PROTECTED AREA PLANNING IN ZAMBIA

VICTOR M SIAMUDAALA

ZAMBIA WILDLIFE AUTHORITY

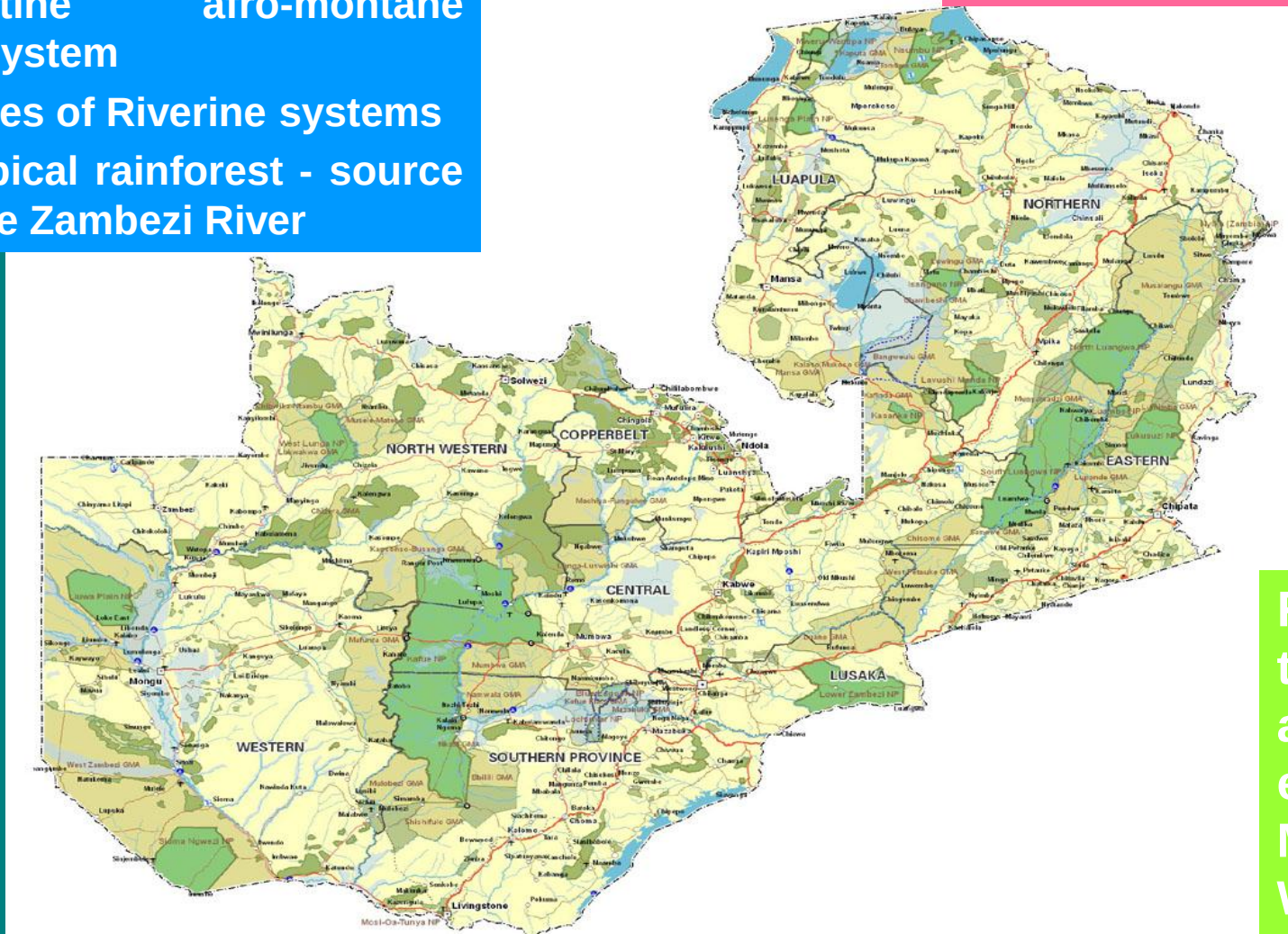
NOVEMBER 2008

OVERVIEW ON PA's

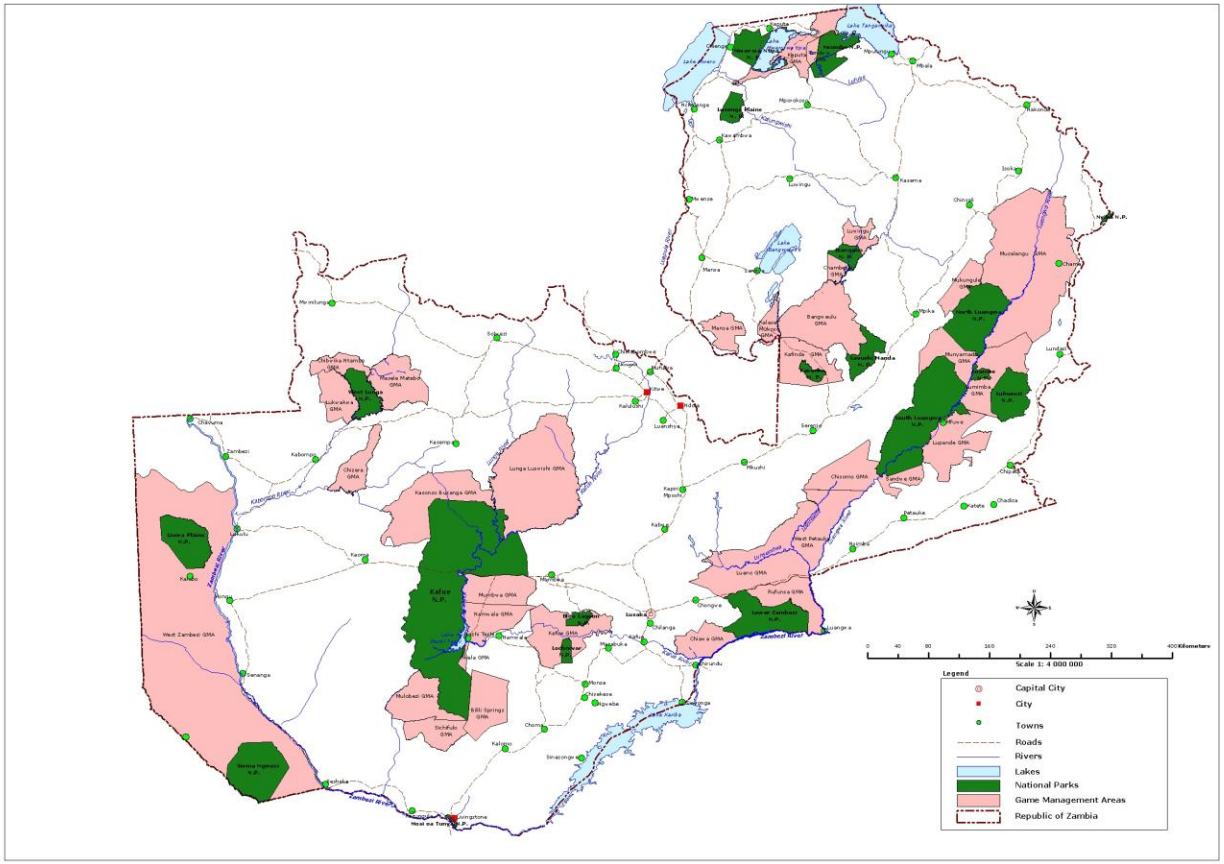
•Zambia - 752,972 km^2 with diversity of ecosystems,

•Major ecosystems in Zambia - network of protected areas (Pas)

- Extensive wetlands
- Pristine afro-montane ecosystem
- Series of Riverine systems
- Tropical rainforest - source of the Zambezi River



