

# **Project Document**

## **The Transboundary Protected Areas Research Initiative**

**A joint initiative of**

**Centre for Integrated Study of Human Dimensions of Global Change  
Carnegie Mellon University**

and

**School for the Environment  
University of the Witwatersrand**

Last updated: 1 May 03  
cis@andrew.cmu.edu

### **Introduction**

The Transboundary Protected Areas Research Initiative (the Initiative) was founded by a core partnership consisting of Carnegie Mellon University's (Pittsburgh, USA) Centre for Integrated Study of the Human Dimensions of Global Change, and the Wits School for the Environment (WiSE) of the University of the Witwatersrand (Johannesburg). Close relations and partnerships are also being developed with a number of other universities and non-governmental agencies.

The Initiative is a response to the implementation of an increasing number of transboundary protected areas (TBPAs) in southern Africa and elsewhere. Given the large number of transboundary PAs being planned or implemented at the moment, it is necessary to gain a better understanding of what such initiatives entail and what their potential impacts are on people and the environment.

Internationally the study of TBPAs is conducted mainly by large NGOs such as the IUCN and WWF. Participation of the academic sector is underdeveloped and only a small number of TBPA research initiatives are underway. Much scope exists for a rigorous academic effort to assess the issues that arise in an integrated and interdisciplinary manner .

The Initiative will accordingly conduct integrated assessments of Transboundary Protected Areas (TBPAs) in southern Africa as coupled human-environment systems, using the Great Limpopo Transfrontier Park (GLTP) as a pilot case study. Its overall objective will be to assess the sustainability of TBPAs with reference to its social, economic and environmental aspects.

Issues of sustainability stand at the forefront with a focus on local participation in TBPA and the (positive and negative) potential impacts on their livelihoods. This orientation gains added significance in a situation where cyclical droughts place the region's food production systems under periodic stress. Dislocation of local populations can result in famine and humanitarian disaster. Such pressures can produce devastating consequences also for the natural environment and has the potential to undermine the ultimate sustainability of biodiversity conservation efforts.

## **Historical background**

Over the past decade vast tracts of land throughout the world have been brought under the sway of large-scale regional planning and investment initiatives. These tended to operate across scales, traditional institutional frameworks, even territorial boundaries, and emphasised close collaboration between the state, private sector and civil society in achieving various development objectives. They thereby left new forms of governance and resource management in their wake, all of which harbour major potential impacts on local people<sup>1</sup> and their environments.

The best example in the southern African context, particularly in South Africa, is the so-called Spatial Development Initiatives (SDIs) that were implemented from the early 1990s onwards. These were large-scale development planning initiatives, characterised by highly centralised decision-making, large budgets, and consultant-driven implementation. Despite the SDIs origins in the state bureaucracy, they followed a business-like, project approach with short time frames and measurable outputs.

Orientated mainly around the development of highway infrastructure, the SDIs rapidly identified regional resources, designed agricultural, conservation or industrial projects and mobilised international private sector investment. In effect, the South African government and its neighbours were implementing homegrown World Bank-style infrastructure development programmes.

Despite their size, the SDIs went virtually unnoticed until civil society groups began to criticise the process followed and potential negative social impacts. Despite obvious environmental impacts in the case of particular SDIs, only muted critique came from the conservation sector. In large part this may have been due to a perception that the hard and fast approach to development propagated under the auspices of the SDIs, could perhaps produce equally rapid conservation results.

The approach is not new to the conservation sector, entire floral kingdoms having been targeted by integrated development initiatives<sup>2</sup>. The regional planning approach brought under its sway and also drew substantially from the Integrated Conservation and Development Programmes (ICDPs) and Community-based Natural Resource Management (CBNRM) approaches to conservation that had developed over the last decade. Despite the conceptual integration, the net effect of the ecoregional orientation of TBPA initiatives translated into a strong emphasis on technical planning, most of which took place at large scale and high levels of administrative decision-making.

The emergence of the ecoregional planning approach as a dominant paradigm in the conservation sector is analysed in Brosius (2003: in print). The central notion behind various forms of transboundary natural resource management is that ecological and human political boundaries and seldom coincide and that transboundary initiatives maximise benefits to biological diversity conservation. Ultimately such initiatives are also thought to promote efficient and rational development of a region's natural resources and therefore to promote local economic development.

Recent TBPA initiatives accordingly focused on harmonising the management of PAs that were in close proximity to one another, yet separated by international boundaries. Alternatively they aimed at linking more widely separated PAs by means of broader transboundary conservation areas (TBCAs). Planning further tended to be 'scaled up', clusters of TBPAs in one region often being linked up with similar clusters in other regions so as to create a higher order collage of protected areas.

