1. WELCOME AND INTRODUCTIONS

The meeting opened at 14.15 in the Veterinary Unit Auditorium at Skukuza. The Chair, Dr. Danie Pienaar, Director of Research, extended a warm welcome to all attending the Interim Working Group Meeting. Since there were several participants who were attending an AHEAD-GLTFCA meeting for the first time the Chair invited the 18 participants to briefly introduce themselves. A list of participants and contact details are provided in Appendix #1. Participants were asked if there were additional items they wished to add to the agenda – none were forthcoming.

Apologies: Apologies were received from: Emily Lane, Chris Foggin, Michael Murphree, Marshall Murphree, Carlos Pereira, Steve Osofsky, Wilna Vosloo

2. UPDATE FROM RECORD OF 5TH FULL WORKING GROUP MEETING (17TH-18TH FEBRUARY, 2005- minutes posted at http://www.wcs-ahead.org/workinggrps_limpopo.html) AND REVIEW OF PROGRESS ON CONCEPTS AND PROJECT DEVELOPMENT (Facilitated by David Cumming/Mike Kock)

The Draft Summary Project Table from the 5th Working Group Meeting, annotated and updated before the meeting by David Cumming, was used as a basis for examining and discussing progress in developing concepts and projects. The table was further updated during this session (see Appendix #3). The following progress was reported and discussed:

Theme #1: Overarching conceptual framework to facilitate integrated and inter-disciplinary approaches

a) Coordination and Project start up. Support by WCS for the coordination and development of the AHEAD-GLTFCA programme was continuing in the form of support for David Cumming’s coordinating role and Steve Osofsky’s and Mike Kock’s input to developing the programme. Major start-up funds for the development and coordination of the larger programme were still being sought.

b) Development of inter-disciplinary frameworks and models

As planned at the 5th Working Group Meeting in February ’05, a small workshop was held in Skukuza in May ’05 to examine a conceptual framework for the programme. The results of the workshop are reported upon in Agenda Item 2 below. A further encouraging development has been a USAID Associates Grant (US $102,500) to WCS to further develop the conceptual framework, start the scenario planning work, and to support programme coordination and development. Under this grant David Cumming will continue to work with a core group to develop the overarching conceptual framework, Mike Murphree will take the lead on scenario planning and Mike Kock and Steve Osofsky will continue their involvement in these activities and in programme development. The grant runs from October 2005 through September, 2006.

c) Baseline indicators. 1. Participatory surveys of animal and human diseases, livelihoods and socio-economic baseline data in communal areas of the GLTFCA

A preliminary Log Frame and Objectives Tree for a GEF Medium Sized Project and PDF A were developed and discussed with GEF Desk Officers in Nairobi. The project design focused on baseline surveys, developing the conceptual framework and scenario planning with provision for strategic disease-related biodiversity and rural development and policy interventions in communal
lands of the GLTFCA. However, during the discussions with GEF staff it became clear that an essentially disease-focused and largely research approach would not easily fit within the current GEF programme. This being the case a full PDF A proposal was not submitted. As a tri-national project and given the current balance of available GEF funds for the countries concerned it was also deemed unlikely to score high. With the already large injection of funds for TFCA development in Mozambique, further GEF funding under the AHEAD-GLTFCA programme was unlikely. See notes under major heading 4. below as well.

**Theme #2: Animal health and disease.**

**a) Epidemiological studies**

1. **BTB, FMD and Brucellosis in the Sengwe Communal Land.** Some 2000 cattle had been examined with no BTB positives being found. The tests for FMD and Brucellosis were still to be completed. The second phase of the project, testing for BTB in buffalo, was to be done once funding was available.

5. **Coordinating pathological data/sample analyses, and GIS database.** The proposal had been developed but was not yet funded. Rosa Costa was working with Emily Lane to develop a Mozambique component and to train field veterinary staff in the collection of material – to begin in November 2005. Nick Kriek noted there had been a workshop earlier in the year at the National Zoological Gardens (NZG) in Pretoria to examine the development of a national tissue data bank (Bio-bank) and there were plans to link this to the PPF Veterinary project’s GIS database being developed by Louis van Schalkwyk. Dr Paul Bartels was a prime mover of this initiative (Biobank – NZG) through his involvement with the Wildlife Biological Resource Center. The project was receiving support from the NRF (National Research Foundation in South Africa). It would be important for Emily Lane to discuss further developments and links to the biological (blood, tissue and other samples) database with Paul Bartels.

6. **Monitoring Tsetse in the GLTFCA.** Fred Potgieter reported that he had been discussing the establishment of a tsetse monitoring programme with Peter van den Bosche in Brussels and exploring the possibility of EU support for this. David Cumming reported that monitoring for the presence of tsetse in the Gonarezhou National Park, using targets and sentinel cattle herds, had found no recent evidence of the fly.

7. **BTB database and research programme (MRI).** Roy Bengis reported that the recent BTB survey in southern Kruger found macroscopic lesions in approximately 1 out of 3 of buffalo examined, and the rate of infection was likely to be higher. Culture rates in 2005 were similar to those in 1998. This level was similar to that recorded in the last survey and the disease may be stabilizing although a high proportion of young animals were infected with BTB. Two buffalo had died of advanced BTB (miliary) in the north of the park 8km from Pafuri close to the Zimbabwe border. Sporadic cases of BTB were appearing in kudu, warthog and lions. The National Veterinary Services were now testing cattle on the western boundary of the Kruger National Park. No positive cases had been found in Mpumalanga Province. Limpopo veterinary personnel have been tied down recently with FMD outbreaks. Anita Michel indicated that culture results from the latest round of BTB testing would be available in December – the next meeting of the BTB study group will be in January 2006.