PA's - terrestrial and aquatic ecosystems Miombo Woodlands

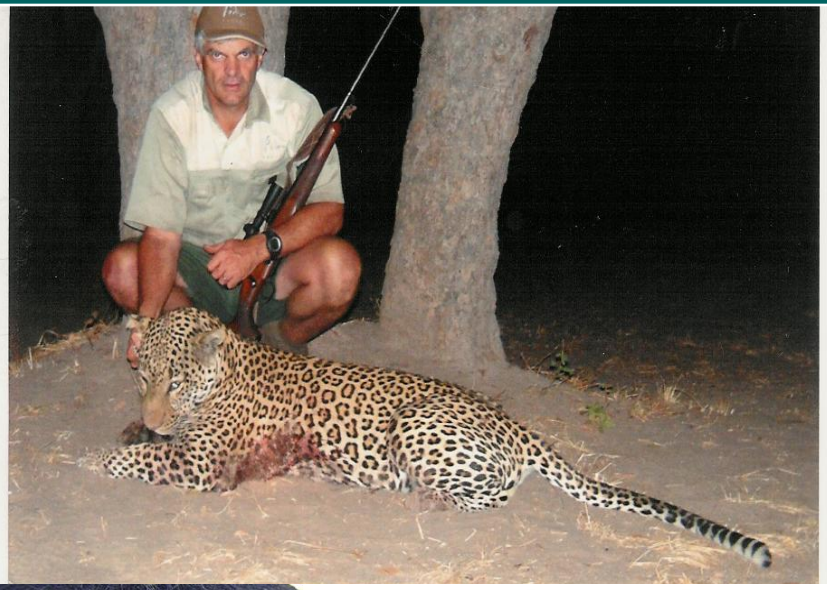


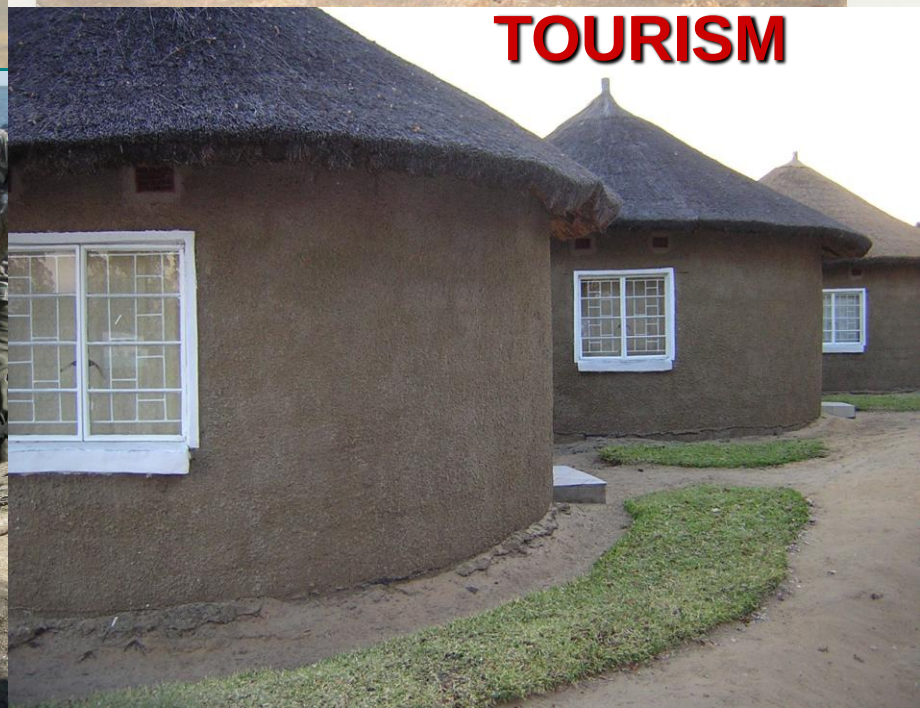
Protected Area Category	Number	Total Land Size, Km2	Purpose
National Parks	19	62,168	Conservation & Tourism
Game Management Areas	32	166,011	Buffer Zones to National Parks. Multiple Land Uses inc. Tourism esp. Consumptive Tourism
