

AHEAD-GLTFCA WORKING GROUP – 5TH MEETING
Record of the 5th Meeting held on the 17-18th February, 2005
Mammal Research Institute, University of Pretoria

1. OPENING REMARKS AND WELCOME

The Chair of the meeting, Professor Johan du Toit, Director of the Mammal Research Institute, extended a warm welcome to all attending the 5th Working Group Meeting and invited the 34 participants to briefly introduce themselves. A list of participants and contact details are provided in Appendix #1. The draft meeting agenda is provided in Appendix #3.

2. INTRODUCTION AND BACKGROUND (Steve Osofsky)

Steve Osofsky, WCS Senior Policy Advisor for Wildlife Health, briefly reviewed the history of the *Animal Health for the Environment And Development (AHEAD)* initiative since its inception at the World Parks Congress in September 2003. Groups such as the IUCN Southern Africa Sustainable Use Specialist Group (SASUSG), Veterinary Specialist Group (VSG), AU-IBAR and others worked with WCS to co-organize that initial forum. Much of the material generated at the Durban meeting is available at www.wcs-ahead.org, including video of all formal talks and copies of all slide presentations given. Dr. Osofsky explained how approx. 80 participants in Durban (veterinarians, ecologists, economists, wildlife managers and other experts from Botswana, Kenya, Malawi, Mozambique, Namibia, South Africa, Tanzania, Uganda, Zambia, Zimbabwe, France, the United States, and the United Kingdom) delineated landscapes of conservation priority across Southern and East Africa with significant disease issues at the wildlife/livestock/human interface, and how the Great Limpopo TFCA emerged as the group's highest priority. The hope is that progress can be made in the GLTFCA through international and interdisciplinary collaboration, and that a successful effort here could also potentially serve as a useful model for other places facing similar challenges in Southern and East Africa, and potentially elsewhere. He briefly described the Wildlife Conservation Society's work as a not-for-profit US-based wildlife conservation organization with programs in over 50 countries. He described WCS' role in AHEAD as that of catalyst, to help support meetings like this so regional colleagues could more easily share information and work together. Steve expressed sincere thanks for the hard work and warm hospitality on the part of the MRI and Johan du Toit to make this meeting possible, and particularly thanked MRI's Elizabe Els for her organizational role and help in producing the documentation required for the meeting.

3. OVERVIEW OF AHEAD-GLTFCA CONCEPT AND DEVELOPMENTS SO FAR

(David Cumming)

A summary, using power point, of the themes and modules of the AHEAD-GLTFCA concept was presented for the benefit of those who had not been at previous Working Group Meetings (for copies of the main slides see p. 14 of "Minutes for the *Fourth* Meeting of the AHEAD-GLTFCA Working Group – June 7–8, Maputo, Mozambique¹". The last three slides of the presentation outlined existing initiatives and actors involved in the GLTFCA, the need to avoid overlap and develop synergies, potential collaborative partnership opportunities within and between the three countries involved in the GLTFCA and the "next steps" required to move the programme forward. The bullet points from that slide were as follows:

- Project concepts to be developed into full proposals

¹ Available at <http://www.wcs-ahead.org/workinggrps/limpopo.html>.

- Several gaps in concepts and potential partners to be filled
- Building a *collaborative* programme:
 - Letters of collaboration
 - Institutional legitimacy
 - MOUs
 - Committee/Steering Group
- Coordinated approaches to potential donors
- Letters of support?

Discussion points arising from the presentation were:

1. The development of institutional legitimacy and more explicit collaborative arrangements are very important and we now need to move these forward. The earlier discussions about establishing a single institutional home in one country have contributed to a growing sense that a more pluralistic approach should be pursued. These issues were to be taken up in greater depth later in the agenda.

1. Marketing the programme for funding in its entirety was likely to be difficult and while it was attractive to break it up into fundable components it was important not to lose the overall vision of the programme. It was important to keep in mind the unique features of this programme, namely that it was dealing with understanding and managing diseases and resources in large landscapes where resilience was likely to be greater. This feature could be important in directing the focus of this programme. Developing system resilience was likely to involve trade-offs and involve complex cross-scale issues. There was an urgent need to examine and answer the overarching questions that characterise and distinguish this programme from others.

2. Responsibility for the coordination of the GLTNP had now been transferred from Mozambique to Zimbabwe and the newly appointed coordinator, Ms. Matepfa, was based in Harare and Dr. Cumming would be contacting her once she had taken up office.

4. PRESENTATIONS AND UPDATES ON CONCEPTS¹

Theme #1. Overarching Conceptual framework

1. Support for the coordination and development of the AHEAD-GLTFCA Programme. (Steve Osofsky, David Cumming and Mike Kock)

Apart from components for project coordination, networking, facilitating agreements and protocols, communication and outreach, this proposal included research components to:

- i) develop conceptual models and an overarching framework to link programme themes,
- ii) complete critical reviews of existing data and conduct baseline animal health, ecological and socio-economic surveys mainly through the use of participatory rural appraisal (PRA) approaches,
- iii) establish baseline data and indicators against which to measure programme progress against objectives. It also makes provision for establishing databases, a web site for sharing of data, and facilitating the formation of a GIS facility (but see point 6 on p. 5 of these notes).

Progress: Discussions have been held with several potential donors to whom the overall programme concept and an outline concept have been submitted. This component has still to be funded.

¹ See also draft projects summary table- Appendix #2

2. Overarching conceptual framework.

It was agreed that a small group should be convened to examine the overarching conceptual framework and report back to the next meeting on this. Harry Biggs and David Cumming agreed to convene the meeting (i.e. ‘the Framework Meeting’).

Theme #2: Animal health and disease

1. Survey of BTb, FMD and brucellosis in Sengwe Communal Land, Zimbabwe (Chris Foggin, Lisa Marabini and Keith Dutlow) (*Theme 2a- Epidemiological studies*)

Progress: The project has started with support from Peace Parks Foundation and 800 cattle were tested for BTb during November- December, 2004 and blood samples were taken from each animal for later analyses. A second survey will begin in March 2005 with the intention of examining a further 1200 cattle. The skin tests carried out so far have not revealed any positive cases of BTb. Blood samples were taken from all animals examined and have still to be processed.

