

# HYDROLOGICAL MANAGEMENT PERSPECTIVES IN BOTSWANA

## *A Contrast between Colonial and Post-colonial periods*

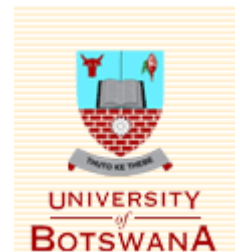
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VISITING SCHOLARS PROGRAM 2011,

United Nations University  
Institute for Natural Resources in Africa  
(UNU-INRA)

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# Presentation outline

- Introduction
- Objectives
- Methodology
- Expected outcome

# Introduction

- Botswana is a water stressed and semi-arid country.
- Water scarcity - biggest limiting factor to development in Botswana
- National experts and the World Bank predict a water shortage by 2025
- Water Act (1967) - to address the water shortage in the new millennium
- Water resources and control have been placed in the power over water and electricity and has been delegated to DWA & W



# Introduction

- DWA - an arm of MMEWR mandated to formulate water policy - Ministry assisted in implementation of policy by DWA, DGS & WUC
- Colonial admin ignored/reluctant to significantly develop water sector beyond precincts of isolated white enclaves
- Administrative focus in 1880s not on establishing efficient water provision and management system

# Introduction

- Colonial water projects included:
  - Irrigation schemes (1940s)
  - Construction of groundwater supplies for livestock, agricultural and water supply sectors of the Protectorate (1950s-1960s )
  - Lobatse & Gaborone Dams (1955-1965)
- Colonial Welfare and Development (CW&D) grants utilised for Surface Water Development Schemes
- Since independence - substantial government investment in the water sector

# Research problem

- Research on water in Botswana emphasizes supply/demand aspects; role of post-independence state - infrastructural development
- Inadequate research on management aspects
- Limited knowledge on similarities and differences in water provision in Protectorate and post-colonial eras.
- Roles of stakeholders in water management under both periods remain unclear

# Objectives

- **Overall objective:**

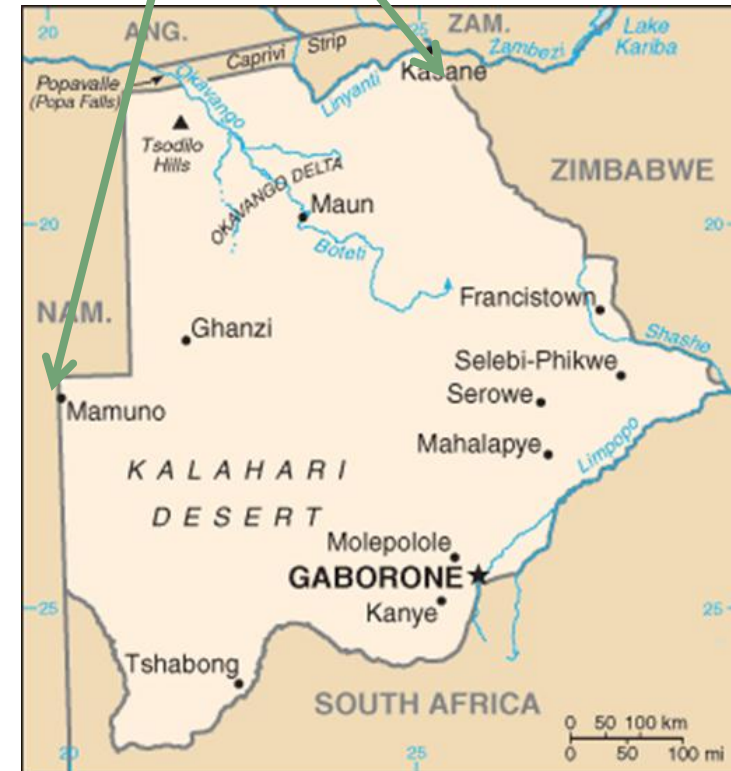
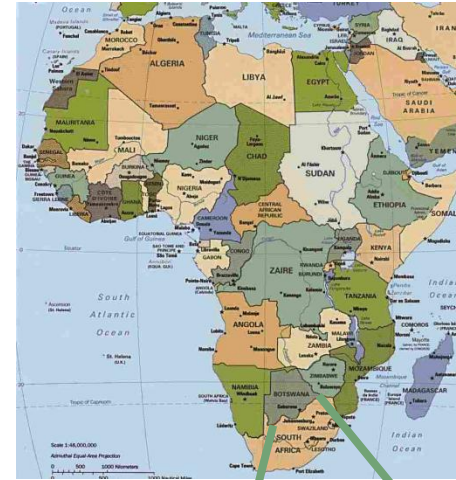
- To trace and assess water development, provision and management practices in Botswana from the colonial period to 2010 and proffer recommendations for a predominantly dry country.

- **Specific objectives :**

- Compare colonial and post-colonial hydrological management perspectives in Botswana
- Evaluate the socio-economic and political implications for policy implementation and development of water supply and management strategies
- Examine the impact of water supply and management strategies on domestic, irrigation (agricultural), livestock, and industrial including mining requirements.

# Study area

- **Country case study**
  - Botswana situated in the southern portion of Africa





# Methodology

- **Methods**

- Archival research including interviews with informants and desk review of literature
- Key informants include: rural and urban population, farmers, government, industry, and civic society as well as retired officials of government and companies
- Literature sources include: Botswana National Archives, libraries, internet and other documentation available
- Both quantitative and qualitative methods will be used to analyse data based on major political, social and economic benchmarks in the water history of the country from 1885 to 2010

# Expected outcome

- On completion the study is expected to generate knowledge on:
- Water resource management similarities and differences specifically the strengths and weaknesses of the two governments
- Stakeholder involvement and roles and their implications for sustainable water resources management and delivery
- Sector-based water requirements and historical measures adopted to bridge the deficit between demand and supply

# Expected outcome

- The findings of this research will be converted into a
  - Working paper to stir further scientific discussions
  - Policy brief to guide future policy and the decision making process on water resources in Botswana and inform policy in other parts of Africa .

# WORK PLAN

Phase	Dates/Period	Activity
Phase 1	3 weeks	<ul style="list-style-type: none"><li>- office research</li><li>- considering and evaluating methodology</li><li>- reviewing research questions</li><li>- identifying areas to visit for research and identifying interview respondents.</li><li>- selection of research assistants and training</li></ul>
Phase 2	2 months	<ul style="list-style-type: none"><li>- field surveillance/reconnaissance</li><li>- field research in identified areas</li><li>- compilation of data</li><li>- analysis of data</li><li>- identifying loopholes in the original plan and revising the plan.</li></ul>
Phase 3	1 month	<ul style="list-style-type: none"><li>- writing of the final report.</li></ul>

# PROGRESS SUMMARY

- Review of secondary literature
- Research in the Botswana National Archives (BNA)
- Oral interviews with key informants in the MMEWR, DWA and WUC
- Seminar presentation of Research Proposal
- Writing the first draft of my paper and preliminary findings

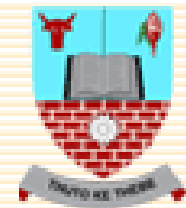
# THANK YOU



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