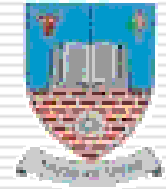
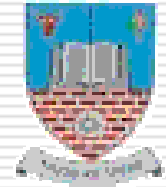


Optimising Land Information Management in Tribal Lands of Botswana

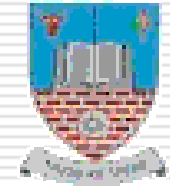


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Department of Civil Engineering



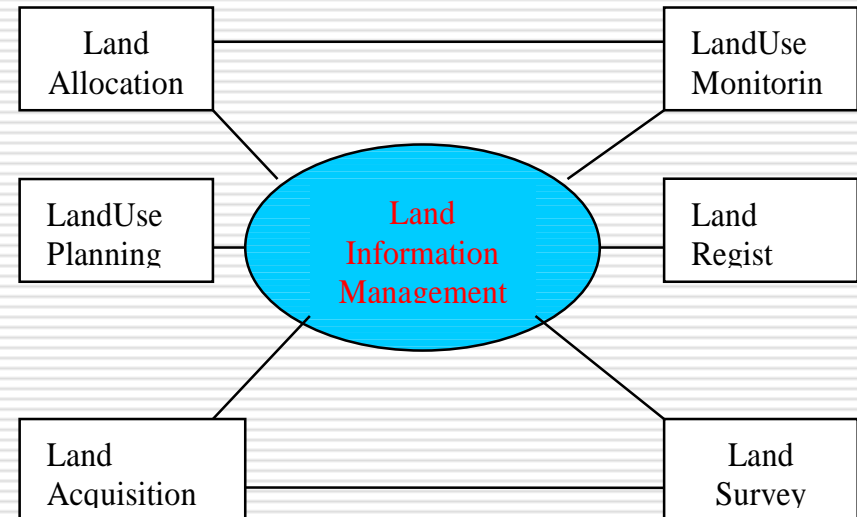
Outline of presentation

- Introduction
- Administration of land in rural Botswana
- The land information nexus
- The Tribal Land Information System
- Data collection to populate system
- LIS Model
- Conclusion



Introduction

- Land forms the basis of any economic development and its proper management can only be achieved if information on the said land is available
- Land information collection, however, has always been an expensive exercise and therefore in most areas in rural Botswana information is incomplete

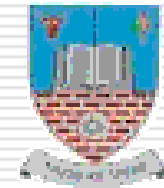




Administration of land in tribal Land

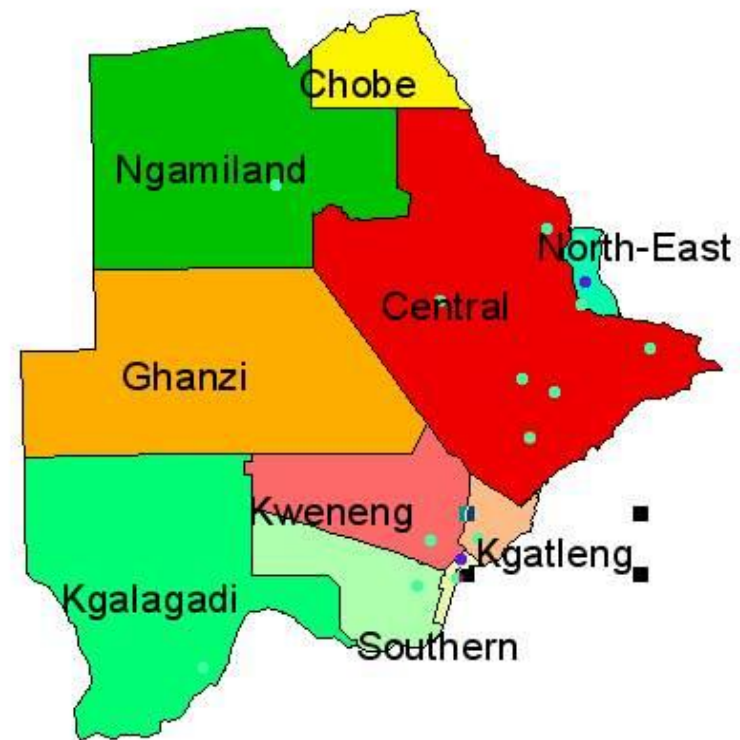
- Tribal land is administered by Land Boards
- Governed by the Tribal Land Act
- The Act governs access, use and disposal of 71% of land in Botswana

