

**THE IMPACT OF OIL PALM PLANTATIONS ON LAND COVER/USE AND
COMMUNITIES' LIVELIHOODS ON BUGALA ISLAND, UGANDA**

BY

RWAMUHOKYA ROBERT

(BEM, MAK)

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF SCIENCE IN ENVIRONMENT, MAKERERE**

UNIVERSITY

NOVEMBER 2017

Abstract

The overall objective of the study was to investigate to what extent the introduction of oil palm (*Elaeis guineensis*) plantations has impacted on some aspects of the natural environment and community on Bugala Island, Uganda for a period of ten months. A combination of both qualitative, quantitative and spatially explicit data methods were used. Research findings indicate that for a period of 15 years (2000 – 2015) the development of oil palm in all Sub-Counties has caused significant reduction of natural vegetation cover (in form of rain forests, grass and wood lands with oil palm trees. It is also perceived that oil palm establishment has led to reduce biodiversity. Currently an area of about 98 km² had been converted to oil palm plantations. The expansion of oil palm plantations is done by both for BIDCO and out-growers. It is observed that there is a perception among the respondents, that their income has significantly increased ($p < 0.05$) since the establishments of the oil palm plantations on the Island. Communities reported better employment opportunities after the establishment of the oil palm plantations. The results shows that the loss of biodiversity and the conversion of former agricultural land by local land owners who become out-growers to oil palm plantations has increased food insecurity on Bugala Island communities. In addition, the problem of food insecurity was also attributed to insufficient

furrowing due to oil palm plantations. Furthermore, as perceived by the respondents, of the practices like the extensive use of large volumes of pesticides and fertilizers in the production of oil palm fruits, on Bugala Island, have reduced the quantity of fish captured from wetlands. To reduce the negative impacts and trade-offs of oil palm plantations and maximize communities' livelihoods alternatives, government decision makers need to restrict the use of forested land for plantation development, enforce existing regulations and encourage out-growers to have food home gardens for improved food security at household level.