The MRI BTB programme was expected to continue and Nick Kriek noted that a meeting was scheduled to be held in Pretoria next week. Claire Geoghegan, a PhD student of Wayne Getz, was likely to be working on BTB in the Hluhlue area examining disease linkages between the park and surrounding communal lands.

**Additional discussion:** Fred Potgieter reported that OVI had submitted 24 project proposals (to the ARC?) and all had been funded. OVI had also received a set of new equipment for DNA and related analyses which would greatly assist in their epidemiological work. OVI would also be examining climatic effects on the epidemiology of *Theileria parva* following a recent transmission of the disease from cattle to cattle in the Bloemfontein area (Koos Coetzer from OP). Fred noted that there was a Corridor Disease outbreak in the Free State where no brown ear ticks have been found and that we
may be seeing climatic influences on disease spread and occurrence. It would be worth examining historical data on tick distribution and changes that may be occurring with global warming. Funding is available for further MCF work – an important disease at the interface between wildlife and livestock. Work is being carried out in KwaZulu-Natal on trypanosomes and tsetse where there is a disturbing resurgence of trypanosomiasis and aspects of virulence are being examined.

**Theme #3: Landuse, ecosystem goods and services & animal health**

There was no progress to report under this theme.

**Theme #4: Human livelihoods, animal health and ecosystem goods & services (Ecosystem health)**

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. Funding to start this project had been received under the USAID Associates Grant to WCS, and the Sand County Foundation (SCF) has made a grant of US$20,000 to Michael Murphree to pursue a project on community based scenario planning. This was a competitive bid won under an SCF small grants programme for innovative approaches to community based natural resource management. CASS are presently working with IDRC to develop the larger project outlined by Marshall Murphree at the 5th Working Group Meeting in Pretoria.

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). A short feasibility study focusing on the realignment of veterinary fences was conducted in May by the Zimbabwe Department of Veterinary Services and the National Parks and Wildlife Management Authority with support from CIRAD. Discussions involving government agencies, local authorities and stakeholders in the SEL indicate that an extension of the TFCA concept to link the GLTFCA and the proposed Shashe-Limpopo TFCA is a distinct possibility. The matter is being considered by the National TFCA Conservation and Veterinary Sub-Committee.

**Theme #5: Policy support and capacity building**

No progress has been made in funding for the projects listed under this theme. A policy component was included under the GEF proposal. However, WCS has been working with Enos Shumba (IUCN and SADC Secretariat in Gaborone) who has been drafting the SADC Regional Biodiversity Conservation Strategy, and components dealing with the AHEAD approach and the importance of diseases at the livestock/wildlife/human interface in the conservation of biodiversity have been included in the draft strategy, due out in early ’06.

**Theme #6: Communications and outreach**

The USAID/WCS Associates Grant includes some provision for ongoing coordination and meetings of the AHEAD-GLTFCA Working Group and for the development of agreements and data sharing protocols.

**Further Discussion**

1. Roy Bengis outlined a case of cyanobacter poisoning in man-made impoundments leading to an outbreak of mortality in wildlife drinking from these impoundments. The organism had been identified and could be associated with unusually high water temperatures and high hippo populations. These infections can be confused with anthrax or botulism.

2. Nick Kriek noted that there may be a need to consider the role of residues and contaminants in the GLTFCA system. The GLTFCA was at the lower end of the Limpopo-Save catchments and there could be several contaminants and residues (e.g. those mimicking hormones) that could affect the health of animals and the wellbeing of humans in the system. It was agreed that this subject could
well be developed as an additional theme or module with the AHEAD-GLTFCA programme. Nick Kriek added that NUFU were supporting research in veterinary faculties on this issue.

3. Roy Bengis said that on the basis of recent and current weather patterns Kruger NP was due for another outbreak of anthrax but this had not occurred. He hypothesized that the 2001 floods in the Limpopo system had scoured out and possibly washed away spoors that were normally resident in stagnant pools along the rivers in the Limpopo system.

4. Markus Hofmeyr suggested that Corridor Disease maybe more problematic than trypanosomiasis particularly with the rapid commercialisation of wildlife and spread of game ranching. The valley bushveld tick has been found in the Willem Pretorius Game Reserve in the Free State and this is probably a result of game translocations – host and disease spread as a result of game movements needed critical examination. Fred Potgieter noted that the wildlife/human/livestock interface has increased dramatically with the increase in game ranching and with it the increased risk of the transfer of pathogens. Harry Biggs commented about the global movement of pathogens and introduction of alien invasive species. Roy Bengis commented that game farmers were not allowed to move animals with any visible ticks and he did not consider rhino to be a major problem. Mass capture and movement is the real problem due to inadequate surveillance and monitoring, and treatment

3. REPORT BACK ON FRAMEWORK MEETING HELD IN MAY 2005 AND DISCUSSION ON CONCEPTUAL FRAMEWORKS (Harry Biggs & David Cumming)

Harry Biggs gave a brief Power Point presentation to illustrate aspects of the output from the May meeting in Skukuza on the Overarching Conceptual Framework for the AHEAD-GLTFCA programme. This was a report of work in progress and the full report of the meeting is still being written-up. The Framework meeting opened with an outline of the AHEAD GLTFCA programme and the alternative approaches that could be adopted in developing a conceptual framework and models of the system. The meeting went on to use components of resilience analysis, complex systems, and the Millennium Assessment framework for examining ecosystem goods and services, to explore the dynamics of the GLTFCA system over a period of three and a half days.