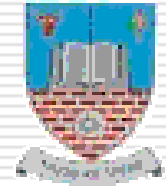




Land Boards functions

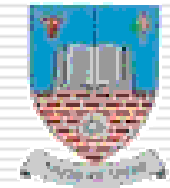
- The granting of rights of use of any land
- The cancellation of any grant of any rights to use any land
- Hearing of appeals from, confirming or setting aside any decision of any subordinate land authority;
- The imposition of restriction on the use of tribal land



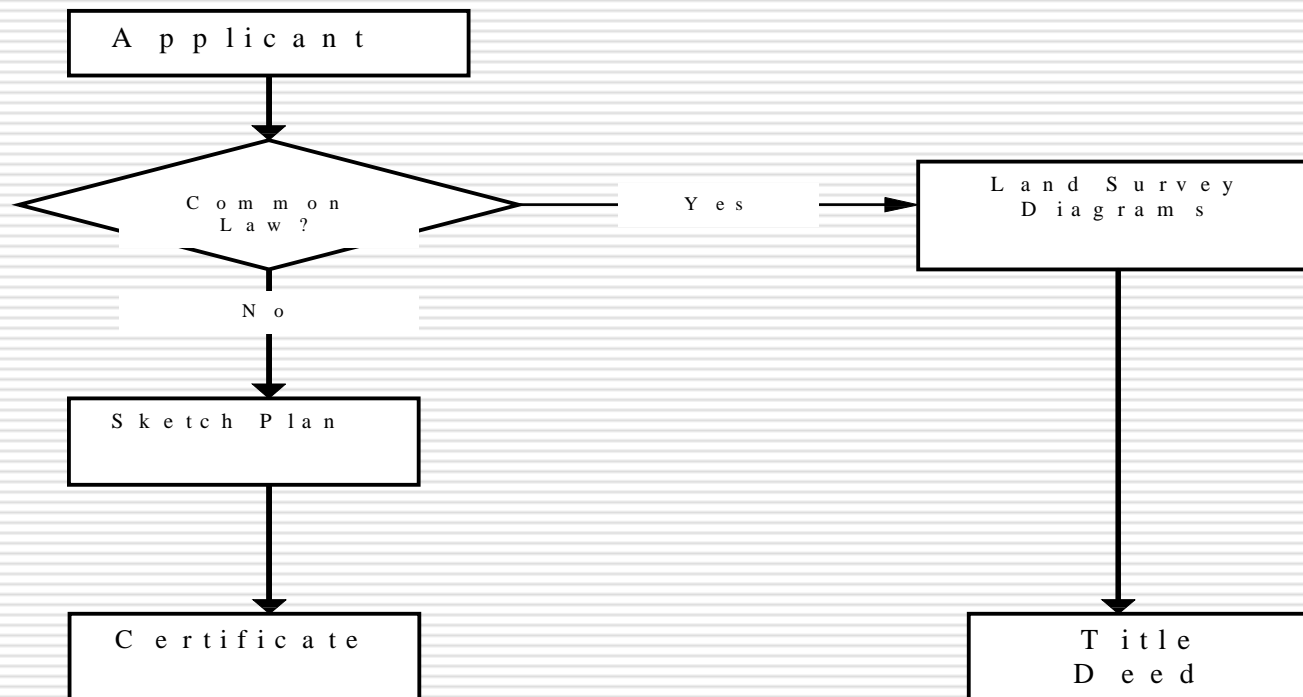


Problems

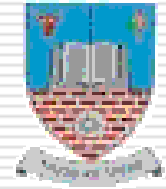
- Failure to deliver on the said functions
- Presidential Commission (2001) noted the poor state of records both in terms of land board minutes as well as the land inventory.
- Issues of land tenure affect how information is gathered



