BUSITEMA UNIVERSITY FACULTY OF NATURAL RESOURCES AND ENVIRONMENTAL SCIENCES

THE IMPACTS OF WILDLIFE POLICIES IMPLEMENTATION ON COMMUNITY
LIVELIHOODS AROUND MOUNT ELGON NATIONAL PARK, MBALE DISTRICT,
EASTERN REGION OF UGANDA

BY

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A RESEARCH DISSERTATION REPORT SUBMITTED TO THE FACULTY OF NATURAL RESOURCES AND ENVIRONMENTAL SCIENCES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A BACHELOR OF SCIENCE IN NATURAL RESOURCE ECONOMICS OF BUSITEMA UNIVERSITY

JUNE 2015

DECLARATION

I WANYONYI INNOCENT declare that this work is out of my own knowledge and research due to the acknowledgement which was accordingly done in form of references to other people's ideas, and it has never been submitted to any organization or any university for an award.

Signature.....

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APPROVAL

This	serves	to	certify	that-WANYON'Y / INNOCENT	
did r	esearch	tha	at I had	the pleasure to supervise. I confirm that this report is a tru	ue
repre	esentatio	on o	of the fin	dings in it.	

I am therefore recommending that the report be submitted to the Faculty of Natural Resources and Environmental Sciences of Busitema University.

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DEDICATION

This piece of work is dedicated to the family of my father Mr.Wambete John and my mother Miss Bisikwa Immaculate in appreciation of the support, care and love offered to me. I also dedicate to my beloved sisters Namwano Barbra, Namwatikho Brenda, Mutenyo Cathrine, Namwama Scovia, all my brothers Lulonde Bruno, Lwala George Linus, and my friends Wakalanga Sulai, Wakoba Fred, Nagobi Sumaya, Katabarwa Collins, Wambi Geoffrey, Jingo Haman, Nviri Geoffrey for the courage that they gave me May the almighty Lord reward them abundantly.

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ABSTRACT

With the implementation of the wildlife policy, people have been displaced but the level of displacement increased with the degazzetment of the park. Access to forest resources was restricted, people lost their grazing land and people were deprived of their farming land and their homes. An initial strict preservation approach was soon substituted by community based participatory approach. The main general objective of the study was to contribute to the knowledge generation about the impacts of the wildlife policy implementation to communities living in surrounding protected areas of Mount Elgon. Secondly to describe how the policy has been implemented. Next objective is to capture the perception of communities about the benefits related to this policy on national park protection, to describe how they affect the livelihoods of people and finally to outline the measures to improve on the livelihoods of this communities and conserving mount Elgon national park. The study was a cross sectional and used both quantitative and qualitative approaches to collect data analyze and present. The methods of data collection used were interviews, questionnaires and field observations. The data was collected from a sample of 60 respondents.

The study included the use of statistical packages like Excel, Stata, Min-tab to generate descriptive statistics, Gaussian models and the correlations for testing for the significance of the results

These were from Gewa parish, Bumusiri parish, Bumajila parish and Bukhwana lower in Bufumbo and Bubyangu sub counties respectively. Findings included the better understanding of the impacts of the wildlife policy implementation were it was established that the wildlife policy implementation had the great impact on the local communities with the finding showing that the communities were mostly affected by hunger as most of the communities were much dependent on the national park for their livelihoods, incomes were much affected given the fact that they are agriculturalists diseases in the families, low productivity of crops due to the exhaustion of the small piece of land that the households posses and low productivity of animals due to luck of the pastures due to limited access to the national park as this has made the communities to have hard time in managing their families. It was found out that the communities have tried out some strategies to ensure that their livelihoods improve as some are engaged in the business of selling of ripe bananas, selling of grass and working for people as a way of earning some income to sustain their families but the strategies are not appropriate in making this communities be well off. It was found out that so far no measures have been taken by the government towards improvement on these communities livelihoods as this communities although have tried to catch up with life by doing some little activities that can earn them some income further research should be done to enhance the findings of the study and their needs the government to include the local community starting from the grass roots before implementation of the policy begins. From the Gaussian linear models both the Gaussian log models and the log models indicate that the data was significant in explaining the impacts of the wildlife policy implementation wit (P<000) and the coping strategies that the communities have under taken. There was also significant (P<0.05) correlations between the variable explaining the impacts of wildlife policy implementation.