2. Status of BTb, FMD and brucellosis in Limpopo National Park. Carlos Pereira and Cobus Raath (being funded by PPF) (*Theme 2a – Epidemiological studies*)

Conduct a serological survey BTb, FMD and brucellosis that covers all of the villages in the Limpopo National Park. This would form a complementary study to that in the Sengwe Communal Land in Zimbabwe.

Progress: Some fifty percent of the animals in an isolated herd of buffalo in the LNP was tested for BTb and but no positive cases were found.

Discussion: It was asked if malignant catarrhal fever (MCF) was missing from the list of diseases to be examined. It has been a problem in South Africa and the Shashe-Limpopo TFCA where cattle and wildebeest have come into contact but has not been a problem in the Limpopo NP yet. It was pointed out that MCF is on the list of diseases of concern compiled within the March 2004 “**Sustaining animal health and ecosystem services in large landscapes – 2nd Draft** – Concept for a programme to address wildlife, livestock and related human and ecosystem health issues in the Greater Limpopo Transfrontier Conservation Area,” (see p. 11) which has been made available in hard copy at this and previous Working Group meetings, and is on the AHEAD website at http://www.wcs-ahead.org/workinggrps_limpopo.html.

3. Serological studies of FMD, etc. in wild and domestic ungulates in the GLTFCA – Wilna Vosloo, Anita Michel *et al.*

Determine the distribution of FMD SAT1, 2 and 3 topotypes, *Theileria* spp., trypanosomes, *Brucella*, and BTb in the GLTFCA and determine levels of herd immunity (serological study) to FMD (SAT types) of cattle in and around the GLTFCA. This will involve the following activities:

1. Gather clinical material from the buffalo in the KNP, Gonarezhou and Limpopo NP to determine the following (helicopter time may be needed):
 - Serological survey to determine the prevalence of FMD SAT-1, SAT-2 and SAT-3 infection in buffalo
 - Virus isolation from probangs to perform phylogenetic analysis and determine the distribution of topotypes of SAT serotypes
 - Survey using skin tests and the gamma-interferon test to determine the prevalence of BTb infection
 - Bacterial isolation from killed infected animals and fingerprinting of isolates to compare the BTb strains
 - Serological and molecular biological (PCR and DNA probes) survey to determine the prevalence of various *Theileria* species in buffalo.
2. Gather sera from domestic animals in the study area:

- Serological survey to determine the FMD prevalence and herd immunity in vaccinated areas (excluding the areas bordering the KNP in SA as this will be done via other efforts)
- Survey to determine the BTb prevalence in domestic animals in the study area, etc.
- Surveillance to determine prevalence of tick-borne diseases in the study area

Progress: Some of the above studies are underway, and work on the proposal is ongoing and the concept could be submitted to donors. There have been several outbreaks of African swine fever in Mozambique that may be linked to the recent donor support for the development of piggeries, and a related proposal to provide information and training for farmers has been developed and a grant from Wellcome to examine ASF and carry out some surveillance has been secured.

4. Tuberculosis caused by *Mycobacterium bovis* in wildlife-livestock-human interface of the GLTFCA – Anita Michel

Possible reasons for the lack of prevalence data on zoonotic tuberculosis in Southern Africa may lie in the limitation of diagnostic procedures which do not permit the differentiation between *M. tuberculosis* and *M. bovis* on the one hand and an insufficient provision of primary health care services on the other hand.

Aim and Objectives. It is the aim of this proposal to study the following factors which are believed to contribute to an increased risk of zoonotic tuberculosis in the wildlife-livestock-human interface:

- Prevalence of *M. bovis* in wild maintenance host populations (buffalo, greater kudu)
- Prevalence of *M. bovis* in communal cattle herds in the interface
- Prevalence of *M. bovis* among high risk human population in the interface
- Genetic relationship between *M. bovis* isolates from wildlife, cattle and humans in the interface (by genetic typing)
- Influence of socio-economic factors on the risk of zoonotic tuberculosis
- Association between HIV status and zoonotic tuberculosis.

Progress: Funding has still to be secured. A proposal to Wellcome was not funded. The zoonotic aspects of BTb have been completely ignored and levels of human infection not known because existing tests do not distinguish between human TB and BTb with the result that surveillance in humans is a problem. The zoonotic aspects are important and BTb has been important in central Europe, for example.

5. Pathology services for the GLTFCA – Emily Lane

To better understand the relationships between animal and human health a detailed pathology diagnostic service is needed for the Greater Limpopo Transfrontier Conservation Area (GLTFCA). Routine monitoring of the cause of death and disease in free ranging and domestic animals, and the storage of information and samples, would provide the basis for focused research on the connections between human and animal diseases, as well as epidemiological studies on the links between disease and habitat health.

Detailed investigations of any animal deaths that occur within the GLTFCA present an opportunity to gather valuable information on the occurrence and distribution of diseases. Personnel identified by the various role players in wildlife and domestic animal health would be trained to carry out necropsy examinations and tissue collection in the field as well as to record detailed epidemiological and environmental information for each case, including the GPS co-ordinates of the site of death. Histological examinations will take place in Pretoria. Where necessary, further diagnostic tests such as bacteriology, virology, toxicology and molecular diagnostics will be done, using the diagnostic capacities of various laboratories in South Africa or the region. All samples from this program will be stored for use in future research programs. In addition, all cases will be catalogued in an electronic database to facilitate analysis of causes of death and diseases diagnosed along with locality and associated environmental information.

Progress: A full proposal has been developed and will be submitted through EWT to potential donors. There is also the potential to establish mutually beneficial links with the BioBank SA project which can provide storage facilities as well as with National Zoological Gardens.