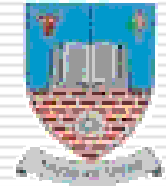
Certificate of rights Vs Title Deed



Development of the Tribal Land Information Systems

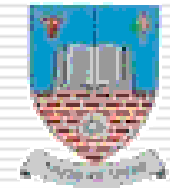


- Previous attempts
 - n Maun-for physical planning
 - n Ramotswa- aerial photographs included
 - n Goodhope- integration of survey data with other data
 - n LYNSIS- Land Inventory for Tribal Areas of Botswana



TLIMS

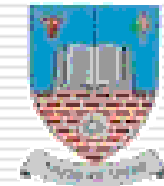
- Tribal Land Integrated Management System would integrate land administration work.
- The system is to have the following functionalities
 - n Land Use Plan,
 - n Process Plot Applications,
 - n Plot allocations,
 - n Change Land Use,
 - n Transfer Land Title, Plot Registration, Sub-Divisions, Sub-Leasing / Sub-Letting, Development Control / Compliance, Acquisition and Compensation, Adjudication and Land Board Revenue



Data collection

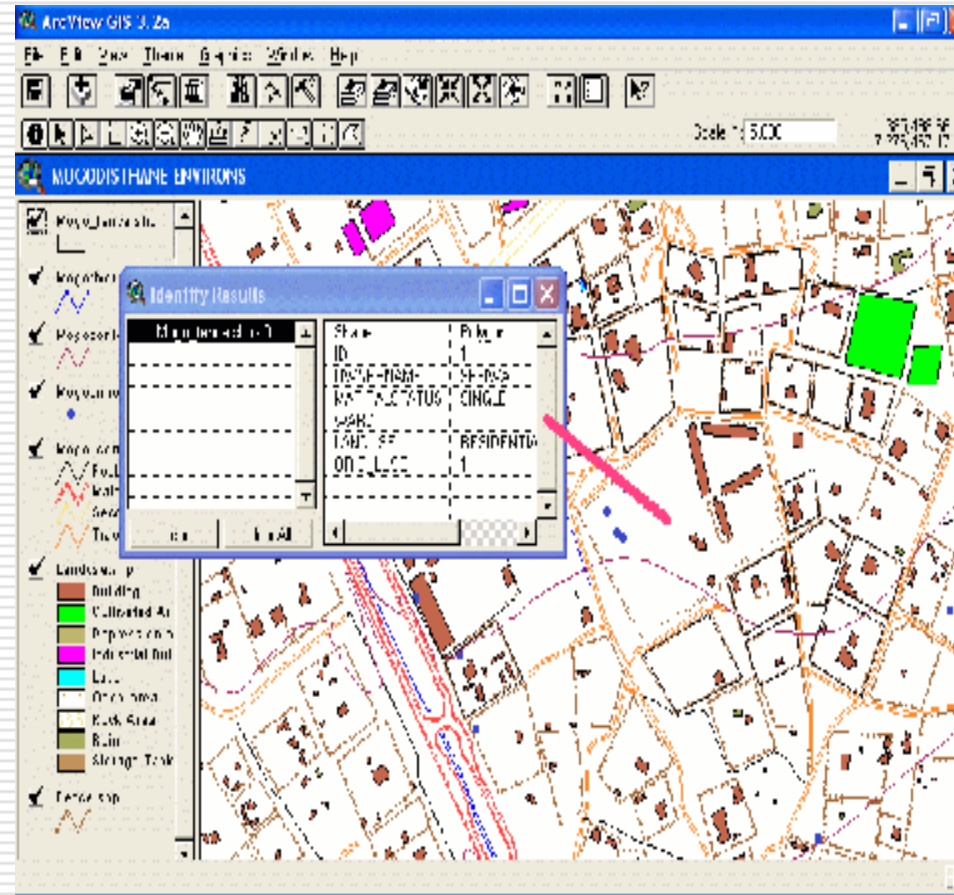
- For system to work geographical and attribute data need to be collected
 - n Defining Boundaries-includes adjudication
 - n Attribute information- ownership, nature of use of the land and original use for which land was allocated.