Key words: policy implementation, conservation refugees, Food security and food production, Ecosystem services and ecosystem products, livelihoods, conservation, eviction.

CHAPTER-I: INTRODUCTION

1.0. Introduction

The research will be looking at the effects of wildlife policy implementation on the livelihoods of communities living with in and around Mount Elgon national park the case study based in Bufumbo sub County. This chapter covers the background of the study, the problem statement, the objectives of the study, research questions, the scope of the study conceptual frame work, operational definitions of the key terms.

1.1. Back ground

Displacement of people has often been driven by large scale development projects, wars, disease and ecological disasters such as famine and drought. However, there is another category of displaced people who have often been ignored. These people who are victims of a much more noble cause are referred to as conservation refugees. Conservation refugees are people displaced from protected areas.

Despite the existence of conservation refugees and their troubles, only Brockington and Igoe (2006) have attempted a global literature review on the problem. Conservation of Mount Elgon national park has made many communities to become refugees as a result of conservation and many have been displaced hence becoming the refugees of conservation. They are people, frequently indigenous people, who are displaced from their lands to create and restore conservation areas national parks or biodiversity reserves. Conservation refugees exist on every continent, except Antarctica. By some reports there are 14 million conservation refugees on the African continent

References

Webster, 1954; Scott, 1998, Protected area governance, carbon offset forestry, and environmental injustice at Mount Elgon, Uganda. (Pg. 17, 13)

A review of Kenya's implementation of the C B D Programme of Work on Protected Areas July 2008 (pg 9)

Himmelfarb, David' 'moving people, Moving Boundaries: The socio-economic effects of protectionist conservation, involuntary Resettlement and Tenure insecurity on the Edge of Mt Elgon national Park, Uganda "Agroforestry in landscape mosaics working paper series. World Agroforestry Centere, Tropical resources institute of Yale University, and the University of Georgia. 2006 (pg 65)

Personal interviews with those in temporary resettlement area. November 16, 2008

"Public Dialogue on Land reform and Tenure Systems in Uganda"October 27, 2008. (pg 15)

State Of Environment Report For Uganda 1994.Minstry Of Natural Resources National Environment Information Center.1994 (pg.37)

- Adams, W. M. and J. Hutton (2007): 'People, Parks and Poverty: Political Ecology and biodiversity Conservation.' Conservation and Society, Vol. 5, No. 2, 2007, (Pg 147-83)
- Adger W. N., T. A. Benjaminsen, K. Brown and H. Svarstad (2001): 'Advancing a Political Ecology of Global Environmental Discourses.' Development and Change Vol. 32, (681-715).Institute of Social Studies. Blackwell Publishers, Oxford.

- Barrow, E. and Fabricius, C. (2002): Community Conservation from Concept to Practice:

 A Practical Framework.' Community Conservation Research in Africa Principles
 and Comparative Practice Working Paper No. 8. IDPM. Manchester (pg 13)
- Barrow E. and Murphree M. (2001): 'Community Conservation. From Coto Practice.'
 in Hulme D. and Murphree M. (Eds.) African Wildlife and Livelihoods. The
 Promise and Performance of Community Conservation. London, James Currey.
- **Brockington, D. (2001):** 'Fortress Conservation. The preservation of the Mkomazi Game Reserve.' African Issues series. London, James Currey. (Pg 307-338)
- **Brockington, D. (2008):** 'Powerful Environmentalisms: Conservation, Celebrity and Capitalism'. Media, Culture and Society. Vol. 30(49: 552-568). SAGE Publications, London.
- **Brockington, D. and J. Igoe (2006):** 'Eviction for Conservation: A Global Overview.' Conservation and Society, Vol. 4, No. 3, (424-470).
- Bush, G., S. Nampindo, C. Aguti and A. Plumptre (2004): 'The Value of Uganda's Forest's A livelihoods and ecosystems approach'. Wildlife Conservation Society, Albertine Rift Programme. NFA (pg 107,109,118)
- Cahn, M. (2002) Sustainable Livelihoods Approach: A Concept and Practice. DevNet Conference 2002 Contesting Development: Pathways to Better Practice, Massey University, www.devnet.org.nz/conf2002/papers/Cahn_Miranda.pf (Accessed 01.04.09)
- Castillo, G. E. and M. Brouwer (2007): 'Reflections on integrating a rights-based approach in environment and development.' Policy Matters, issue 15. July 2007. Cenesta Publishing.

