



THE LINK BETWEEN RESEARCH AND PROTECTED AREA MANAGEMENT

Aggrey Rwetsiba

Senior Monitoring and Research Coordinator

Uganda Wildlife Authority



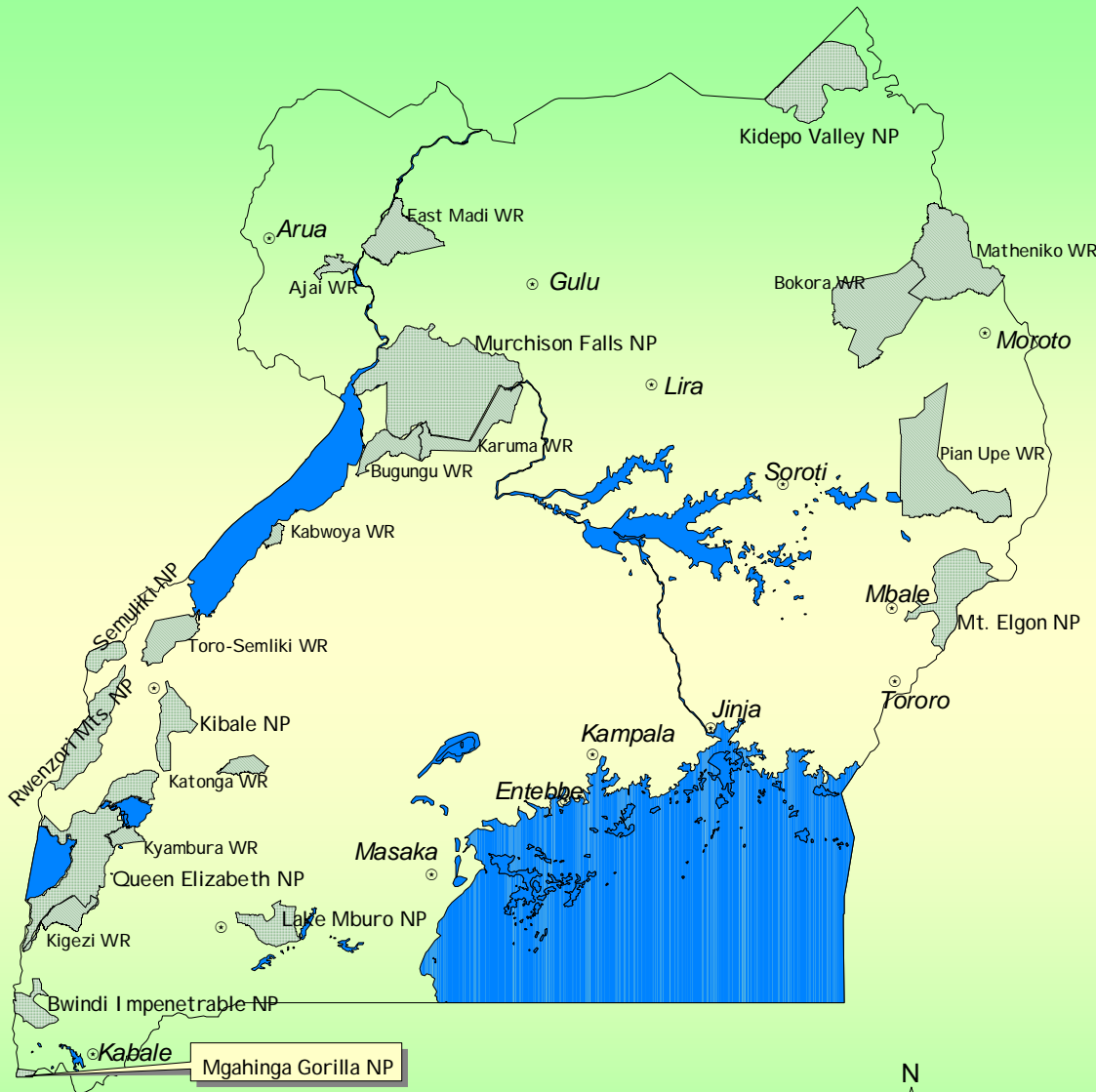
Introduction

❖ Wildlife PAs cover about 11% of Uganda's land surface

❖ PAs are made up of tropical rainforests, woodlands, grasslands, wetlands and open water (lakes and rivers).

❖ UWA manages PAs (10 NPs, 10 WRs, 7 W Sanctuaries & 5 CWA)

❖ UWA also manages wild animals outside wildlife PAs while plants are managed by NFA



Legend

- Wildlife Reserves
- Major town
- National Park
- Water bodies
- International boundary

100 0 100 200 300 Kilometers

STRATEGIC PROGRAMMES



1. Development of Policies, Systems and Procedures.
2. Planning
3. Protected Area Management
4. Wildlife Services
5. Collaborative Management
- 6. *MONITORING AND RESEARCH***
7. Security and Law Enforcement
8. Financial Sustainability and Management
9. Tourism Development
10. Public Relations
11. Performance Accountability
12. Good governance

Research and Management of Protected Areas



- Linkage between wildlife conservation and research in Uganda started way before the creation of NPs in the 1950s.
- By 1950s Cambridge University researchers undertook studies on habitat changes and carrying capacity in QENP.
- This led to establishment of the first Institute of Ecology and the research findings were used for management actions e.g culling of hippos.



