

The Future Okavango (TFO) Scientific Support for Sustainable Land and Resource Management in the Okavango Basin



Information

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Partners

- Research facilities within the TFO project

Funding

- Federal Ministry of Education and Research, Germany

Project Duration

- Start: September 2010
- End: August 2015

Objectives

- An improvement of knowledge based land use management within the Okavango catchment by involving the countries Angola, Botswana and Namibia
- The application of a trans-disciplinary approach by involving relevant stakeholders on different scales
- The analysis of ecosystem functions (ESF) and services (ESS) under scenarios of global change

Milestones

- TFO-Workshop in Maun, Botswana, in October 2011
- Successful evaluation in December 2011

CONTEXT

The Okavango River originates in the Highland of Bié in Angola, touches the north-eastern part of Namibia and terminates in the world's largest inland delta in Botswana. As the region is strongly characterized by and depends on the water resources of the Okavango River, the possible changes of the climate affecting all components of the hydrological cycle and thus the lives of the people living in a region of such unique natural characteristics are of uppermost importance and interest. The interdisciplinary research project "The Future Okavango" (TFO) aims at an improvement of knowledge based land use management within the Okavango catchment.

METHODS

There is a high demand for suitable scientific contributions of improvement of land use and resource management in this region. The Okavango catchment can be considered as model region to obtain such contributions. The following questions will be addressed:

- What is the current situation by the Okavango River?
- What is the effect of land use?
- How can sustainable land use management be implemented in this region?

Different research disciplines evaluate the current problems and develop solution strategies for the Okavango catchment. In the research project 13 universities and 7 research facilities from Germany, Brazil and the African partner countries are involved.

PROJECT OVERVIEW

The task of the Climate Service Center in subproject 01 is to analyze present and future climate conditions in the Okavango basin under different emission scenarios and provide climate change data including uncertainty information to the other subprojects. Two different climate change scenarios are calculated with two global models and two regional climate models to obtain robust results of possible future climate changes. The focus of the analysis is to strengthen the understanding of the processes determining the climate of the Okavango region as well as the estimation of the uncertainty of the climate projections.

PRODUCTS

- Improved understanding of the relationship between land use, ecosystem function and climate impact
- Strategies for optimized land use and resource management under different global scenarios