- Cernea, M. (1997): The risk and Reconstruction Model for Resettling Displaced Populations. World Development, Vol. 25, No 10. (Pp. 1569-1587). Elsevier Science Ltd.
- Cernea, M. M. and K. Schmidt-Soltau (2006): 'Poverty Risks and National Parks: Policy Issues in Conservation and Resettlement.' World Development Vol .34, No 10,(1808-18300). Elsevier Ltd. Oxford.
- Banana AY, Ongugo PO, Gombya-Ssembajjwe WS,Gole TW, Senbeta F, Namaalwa J, Luoga E, BahatiJ, Mbwambo LA, Graw V, Gatzweiler FW. 2013.
- Forest Governance Reforms in Eastern Africa: A Comparative Analysis of Institutional, Livelihoodand Forest Sustainability Outcomes. In Gatzweiler FW, ed. Institutional and Livelihood Changes in East African Forest Landscapes: Decentralization and Institutional Change for Sustainable Forest Management in Uganda, Kenya, Tanzania and Ethiopia. Peter Lang International Academic Publishers. Frankfurt am Main, Berlin, Bern, Bruxelles, New York, Oxford, Wien, 2013. XVI, 312 pp., 5 coloured fig., 4 b/w fig., 43 tables; ISBN 978-3-631-63462-2 pb.
- **[GoU] Government of Uganda. 2007a.** the national land use policy. Entebbe: Government of Uganda.
- [GoU] Government of Uganda. 2007b. Climate change: Uganda national adaptation programmes of action. Entebbe: Government of Uganda.(pg 21,22,25)
- **Transboundary biodiversity management:** institutions, local stakeholders, and protected areas. A case study from Mount Elgon, Uganda and Kenya. Society and Natural Resources 24(12):(1304–21.)
- [UFRIC] Uganda Forestry Resources and Institutions Center. 2008. Masaba and Kapchorwa Site Report: Third Visit June-Aug. 2008. IFRI/SANREM-CRSP Report. Kampala:UFRIC, Makerere University

- **Vedeld, P. (2002):** The Process of Institution Building to Facilitate Local Biodiversity Management. Noragric Working Paper No. 26. Noragric.
- United Nations High Commissioner for Human Rights (1998): The Guiding Principles on Internal Displacement .http://www.unhchr.ch/html/menu2/7/b/principles.htm (Accessed 03.12.07

Scott, P. (1998):

- Mooney, Erin (2005): "The Concept of Internal Displacement and the case for Internally Displaced Persons as a Category of Concern." UNHCR Refugee SurveyQuarterly,Vol. 24, Issue 3. http://www.brookings.edu/~/media/Files/rc/articles/2005/fall_humanrights_mooney/9.pdf(Accessed 10.04.09)
- Moser, C., and A. Norton. (2001): To Claim Our Rights: Livelihood Security, Human Rights and Sustainable Development. Overseas Development Institute.www.odi.org.uk/pppg/publications/books/tcor.pdf (Accessed 12.02.09)
- Jankulovska, A., P. Vedeld and J. Kaboggoza (2003): "Coaching Poaching?"
 Governance, Local People and Wildlife around Mount Elgon National Park, Uganda."
 Noragric Working Paper No 31. Noragric, University of Life Sciences.Katto,
- **F. M. J (2004):** Sustainable livelihoods and environmental income dependence around Mt. Elgon National Park, Uganda. M.Sc.thesis 2004. (Pg 107,109)
- Asingwire, N, Asiimwe, F. & Muhangi, D., January 1998. Baseline Study: Socio-Economic Assessment of the Benet Community. A Final Consultancy Report Preparedfor Uganda Wildlife Authority (UWA), Min. of Tourism, Wildlife and Antiquities. Faculty of Social Sciences, Makerere University (74 pp).
- Banana, A.Y. and W. Gombya-Ssembajjwe (2000) Successful forest management: The importance of security of tenure and rule enforcement in Ugandan forests. In C.C. Gibson, M.A. McKean, and E. Ostrom, (eds.), *People and Forests: Communities, Institutions, and Governance*. Cambridge: The MIT Press, (p. 87-98).
- Backes, Martina M. 2001: The role of indigenous trees for the conservation of bioculturaldiversity in traditional agroforestry land use systems: The Bungoma case study In-situ conservation of indigenous tree species. Agroforestry Systems 52: (119–132), 2001