Total	**51**	**228,179**	

EXISTING PRACTICE OF PROTECTED AREA PLANNING

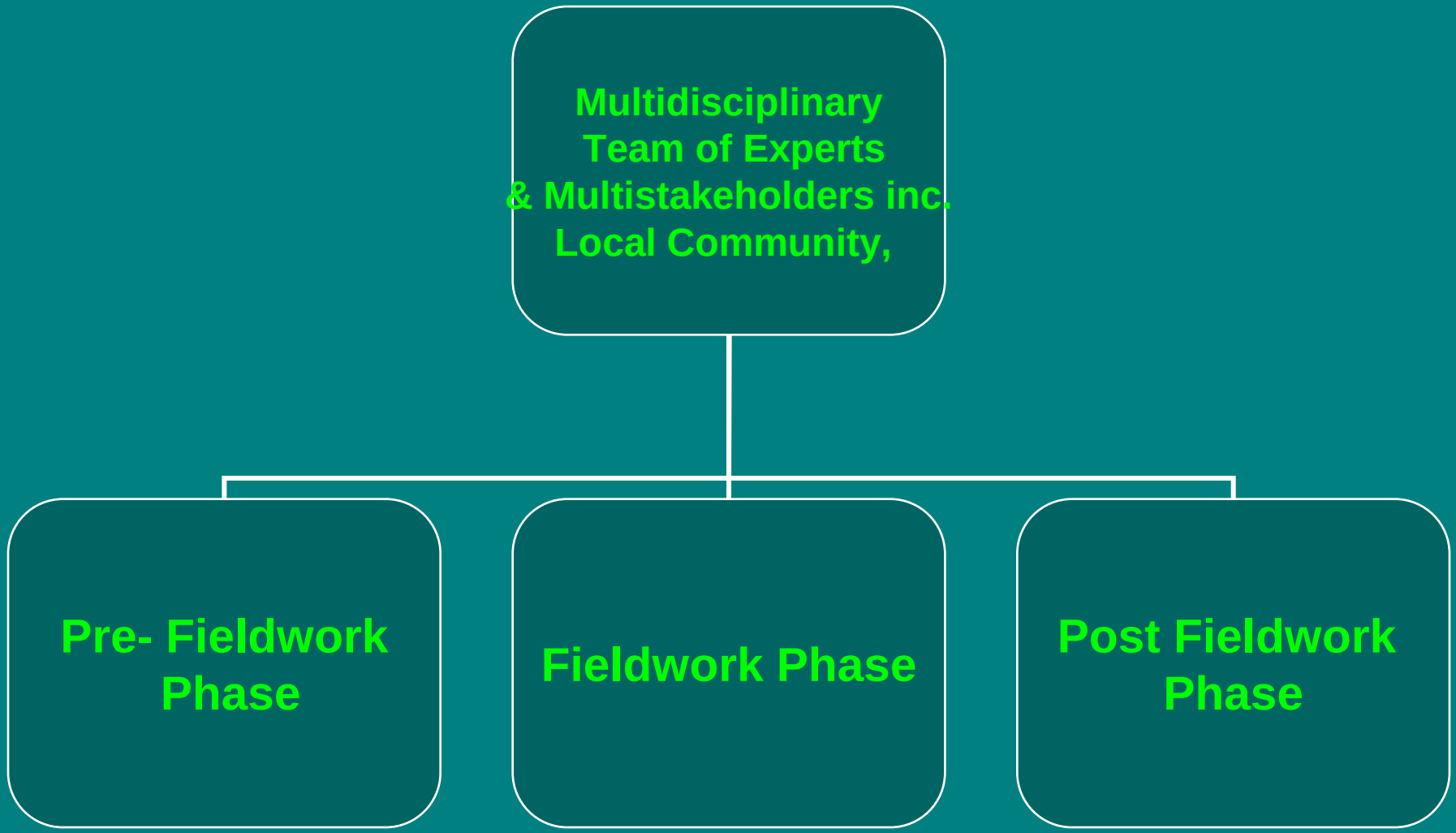
- PLANNED FOR EACH PA SEPARETLY
- STRATEGIC PLANNING PROCESS (SPP)
- PARTICIPATORY – STAKEHOLDER ENGAGEMENT
- EACH MANAGEMENT PLAN – UNDERGO PERIODIC REVIEW EVERY 5 YEARS

