AN ETHICAL	ASSESSMENT	OF HUMAN	<b>ADAPTATION</b>	TO ANNUAL	FLOODS IN
MONGU'S B.	AROTSE FLOO	DPLAIN ANI	) ITS IMPACT	ON THE ENVI	RONMENT

BY

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A dissertation submitted to the University of Zambia in partial fulfilment of the requirements of the degree of Master of Arts in Applied Ethics.

THE UNIVERSITY OF ZAMBIA LUSAKA

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### **Declaration**

IVI	nonga Mutonga, decrare that this dissertation:
(a)	Represents my own work.
(b)	Has not previously been submitted for a degree at this or any other University; and
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# Approval

This dissertation of Mutonga Mutonga is approved as fulfilling the requirements for the award of
the degree of Master of Arts in Applied Ethics by the University of Zambia.

Signed:	Date:	
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#### Abstract

The main aim of this research was to carry out an ethical assessment of the manner in which humans living in Mongu's Barotse floodplain have adapted to annual floods and how these strategies have affected the human and natural environment.

The methodology of the study was a descriptive study using qualitative methods and involving an ethical evaluation. Primary data was collected using observation, in-depth semi-structured interviews and focus group discussions. The total sample of 90 was comprised of Mongu's Barotse floodplain residents, local leaders, and officials from government and non-governmental organizations. The theoretical framework for the study was the environmental land ethic theory and an extended form of utilitarian theory and an ethical assessment of the data was made on the basis of these two theories.

The findings of the study revealed that flood events have increased in occurrence and in extent covering areas that never experienced floods before in Mongu's Barotse floodplain. These floods have had diverse impacts on both the human inhabitants and the natural environment that are both positive and negative. Among the positive impacts were rejuvenating soil fertility, easing movements, increasing fishing and promoting the local culture in the *Kuomboka* cultural ceremony. The negative impacts included destruction of houses and property, crops, grazing lands, reduced cultivable land, siltation/sedimentation and submerging of burial sites. The study has also revealed that floods have increased epidemics and waterborne diseases.

The study findings further revealed that the humans in Mongu's Barotse floodplain have adapted to the annual floods by building villages on mounds, raising the grounds of villages, vacating the flooded plain to higher grounds, fishing, making advance preparations in agriculture, keeping cattle, hunting and conducting economic enterprises.

The study concluded that both the land ethic and the extended form of utilitarian theory justified the adaptation strategies undertaken by the inhabitants of Mongu's Barotse floodplain.

Based on the findings, a number of recommendations were made to the government and the BRE as to how improvements might be made for the future.

## DEDICATION

I dedicate this document to my late mother Mrs. Grace Mutumba Mutonga and my daughter Grace Notulu Mutonga.

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### **Operational definitions**

Adaptation : The process or state of changing to fit a new environment or different conditions

or the resulting change.

Annual : Happening once a year.

Assessment : A judgement of something based on the situation.

Ethical : Conforming to accepted moral standards

Environment: All the factors in the natural surrounding affecting and being affected by the

biotic life forms (human, animal and plant) in addition to the abiotic elements

in Mongu's Barotse floodplain.

Flood : A very large amount of water covering previously dry area from the rains or an

overflow of water from the river source.

Floodplain : A low-lying land across which a river flows that is covered by sediments as a

result of frequent flooding.

Impact : The effect that an action/ something has on another either negative or positive.

### **Acronyms/Abbreviations**

B.C. : Before Christ

BRE : Barotse Royal Establishment

C.S.O. : Central Statistics Office

DMMU : Disaster Management and Mitigation Unit

E.C.Z. : Environmental Council of Zambia.

G.R.Z. : Government of the Republic of Zambia

MACO : Ministry of Agriculture and Co-operatives

MTENR : Ministry of Tourism, Environment and Natural Resources

P.P.S. : People's Participation Service

RMB : Renminbi

Rs. : Rupees

Sq. : Square

US : United States

US\$ : United States Dollar

ZAWA : Zambia Wildlife Authority

ZEMA : Zambia Environmental Management Agency

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