In southern Africa a WWF/USAID/WRI survey (Van der Linde, et al. 2001) identified up to 20 potential TBPAs. Several of these are currently being implemented in processes that are driven by civil society actors such as the Peace Parks Foundation (PPF) and Conservation International that act in close collaboration with government agencies. One of the earliest TBPA initiatives in the region is that of the Great Limpopo Transfrontier Park (GLTP), comprising the Kruger National Park (South Africa), Limpopo National Park (Mozambique) and the Gonarezhou National Park (Zimbabwe).

The first steps toward the establishment of the GLTP were taken in the early 1990s with the launching of the Mozambican government's World Bank supported Transfrontier Conservation Areas programme (TFCA). At the same time the South African-based PPF began to popularise the idea of international Peace Parks, placing much emphasis on the linkage of the Kruger National Park (KNP) with protected areas in Mozambique and Zimbabwe.

By 2002 the GLTP had been formally declared. Concrete steps are currently underway to harmonise the management regimes of the KNP and the neighbouring Limpopo National Park in Mozambique. A process is also underway to include speed up the development of the far larger Great Limpopo Transfrontier Conservation Area (GLTCA) which includes the Zinave and Banyine National Parks further to the east in Mozambique.

### **Research objectives and orientation**

The Initiative will study the social and natural transformations brought about Transboundary Protected Areas (TBPAs) and related biogeographic and ecoregional planning processes. Its ultimate objective is to assess the sustainability of TBPAs with reference to both its social, economic and environmental aspects.

In consequence the Initiative will provide interdisciplinary perspectives on TBPAs as coupled human-environment systems that operate across scales and boundaries. Where

appropriate it will use Integrated Assessment (IA) methodologies to integrate different disciplinary and scalar perspectives. It will also attempt to contribute toward theoretical conceptualisations and methodological approaches to be used in TBPA settings.

The Great Limpopo Transfrontier Park (GLTP) and the larger Great Limpopo Transfrontier Conservation Area (GLTCA) will serve as pilot research project. In this regard the Initiative will provide an independent research service with the objective of making critical and constructive contributions to the policy decision-making process.

## **Research partnerships**

The core research partnership is between the CMU Centre for Integrated Study of the Human Dimensions of Global Change (the Centre) and the University of the Witwatersrand's (Wits) School of the Environment (WiSE).

- WiSE and the SAVANA-consortium:

WiSE is a member of the SAVANA-consortium, consisting also of the University of Virginia Charlottesville, University of the North (South Africa), Eduardo Mondlane University (Mozambique) and the University of Botswana. SAVANA aims at studying the bio-geophysical environment of the southern African Region, including the human dimensions and interactions. This set of partnerships represents significant capacity in the physical and natural sciences. The Initiative's network is of interest to SAVANA, because it would round off its capacities in the social sciences. Likewise, the Initiative will benefit from the data and materials generated by SAVANA.

Key party: Professor Harold Annegarn, Director of the Wits School for the Environment and South African coordinator of the SAVANA Consortium:

- The Centre for Integrated Study of Human Dimensions of Global Change:

The Centre has a number of established partners, including the University of British Columbia (Canada), University of Colorado (US), Duke University (US), Clark University (US), Harvard (US), Wesleyan University (US), and IIT-Bombay (India). Institutions involved (or potentially involved) in aspects of the Initiative include the University of Georgia, Bates College (US), University of Florida (US), and the University of East Anglia (UK). The Centre has also built a wider network of academics with an interest in TBPA's in southern Africa and other regions of the world. A listserver (TransboundaryPA-list) has been set up to facilitate communications between these.

Key party: Professor Baruch Fischhoff, Director of the Centre University Professor in the Department of Social and Decision Sciences and Department of Engineering and Public Policy.

The partnership has the following basic characteristics:

- The Centre-network with its social sciences orientation complements the biophysical orientation of the SAVANA-consortium. In this regard the objectives are to develop synergies with ongoing SAVANA research projects and to promote interdisciplinary cooperation.
- The Centre's network is organised in a manner that optimises benefits to its local partner institutions and students. In particular the network aims to contribute toward the development of local research skills, capacities and infrastructure<sup>3</sup>.
- Beyond the collaboration foreseen in this document, the Centre and SAVANA retain their identity as independent processes.

In addition to the core partnership the Initiative has developed a network of relationships with actors that are involved in the implementation of the GLTP and other transboundary PAs. These include practitioners and actors in some of the relevant government departments, Non-Government Organisations (NGOs), and aid agencies. Some agencies merely expressed an interest in research that could inform the policy decision-making process. Others are interested in collaborating more closely with specific research projects.

