HYDROLOGICAL MANAGEMENT PERSPECTIVES IN BOTSWANA

A Contrast between Colonial and Post-colonial periods

VISITING SCHOLARS PROGRAM 2011,

United Nations University
Institute for Natural Resources in Africa
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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 UN predict water shortage by 2025

• Water Act (1967) - to address imminent water shortage in the new millennium

• Water resources and control vested in the state - power over water and water rights delegated to DWA & Water Apportionment Board
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.
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<tr>
<th>Phase</th>
<th>Dates/Period</th>
<th>Activity</th>
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<tr>
<td>Phase 1</td>
<td>3 weeks</td>
<td>- office research&lt;br&gt;- considering and evaluating methodology&lt;br&gt;- reviewing research questions&lt;br&gt;- identifying areas to visit for research and identifying interview respondents.&lt;br&gt;- selection of research assistants and training</td>
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<td>Phase 2</td>
<td>2 months</td>
<td>- field surveillance/reconnaissance&lt;br&gt;- field research in identified areas&lt;br&gt;- compilation of data&lt;br&gt;- analysis of data&lt;br&gt;- identifying loopholes in the original plan and revising the plan.</td>
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<td>Phase 3</td>
<td>1 month</td>
<td>- writing of the final report.</td>
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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