AN ETHICAL ASSESSMENT OF HUMAN ADAPTATION TO ANNUAL FLOODS IN MONGU’S BAROTSE FLOODPLAIN AND ITS IMPACT ON THE ENVIRONMENT.

BY

MUTONGA MUTONGA

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

2012
Declaration

I, Mutonga Mutonga, declare that this dissertation:

(a) Represents my own work.
(b) Has not previously been submitted for a degree at this or any other University; and
(c) Does not incorporate any published work or material from another dissertation.

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Date:………………………………………..
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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.

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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.
ACKNOWLEDGEMENTS

I wish to express my profound gratitude to my supervisor Professor Clive Dillon-Malone for the patience, understanding, support and encouragement he exhibited during the study. I am also extending gratitude to members of staff in the Department of Philosophy and Applied Ethics especially Dr. A. Musonda (HoD), Professor G. Spielthenner and the secretary, Mrs F. Mwanamwalye.

I also extend gratitude to the following lecturers: Dr. B.S. Siamwiza (Dean of School of Humanities and Social Sciences), Dr. F. Lumbwe (Ecology), Dr. E. Sakala (Geography), Dr. C. M. Namafe (Environmental Education) and Mr. G. Kajoba, (Geography) for their important references to literature and for the encouragement they gave me during the study.

Special thanks go to my superiors who granted me study leave at a short notice, Mr. D. Ngimbu (former DEBS, Zambezi), Mr. A. Chilengi (former HR, Zambezi) and the following individuals from Zambezi Day High School, Mr. Mudenda (Former Headteacher), Miss. E. Machayi (Acting Headteacher) and Mr. B. Mtayachalo (Acting HoD, Social sciences)

I also wish to extend my gratitude to Induna Tungulu of Lealui Royal village, and Mr. Moonga, ZAWA Mongu Warden, for the substantial information rendered to the study and to all who may have contributed in one way or another.

Furthermore, I would like to recognize the support and encouragement given to me by colleagues, Mr. Josia Kafila, Mr. Emmanuel Ng’andu, Mr. Emmanuel Mbao, Mr. Isaac Lijimu, Mr. Everisto Habiyaremye Mr. Joreck Chishika, Mr. Lumamba Mudenda, Mr. Bright Muleya and others who contributed to my study.

Last but not the least, I extend my gratitude to my dear wife Mrs Harriet Mwiya Mutonga, my sisters, Mrs Melody Mutonga Akende, Miss Christah Akende, Miss Rachael Mutonga and my brother Mr. Silumesi Mutonga for their financial support, understanding and encouragement during the study and to my nephew, Mr. Mike Pumulo Tepa, for keeping the house when I was away for studies.

May the Good Lord bless you all!
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

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>B.C.</td>
<td>Before Christ</td>
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<tr>
<td>BRE</td>
<td>Barotse Royal Establishment</td>
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<tr>
<td>C.S.O.</td>
<td>Central Statistics Office</td>
</tr>
<tr>
<td>DMMU</td>
<td>Disaster Management and Mitigation Unit</td>
</tr>
<tr>
<td>E.C.Z.</td>
<td>Environmental Council of Zambia</td>
</tr>
<tr>
<td>G.R.Z.</td>
<td>Government of the Republic of Zambia</td>
</tr>
<tr>
<td>MACO</td>
<td>Ministry of Agriculture and Co-operatives</td>
</tr>
<tr>
<td>MTENR</td>
<td>Ministry of Tourism, Environment and Natural Resources</td>
</tr>
<tr>
<td>P.P.S.</td>
<td>People’s Participation Service</td>
</tr>
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<td>RMB</td>
<td>Renminbi</td>
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<td>Rs.</td>
<td>Rupees</td>
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<td>Sq.</td>
<td>Square</td>
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<tr>
<td>US</td>
<td>United States</td>
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<tr>
<td>US$</td>
<td>United States Dollar</td>
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<tr>
<td>ZAWA</td>
<td>Zambia Wildlife Authority</td>
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<td>ZEMA</td>
<td>Zambia Environmental Management Agency</td>
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