The Initiative is keen to maintain constructive, but critical relations with all actors involved in the GLTP and other TBPAs. As part of this effort the Initiative is collaborating with a recent initiative of the American Anthropological Association's Conservation and Community Working Group. This is a recent initiative of the AAA's Environmental Section that aims at improving communication between particularly Anthropologists and Conservation Biologists (<http://dizzy.library.arizona.edu/ej/jpe/anthenv/workinggroups.html>).

Members of the Initiative further participate in the IUCN's Commission on Environmental, Economic and Social Policy (CEESP) and are collaborating on a paper for the upcoming World Parks Congress (2003) ([iucn.org/themes/wcpa](http://iucn.org/themes/wcpa)). Closer linkages with the IUCN's recent Parks for Peace Programme are being strived at (<http://iucn.org/themes/wcpa/theme/parks/programme.htm>). In addition to this the Initiative aims to develop a comparative perspective through collaboration with research programmes in other parts of the world.

### **The pilot research phase**

The first research phase will have the Great Limpopo Transfrontier Park (GLTP) and the wider Great Limpopo Conservation Area (GLCA) as a pilot case study (Limpopo Heartland). It will last from beginning of 2003 until June 2004.

**Project organisation:**

The research will be conducted and coordinated by a Transboundary PA Research Unit based at the University of the Witwatersrand:

South African research head: Prof. Robert Thornton - Wits Department of Social Anthropology (Mail to: [thorntonr@social.wits.ac.za](mailto:thorntonr@social.wits.ac.za))

Research coordinator: Dr Conrad Steenkamp – Researcher, CMU Centre for Integrated Study of Human Dimensions of Global Change. (Mail to: [cis@andrew.cmu.edu](mailto:cis@andrew.cmu.edu))

Senior researcher: Unjinee Poonan - PhD-candidate, Wits School of Social Sciences (Mail to: [upoonan@iafrica.com](mailto:upoonan@iafrica.com))

In addition to this one postdoctoral position, two middle-level researchers and up to three junior posts have been filled.

**Research themes and projects:****a) Ecoregional planning framework**

The GLTCA represents a large-scale ecoregional planning exercise that is conducted across various scales (local to global) and boundaries by a wide range of actors. In this regard the Initiative will accordingly focus on<sup>4</sup>:

- the biogeographical characteristics of the natural landscape and how these relate to the biodiversity conservation and commercial development objectives strived at by the state, NGOs and other actors;
- the wide range of planning processes that took place/ are underway in the three countries involved;
- the nature of the linkages between these planning processes across scales.

**b) Historical vulnerabilities and adaptation of local people to climate variability, resource limitations and political ecologies**

The livelihoods of rural populations in southern Africa, particularly in the Limpopo heartland, are regarded as highly vulnerable to climate variability and change. The objective here is to view the GLTP diachronically as a coupled human-environment system. This project will be initiated in 2003 and will revolve substantially around the processing of the TEBA (The Employment Bureau of Africa) archives<sup>5</sup>.

**c) The social and economic framework with an emphasis on land ownership and land reform**

The GLTCA covers territories with contrasting land ownership and use regimes and the entire region is currently subject to rapid social and political change. The Initiative will obtain an overview of land ownership, resource use/entitlements/conflicts, and land reform processes. The subsidiary objective is to assess recursive impacts between these and the park and tourism development processes.

**d) Tourism development and community-based tourism with special reference to Community-Public-Private Partnerships**

The economic and social sustainability of the GLTP and GLTCA depends on the successful development of conservation-based tourism. Over the last decade much effort has accordingly been directed at promoting tourism development in this region while simultaneously securing benefits for local people. Tensions exist between these two imperatives in addition to which community-based tourism initiatives have experienced difficulties. The Initiative will accordingly focus on the following:

- Overview and assessment of the extent, nature and impacts of tourism development and investments in the GLTCA.
- Overview and assessment of community-based tourism initiatives launched in the GLTP area over the last decade<sup>6</sup>.
- Overview and assessment of selected CPPP (Community-Public-Private Partnerships) case studies<sup>7</sup>.

**e) Decision-making process and governance**

The Initiative aims to gain a better understanding of the nature of the GLTP decision-making process and emergent system of governance. The Initiative will accordingly focus on the following:

- Actor analysis  
Identification of the main actors involved in the GLTCA decision-making process and qualitative assessment of the linkages between these<sup>8</sup>.
- Discourse analysis  
An assessment of the discourse around the GLTCA will make it possible to identify key issues that underpin the decision making process and how various actors tried to deal with these<sup>9</sup>.
- Network analysis

A quantitative assessment of the interactions between the GLTCA/GLTP actors will make possible rigorous analysis and graphic portrayal of the decision making process. This makes it a potentially valuable tool for policy decision-making<sup>10</sup>.