6. Development of strategic operational plans (SOPs) for key diseases in the GLTFCA – Cobus Raath (*Theme 2c – Preventative/proactive measures in disease control and management*)

There is a need for greater preparedness for joint action by the three countries involved in the GLTFCA in relation to critical diseases outbreaks. One way to achieve this is to develop strategic operational plans for each of the priority animal diseases that may need rapid and coordinated attention in the event of an outbreak. The development of formal SOPs will also help to define research and management priorities.

Progress: The PPF Stellenbosch GIS unit had high resolution maps made that would be linked to a variety of databases on landuse, diseases, parasites, wildlife distributions, settlement, etc. that were a necessary precursor to the development of SOPs. The intention was that these would be dynamic data sets providing “living atlases” and be available to the AHEAD-GLTFCA Working Group to add to and to use (web access for the working group and others is pending). Additional data sets from South Africa, Mozambique and Zimbabwe were being sought. It was noted that Graeme Cumming had produced a dataset of tick-host records for Africa that was available on his website at the University of Florida, and there was a database on diseases for Mozambique that Carlos Pereira and his unit had assembled over the last four years.

7. Theoretical studies (Theme #2(d)) – concept notes by Paul Cross and Graeme Cumming.

Both of these concepts (elaborated in documents from the 4th Meeting and available on the AHEAD website) needed to be followed through. Paul Cross has now taken a position in the USA but was happy for someone to follow up on his ideas.

Theme #3 Landuse, ecosystem goods and services and animal health

1. Potential public health implications and recommendations for public health improvements in relation to the creation of the GLTFCA – Greg Simpson (*Theme #3d Linkages between animal and human health*)

The establishment of the GLTFCA is likely to increase the interaction between wildlife, livestock and humans which will in turn pose challenges for management and disease control. The public health implications of the development of the GLTFCA have been neglected and research in this field will be important for this and related initiatives. The proposed research will involve a review of published and unpublished literature, key person interviews, participatory rural appraisals with rural communities in the GLTFCA and an analysis of potential public health implications arising from the TFCA’s development.

Discussion: There was a need to capture data on the nutritional status and condition of people, particularly children, living in the TFCA as an index of health. There were simple standard measures that could be repeated and provide a basis for ongoing monitoring using village clinics. The very comprehensive Agincourt data base for areas adjacent to Kruger should be considered.

2. Methods of animal husbandry or stockmanship adopted by rural communities in the GLTFCA and relationships between these methods and predation as well as disease transmission – Mike Kock (*Theme #3e - understanding animal husbandry practices*)

Poor rural communities living adjacent to wildlife rich areas face depredations by wildlife (e.g. elephant, lion, leopard, wild dog, hyaena, jackal, and others) on their crops and livestock and the risk of disease transmission from wildlife to livestock and risks to themselves. The establishment of the GLTFCA will clearly provide many challenges in terms of conflict between wildlife and rural communities across a diverse and changing landscape.

This study will examine existing levels of wildlife/livestock conflict in relation to existing animal husbandry practices across a range of communities and conflict situations in the GLTFCA, with a view to the participatory development of innovative animal husbandry and livestock management practices to mitigate wildlife/livestock conflict and disease transmission. Experience and mitigation measures developed elsewhere in the region will be reviewed and their potential use in the GLTFCA evaluated.

Progress and discussion: Full project proposal still to be developed. Predators are an important factor in livestock loss and human-wildlife conflict and thus are of course a significant issue at the wildlife-human interface. There was also a need to go beyond analysis of the problem to designing suitable interventions and providing communities with information and understanding of the relationships between disease, animal husbandry and disease control.

Theme #4 Human livelihoods, animal health and ecosystem goods and services

1. Local level scenario planning, iterative assessment and adaptive management – Centre for Applied Social Sciences (CASS) (Marshall Murphree and Phanel Mugabe). (*Theme # 4a – Scenario planning and participatory exploration of landuse options*)

This project aims to develop scenario planning and modeling at local community and village levels and to develop approaches and methodology for “local adaptive scenario planning” over a period of at least 5 yr. A sequential process is proposed that can be summarized as follows: scenario modeling → scenario planning → implementation (experimentation) → analysis/assessment → adaptation → iteration.

Progress and discussion: The discussion highlighted the importance of this project, and the hopes to get it underway shortly.

2. Regional level landuse planning and a biosphere reserve concept in SE Zimbabwe – WWF-SARPO - Raoul du Toit

The South East Lowveld region of Zimbabwe cover about 50,000 km² and comprised a complex juxtaposition of differing land uses and tenure systems. A key constraint to the development of appropriate extensive animal production systems that include both wildlife and livestock is the positioning of veterinary disease control zones and fences. The principles embodied in planning biosphere reserves, if applied to this to this region, may help to resolve many of the existing landuse and land tenure conflicts and pave the way for a more productive (and sustainable) use of the natural resources of the region while at the same time increase environmental and livelihood security of the people living in the region. This project seeks to explore the options for establishing a biosphere reserve and conducting the necessary participatory framework to examine landuse options and tradeoffs involved by all stakeholders in the region.

Progress and discussion: A study of the placement of fences in the SEL is due to be carried out in May with support from CIRAD.

Theme #5: Policy support and capacity building

1. Policy development on animal health and linkages between animal, human and ecosystem health – Steve Osofsky, David Cumming and Mike Kock

Activities:

1. Review of current policy and practice in each country in relation to management and control of animal diseases and zoonoses.
2. Convene seminars and workshops involving researchers and those involved in national and regional disease control policy formulation in relation to the GLTFCA.

3. Facilitate and support training workshops and/or short courses in policy analysis and development.
4. Publish results of reviews and training materials developed.

There are several key areas of debate, and therefore of policy, relating to animal disease control in the GLTFCA area. One of the more contentious is that of fences. The construction and location of veterinary (disease control) fences and their associated impacts on wildlife and land use options has long been a major area of debate and dispute in southern Africa. The policy debate needs to move from contests between sectors (e.g. wildlife versus livestock) and the situation where single resource decisions incur multiple resource consequences, to a more holistic consideration of the full range of social, economic and environmental impacts and trade-offs accompanying the construction (or removal) of fences in larger landscapes. We expect to generate a more informed debate on disease control strategies and related land-use issues at the interface between wildlife, livestock and human health and ecosystem integrity through the results of research and policy reviews, and an accompanying series of interdisciplinary seminars and workshops. These seminars will also inform the development of the longer term research programme of key areas of contention and gaps in knowledge and understanding.

