







## **ABSTRACT**

Land use planning in Zambia is currently riddled with the problems of being cumbersome, unsatisfactory, unbalanced and fragmented.

The study revealed that the above scenario, may be attributed to among other reasons, the inappropriate and often out dated land use planning process tools currently in use, whilst current planning methods are cumbersome and time consuming. On the other hand, “the planning system consists of various actors with varying functional authority relating to or affecting spatial planning.” (MLGH.2008, P.3). These players are normally “guided by overlapping and conflicting legislation.”(MLGH.2008, P.14). Planning for the study area is in turn done by the Northern Province Planning Authority, which delays decision making. In a nutshell, “plan making in Zambia is currently ad hoc, piece meal, compartmentalized and demand driven, and not based on critical analysis of the over-all spatial development process.” (MLGH. 2008, P.11).

This research project therefore explores how introduction of GIS and remote sensing technologies may help improve land use planning process

A model was developed illustrating proposed role of GIS in the planning process. Time factor, coupled with inadequate financial resources and lack of GIS equipment at the Mpika District Council however impacted negatively on sample size, and testing of the proposed model. Instead, partial testing was only done through inspecting on screen and printed copy of a land use map, as a product of the design in ArcView 3.2a.

In view of the foregoing, clear guidelines and policy changes are therefore required to facilitate entry of a GIS based integrated approach to district land use planning. This consequently calls for massive investment in district capacity building. With GIS application, integrated district land use planning process is not only feasible but attainable.

It is envisaged that if proved successful, the results of this study would then be replicated and the experiences shared with other local authorities in Zambia.

**DEDICATION**

**To  
Dearest  
Mum**

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## ACRONYMS

CSO.....	Central Statistical Office
DC.....	District Commissioner
DDCC.....	District Development Coordinating Committee
DHMT...	District Health Management Team
DPPH.....	Department of Physical Planning and Housing
ECZ.....	Environmental Council of Zambia
EPPCA.....	Environmental Protection and Pollution Control Act
ESRI.....	Environmental Systems Research Institute
GIS.....	Geographical Information Systems
IDPs.....	Integrated Development Plans
IDLUPP...	Integrated District Land Use Planning Process
LGAZ.....	Local Government Association of Zambia
MENR...	Ministry of Environment and Natural Resources
MLGH...	Ministry of Local Government and Housing
MoFNP.....	Ministry of Finance and National Planning
NDCC.....	National Development Coordinating Committee
NPPA.....	Northern Province Planning Authority
PDC.....	Provincial Development Coordinating Committee
RDC.....	Residents Development Committee
RS.....	Remote Sensing
SWOT.....	Strengths, Weaknesses, Opportunities and Threats.
TC.....	Town Clerk
T&CPA.....	Town and Country Planning Act
UNCHS....	United Nations Centre for Human Settlements
UNEP.....	United Nations Environmental Programme
ZAMSIF...	Zambia Social Investment Fund