The first step involved bounding the system in broad terms and this was followed by developing time lines that highlighted major shocks to the system within each of the countries and across countries. This exercise included an outline of the key drivers of change in the system over time. The group then analysed goods and services relating to wildlife and livestock in the communal lands of the GLTFCA and it was clear that there were considerable differences between those in South Africa and those in the neighbouring countries of Zimbabwe and Mozambique.

The group then moved on to develop a preliminary systems model (diagram) reflecting the major linkages affecting livestock, wildlife, disease and livelihoods in the communal lands of the GLTFCA. For the most part this diagram was based on perceived dynamics in the Mozambique and Zimbabwean communal lands

Following the development of the systems diagram separate components were examined in relation to the main themes of the programme and key research needs were identified (e.g. Appendix 3).

A stakeholder/participation analysis was completed and Michael Murphree gave a Power Point presentation followed by an extended discussion of the role of scenarios and scenario planning in the development of the TFCA.

4. FOLLOW UP ON THE GEF PROPOSAL

David Cumming outlined the work that WCS (Steve Osofsky and David Cumming) had done since the 5th Full Working Group Meeting in February 2005 and the May 2005 ‘Frameworking’ meeting to develop a PDF-A proposal to the UNEP GEF Office in Nairobi. Alan Lambert, who had been very encouraging, moved to South America and it was necessary to establish relations with his replacement. Before taking the step of developing a full and detailed proposal we felt it would be
advisable to explore ideas with the UNEP GEF office in Nairobi by way of a preliminary Objectives Tree and Log Frame for the work we had in mind within a budget of approximately one million US dollars. The preliminary proposal focused on the review and synthesis of existing information, participatory field surveys to gather up to date information on the current status of disease and livelihoods in the communal lands of the GLTFCA, developing conceptual models and scenario planning, and using this information to develop policy briefs and strategic pilot projects focused on disease mitigation strategies at local levels. However, the linkage between disease management and biodiversity conservation was not something UNEP GEF had experience in supporting and the (applied) research focus was also unlikely to gain UNEP GEF support. A variety of alternative approaches and strategies were explored with the Nairobi office, and WCS decided to shelve further development of a GEF proposal for the time being- unless AHEAD GLTFCA Working Group members felt strongly about pursuing UNEP GEF.

The possibility of developing a South African proposal was discussed at some length and may be picked up by SANParks. Given the already high World Bank investment in the Mozambique portion of the GLTFCA, there was little likelihood of further support being forthcoming from GEF within the Mozambique component of the GLTFCA. UNEP GEF was also unlikely to support work in Zimbabwe at this time.

5. **LETTERS OF UNDERSTANDING AND INSTITUTIONAL COMMITMENTS**

The initial draft Letter of Understanding which was circulated earlier in the year envisaged a full set of signatories on a single document. Given the logistical difficulties of circulating a single letter for signature and the inclusion of agency Logos as it developed, it was decided that single letters, signed by one agency on their letterhead, would be a more suitable approach.

To date the Letter of Understanding (See Appendix #4) has been signed by the following agencies:

- Center for Applied Social Sciences (CASS), University of Zimbabwe,
- Tropical Resource Ecology Programme (TREP), University of Zimbabwe,
- Department of Veterinary Services, Ministry of Agriculture, Zimbabwe
- Research Division, Kruger National Parks, South Africa
- Onderstepoort Veterinary Institute, ARC, South Africa
- Wildlife Epidemiology Group, Dept. of Environmental Science, Policy and Management, College of Natural Resources, U C Berkeley
- Wildlife Conservation Society

Several other member agencies of the Working Group have indicated that they intend signing the LOU and expect to do so in the near future.

6. **RELATED RESEARCH DEVELOPMENTS AND LINKAGES**

6.1 **TFCA programme Mozambique** (Jorge Ferrao)

Jorge Ferrao reported that the next phase of the TFCA programme in southern Mozambique would be starting soon. The overall funding would amount to US$34 million and comprise grants from the World Bank IDA, JICA and the World Bank GEF. There were five main components to the programme:

1. Strengthening policy and conservation legislation
2. Integrated District Development Plans for rural development
3. Community / private sector partnerships and tourism development
4. Protected areas management focusing on biodiversity conservation and including support for the establishment of a wildlife veterinary unit.

5. Monitoring, evaluation and programme management.

The Lebombo TNP would be a major focus of the programme where it would be working with the Peace Parks Foundation, but the programme would also include the GLTFCA and Chimanimani TNP.

6.2 PPF Veterinary Programme (Nick Kriek)

Professor Nick Kriek (formerly Dean of Veterinary Science at the University of Pretoria) informed the meeting that he had joined the Peace Parks Foundation (PPF) at the beginning of October to head the PPF Veterinary Programme. He would continue to be based at Onderstepoort. He emphasized that the unit would remain small and its primary function was to facilitate the development of capacity, both in terms of training and resources, to enable existing organisations in the region to tackle key veterinary problems that affected the development of peace parks in the SADC region.

- no intention of competing with or overlapping with the AHEAD-GLTFCA programme
- will be linking with a wide range of agencies in the region
- information management important to all involved

Professor Nick Kriek gave the following Power Point Presentation.