Theme #6: Communications and Outreach

1. Effective linkages and communications between resource managers, researchers and organisations operating in the GLTFCA initiated - Cumming, Osofsky and Kock

Activities:

1. Convene appropriate meetings and workshops to inform and involve / seek input from key rural communities, researchers and agency officials in program planning, and to inform all parties of research progress and results.
2. Establish linkages with other projects and related programmes that help disseminate information and implement findings / results.
3. Establish and actively maintain programme website to ensure accessibility of results and information that needs to be in the public domain. The web site should also include a “member’s area” and document database.

Effective communications and outreach will be vital to the success of the project and to its longer term aims and is, of course, very closely linked to the previous outputs. One of the major aims, therefore, is to create a support system and enabling environment so that those involved with the project and the GLTFCA within the three countries can continue to meet, exchange ideas, and benefit from each other’s technical expertise.

5. DONOR AND PRIVATE SECTOR PERSPECTIVES

In a wide ranging discussion of the programme the following main points were either raised or made:

1. What is not clear from the documentation that is available is where the programme fits within the overall development of the TFCA. It may help to give this aspect more careful thought and to clarify just how it may contribute to the overall development of the TFCA.
2. There is a need to examine, or at least consider, what the economic costs of disease outbreaks in the TFCA might be and what impacts disease and human health issues may have on the development of the TFCA. Associated with this analysis is the need to consider risks to human health and development and move beyond the mainly conservation concerns of the TFCA initiative. From an agriculture perspective, the costs of FMD outbreaks for SA, for example, could be enormous.

3. The programme has been marketed as a package and it may be too big and too complex to do so- at least with most potential donors. A more effective tactic may be to market components of it separately while ensuring that the overall framework and conceptual links are maintained.
4. There are marked disparities in development and resources between the countries involved which may influence what can be achieved both in terms of understanding and subsequent influence on development.
5. The economic implications of the diseases involved in the TFCA for national economies and global markets and what might be the implications of the proposed research programmes on these issues?
6. The AHEAD-GLTFCA programme has some features in common with the SAEON model and it would be useful to look at the development of that programme.
7. The Department of Environmental Affairs and Tourism (DEAT) in South Africa has established a Directorate responsible for TFCAs and is linked to SANParks. The Directorate is accordingly interested in the AHEAD-GLTFCA initiative.

6. ENGAGING THE PUBLIC HEALTH SECTOR (Mike Kock)

The session was opened by Mike Kock with a brief power point presentation emphasizing the need for an interdisciplinary, “one health” approach and the importance of balancing needs and expectations. This was followed by a presentation from Neil Cameron which outlined changing approaches to community health and the shift to primary health care which included communities in planning health services. Greg Simpson suggested that there may be a need to go beyond zoonotic issues to attract funding.

In the ensuing discussion the following points were made:

- The first step is to establish the priorities and to use these as stepping-stones to other issues. On the wildlife/livestock issues priorities would be spelt out by the JMB.
- The AHEAD-GLTFCA programme will not be able to tackle the primary health status of the GLTFCA region but it can contribute to improved knowledge and understanding of the problems by examining the influence of such factors as animal and ecosystem health on human wellbeing.
- The key feature of the AHEAD-GLTFCA programme that distinguished it from other programmes was that it was concerned with the linkages between systems rather than with one or another aspect of particular health programmes or systems.
- While it is tempting to try and link funding to malaria or HIV this would in many cases be disingenuous in relation to the stated objectives and focus of the programme. Zoonotic diseases like BTb and their relationship with HIV/AIDS may represent a *bona fide* area of overlap. There is nevertheless a need to engage with researchers and practitioners in the human health field to build the linkages between animal and ecosystem health and human wellbeing.

7. REPORT BACK ON APPROACHES TO DONORS & PROJECT DEVELOPMENT

(Steve Osofsky)

Steve Osofsky outlined the approaches that had already been made to donors. He had concentrated on seeking funds for the overall coordination of the project rather than funding for individual projects within the programme. Potential donors that had been approached so far:

Examples of Foundations, Agencies & Companies approached that said “No” or which have been unresponsive:

Wellcome Trust
 Charles Stewart Mott
 The Oak Foundation
 The Vidda Foundation
 The McKnight Foundation
 Levi Strauss & Co.
 Eastman Kodak
 Schering-Plough (South Africa)

Potential Donor Partners on which to focus

(many in various stages of communications with participants in AHEAD-GLTFCA initiative):

De Beers (Sustainable Development Programme)
 UNEP GEF UNDP GEF?
 World Bank (Mozambique)
 W. K. Kellogg Foundation (Pretoria)
 Ford Foundation (Johannesburg)
 Heinz Foundation(s), Turner
 CIRAD, KfW, GTZ, Netherlands, Norway, Sweden, Japan, Canada, **DFID (in future)**
 U.S. Dept. of State
 USAID (South Africa, Zimbabwe, Mozambique, RCSA)
 Darwin Foundation? EU?
 Safari Club? Rockefeller?

DON'T FORGET PRIVATE SECTOR!!

A constraint within WCS was that if a major project had already been submitted to, or was being negotiated with a particular foundation, then they could not be approached with another proposal from within WCS. A major constraint when presenting the AHEAD GLTFCA initiative to donors was the lack of a more formal agreement between members of the working group.

In a second session on this topic Steve Osofsky handed out a UNEP/GEF AHEAD GLTFCA concept paper and took the working group through the requirements and work needed to develop a full proposal for major funding agencies such as GEF. UNEP/GEF has expressed interest in a proposal from AHEAD GLTFCA, and the group later agreed this was worth pursuing (see ahead).