OVERALL OBJECTIVE – MEET THE NEEDS OF WILDLIFE & STAKEHOLDERS





Strategic Planning Process' (SPP)



HIGHLIGHTS ON PRE-FIELD WORK PHASE

a) Critical Stage - Forms basis of initiating Participatory Planning Process (PPP)

b) Review Existing Literature on PA - Understand key issues related to sustainable management of the PA, Legal & Policy Issues

c) Formulate objectives for baseline data collection and field reconnaissance surveys

d) Objectives Must be ‘SMART’

Specific, Measurable, Achievable, Realistic and Time Bound.

PRE-FIELD WORK PREPARATION

- GIS Data/Remote Sensing Data
- Interact with knowledgeable people
- Divide PA into Specific Segments - Facilitate Reconnaissance
- Task Allocation To Team Members – Areas of Specialization

FIELD RECONNAISSANCE SURVEY

Gather key information on PA + Surrounding Areas

Resource Mapping (Spatial + Temporal Scale + Values),

Understand Dynamics of Influence between PA and Surrounding Areas

Assess Opportunities + Challenges (inc. Risks) faced by PA

Assess Existing Conditions + Evaluate Potential Impacts on Resources

Identify areas where further information and analysis is needed;

Generate management objectives, improved conditions, and specific recommendations in the protected area management plan

Identify sites for desired future developments and formulate appropriate mitigation measures and recommendations

Stakeholders Consultative Workshop – Agree On

i. Protected Area's Purpose;
ii. Exceptional Resource Values;
iii. Significant Statement;
iv. Management Problems, Issues and Concerns;
v. Management Objectives;
vi. Management Zones;
vii. Management Actions;
viii. Strategic Environmental Assess.
ix. Strategic Investment Plan/Budget.

MANAGEMENT ZONES

- **Five Management Zones in the SPP are:**

a) **Wilderness Preservation Zones;**

b) **Natural Preservation Zones;**

c) **Development Zones;**

d) **Cultural Preservation Zones; and**

e) **Special use zones.**

PLAN OF ACTION

The plan of action consists of interrelated actions for:-

a) **Land Protection**
b) **Boundary Changes**
c) **Visitor Use and Development**
d) **Limits of Use and Development for Each Zone**
e) **Natural Resources Management**
f) **Cultural Resources Management**
g) **Protected Area Operations and Maintenance**
h) **Other Studies and Plans**

STRATEGIC ENVIRONMENTAL ASSESSMENT

1. **The Steps in Environmental Impact Analysis of a MP:-**
   a) **Identify Environmental Impact Topics to be Analyzed**
   b) **Analyze each Impact Topic Individually**
   c) **Prepare a Summary Matrix of Impact Topics and Actions**
   d) **Identify adverse Effects that cannot be avoided or mitigated Sufficiently**