The TFCA-VP
Nick Kriek
Peace Parks Foundation

Context

Objectives of PPF:
- It facilitates the
  - The development of Transfrontier Conservation Areas, and
  - The development of human resources
- To support
  - Sustainable economic development,
  - The conservation of biodiversity, and
  - Regional peace and stability

Context – veterinary programme

- Objectives of PPF
- Economic needs of the subregion
- Changing nature of borders
- Changing epidemiology of diseases
- Changing natural phenomena
  - Global warming
  - Deforestation
  - Bush encroachment
  - Small-scale farming

Threats

- Cannot sustain development of TFCAs
- Conservation is not sustainable
- Ecotourism does not generate sufficient numbers of tourists
- Need for ground impinging on conservation areas
- Pressures from interface communities
- Diseases of humans and animals

Diseases
Wildlife
• Domesticated animals
• Livestock
  Interface
  — Wildlife
  — Domesticated animals
  — Human
• Economic impact

Diseases
• Transboundary animal diseases
  — Foot-and-mouth disease
  — Theilerioses
  — Trypanosomiasis
  — Tuberculosis
• Endemic diseases
• Emerging diseases
• Zoonotic diseases
  — SARS, avian influenza, BSE (political diseases)

Economic and social impact
Increased risk of spread of serious diseases between countries:
— Increased efforts needed to contain these diseases
— Adverse impact on the macro-economy

Economic and social impact
— Local (interface) socio-economic stability
— Food security and food safety
— Increased exposure of communities to zoonotic diseases at the interface
— Increased risk of disease transmission
  • domestic animals to wildlife and
  • the resultant negative impact on biodiversity

Goals of the TFCA-VP
• To facilitate the
  — identification,
  — prioritisation and
  — finding solutions for the veterinary-related health challenges created by the development of Peace Parks
• Philosophy of the OIE and FAO,
• Zonation, and
• Ongoing, integrated disease management in SADC

Goals of the TFCA-VP
To facilitate on SADC basis:
— Multidisciplinary and multi-institutional, problem-based veterinary-related research (existing networks),
— The development and utilization of standardised methodology (management, diagnostics and research),
— The development of scientific networks
— Integrated information management, and
— The development of regional contingency plans for outbreaks of disease

Goals of the TFCA-VP
To facilitate the
• Creation,
• Expansion and
• Utilization of regional human and infrastructural resources

Operational plan
• Obtain regional SADC cooperation and acceptance
• Obtain approval and support from each country for the implementation of the TFCA-VP

Operational plan: specific activities
• Disease monitoring and surveillance
  • Surveys: detection of new, emerging and re-emerging diseases
  • Surveillance and monitoring
• Information management
  — Develop
  • A generic data-capture system and veterinary portal
  • A centralised data repository
  • GIS ability with veterinary application
  • Sample banking and storage (NRF)

Operational plan
Facilitate:
  — Research (integrated veterinary research including public health)
  — Education and training
  — Infrastructure and equipment
  — Community interaction In association with existing initiatives

Operational plan
• To provide sufficient information to allow
  — Epidemiological modelling and risk analysis based on available data, and the
  — Development of future integrated, regional management plans
  — To negate the potential negative impact of disease on the development of TFCP/As

Operational plan
• AHEAD
• Faculty of Veterinary Science

Discussion:
Harry Biggs noted that there was overlap between the two programmes and thought it would be important to explore potential links between PPF and WCS. Nick Kriek noted that the PPF Veterinary programme covered the sub-region and had established strong institutional links within the region. A constructive and wide-ranging discussion on cooperation and seeking win-win outcomes between the various programmes in the GLTFCA followed. It was noted that human health issues and involvement of the social sciences (particularly economics) were still not adequately covered in the AHEAD-GLTFCA programme, but this was something being addressed. Conrad Steenkamp drew attention to the TEBA archives (monthly reports on labour recruitment) which contained a remarkable record of the past events influencing the recruitment of labour from the GLTFCA region.

6.3 SANParks (Peter Buss)
The following main points were covered in a briefing by Peter Buss:
- Most of SANParks effort has been focused on BTB. Thresholds of Potential Concern (TPCs) for the disease were being established and being tracked.
- Animal disease now seen, at a national level, to be a risk and threat to biodiversity and new legislation in SA now requires consideration of these risks and compliance with the Diseases Act. This in turn requires policy analysis and research.
- SANParks is involved with a range of actors (e.g. AHEAD, OP, PPF) and it would help if there were greater integration between these programmes and activities.

Discussion:
In the ensuing discussion Roy Bengis noted that the National Directorate has over the past 40 years focused on surveillance and threats to agriculture but it is now broadening its mandate to include veterinary public health issues and the use of wildlife by the public. Translocation hazards are also being examined. Harry Biggs noted that SANParks is examining the appointment of a Disease
Research Manager and a Social Science Research Manager. The Kinsey Report had recommended a tripling of research effort for SANParks to meet its biodiversity conservation mandate.