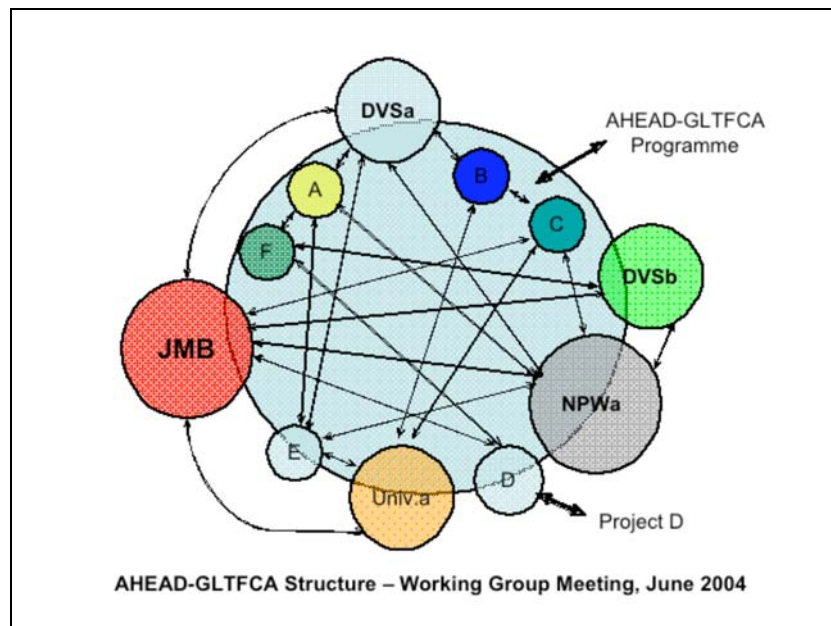
8. INSTITUTIONAL DEVELOPMENT (David Cumming)

The session opened with a brief presentation of some of the key issues and possible institutional structures that might be considered by the Working Group. The alternatives outlined are shown in the following slides.

AHEAD-GLTFCA: Institutional Arrangements

Building a collaborative research programme

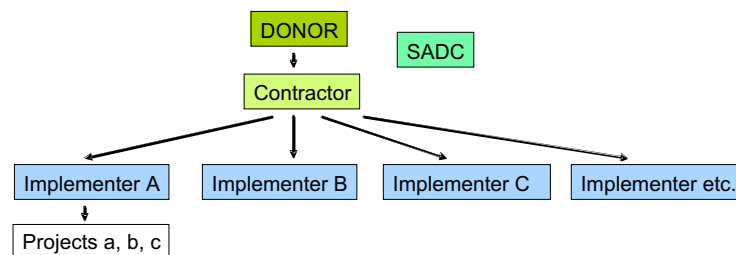
- Collaborative Group
 - ⌘ Joint letter of intent to collaborate
 - ⌘ Simple MOU signed by collaborating agencies to form a collaborative alliance/partnership to cooperate in a particular research programme.
 - ⌘ Signatories retain individual identity in financial and administrative arrangements and in the receipt and disbursement of funds

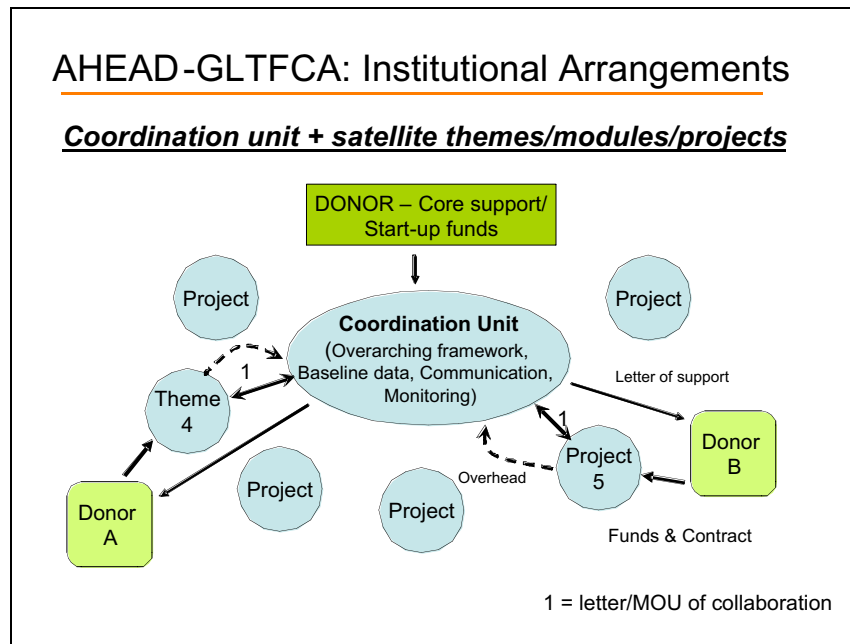


AHEAD-GLTFCA: Institutional Arrangements

Contractual implementing partnerships with Donor(s)

- Implementing Consortium
 - ⌘ Lead contracting/lead agency with donor (Institutional home?)
 - ⌘ Implementing partners – formal contractual MOUs with lead agency to implement selected programme components





The above slide was the result of a discussion held during the previous afternoon and developed from a structure outlined by Sebastien Le Bel that could build in a measure of sustainable core funding for coordination of the programme.



Other institutional/administrative models discussed were those of the IUCN Southern African Sustainable Use Specialist Group, The Kruger Rivers Programme, the SAEON programme and the institutional arrangements established for the SADC Regional Programme for Rhino Conservation. The latter was outlined in a short power point presentation by Raoul du Toit. The slides were as follows:



STRATEGY

Goal (long term):
Optimize human well-being and natural biodiversity through better understanding of the wildlife-livestock-human disease interface within major southern African ecosystems.

Objective (five year):
Achieve significant input to land-use policies and planning within major Southern African TFCA landscapes through the collection, analysis, and communication of data and perceptions on the wildlife-livestock-human disease interface.

Output 1: An overarching conceptual model developed....
Activity 1.1: Give David Cumming some whiskey and a flipchart....

Output 2: Current distribution and threat of the major diseases at the wildlife-livestock-human disease interface assessed....
Activity 2.1: Put Wilna to work.....
Activity 2.2: Put Anita to work....

