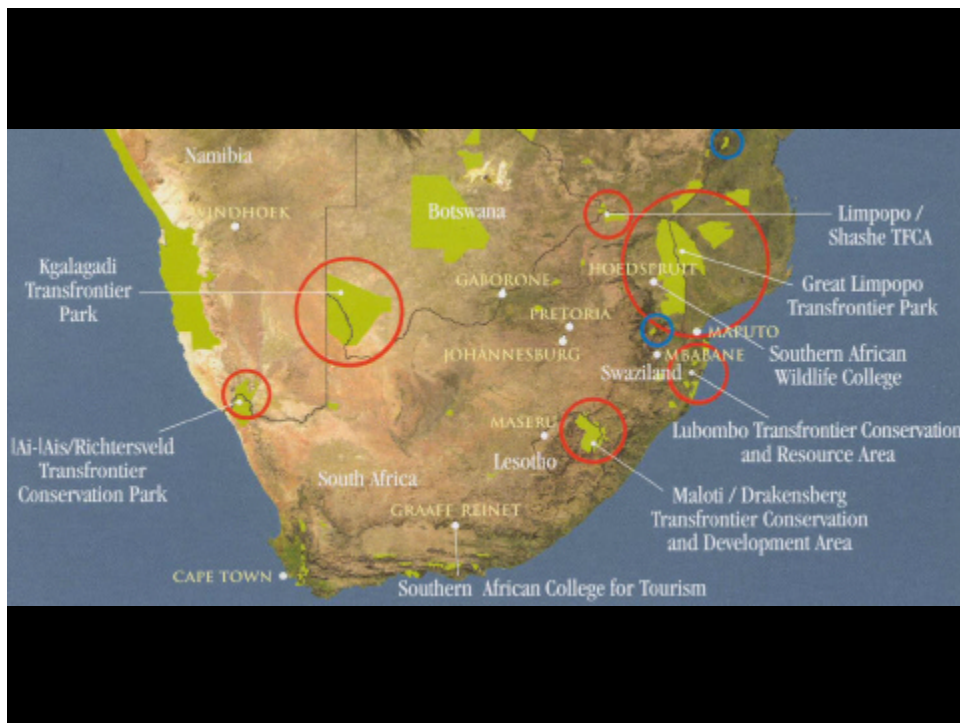


**TRANSFRONTIER  
CONSERVATION INITIATIVES :  
SOME ANIMAL HEALTH  
CHALLENGES.**

**ROY G. BENGIS**

**SUB-SAHARAN AFRICA : THE  
CURRENT SITUATION**

- **SEVEN TFCA'S ALREADY ESTABLISHED OR AGREEMENTS SIGNED BY PARTICIPANTS.**
- **A FURTHER FIFTEEN POTENTIAL TFCA'S HAVE BEEN IDENTIFIED BY THE PEACE PARKS FOUNDATION**





## POTENTIAL CONSEQUENCES

- **CONTIGUOUS POPULATIONS**
- **BIOLOGICAL BRIDGES**
- **EXPANSION OF RANGE OF PATHOGEN OR VECTOR**
- **INCREASE IN THE SIZE OF THE WILDLIFE / LIVESTOCK INTERFACE**

# **RISK FACTORS**

## **ENVIRONMENTAL RISK FACTORS**

### ***CLIMATE***

- MEAN TEMPERATURE
- RAINFALL
- ALTITUDE

### ***HABITATS AND LANDSCAPES***

- |            |              |
|------------|--------------|
| -ARID      | DESERT       |
| -TEMPERATE | SAVANNAHS    |
| -TROPICAL  | RAIN FORESTS |

## **RISK FACTORS ASSOCIATED WITH WILDLIFE SPECIES MIX**

- **BUFFALO** – FMD, TB, BRUCELLA, THEILERIOSIS & TRYPANOSOMIASIS
- **WILD PORCINES** – ASF, TB TRYPANOSOMIASIS
- **TRAGELAPHIDS** – TRYPANOSOMIASIS, FMD, TB & ANTHRAX
- **WILDEBEEST** – ALCELAPHINE MCF
- **ZEBRA** - AHS