6.4 Transboundary Protected Areas Initiative (TPARI) (Conrad Steenkamp)

TPARI is essentially a research network focusing on young researchers, useful problem solving, and avoiding “research fatigue” in its interactions with communities. It will in the future be doing more on social impacts assessments and post baseline studies of achievements in TFCAs. The text from Conrad Steenkamp’s illustrated Power Point presentation was as follows:

Transboundary Protected Areas Research Initiative
Iniciativa de Investigação de Áreas Protegidas Trans-Fronteiriças

Overview
- Research network running under auspices of IUCN
- Initial funding from NSF via CMU HDGC
- Human and social dimensions of TBPAs / TFCAs in southern Africa
- 28 researchers over last two years
- Two post-doctoral fellows: tourism (Anna Spenceley) and CBNRM survey/assessment (Wolfram Dressler)

Relationships
- Key partnership: IUCN South Africa
- Key relationships: DEAT, SANP, PPF, EWT, SAVANNA consortium, WCPA-IUCN, TBPA Task Force, AHEAD
- Southern African academic partners from:
  - Wits - BMW Chair of Sustainability, Social Anthropology, Sociology, Wits Rural Facility, Office of Disaster Preparedness in Africa
  - UJ (Environmental Science, Philosophy) US (Sociology & Anthropology, Philosophy)
  - University of Cape Town (Anthropology)
  - EMU (Faculty of Science, Dept of Geography)
  - University of the Western Cape (PLAAS)
- North America:
  - Bates College, Carnegie Mellon University, Johns Hopkins, Indiana, Georgia, Berkeley Calif., British Columbia, Montana, Michigan
- Europe:

Modes of collaboration
- Formal inter institutional MoU
- Formal researcher MoU
- Informal agreements & informal participation in network
- Benefits:
  - Library & research platforms
  - Proofing of research topic
  - Research design
  - Logistical support & registration procedures
  - Field mentoring (academic)
  - Networking (incl. commun) & research synergies
  - Funding & fundraising
  - Exposure and peer review (teleseminars)

A criterion for suspending an MoU:
Any party to this MoU's work or behaviour results in substantial or persistent tensions and dissatisfaction on the part of conservation officials or local people, without the benefit of that work/behaviour being evident. That is, it is expected that researchers will sometimes deal with sensitive topics and TPARI
supports the right of researchers to do so. Simultaneously research has to be conducted in a way that is not disruptive on the local level.

**Research themes**

- Human-environment relations:
  - Climate variability, environmental disaster, resource limitations,
  - HIV-AIDS & resource use
- Decision-making and governance:
  - Political ecologies, planning & participation
  - PA Management and co-management
- The social and economic framework:
  - Land rights, resource rights and livelihoods
  - Tourism development, economic development and beneficiation
  - Cultural landscapes, cultural histories, cultural & social impacts

**Orientation**

- NB: Development of new generation of young researchers
  - Synergies between researchers: e.g. 7 researchers from different universities on research in Mozambique
  - Targeting & relevance of research
  - Retention of research & feedback
  - Relations between key actors: researchers, local people, conservation practitioners - joint problem solving

**Projects**

- Senior researchers, post docs & PhDs
  - Digitisation of TEBA Archives
  - Multi-objective decision-making model for Kruger to Canyons (looking for funding) (Senior)
  - Indigenous knowledge systems and Disaster preparedness - Office of Disaster Preparedness
  - Survey & assessment of ‘CBNRM’ interventions (Post doc)
  - Tourism investments in GLTP (post doc)
  - PAs: does collaborative management make a difference? Comparative study (PhD)
  - Agroforestry study in Limpopo National Park (PhD)
  - GLTP history and NGO relations (post doc)
  - SANP approaches to engaging community (PhD)
  - GLTP, ENSO events & livelihoods (PhD)
  - Agricultural development project next to park (PhD)
  - Do TBPAs help? (PhD)
  - States, markets and conservation (PhD)
  - Woodland conservation & EE: comparative SA and Nigeria (PhD)
  - Understandings of land & place among the displaced people from the GLTP (PhD) MA/ MSc
  - Community participation in Kgalagadi: park perspective
  - Network Analysis of 2 villages
  - 2 Cultural tourism case studies
  - Concept of Peace Park and implementation in SA
  - Distribution of iron age habitation in Pafuri
  - Cons & livelihoods in Makandizulu, LNP
  - Madimbo Corridor land claim
  - Private game farms and transboundary conservation.
  - Makuleke training project (BA Hons)
  - Gender and Indigenous Knowledge in LNP (Hons)

**2005-2006**

- Workshop: "Engaging conservation practitioners and local people" (2005) - post-Indaba process
- Workshop: "Tourism in the GLTFCA" (2005) – post workshop process Social sustainability of PAs/ TBPAs conference – being developed (2006?)

**Dissemination**

Participants expressed their appreciation for the presentation. Discussion on possible links between veterinary research and the sociological research being conducted by TPARI ensued.

6.5 Onderstepoort Veterinary Institute (Fred Potgieter)

The following main points were covered in a briefing by Fred Potgieter:

- OVI was a parastatal organisation where the main thrust is to develop technology for disease control – e.g. diagnostics, vaccines, use and application of new technologies.
- All of the research and development proposals put forward for the next financial year have been funded.
- OVI can offer surveillance, screening, diagnosis services, etc. for particular diseases.
- The institute is customer driven and its prime responsibility is to help meet the disease control and disease management needs of the agricultural industry in South Africa.

Discussion:

Roy Bengis noted that landowners now legally “responsible” for disease and this created a need for the rapid detection of diseases as distinct from “certification” of the presence of a disease by a state veterinarian.

6.6 Mozambique Diagnostic Laboratory (Rosa Costa)

Rosa Costa briefly outlined the work of her institute and their interest in participating in the AHEAD-GLTFCA programme. It was encouraging to learn that funds were likely to be available from the current World Bank project to facilitate their work and to establish a wildlife veterinary unit.

7. Strategies/Tactics/Priorities for Developing the AHEAD-GLTFCA Programme (Facilitated discussion)

The discussion was initiated with the following points presented on slides [editorial note: I have updated some of the slides as presented in these notes from the time they were presented at the meeting: any errors of commission are my own. –Steve O.]