STRATEGY MUST BE REFERENCED TO SADC PRIORITIES

SADC Treaty and Declaration (Chapter 3, Article 5);

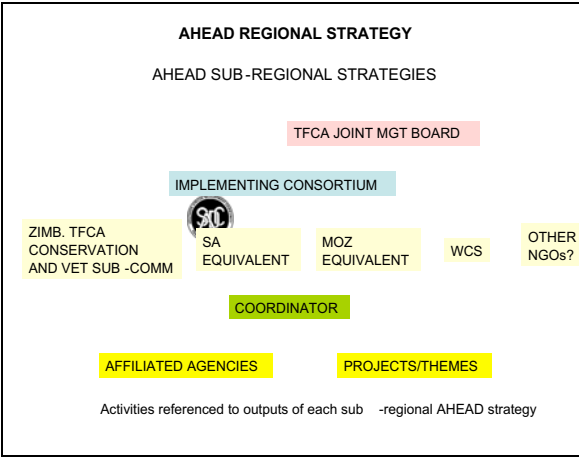
SADC Protocol on Wildlife Conservation and Law Enforcement (and the Implementation Plan for this Protocol);

the SADC Regional Indicative Strategic Development Plan (RISDP).

Protocol on Wildlife Conservation
Article 3 (Principles) Sub -article 2 (b) and (c);
Article 7(Wildlife Mgt Programmes)
Sub-articles 1, 3 (b), 4 (b) and Sub -article 7 (a) and (b)
gives a regional policy framework for co -operation in wildlife issues

5. States Parties shall, as appropriate, establish programmes and enter into agreements:
a) to promote the co-operative management of shared wildlife resources and wildlife habitats across international borders; and
b) to promote co-operative management, the conservation of species and populations and the marketing of their products.

RISDP document
Chapter 4 Sub -chapter 4.7 (Environment & Sustainable Development)
Paras 4.7.3, 4.7.4 and 4.7.5; Sub -chapter 4.12 (Sustainable Food Security)



In the ensuing discussion the following points were raised:

- It was noted that both SADC and JMB support was needed but that JMB involvement was the most critical.
- The question of including other TFCAs, such as the Shashe-Limpopo was raised in the context that the GLTFCA-JMB did not cover the Shashe-Limpopo.
- Effective links with SADC could provide an opening to the region.
- NEPAD was also discussed.

- A consensus was reached on the need to establish institutional *legitimacy* for the programme by establishing links between the working group and the JMB and SADC. Links with the JMB had in effect been established and many members of the working group were members of the Conservation and Veterinary sub-committee of the GLTFCA-JMB. The *collaborative* arrangements for the programme would remain flexible with a simple Letter of Understanding, at least initially, providing the basis for establishing a more formal link between agencies involved in the programme and potential donors. The understanding reached on this is summarized in the diagram below (Fig.1).

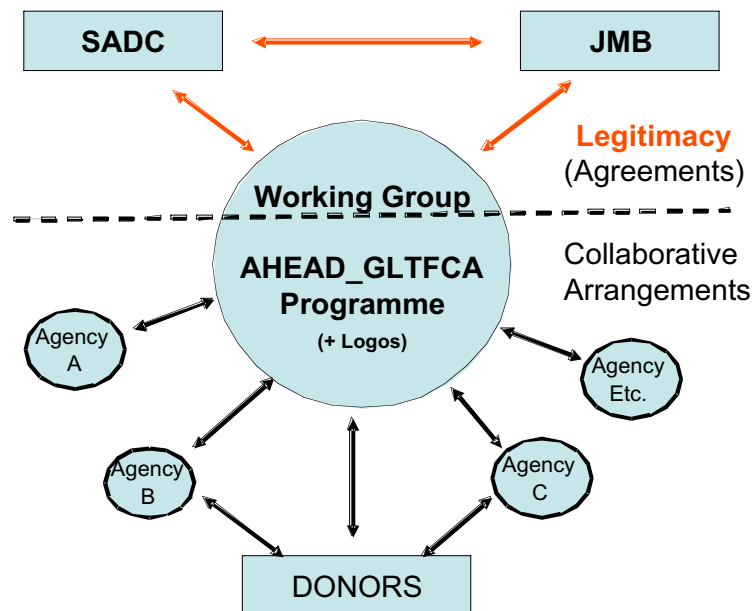


Fig. 1. Diagram showing the agreed structure for the AHEAD-GLTFCA programme

9. DISCUSSION ON PROJECTS

Following agreement on institutional arrangements there was a general discussion on projects in which the following main points emerging:

1. The scenario planning project being developed by INR and CASS may have links to the work being done in the TFCFA by TPARI and this needed to be explored. The question also raised the broader issue of linkages between projects within the programme and how best to develop potential links and synergy.
2. The development of a proposal to UNEP/GEF was discussed at some length and it was noted that the following needed to be attended to:
 - a. Contacts with and approaches to the GEF focal points in each country would need to be made.
 - b. It was agreed that WCS would follow through on developing (with help from the working group!) and submitting the proposal and could be the institutional contractor
 - c. The potential for using matching funds from some donors to WCS was examined. It was clear that if PPF (as a local NGO) were prepared to contribute to a component of the programme (e.g. the core funding) WCS had the facility, through some of its donors, to contribute the equivalent amount in matching funds. Steve Osofsky and Cobus Raath were asked to follow up on this option.

- d. Existing projects and their relationship to the AHEAD-GLTFCA programme were discussed. It was agreed that a full inventory of existing planned work needed to be available for the information of all involved in the GLTFCA region. Project linkages within the AHEAD-GLTFCA programme needed to be clarified.
- e. The programme has not yet engaged with resource economists and this gap needed to be rectified. Biggs and Cumming were tasked with following up on this.

10. NEXT STEPS, ACTIONS AND RESPONSIBILITIES (David Cumming)

The following action points were listed as next steps and then incorporated into the table below with responsibilities and time lines.