THE POST-FIELD WORK PHASE

- **Summary of Post-field work phase**

a) **Implementation of Management Action Plans; and**

b) **Monitoring, Evaluation and Feedback.**

IMPLEMENTATION OF MANAGEMENT ACTION PLANS

1. Management Action Plan - Realistic and Implementable

2. SPP – Lead Stakeholder Consensus on Prioritization of Management Actions

OTHER CONSIDERATIONS

Implementation Capacity

- **Funding, Technical & Managerial Skills**
- **Political Will & Government Will**
- **MP – Viewed in a Wider Context as an integral plan of**
- **the national development process in protected area management.**

INTEGRATED PLANNING PROCESS – AN ECOSYSTEM APPROACH

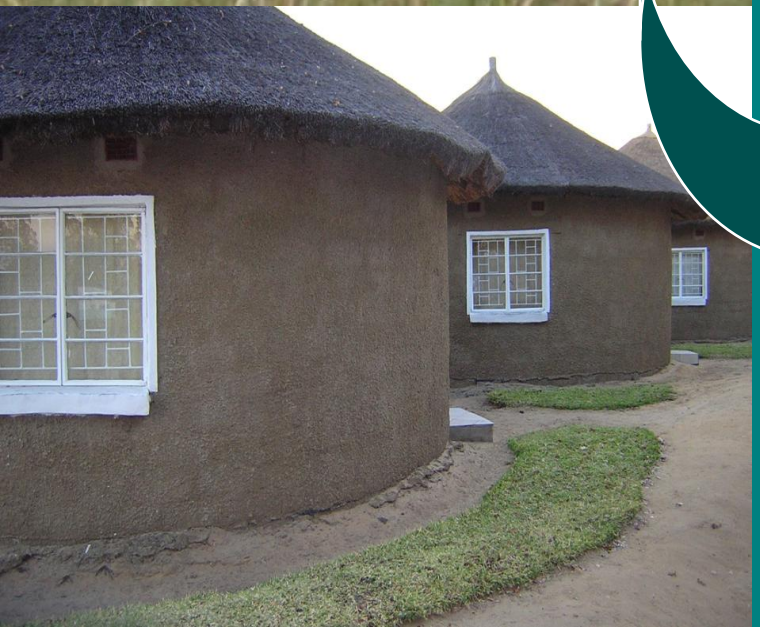
- TWO EXAMPLES IN ZAMBIA
- ZAMBIAN COMPONENT OF THE KAZA TFCA (COMPLETED)
- NORTH LUANGWA ECOSYSTEM (ON GOING)

PARADIGM SHIFT from PA Specific Planning to Sector-wide Approach with PA's as Core Areas

