## SOCIO ECONOMIC BENEFITS OF VITELLARIA PARADOXA TREES TO THE LIVELIHOOD OF THE COMMUNITY A CASE STUDY OF LAGORO SUB COUNTY, KITGUM DISTRICT

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A RESEARCH REPORT SUBMITTED TO THE FACULTY OF
NATURAL RESOURCE AND ENVIRONMENTAL SCIENCES IN
PARTIAL FULFILLMENT FOR THE AWARD OF BACHELOR OF
SCIENCE DEGREE IN NATURAL RESOURCE ECONOMICS

**JUNE 2015** 

## **DECLARATION**

I OLWENY KENNEDY do declare that this is my own original work and has not been submitted for any other degree award to this or any other University/ Institution of higher learning for any academic qualification.

Signed..

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Date 23 06 2015

## **APPROVAL**

This is to certify that this report by OLWENY KENNEDY has been successfully completed under my supervision and I recommend it for submission to the Faculty of Natural Resources and Environmental Sciences of Busitema University with my approval.

Signature.....

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Date 08/07/2015

## **DEDICATION**

This dissertation is dedicated to my dear parents Mr. KITARA ALFRED and Ms. ALENGO PAULA in appreciation of the love, care and support they gave to me during this research.

## **ACKNOWLEDGEMENT**

I wish to thank the Almighty God for the knowledge and success he granted unto me which has made this research wonderful and successful.

I wish to most sincerely acknowledge the valued support, advice and correction I received from my dear supervisor Dr. ALICE NAKIYEMBA and the entire academic staffs of Busitema University, Faculty of Natural Resource and Environmental sciences, department of Natural Resource Economics.

My special thanks goes to my Aunts Mrs. Margret Apotto and Beatrice Alanyo for the moral and financial support they extended to me without which I would have found it difficult to purchase the necessary materials to produce this research. Thanks to my Uncles brothers, sisters and all my Friends for their prayers, encouragement, emotional and social supports, you people really kept me going.

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## **ACRONOMY**

NRE Natural Resource Economics

NGOs Non-Governmental Organizations

NEMA National Environmental Management Authority

NARO National Agricultural Research Organization

SPSS Statistical Packages for Social Science

VPTs Vitellaria Paradoxa Trees

FAO Food and Agricultural Organization

UNEP United Nations Environmental Programme

#### **ABSTRACT**

The study examined the socio economic benefits of Vitellaria Paradoxa Trees to the local people of Lagoro sub county, Kitgum District. The benefits of Vitellaria Paradoxa Trees, like any other natural resources can be assessed basing on a number of factors that include the level of employment, status of the livelihood of people, contribution to household income, food security, and contribution to economic growth and development. The study employed Cross sectional survey design and Data was collected using the Stratified random sampling and purposive sampling methods. Questionnaires were used to obtain data from different respondents, SPSS statistical software and Microsoft Office Excel as well as Data spread sheets were used to analyze the data.

The main objective of the research was to assess the socio economic benefits of the Vitellaria Paradoxa Trees to the community in Lagoro Sub-county Kitgum district. The Specific objectives were; to find out how the community in Lagoro Sub County manage Vitellaria Paradoxa Trees, to find out the socio economic benefits of Vitellaria Paradoxa Trees to the households in the community, to find out the threats to the Vitellaria Paradoxa Trees in the area, and to find out ways of how to sustain the use of the Vitellaria Paradoxa Trees.

Results show that of the 70 respondents interviewed, 50 were female and 20 were male. The mainly preferred products obtained by the community from Vitellaria Paradoxa Trees are Shea butter/oil, Shea fruits, Shea nuts, firewood, charcoal, poles and wood for craft works like furniture making. Shea butter/oil has been the central vegetable oil used for frying food and also sold in local markets to generate income for the households. The local community in Lagoro Sub County traditionally manage and conserve VPTs on farms and parklands through pruning branches, integrating VPTs with other annual crops, weeding around the tree, cutting dead branches to allow new ones to sprout, sparing VPTs when opening agricultural land and protecting young Shea seedling against fire and grazing animals. The respondents were willing to plant and manage VPTs on farm, around home compound, along boundaries, roadside and parkland if only provided with early maturing planting materials. Opportunities suggested by the respondents for conserving the Vitellaria Paradoxa Trees included replanting cut VPTs, controlling bush fire during dry seasons by encouraging early burning, weeding around regenerating Shea seedlings, planting Shea seedlings, applying rules and regulations to curb cutting VPTs, planting alternative tree species for charcoal, and compulsory caring for young VPTs.

For that matter, the outstanding challenge for the community in Kitgum District and Uganda at large is to appreciate the contribution of the VPTs towards Uganda's socio economic sustainability. Stakeholders can only meet the challenge if they appreciate the roles played by policy measures such as sensitization of the masses on the importance of VPTs and enforcement of the law in the strongest terms possible against any illegal activities among others.

#### CHAPTER ONE: INTRODUCTION

This chapter introduced the study topic, the socio economic benefits of Vitellaria Paradoxa Trees (Shea butter trees) as the indigenous species to the livelihood of the community, Lagoro sub-county, Kitgum district. It also covers the background to the study, the problem statement to the study, study objectives, research questions to the study, the scope of the study, and significance of the study.

#### 1.1 BACKGROUND

Vitellaria Paradoxa Trees commonly known as Shea butter trees are tree of the Sapotaceae family. They are the only species in genus Vitellaria and they are indigenous to Africa. The Shea fruit consists of a thin, tart, nutritious pulp that surrounds a relatively large, oil-rich seed from which Shea butter is extracted. The Shea tree is a traditional African food plant. It has been claimed to have potential to improve nutrition, boost food supply in the "annual hungry season" foster rural development, and support sustainable land care. The tree starts bearing its first fruit when it is 10 to 15 years old, full production is attained when the tree is about 20 to 30 years old. It then produces nuts for up to 200 years. The fruits resemble large plums and take 4 to 6 months to ripen. The average yield is 15 to 20 kilograms of fresh fruit per tree, with optimum yields up to 45 kilograms. Each kilogram of fruit gives approximately 400 grams of dry seeds. Shea butter is composed of five principal fatty acids: palmitic, stearic, oleic, linoleic, and arachidic. About 85 to 90% of the fatty acid composition is stearic and oleic acids. The relative proportion of these two fatty acids affects Shea butter consistency. The stearic acid gives it a solid consistency, while the oleic acid influences how soft or hard the Shea butter is, depending on ambient temperature. The proportions of stearic and oleic acids in the Shea kernels and butter differ across the distribution range of the species. Ugandan Shea butter has consistently high oleic acid content, and is liquid at warm ambient temperatures. It fractionizes into liquid and solid phases, and is the source of liquid Shea oil. The fatty acid proportion of West African Shea butter is much more variable than Ugandan Shea butter, with an oleic content of 37 to 55%. Variability can be high even locally, and a tree that produces hard butter can grow with one that produces soft butter. Nuts are gathered from a wide area for local production, so Shea butter consistency is

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