Strategies/tactics/priorities

Consider:

1. Funding for the overall programme and its components
2. The science needed to move forward in a concerted / integrated way
3. Local support and buy-in (building interest & credibility)

The funding problem:

1. Wellcome questioned the science (livestock focus of Wellcome- livestock/wildlife interface not a concept they had been considering)
2. GEF asked about the relevance to biodiversity conservation (donor education an issue with something relatively new like this)
3. Development agencies (including GEF) – see too much emphasis on research (in the face of development needs)
So, how do we deal with the funding problem?

1. Define the conceptual framework more rigorously
2. Identify key modules/projects – those that are likely to result in maximum leverage
3. Target potential donors more carefully (hard when relatively few donors are focusing on conservation)
4. Park modules/programme components under different programmes while maintaining linkages & coherence

Draw in related programmes and partners (part of ongoing process):

1. Programmes in SA?
   - RESTORE, OVI, OP, PPF
2. Programmes in Zw?
   - WWF – CBNRM, CIRAD, CESVI
3. Programmes in Mz?
   - WB, GEF,

⇒ Need good, up to date information on existing programs to build Synergies and Bridges and win-win partnerships

Discussion: The ensuing discussion covered potential approaches to several donors including NEPAD. It was, however, clear that Aid/Donor agencies would want to see a greater emphasis on developmental aspects, poverty alleviation and conservation action. The key research components would be best pursued through competitive research proposals for project funding submitted through Universities. AHEAD (Animal Health for the Environment And Development) is not just about research. Especially with donor community, need to emphasize applied problem-solving, real world applications to improve livelihoods, health and environmental stewardship.

8. NEXT STEPS, ACTIONS AND RESPONSIBILITIES

1. The record of the interim meeting would be written up by David Cumming and circulated.
2. The write-up of the Framework meeting would be completed by David Cumming and Harry Biggs early in the New Year and David Cumming would be continuing work on the Conceptual Framework early in 2006.
3. Some aspects of the AHEAD programme would be presented at the Resilience Alliance / Complex Adaptive Systems meeting and symposium that is being planned for April, 2006.
4. Potential linkages between PPF and WCS would continue to be explored.
5. Other work recently funded (e.g., scenarios planning with USAID and Sand County Foundation support) to get underway.

9. THANKS AND CLOSURE

Thanks were extended to SANParks for hosting the meeting and particularly to Danie Pienaar and Piet Theron for their help in arranging the meeting to follow-on from the JMB meeting on research policy for the GLNP and TFCA earlier in the week.

10. NEXT MEETING

The next Working Group Meeting is expected to take place between the 8th and 10th of March 2006. It will probably be held in or near Pretoria and further information on the meeting will be sent out in January.
APPENDICES

APPENDIX #1: LIST OF PARTICIPANTS

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<tr>
<th>Name</th>
<th>Organization</th>
<th>Email</th>
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<tr>
<td>Bengis, Roy</td>
<td>ARC / Kruger National Park</td>
<td><a href="mailto:RoyB@nda.agric.za">RoyB@nda.agric.za</a></td>
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<tr>
<td>Biggs, Harry</td>
<td>Kruger National Park</td>
<td><a href="mailto:biggs@snaparks.org">biggs@snaparks.org</a></td>
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<tr>
<td>Buss, Peter</td>
<td>Kruger national park</td>
<td><a href="mailto:PeterB@snaparks.org">PeterB@snaparks.org</a></td>
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<tr>
<td>Cumming, David</td>
<td>WCS Consultant / TREP</td>
<td><a href="mailto:cumming@icon.co.za">cumming@icon.co.za</a></td>
</tr>
<tr>
<td>Costa, Rosa</td>
<td>Central Veterinary Laboratory, Mozambique</td>
<td><a href="mailto:inivei@teledata.mz">inivei@teledata.mz</a></td>
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<tr>
<td>Ferrao, Jorge</td>
<td>Ministry of Environment and Tourism</td>
<td><a href="mailto:ljferao@tvcabo.co.mz">ljferao@tvcabo.co.mz</a></td>
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<td>Govender, Dannie</td>
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<td>Hofmeyr, Markus</td>
<td>Kruger National Park</td>
<td><a href="mailto:markush@snaparks.org">markush@snaparks.org</a></td>
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<tr>
<td>Kock, Michael</td>
<td>WCS Field Veterinary Program</td>
<td><a href="mailto:mdock@kingsley.co.za">mdock@kingsley.co.za</a></td>
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<tr>
<td>Kriek, Nick</td>
<td>PPF Veterinary Programme</td>
<td><a href="mailto:nick.kriek@up.ac.za">nick.kriek@up.ac.za</a></td>
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<tr>
<td>Macandza, Valerio</td>
<td>Veterinary Faculty, UEM, Mozambique</td>
<td><a href="mailto:Vmacandza2001@yahoo.com">Vmacandza2001@yahoo.com</a></td>
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<td>Mutepfa, Fannie</td>
<td>JMB International Coordinator</td>
<td><a href="mailto:fmutepfa@comone.co.zw">fmutepfa@comone.co.zw</a></td>
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<tr>
<td>Michel, Anita</td>
<td>ARC Veterinary Research Institute, Pretoria</td>
<td><a href="mailto:michela@arc.agric.za">michela@arc.agric.za</a></td>
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<tr>
<td>Pienaar, Danie</td>
<td>Kruger National Park</td>
<td><a href="mailto:dpienaa@snaparks.org">dpienaa@snaparks.org</a></td>
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<tr>
<td>Potgieter, Fred</td>
<td>ARC Veterinary Research Institute, Pretoria</td>
<td><a href="mailto:potgieterf@arc.agric.za">potgieterf@arc.agric.za</a></td>
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<td>Steenkamp, Conrad</td>
<td>TPARI</td>
<td><a href="mailto:c.steenkamp@lantic.net">c.steenkamp@lantic.net</a></td>
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<tr>
<td>van Schalkwyk, Louis</td>
<td>Faculty of Veterinary Science, University of Pretoria</td>
<td><a href="mailto:louis.vanschalkwyk@up.ac.za">louis.vanschalkwyk@up.ac.za</a></td>
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</table>
APPENDIX #2: DRAFT AGENDA