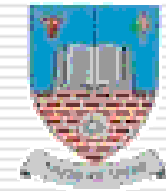




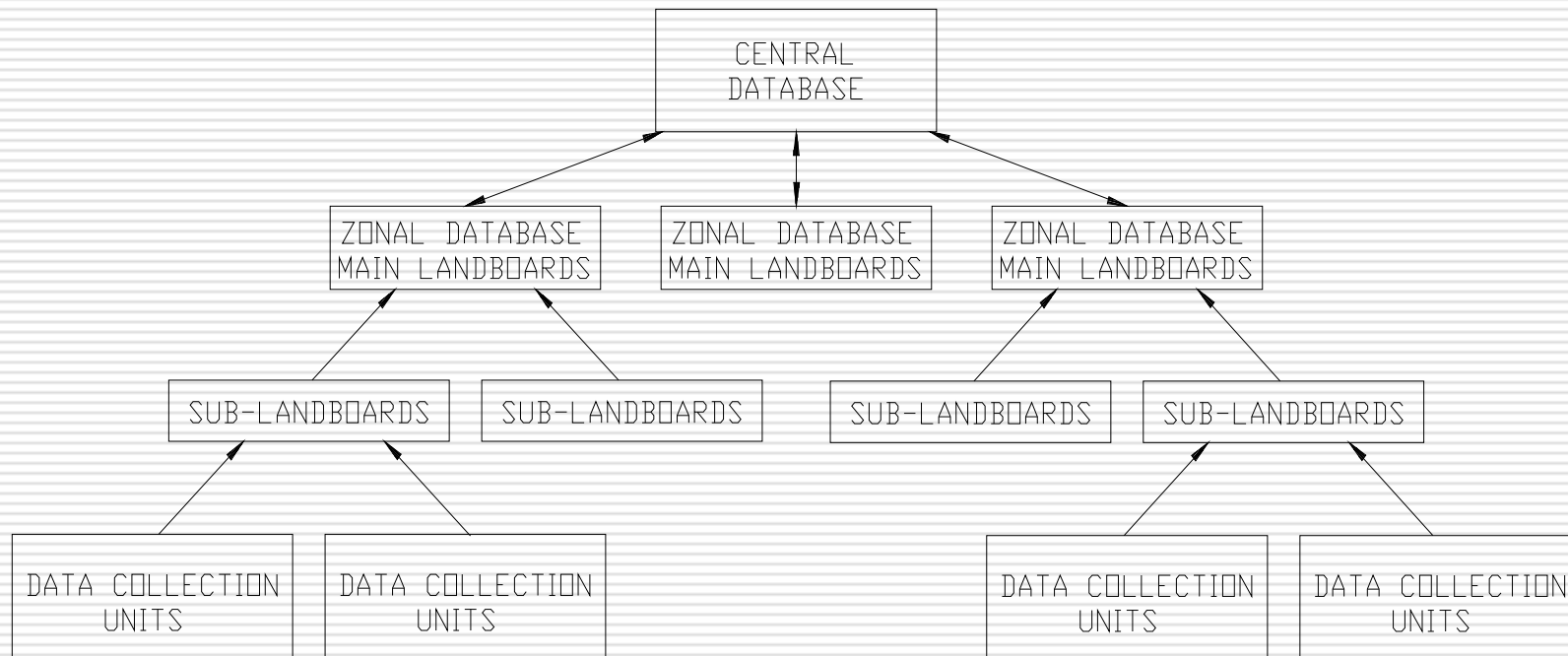
Defining Boundaries

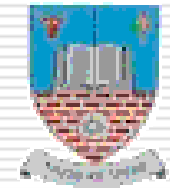
1. Use of Orthophotos and DXF plans from Department of Surveys and Mapping- All major villages are being mapped at 1:5000
2. Land Registry data-owner, marital status etc