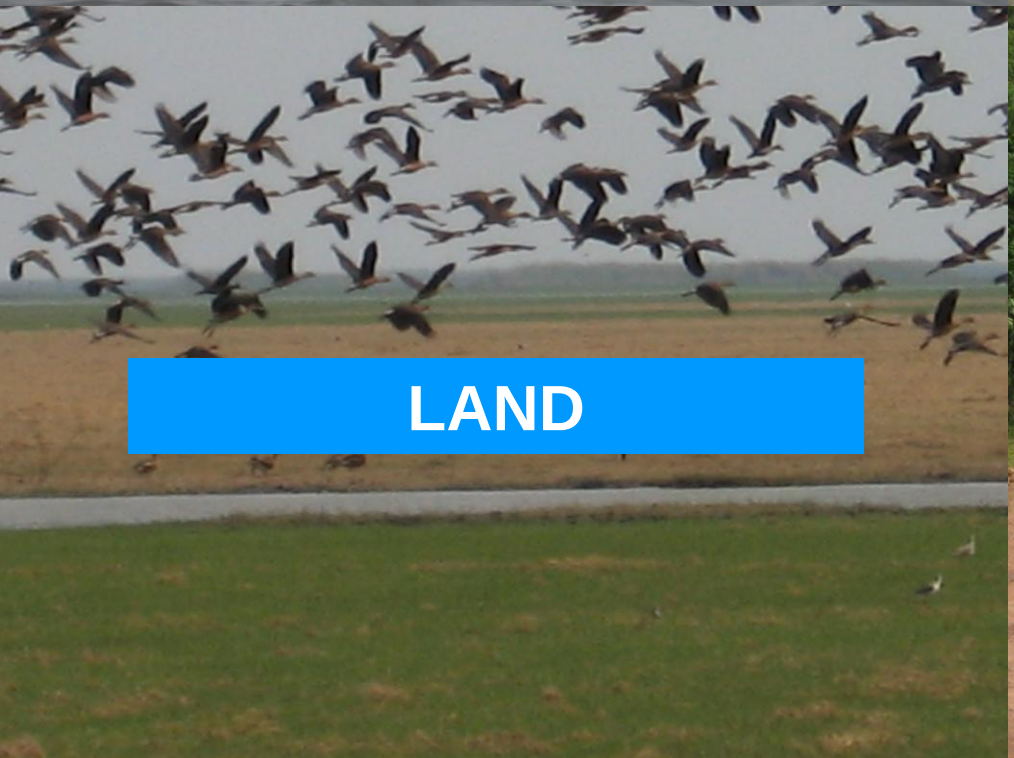
Sector Linkages/

Dynamics/

Trade Offs



Now Consider Natural Resources in Broader View + Not Restricted to Wildlife



STARTING POINT – ANCHOR THE PLAN IN THE NATIONAL DEVELOPMENT PLAN FOR THE COUNTRY - FIFTH NATIONAL DEVELOPMENT PLAN (FNDP)

- ***Vision** of FNDP – Natural Resources*
  - *Well-conserved* natural resources for sustainable development

- ***Goal of FNDP – Natural Resources***
  - Ensure *sustainable use* and *equitable* sharing of benefits of natural resources by all Zambians Focus on Core Business

Natural Resources Sector

Management of Protected Areas:

- **Objective**
  - To maintain a *representation of ecosystems*
- **Strategies**
  - Maintenance of *representative protected areas* network system
  - *Expansion* of protected area system to include *types not currently under protection*

Natural Resources Sector

Sustainable Management of Wildlife Resources:

- **Objective**
  - To effectively conserve and manage wildlife and habitats
  - **Strategies**
  - Improving habitat productivity, protection, and *monitoring*
  - Rehabilitation of protected areas *infrastructure*
  - *Integrated regional law enforcement*
  - *Co-management* of wildlife resources
  - *Commercialization* of wildlife industries

ZAMBIAN COMPONENT OF THE KAVANGO-ZAMBEZI TFCA

- Is a mosaic of land use practices under different land tenure system: State Land, Customary land and Private Land
- Has several Protected Areas – National Parks, Forest Reserves e.t.c.
- Has Several Wildlife Corridors
- Straddles across Two Provinces and Several Districts
- Has several tribes

PLANNING PROCESS

- Followed the SPP's Approach with Additional Assessment based on Sector-wide Approach

- Integrated Sensitivity Analysis based on additional Skills and capacity supplemented by Peace Parks Foundation

- OVERALL OBJECTIVE OF THE ZAMBIAN COMPONENT OF KAZA

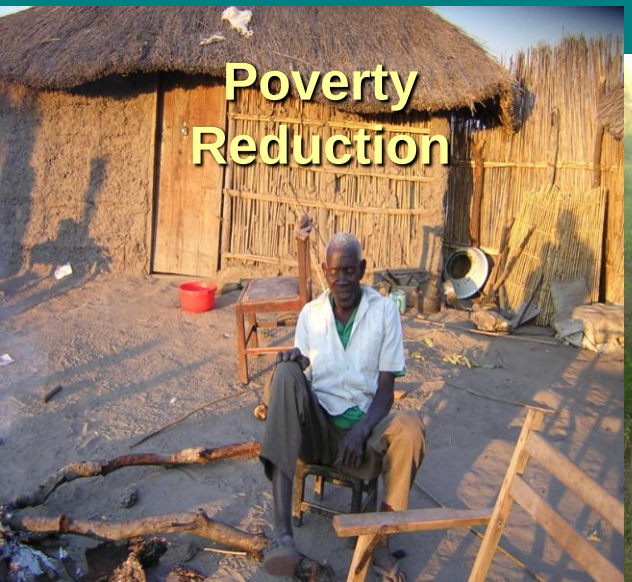
Ensure the sustainable and equitable development, utilization and management of the Zambian component of the Kavango-Zambezi TFCA

ZAMBIAN COMPONENT OF KAZA

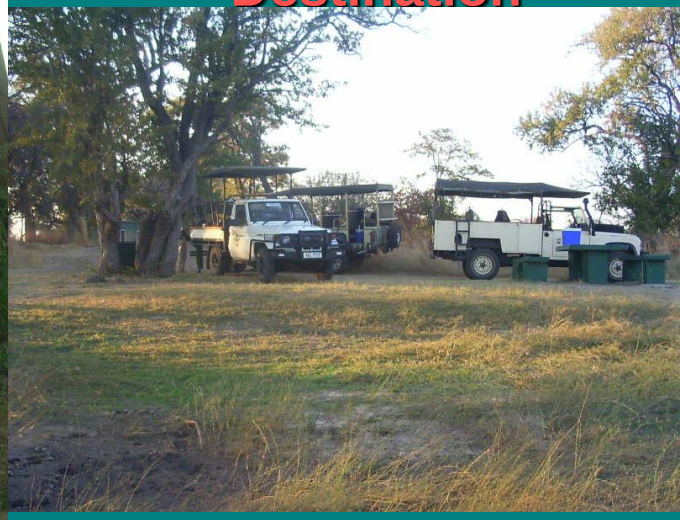
Adapted the Planning Process & Vision into the Overarching Vision for the KAZA TFCA