Wednesday 19th October

14.00 Welcome and introductions (Chair - Danie Pienaar)

14.15 Record of 5th Meeting (February 2005) and review of progress on concepts and project development (Facilitated by David Cumming/Mike Kock)

(USAID grant to WCS, GEF, CASS and SCF on scenario planning and others?)

15.30 Tea/Coffee

16.00 Report back on Framework meeting held in May 2005 and discussion on conceptual frameworks (Harry Biggs & David Cumming)

17.30 Break for evening

1900 Boma Dinner

Thursday 20th October

08.00 Related research developments and linkages (World Bank programme in Mozambique, PPF Veterinary Programme, SANParks, TPARI, and others)

09.30 Letters of Understanding and institutional commitments

10.00 Follow up on GEF proposal

10.15 Tea/Coffee

10.45 Strategies/tactics/priorities for developing the AHEAD-GLTFCA programme (Facilitated discussion)

12.15 Summary - next steps, actions and responsibilities

12.30 Thanks and closure

12.45 Lunch and departures
### APPENDIX #3: DRAFT PROJECTS SUMMARY TABLE + UPDATES IN OCTOBER, 2005

**AHEAD-GLTFCA – Programme: Outline of Themes and Modules and summary of concepts being developed or suggested – 20th October, 2005 draft**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Module</th>
<th>Potential research proposal/Activity</th>
<th>Lead Agency/person respon.</th>
<th>Status</th>
<th>Potential Donor</th>
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<tbody>
<tr>
<td>#1</td>
<td>a)</td>
<td>Coordination and project start up</td>
<td>WCS/ Osofsky</td>
<td>Outline proposals developed</td>
<td>WCS</td>
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<td></td>
<td>b)</td>
<td>Development of inter-disciplinary frameworks and models</td>
<td>WCSS/CASS Cumming</td>
<td>Initial funding secured for framework and scenario planning</td>
<td>USAID/WCS</td>
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<td></td>
<td>c)</td>
<td>Baseline indicators</td>
<td>WCS Cumming/Osofsky</td>
<td>Initial concept and budget by WCS</td>
<td>GEF?</td>
</tr>
<tr>
<td>#2</td>
<td>a)</td>
<td>Epidemiological studies</td>
<td>Vet Wildl. Unit, Zw/ Foggin</td>
<td>2000 cattle sampled – non +ve</td>
<td>PPF</td>
</tr>
<tr>
<td></td>
<td>b)</td>
<td>Alternative animal health management and disease control strategies</td>
<td>OVI/ Michel</td>
<td>Project Concept Needs further development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c)</td>
<td>Preventative/proactive measures in disease control and management</td>
<td>Raath</td>
<td>Starting with baseline GIS work and developing a template</td>
<td></td>
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</tbody>
</table>

**Notes:**
- **#1 Overarching conceptual framework to facilitate integrated and inter-disciplinary approaches**
- **#2 Animal health and disease**

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### Theme #1: Overarching conceptual framework to facilitate integrated and inter-disciplinary approaches

1. Support for the coordination and development of the AHEAD-GLTFCA programme
   - **Lead Agency/person respon.:** WCS/ Osofsky
   - **Status:** Outline proposals developed
   - **Potential Donor:** WCS

2. Development of 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
   - **Lead Agency/person respon.:** WCSS/CASS Cumming
   - **Status:** Initial funding secured for framework and scenario planning
   - **Potential Donor:** USAID/WCS

3. Furthering TFCA scholarship (open for further discussion)
   - **Lead Agency/person respon.:** CASS Inst. Nat. Res. Centre Environ. & Development
   - **Status:** Initial note from CASS

### Theme #2: Animal health and disease

1. BTb, FMD and Brucellosis in Sengwe Communal Land Zw.
   - **Lead Agency/person respon.:** Vet Wildl. Unit, Zw/ Foggin
   - **Status:** 2000 cattle sampled – non +ve
   - **Potential Donor:** PPF

2. Status of BTb, FMD and Brucellosis in Limpopo National Park
   - **Lead Agency/person respon.:** DINAP/Pereira and Raath
   - **Status:** Initial note
   - **Potential Donor:** PPF

3. Serological studies of FMD, etc. in wild and domestic ungulates in the GLTFCA
   - **Lead Agency/person respon.:** OVI Vosloo et al.
   - **Status:** Will be revisited
   - **Potential Donor:** Project concept

4. BTb and zoonotic implications
   - **Lead Agency/person respon.:** OVI / Michel
   - **Status:** Project Proposal developed

5. Coordinating pathological data/sample analyses in GIS database
   - **Lead Agency/person respon.:** Lane
   - **Status:** Project Proposal developed

