ASSESSING THE QUALITY OF DOMESTIC WATER CONSUMED BY THE NAGONGERA COMMUNITY, UGANDA

BY

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DECLARATION

I hereby declare that this research is my original work and has never been presented to any institution of learning for any academics award.

Sign…… Date……

OKAI MOSES

APPROVAL

This is to satisfy this project by OKAI MOSES has been carried out under the tittle:

*"Assessing the quality of domestic water consumed by the Nagongera community"*and has been submitted for examination with my approval:

Supervisor:

Signature…… Date…….

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DEDICATION

I would like to dedicate this piece of work to my beloved parent Mr. Awinyo Selestine and Ms.Agero Mary for having natured me, taking care of me, and for having being supportive and encouraging parents. May GOD bless you. Also to my brother Olobo Samuel, you were my inspiration, challenge, and encouragement all the way through my graduate studies.

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ABSTRACT

The aim of this study was to monitor the quality of domestic water from various sources within Nagongera communitywith the specific objectives of determining conductivity, pH and total dissolved solids of water so as to determine its quality

Samples from four water sources were collected for laboratory analysis. Water sources were found in the village of Mahanga, Maundo, Benda, and Opadamwara. In addition, samples were collected both from improved water sources and unimproved nearby alternative water sources currently used as main sources for household consumptions.

The results from the laboratory analysis shows that ,Temperature values are consistent and can be considered as being ambient and not too bad in terms of supporting microbial growth. Average pH is slightly acidic and indicates corrosion problems, especially in areas of Mahanga boreholes. Electrical conductivity and total dissolved solids values are very low; these give a measure of the ionic load and contaminants in the water. Hence, from the EC and TDS values, the water sources of this study area can be said to have low salt concentration and good for drinking and crop production

The resultsshow that, the water sources in the study area can be regarded as being of good quality for drinking and agriculture purposes with reference to the parameters under consideration, although with little pH treatment especially in areas of Mahangaand Maundo.

This study recommends further studies with reference to the chemical and microbial analyses to be done to have a broader picture of this water quality