OVERACHING VISION (Five Governments Involved in The KAZA -Angola, Botswana, Namibia, Zambian & Zimbabwe)

Establish a World-class TFCA – Addressing:



Premier Tourism Destination



TO ACHIEVE THE CONSERVATION OBJECTIVES UNDER THE FNDP

Integrated Spatial Planning Process (Sector-wide Approach) i.e. Natural Resources + Developmental Sectors

STAKEHOLDER ANALYSIS & ENGAGEMENT/AWARENESS – ALL PROVINCES & DISTRICTS

GOVERNMENT AGENCIES

- ZAWA – WILDLIFE
- DEPT OF WATER AFFAIRS – WATER
- DEPT OF FISHERIES – FISHERIES
- DEPT OF LANDS – LAND
- DEPT OF FORESTRY – FORESTRIES
- DEPT OF MINES – MINING: ALL TYPES

OTHER AGENCIES

NON-GOVERNMENTAL ORGANISATIONS

- LOCAL
- INTERNATIONAL

PRIVATE SECTOR

LOCAL COMMUNITIES & TRADITIONAL LEADERS

LOCAL POLITICAL REPRESENTATIVES (AREA MP'S, COUNCILLORS, MINISTERS) – LOCAL BUY OUT

IMMINENT LOCAL PERSONS & PROFESSIONALS

MEDIA ENGAGEMENT

POLITICAL ENGAGEMENT/ BUY IN

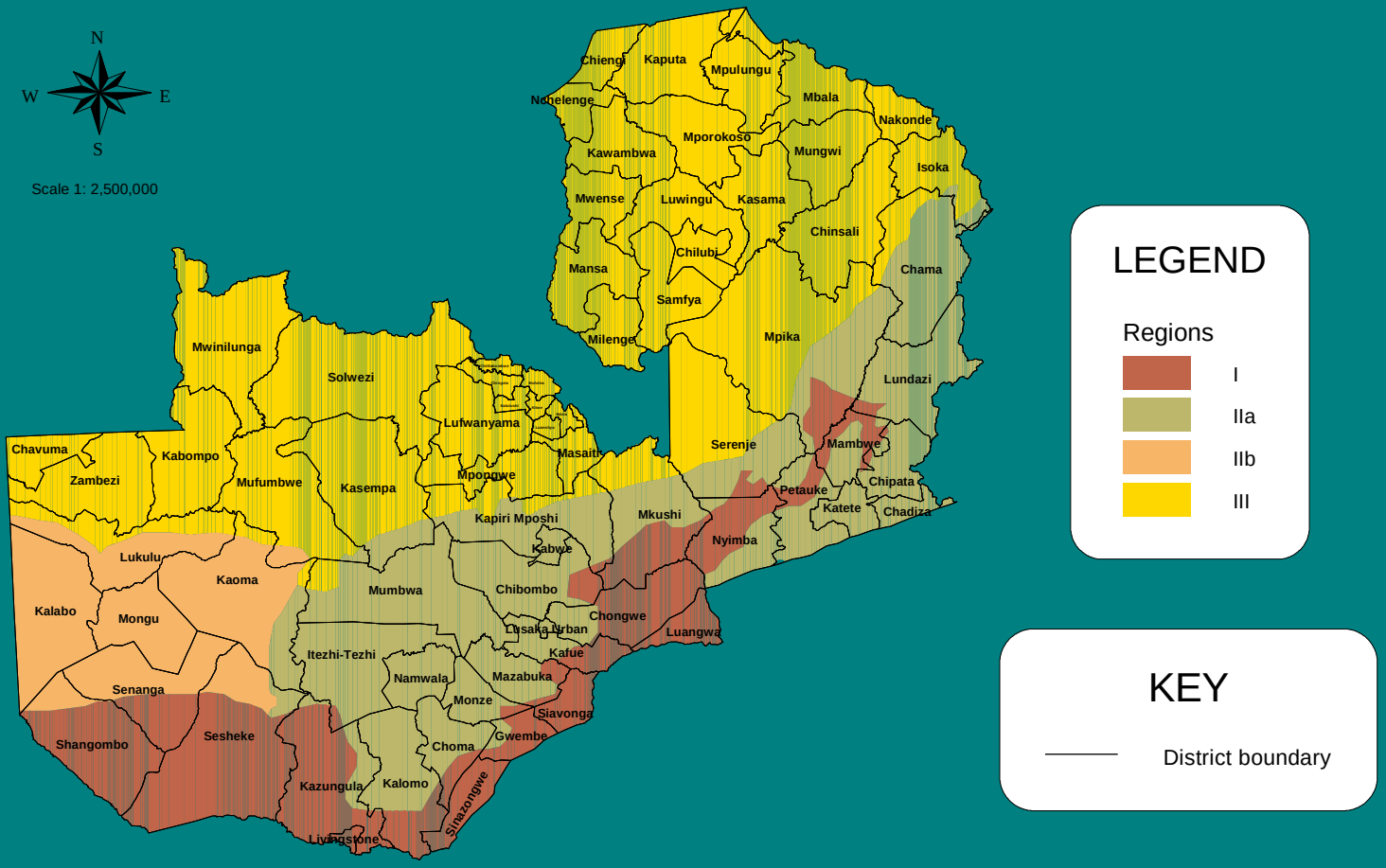
- Address Special Committee of MP's from Western Province
- Address the Barotse Royal Establishment
- MTENR – Leverage Point especially at Cabinet & Parliamentary Levels

