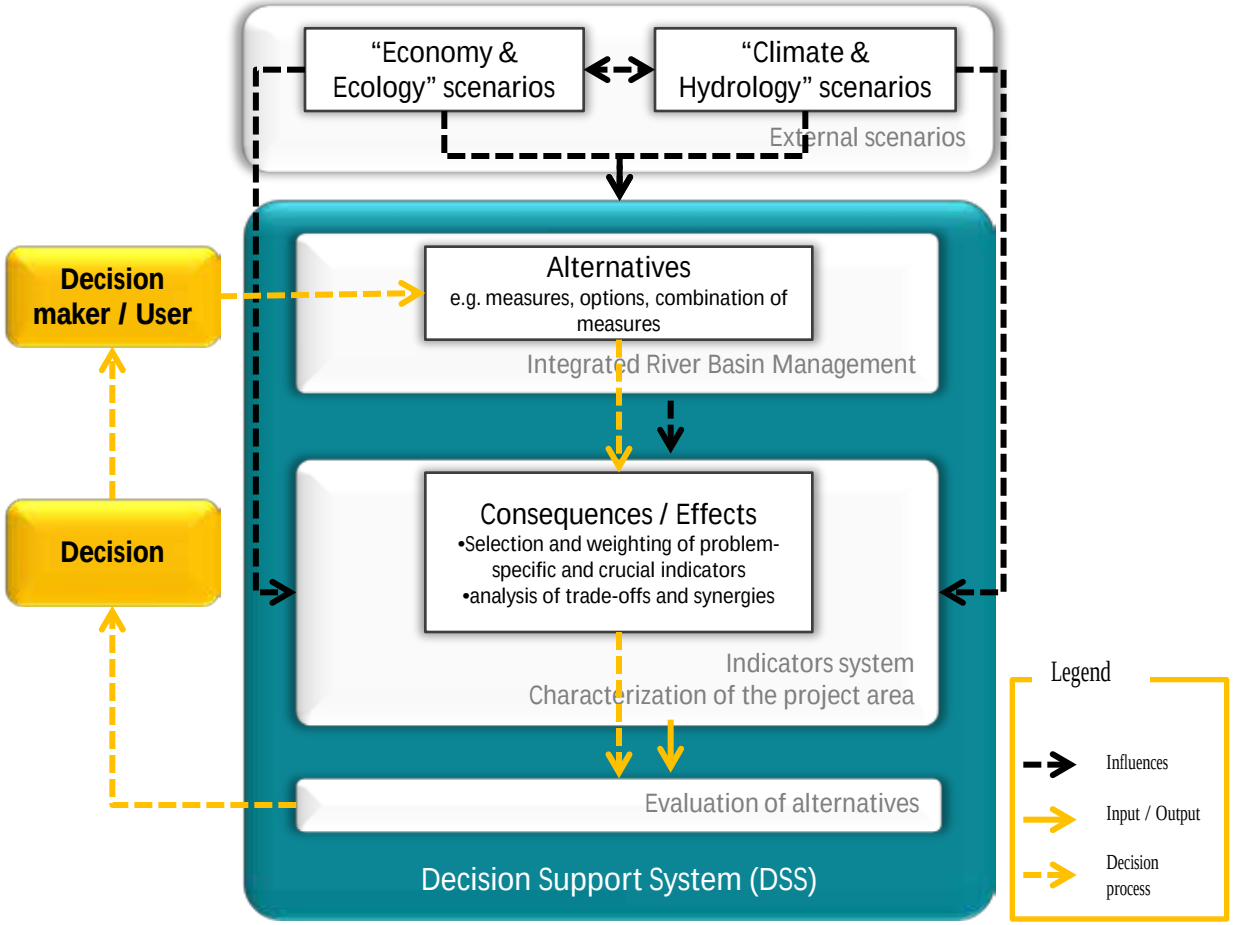
SuMaRiO

Decision support system



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SuMaRiO

Summary

1. To find adapted solutions it needs cooperation among scientists, stakeholders and decision makers from the beginning
2. Solutions are scale-dependent and need to be seen in local context, but upscaling is possible
3. Presentation of results and solutions has to be target group specific
4. A cross-cutting coordination unit is helpfull for cross-cutting tasks among the case study projects

SUSTAINABLE LAND MANAGEMENT

SuMaRiO

SuLaMa

INNOVATE

Next steps:

- **Synthesis evaluation report over all 12 regional projects by WOCAT method**
- **WOCAT questionnaire sent to all projects**
- **Book expected to be ready end of 2016**

WOCAT

World Overview of Conservation Approaches and Technologies

SUSTAINABLE LAND MANAGEMENT

SCIENTIFIC COORDINATION AND SYNTHESIS GLUES

Find more information about all regional projects:

www.sustainable-landmangement.net

SUSTAINABLE LAND MANAGEMENT

URL

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Thank you for your attention!

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