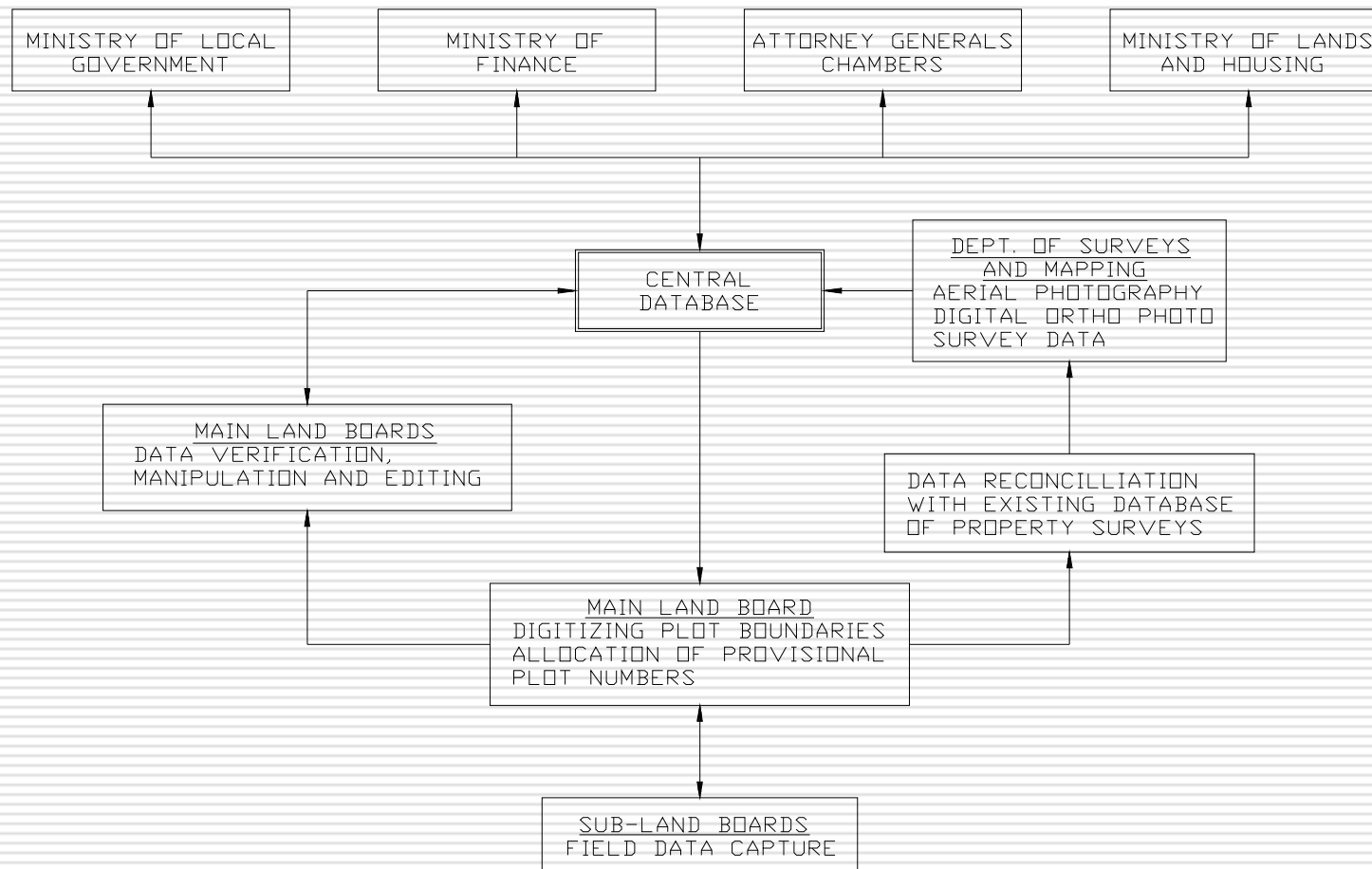


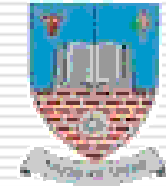
Land Information Model-Schematic data flow





LIS Model





Conclusion

- Land Information System must form the basis of all spatial data and would be used in the management of land in rural areas.
- Though the collection of data required to populate the land information system seems onerous it is a process that needs to be done if the information system will truly be meaningful
- integration of customary and statutory systems remains a major challenge for policy in Africa and more work is required to clarify both the technical and institutional options available