## **DISEASE RISKS ASSOCIATED WITH DOMESTIC ANIMALS**

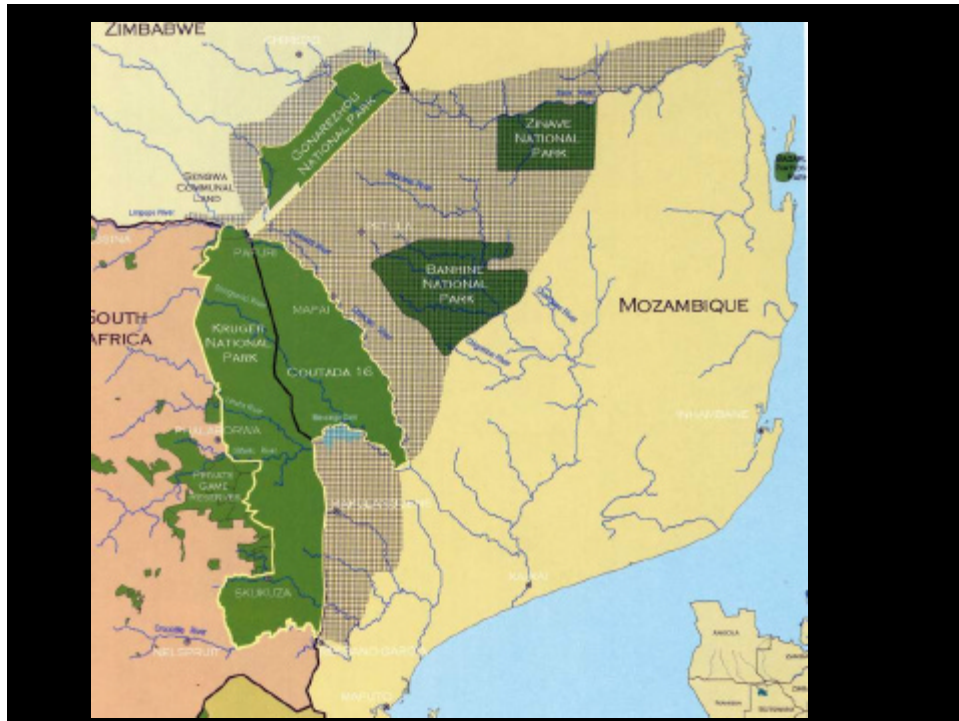
- **RINDERPEST**
- **BOVINE TB**
- **CANINE DISTEMPER**
- **RABIES**

## **EXTENT AND TYPE OF INTERFACE**

- **FOCAL**
- **LINEAR**
- **DIFFUSE**

***IMPORTANT FOR DIRECTLY  
CONTAGIOUS AND TICK-BORNE  
DISEASES***

## **THE GREAT LIMPOPO TRANSFRONTIER PARK – A POTENTIAL CASE STUDY**



## **CURRENT STATUS**

- **RATIFIED TREATY – SIGNED**
- **JOINT MANAGEMENT BOARD WITH SUPPORTING COMMITTEES – IN PLACE**
- **FENCES HAVE NOT YET BEEN DROPPED**
- **SENGWE CORRIDOR IS NOT YET FUNCTIONAL**
- **PLAINS GAME, ELEPHANTS, GIRAFFE AND RHINO HAVE BEEN TRANSLOCATED TO A FENCED CORE SANCTUARY AREA IN LIMPOPO NATIONAL PARK**

## **RISK FACTORS**

- **SUB-TROPICAL CLIMATE.**
- **LOWVELD SAVANNAH ECOSYSTEM**
- **MOST DISEASE MAINTENANCE HOSTS ARE PRESENT**
- **EASTERN SIDE IS UNFENCED – DIFFUSE INTERFACE**
- **WESTERN SIDE IS FENCED – LINEAR INTERFACE**
- **DISEASE STATUS OF DOMESTIC ANIMALS ON BORDERS – LARGELY UNKNOWN.**

## **DISEASE RISKS - ZIMBABWE**

- **LIVESTOCK AND WILDLIFE**
  - **BOVINE TB FROM THE KRUGER NATIONAL PARK**
  - **CYCLICAL ANTHRAX EPIDEMICS**



## **DISEASE RISKS - MOZAMBIQUE**

- **LIVESTOCK – (*EASTERN DIFFUSE INTERFACE*)  
-WILDLIFE ASSOCIATED INFECTIONS FROM  
KRUGER NATIONAL PARK**
- **WILDLIFE**
  - **BOVINE TB – FROM KRUGER NATIONAL PARK**
  - **RABIES – LOCAL DOMESTIC DOGS**
  - **CANINE DISTEMPER – LOCAL DOMESTIC DOGS**

## **DISEASE RISKS – SOUTH AFRICA (KRUGER)**

- **TSETSE FLY / NAGANA – GONAREZHOU.**
- **NEW – TOPOTYPES FMD VIRUS – FROM  
GONAREZHOU**
- **RABIES AND CANINE DISTEMPER FROM  
LIMPOPO NATIONAL PARK**

## CONCLUSIONS

- **TFCA'S ARE POSITIVE INITIATIVES WITH REGARDS TO BIODIVERSITY CONSERVATION AND ECOTOURISM.**
- **TFCA'S INTRODUCE NEW ANIMAL HEALTH CHALLENGES.**
- **PRO-ACTIVE PLANNING AND DEVELOPMENT OF APPROPRIATE DISEASE MANAGEMENT STRATEGIES**