SECTOR-WIDE RESOURCE MAPPING: SPATIAL & TEMPORAL

- CADASTRAL INVENTORY - LINKED TO FNDP AND SECTOR-SPECIFIC DEVELOPMENT PROGRAMMES
- SECTOR-TO-SECTOR WIN-WIN SITUATION
- SHOW CASE INTER-SECTOR DEPENDENCE IN SOCIO-ECONOMIC DEVELOPMENT AT LOCAL & NATIONAL LEVELS

USE EXISTING INFORMATION/WORK AS BUILDING STEPS

Agro-Ecological Regions



Sensitivity Analyses
Generic Process

Habitat Value
What does an area contribute to the international, national & regional conservation estate

Cultural Value
Quantification of sites with Historical, cultural & archaeological value/significance

Evaluate in a defendable, transparent and accountable framework

Landscape Sensitivity
How vulnerable is an area to physical disturbance by development

Visual Sensitivity
The ability of landscapes to absorb developments without causing visual intrusions

TOOK A MORE DETAILED APPROACH THIS TIME AROUND WITH THE ASSISTANCE FROM PEACE PARKS FOUNDATION

Sensitivity Analyses Generic Process

Set up technical working group

Habitat Value	Landscape Sensitivity	Visual Sensitivity	Cultural Value

Evaluate and score layers

Conservation Status Conservation Targets Local Representation National Representation Transformation	Topographic Hydrographic Soil Vegetation Species Specific Legislative	Slope Relative Elevation Edges & Lines Landscape Complexity Vegetation Height/Dens. Soil Colour/Contrast	National Legislation Resource Mapping Determine Significance Determine Footprint
		Visual Impacts Audio impacts Aspect	Population Density

Combined Sensitivity Index

RESOURCE MOBILIZATION

- Funds – Development of IDP & Operationalization of IDP
- Interdisciplinary Professional and Technical Experts
- Indigenous Knowledge & Vision
- Leadership – ZAWA was made to Lead the Process
- Keeping the Momentum (Core Planning Team – Passionate/Disciplined)

Sensitivity Analyses

- A *decision support tool* to integrate best available biodiversity, demographic & cultural knowledge into spatial planning for TFCAs
- If planning / zoning is to provide:
  - sustainable solutions to planning issues
  - ensure that protected / natural areas maintain required conservation values; sustain viable eco-tourism businesses
- it must be based on strong biodiversity informants

Sensitivity Analyses ~ Generic Process

- Organize Data are organized into readily usable, consistent, spatial format
- Systematical look at biodiversity contribution of the areas
- Critically review conservation objectives
- Sets management priorities
- Cooperative biodiversity decision making
  - Good interaction between sectors (institutions, managers, land owners, Professionals + Central Government)

LESSONS LEARNT

- Management of mosaic land uses – Complex + Expensive
- Engagement of diverse stakeholders & interest groups – Transparency, Consistency, Diplomacy & Stakeholder Movers
- Stakeholder Sensitivity – Reluctance
- Address Legal & Policy Challenges to Address Conservation & Business Opportunities & Partnerships ***e.g. Carbon Trading***
- **STAKEHOLDER AWARENESS OF SECTOR DEVELOPMENTAL AGENDA – LONG & SHORT TERM & How One Fits In**
- **IDP's – Catalysts for Development Investment: WIDENS JUSTIFICATION OF SECTOR SPECIFIC INVESTMENT e.g. Infrastructure Investment – Serve Multiple Sectors & Interests**
- **Synchronize & Harmonize Investment**

Keep the Momentum & Deliver on Commitments

IDP – CONTRIBUTING TO SOLUTIONS OF GLOBAL ENVIRONMENTAL CHALLENGES – CLIMATE CHANGE

THANK YOU