- Later the institute was renamed Uganda Institute of Ecology, UIE. The UIE became the research arm of UNP largely focusing on savannah parks.
- UIE played a key role in undertaking research on animals and plants and also carried out regular aerial surveys that helped in mgt decision making and planning.
- Later in the 1980s and early 90s more research stations were established in protected areas (MUBFS in KNP and ITFC in BINP) that have also contributed to protected area mgt.



- These research stations have concentrated mainly on basic and academic research but also on management oriented research.
- Results from some of the long-term research programs have been instrumental in a number of areas such as planning, development and management of gorilla and chimpanzee tourism programs.
- Uganda Wildlife Authority now has a comprehensive Monitoring and Research Programme



The Programme is governed by;
A Wildlife Monitoring and Research policy

The goal is to promote the collection and provision of relevant, accurate and timely information required for conservation and management of Uganda's wildlife resources.

Prioritization of monitoring parameters

- There are number of ecological monitoring parameters to be monitored; Thus we prioritize them using criteria such as;



- ✓ The significance of the threat to which parameter relates
- ✓ The relevance to park management
- ✓ The feasibility of measuring the indicator
- UWA identified monitoring & research priorities at both national and PA levels, which is reviewed regularly.
- These are found on the UWA Website, www.or.ug.

Management Information System (MIST)



- UWA has a management information system
- To ensure flow and dissemination of information on research and monitoring programmes
- Information in MIST is collected thru the Ranger Based Data Collection (RBDC), Community Based Data Collection (CBDC) and Research
- MIST complements long term research but also does trigger or helps identify long term research needs.



Examples of MIST Outputs

➤ Maps

- ✓ Patrol coverage maps
- ✓ Distribution and number of illegal activities
- ✓ Distribution and number of key wildlife species.

➤ Reports

- ✓ Information on patrols (time and distance patrolled)
- ✓ Illegal activities (indices and numbers)
- ✓ Key wildlife species (indices, numbers and population structure).

How research information has been used



- Preparation of General Management Plans (GMP) for PAs.
 - Research data on wildlife, vegetation, socio-economics is very useful in preparing a GMP.
- Wildlife Translocations and Reintroduction.
 - Through research, we have managed to restock elands and giraffe in KVNP and to bring rhinos back into Uganda after 20 yrs.

Use of research info cont.



- Tourism development and diversification programs e.g
 - ✓ habituation of gorillas and chimps.
 - ✓ Monitoring and Evaluation of Tourism impacts eg in KNP, a study is ongoing on the impact of tourism and habituation on the behavior of chimps. Similar studies have been undertaken BINP and in other PAs.
 - ✓ The research findings will provide information to help management make informed decisions



Use of research info cont.

- Managing of Problems
 - ✓ Used research data to understand levels of crop raiding and where to put which deterrent e.g.
 - **buffer crops,**
 - **live fences (M. thorns)**
 - **trenches, etc**

- Management of invasive species (IS)
 - ✓ Mapping and inventory of the invasive spp
 - ✓ Control of invasive spp

- Development of Species Action Plans e.g NGASP,

Use of research info cont.



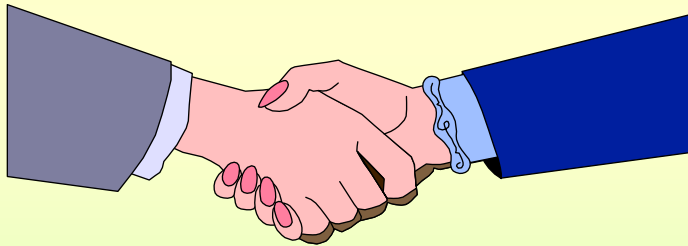
- Negotiating Collaborative Agreements with Communities and other forms of partnerships
 - ✓ Resource use, off take and the program impact
 - In BINP, research results have helped to determine off take levels for resources by communities from the park and this has improved the mgt of multiple use areas.
 - ✓ Negotiation and management of concessions

- Implementation of Wildlife Use Rights program;
 - ✓ Monitoring and Research data on wildlife populations and distributions is used in for example setting of quotas for different classes of wildlife use rights.

Conclusion



- UWA greatly values research and uses data for making informed decisions and planning
- As such, UWA has strived to provide a conducive atmosphere for research within the protected areas under her jurisdiction.
- It is through research that we can detect and monitor changes in the environment and resources and it is again through research and monitoring that the forces driving these changes are understood and proper interventions undertaken.
- **UWA appreciates support of our partners and pledge total commitment to the cause of wildlife and sustainable development.**



Thank You