1. Follow through on GEF – UNEP Proposal
2. WCS and PPF linkages on matching funds to be explored
3. Listing of existing projects
4. Examine and think through project linkages with the programme
5. Engage Resource economists and public sector
6. Collaborative arrangements
 - a) Draft collaborative letter
 - b) Strategy and objectives tree of 2-3 pages
 - c) Signatures to the letter of agreement
7. Legitimacy
 - approaches to JMB and perhaps attend and brief next JMB meeting
 - Approaches to SADC
8. Framework group (sub-group) flesh out the overarching framework and models of systems dynamics and drivers and public health linkages
9. Steering Group - not needed but keep it in mind
10. Next meeting – aim for July, and decide on venue later potentially Zimbabwe.

And actions responsibilities and time lines are summarized in Table 1 below

Table 1. Summary of actions, responsibilities and deadlines.

Action #	What has to be done	Who	By When
1. UNEP-GEF proposal	a) Call UNEP and clarify if they are still interested in a proposal and what form the letters of support from the focal points should take b) Contacts and meetings with country focal points - Zw - SA - Mz	Steve O DC DP & DEAT CP & BS	7 March Depends on letters of Understanding
2. WCS/PPF	Discussions on linkages between WCS and PPF	SO & CR	Immediately
3. Project lists	Inventory of ongoing projects - SA - Mz - Zw	MK CP DC	31 March
4. Projects linkages	Initial draft of project linkages between themes, modules and projects with the programme	DC	30 April
5. Engaging economists & public health sect.	Establish contacts/engage economists in the programme Establish contacts/engage public health specialists in the programme	DC GS & NC	
6. Letter of Collaboration	a) Initial draft letter b) Strategy outline and objectives tree c) Signatures to letter of collaboration	DC DC and RdT WG Members	31 March ?
7. Issue of Legitimacy	a) Establish links with JMB and new coordinator b) Attend and brief JMB meeting on AHEAD-GLTFCA pgm. c) Establish/maintain contact with SADC - Continue correspondence etc. with Dr. Mtei - Establish links through JMB - TREP/CASS- recognized SADC project- link AHEAD GLTFCA that way? d) Brief IUCN-ROSA on the programme	DC DC DC	
8. Develop an initial Conceptual framework	Convene a small sub-group and meeting to examine and develop an initial conceptual framework for the program	DC & HB	May-June
9. Next meeting	Convene next meeting - Zw if possible	DC/SO	July

APPENDICES

APPENDIX #1: LIST OF PARTICIPANTS

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APPENDIX #2: DRAFT PROJECTS SUMMARY TABLE

AHEAD-GLTFCA – Programme: Outline of Themes and Modules and summary of concepts being developed or suggested – 18 February, 2005 draft

Theme	Module	Potential research proposal/Activity	Lead Agency/ person respon.	Status	Potential Donor
#1 <i>Overarching conceptual framework to facilitate integrated and inter-disciplinary approaches</i>	a) Coordination and project start up	1. Support for the coordination and development of the AHEAD-GLTFCA programme	WCS/ Osofsky	Outline proposals developed	
	b) Development of inter-disciplinary frameworks and models	1. Develop conceptual models to link the six programme themes through a series of meetings/workshops involving full range of researchers/disciplines and stakeholders in the GLTFCA (Start with a model asap – one day session of a few people?)	WCS/CASS Cumming	Proposal and budgets developed	
		2. Furthering TFCA scholarship (open for further discussion) ? NSF grants, Ford Foundation support to MSc. Students,, UCN/PLAAS short course . TPARI. Scholarship funding? Pick up on baseline indicators	CASS Inst. Nat. Res. Centre Environ. & Development.	Initial note from CASS	
	c) Baseline indicators	1. Participatory surveys of animal and human diseases, livelihoods and socio-economic baseline data in communal areas of the GLTFCA (Part of module 1(a)1?)	?	Initial concept and budget by WCS	
#2 <i>Animal health and disease</i>	a) Epidemiological studies	1. BTb, FMD and Brucellosis in Sengwe Communal Land Zw.	Vet Wildl. Unit, Zw/ Foggin	Started	PPF
		2. Status of BTb, FMD and Brucellosis in Limpopo National Park Will be done this year	DINAP/Pereira and Raath	Initial note	PPF
		Kruger			
		3. Serological studies of FMD, etc. in wild and domestic ungulates in the GLTFCA (Links to Theme #4 need to be built in and be explicit) and link to development NGO?)	OVI Vosloo et al. Will be revisited	Project concept	
		4. BTb and zoonotic implications	OVI / Michel	Project Concept Needs further development	
		5. Coordinating pathological data/sample analyses in GIS database	Lane	Project Proposal developed	
		6. Monitoring of tsetse in TFCA	Potgieter		
		7. BTb data base from MRI work			
	b) Alternative animal health management and disease control strategies	NOTE: No concepts yet Primary health care measures, Cultural practices and indigenous knowledge, links with epidemiological studies, community based strategies			
	c) Preventative/proactive measures in disease control and management	7. SOPs/Contingency plans/Risk assessments/Scenarios for priority diseases (e.g. Distemper) as a way of helping to define research and management priorities. (?Alien invasions!) – links to National Depts., Joint MB – Vet & Wildl. Committee	Raath Starting with baseline GIS work and developing a template		
	d) Theoretical/fundamental studies (Needs further development in terms of key or strategic additional studies/ideas)	1. Examining the relationship between social structure and the spread of diseases in ungulates and viverrids using modeling approaches and empirical data from general sampling of disease presence in a range of species in these groups. (also question of <i>Brucella</i> in small ungulates)	Cross MRI/UCB	Initial note- Cross can not continue (new job)	NSF