6. Monitoring of tsetse in TFCA
   - **Lead Agency/person respon.:** Potgieter
   - **Status:** Follow up with EU (v.d. Bosche) on monitoring in GLTFCA
   - **Potential Donor:** ?EU

7. BTb data base from MRI work
   - **Lead Agency/person respon.:** MRI / Wayne Getz / Claire Geoghegan
   - **Status:** Programme continuing
   - **Potential Donor:** ? UCB
<table>
<thead>
<tr>
<th>Theme</th>
<th>Module</th>
<th>Potential research proposal/Activity</th>
<th>Lead Agency/person respon.</th>
<th>Status</th>
<th>Potential Donor</th>
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<tbody>
<tr>
<td>d)</td>
<td>Theoretical/fundamental studies (Needs further development in terms of key or strategic additional studies/ideas)</td>
<td>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 Brucella in small ungulates)</td>
<td>?</td>
<td>Initial note- Cross cannot continue (new job)</td>
<td>NSF</td>
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<td></td>
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<td>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</td>
<td>?</td>
<td>Initial note- Cross cannot continue (new job)</td>
<td>NSF</td>
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<td>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.</td>
<td>Cumming GS WEC/UFL</td>
<td>Initial note</td>
<td></td>
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<tr>
<td>#3</td>
<td>Landuse, ecosystem goods and services &amp; animal health</td>
<td>a) Spatial and temporal relationships between ecosystem processes and disease prevalence</td>
<td>NOTE: No concepts yet</td>
<td>Requires remote sensing studies linked to epidemiological work in Theme #2 Climate change and cycles in relation to disease spread and prevalence</td>
<td></td>
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<td></td>
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<td>b) Landscape level resource use and impacts by wild and domestic ungulates on ecosystem goods &amp; services</td>
<td>NOTE: No concepts yet</td>
<td>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</td>
<td>INR?</td>
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<tr>
<td></td>
<td></td>
<td>c) Effects of landuse scale and pattern on animal health</td>
<td>NOTE: No concepts yet</td>
<td>Requires links between 3a &amp; b and 2a. What minimum sets of data are needed?</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>d) Linkages between animal and human health</td>
<td>1. Disease risk assessment of people living in villages in the TFCA</td>
<td>Follow up on LNP Survey by Raath and Pereira</td>
<td>?</td>
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<td>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)?</td>
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<td>3. Public health implications of establishing the GLTFCA</td>
<td>Simpson</td>
<td>Proposal</td>
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<td></td>
<td></td>
<td>e) Understanding animal husbandry practices</td>
<td>1. Role of livestock in household production, community differentiation, collective management and institutional factors affecting these</td>
<td>INR</td>
<td>Being reworked</td>
</tr>
<tr>
<td>#4</td>
<td>Human livelihoods, animal health and ecosystem</td>
<td>a) Scenario planning and participatory exploration of land use options</td>
<td>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.</td>
<td>CASS + INR Mugabe &amp; Murphree MJ +MW</td>
<td>Partially funded USAID / WCS &amp; SCF</td>
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<tr>
<td>Theme</td>
<td>Module</td>
<td>Potential research proposal/Activity</td>
<td>Lead Agency/person respon.</td>
<td>Status</td>
<td>Potential Donor</td>
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<tr>
<td>ecosystem goods &amp; services</td>
<td>(Ecosystem health)</td>
<td>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)</td>
<td>WWF-SARPO R. du Toit +CIRAD/NPWMA</td>
<td>Feasibility study in May 05 – Done. Extended TFCA concept now being examined</td>
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<td></td>
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<td>b) trade offs between alternative landuse enterprises</td>
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<td>NOTE: No concepts yet but could form part 4(a)/2 above on biosphere reserve concept</td>
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<td>c) Effects of alternative policies on development, adaptability and resilience</td>
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<td>NOTE: No concepts yet</td>
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<tr>
<td>#5</td>
<td>Policy support and capacity building</td>
<td>a) Support for policy development on animal health and linkages between animal and human health and ecosystems</td>
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<td>Initial concept and budget developed by WCS</td>
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<td>Reviews of existing policy, seminars and training workshops in policy analysis</td>
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<td>b) Exploring consequences of alternative policies using scenarios</td>
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<td>RdT and MM</td>
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<td>See 5(a)/1 above</td>
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<td>Scenario planning workshops</td>
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<td>Urgent need in Zw – scenarios and use of scenes from remote sensing</td>
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<td>c) Capacity building in policy analysis</td>
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<td>See 5(a)/1 above</td>
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<tr>
<td>#6</td>
<td>Communications and outreach</td>
<td>a) Communication between research workers and agencies engaged in the programme</td>
<td>WCS</td>
<td>Concept and budget developed</td>
<td>Partial support under USAID / WCS grant</td>
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<td>Series of workshops and seminars</td>
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<td>(See also Theme #1)</td>
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<td>b) Information flow between scientists and Govt. and implementing agencies and policy making agencies</td>
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<td>Workshops and seminars and meetings</td>
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<td>Development of website and database for results.</td>
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<td>WC5 &amp; CASS</td>
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<td>PPF GIS initiative</td>
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<td>c) Participation of landowners, communal farmers etc. in the programme &amp; information flow</td>
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<td>d) Production and distribution of research results, synthesizes, policy briefs, etc</td>
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<td>NOTE: No specific concepts yet</td>
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<td>e) Community and Village outreach including theatre linked to PRA</td>
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<td>Transfer of information and research findings to communities and feedback on their views, perceptions and needs</td>
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<td>Kock &amp; Theatre for Africa + INR</td>
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<td>Concept note</td>
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