## **Selected bibliography**

Van der Linde, H., Oglethorpe, J., Sandwith, T., Snelson, D., Tessema, Y., Tiega, A and Price, T., 2001. Beyond Boundaries: Transboundary Natural Resource Management in Sub-Saharan Africa. Biodiversity Support Programme. Publication number 127.

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Zbicz, D. 1999. Transfrontier Ecosystems and Internationally Adjoining Protected Areas.

(Duke University, Nicholas School of the Environment)

([www.unep-www.unep-cmc.org/protected\\_areas/transboundary/adjoining.pdf](http://www.unep-www.unep-cmc.org/protected_areas/transboundary/adjoining.pdf))

## **Useful websites:**

- Peace Parks Foundation: [www.peaceparks.org](http://www.peaceparks.org)
- African Wildlife Foundation: [www.awf.org](http://www.awf.org)
- Conservation International: [www.conservation.org](http://www.conservation.org)
- South African Department of Foreign Affairs: [www.dfa.gov.za/for-relations/multilateral/tfca.htm](http://www.dfa.gov.za/for-relations/multilateral/tfca.htm)
- South African Dept of Env. Affairs & Tourism: [www.environment.gov.za](http://www.environment.gov.za)
- South African National Parks: [www.parks-sa.co.za](http://www.parks-sa.co.za)
- Official GLTP website: [www.gkgpark.com](http://www.gkgpark.com)

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<sup>1</sup> The term “local people” is preferred to “community”, which is loaded with (often misleading) meaning and assumptions. Furthermore, in this instance the unit of analysis used, is not “communities”, but social networks.

<sup>2</sup> CAPE – Cape Action Plan for the Environment sets in place an emergency management plan for the Cape Floral Kingdom, in South Africa.

<sup>3</sup> Where feasible and appropriate this will include measures such as:

- 1) the provision of research support to local students,
- 2) exchange visits for local students,
- 3) local registration of foreign students,
- 4) contributions to overhead costs and infrastructure development.

<sup>4</sup> These questions can be dealt with under a single research project to be initiated in 2003. Given SAVANA’s extensive work on this theme, much scope exists for collaboration between natural and social scientists.

<sup>5</sup> The TEBA archives contain much information that would enable one to gain an in depth understanding of local responses to climate variability. They are also largely unused and represent a major academic project with substantial benefits. During 2003 the main focus will be to digitise the archives and make them available on the internet in cooperation with the University of Virginia’s Digital history programme. It will be possible to conduct meaningful analytical assessments of this data only by 2004.

<sup>6</sup> A large number of smaller community-tourism projects have been launched over the last decade. This includes woodcarving projects, medicinal plants nurseries, cultural villages, bush clearing projects, community-owned game drive ventures, environmental education projects, etc. These were designed and implemented by a range of actors, such as government agencies, development agencies and NGOs. Such projects tended to have a poverty alleviation and job creation orientation, but also aimed at developing the participation of rural people in the tourism industry or achieving certain specific or general conservation objectives. Often projects were based on the assumption that an increased benefit flows from conservation-based economic activities, would have the effect of improving local attitudes toward conservation as a land-use form. After more than a decade of efforts to develop local participation in the conservation industry, it will be useful to conduct an overview of projects launched during this period. The following steps will be followed:

- 1) Identification and mapping of the projects in collaboration with the implementation agencies. Basic information about individual projects will be collated (activity underway);
- 2) Identification of projects that are currently still in operation and field visits to the project areas where viable. Low-resolution assessments will be conducted (year 1);
- 3) Identification of key case studies for higher resolution studies making extensive use also of archival material where possible (year 2).

<sup>7</sup> Particularly in South Africa and Mozambique, CPPPs are considered as mechanisms that would ensure proper governance of the resource base, its economic development, and appropriate distribution of the benefits. They represent the point at which the networks (as above) engage with community-level interests and have major potential consequences for resource entitlements and governance. At this stage it would be useful to assess their impacts in this regard.

<sup>8</sup> Of specific interest are funding flows between actors. Depending on resources and person power, it could be conducted as a desktop exercise, or include more intensive archival work. It can be implemented in 2003 and will inform the proposed quantitative network analysis.

<sup>9</sup> Such an analysis will make use of published and archival material dating between the present and the early 1990s. It can be implemented in 2003 and will inform the proposed quantitative network analysis project.

<sup>10</sup> This project can be dealt with only by 2004 and will build on actor and discourse analyses conducted in the course of 2003. It depends, however, on identifying an appropriate researcher to conduct the work.