Theme	Module	Potential research proposal/Activity	Lead Agency/ person respon.	Status	Potential Donor
		2. Spatial models of disease risk between KNP and Mozambique using village livestock and wildlife densities and also examining the risks of diseases spreading from dogs to wild carnivores	Cross	Initial note- Cross cannot continue (new job)	NSF
		3. Study of tick-host-pathogen ecology at several spatial and temporal scales involving wild and domestic ungulates and humans. A key area of focus would be on determining thresholds of transmission and how these may vary under differing management regimes.	Cumming GS WEC/UFL	Initial note	
#3 <i>Landuse, ecosystem goods and services & animal health</i>	a) Spatial and temporal relationships between ecosystem processes and disease prevalence	NOTE: No concepts yet Requires remote sensing studies linked to epidemiological work in Theme #2 Climate change and cycles in relation to disease spread and prevalence			
	b) Landscape level resource use and impacts by wild and domestic ungulates on ecosystem goods & services	NOTE: No concepts yet Requires remote sensing studies and detailed ground survey work at appropriate scales e.g. impacts of elephant damage, overgrazing, trampling on run off, nutrients, water, non timber forest products	INR?		
	c) Effects of landuse scale and pattern on animal health	NOTE: No concepts yet Requires links between 3a & b and 2a. What minimum sets of data are needed?			
	d) Linkages between animal and human health	1. Disease risk assessment of people living in villages in the TFCA	Follow up on LNP Survey by Raath and Pereira	?	
		2. What happens when fences are taken down in the wake of dispersal of wildlife from NP and vice versa for livestock dispersal (also linked to water distribution)?			
		3. Public health implications of establishing the GLTFCA	Simpson	Proposal	
e) Understanding animal husbandry practices	1. Role of livestock in household production, community differentiation, collective management and institutional factors affecting these	INR Brigid Letty	Being reworked		
		2. Mike's concept + ARC projects and related projects			
#4 <i>Human livelihoods, animal health and ecosystem goods & services (Ecosystem health)</i>	a) Scenario planning and participatory exploration of land use options	1. Scenario planning and modeling at local community and village levels and developing approaches and methodology for "local adaptive scenario planning" – a 5 yr programme at least.	CASS + INR Mugabe & Murphree MJ +MW	Proposal	
		2. Issues of larger scale landuse planning, placement/removal of fences etc. (Biosphere Reserve concept for SEL of Zimbabwe?) (Need for spatial info. and remote sensing data/interpretation)	WWF-SARPO R. du Toit	Feasibility study in May 05	
	b) trade offs between alternative landuse enterprises	NOTE: No concepts yet but could form part 4(a)2 above on biosphere reserve concept			
	c) Effects of alternative policies on development, adaptability and resilience	NOTE: No concepts yet			

Theme	Module	Potential research proposal/Activity	Lead Agency/ person respon.	Status	Potential Donor
#5 <i>Policy support and capacity building</i>	a) Support for policy development on animal health and linkages between animal and human health and ecosystems	Reviews of existing policy, seminars and training workshops in policy analysis	?	Initial concept and budget developed by WCS	
	b) Exploring consequences of alternative policies using scenarios	See 5(a)1 above Scenario planning workshops Urgent need in Zw – scenarios and use of scenes from remote sensing	INR Mike Murphree RdT and MM		
	c) Capacity building in policy analysis	See 5(a)1 above			
#6 <i>Communications and outreach</i>	a) Communication between research workers and agencies engaged in the programme	Series of workshops and seminars	WCS (See also Theme #1)	Concept and budget developed	
	b) Information flow between scientists and Govt. and implementing agencies and policy making agencies	Workshops and seminars and meetings Development of website and database for results.	WCS & CASS PPF GIS initiative		
	c) Participation of landowners, communal farmers etc. in the programme & information flow	NOTE: No specific concepts yet			
	d) Production and distribution of research results, syntheses, policy briefs, etc	NOTE: No specific concepts yet			
	e) Community and Village outreach including theatre linked to PRA	Transfer of information and research findings to communities and feedback on their views, perceptions and needs	Kock & Theatre for Africa + INR	Concept note	

APPENDIX #3: DRAFT MEETING AGENDA**5th AHEAD-GLTFCA Working Group Meeting****17 – 18th February, Mammal Research Institute, University of Pretoria****Venue: *Economic and Management Science Graduate Centre, UP***

NOTE: *Invitees from the donor community / private sector are welcome to attend the entire meeting. However, the sessions likely to be of most relevance to them have been scheduled for Thursday morning.*

Day One: Thursday 17th February

- 0830 Welcome** (J. du Toit)
- 0840 Introductions
- 0850 Introduction to *AHEAD* and background (S. Osofsky)
- 0905 Overview of *AHEAD* – GLTFCA initiative, and concept development so far (D. Cumming)
- 0930 Brief presentations / updates by proponents of concepts submitted so far and discussion (Facilitator: Cumming)
- 1030 Tea/Coffee break**
- 1100 Continuation of brief presentations / updates by proponents of concepts submitted so far and gaps to be filled (Facilitator: Cumming)
- 1200 Comments / perspectives from the donor community / other potential partners and discussion
- 1300 Lunch**
- 1400 Ideas on more strongly engaging the Public Health Sector (Facilitator: M. Kock)
- 1430 Report back on approaches to donors, discussion on project and programme funding – including group feedback on revisiting the need for an *AHEAD-GLTFCA* Steering Group (Facilitator: Osofsky)
- 1515 Tea/Coffee break**
- 1530 UNEP GEF – example of a possible source of support and what would be involved (Facilitator: Osofsky)
- 1630 Brief review of progress, outline of tomorrow’s programme and break for evening (Cumming)

Day Two: Friday 18th February

- 0830 Project proposal development** and cultivating specific donor partnerships for the overall *AHEAD* – GLTFCA Programme, “who wants to do what and when” (Facilitators: Cumming / Osofsky)
- 0915 Breakout Groups (by country, theme, or donor partner?) to delineate plans for linking the overall programme and /or specific modules and projects to compatible potential donor partners.
- 1030 Tea/Coffee break**
- 1045 Report back from breakout groups
- 1130 Institutional commitments to the programme: if / how to finalise “letters of collaboration” and the question of a host institution, or institutions (Facilitator: Cumming)
- 1230 Next steps, actions and responsibilities
- 1300 Thanks and closure followed by lunch**
- 1400 Continuing discussion and/or follow-on working group if needed.