

FACTORS AFFECTING ADOPTION AND IMPLEMENTATION OF ORGANIC SOIL MANAGEMENT PRACTICES IN MAIZE PRODUCTIOPN IN KACHUMBALA SUB-COUNTY BUKEDEA DISTRICT-UGANDA

\mathbf{BY}

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DECLARATION

I \mathbf{OKUNI} \mathbf{PIUS} do declare that this special project	report is my own original work and has never	
been presented for any award of a Degree at any tertiary institution or university.		
Signed:	Date:	

APPROVAL

This special project report is submitted to the examination board of Busitema University with my
approval as a University Academic Supervisor.
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DEDICATION

I dedicate this work to my lovely mother Abeja Florence, my lovely guardian mother Wakwale Base Catherine, my lovely future wife Nambuya Juliana my brothers Odung Moses, Okurut John, Abuko Simon, Omoding Anthony, my beautiful sisters Achom Grace, Ijangolet Irene And Abeja Florence and my best friend Musema Edmond for supporting me during my pursuit for this Degree. May the almighty GOD reward all of you abundantly.

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LIST OF ACRCONYMS

CA: Convectional Agriculture

FAO: Food and Agriculture Organization

IFOAM: International Federation of Organic Agricultural Movements

IFT: Inorganic farming technologies

IOSF: Indigenous Organic Soil Fertilisation

MDG1: Mellanous Development Goal one

MDG7: Mellanous Development Goal seven

NAADS: National Agricultural Advisory Development Services

OA: Organic Agriculture

OFT: Organic farming technologies

OSMP: Organic Soil Management Practices

WHO: World Health Organization

ABSTRACT

The study established the factors affecting the adoption of organic soil management practices among maize producing farmer's case study of Kachumbala Sub-County Budaka District. The study was guided by specific research objectives which included determining farmer's perceptions towards organic farming technologies, assessing socio-economic and institutional factors affecting adoption and intensity of use of organic farming practices and establishing the measures to increase adoption of organic farming technologies.

The study used cross sectional design and a case study was Gamogo Sub-County Kapchorwa District. To achieve the set objectives the study used purposive sampling and simple random sampling in sample selection. A sample of 109 respondents participated in study. Farmers filled the questionnaires because they were in constant engagement and introduction letter was obtained from the faculty of science and education introducing the researcher to the field of research.

The findings revealed that the inputs used in these technologies are readily available, soil fertility can be improved by application of green manure and cultivation of legume crops, pesticide overuse may lead to pest resistance to pesticides, and green leaf manure helps to improve soil structure and reduce weed population. Furthermore, the findings indicated that extension exposes farmers to a wide range of ideas which may give them the opportunity to have better access to information on new innovations, credit is necessary in hiring of labour and purchasing farm inputs, groups expose farmers to a wide range of ideas and sometimes give farmers the opportunity to have better access to information on new innovations, and group membership also enables farmers to have a collective bargaining power when. In addition, biological control is the best methods of pest control, retaining plant residues may increase weeds, minimum tillage reduces soil erosion, disturbance and exposure, organic farming leads to reduced cost of production, cultivation of mixed crops not only increase total production but also reduces soil erosion and release of crop residues in maize farm will decrease soil fertility.

The recommended policy interventions in enhancing farmers' awareness through extension and training on organic soil management practices, encourage stocking of dried organic manure in shops, improvement on prices of organic products, improving farmer access to credit facilities and enhancing security of tenure through provision of land title deeds. This will promote adoption and intensity of use of organic soil management practices which will in turn lead to environmental sustainability.

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Ugandan economy largely depends on the agricultural sector as the engine for economic growth. The agricultural sector in Uganda largely relies on conventional farming system yet the country has not been able to produce enough of her food needs. As a way of meeting the food deficiency. The major causes of low agricultural productivity are soil nutrient depletion, pest and disease problems, poor land management systems, climate change and poor implementation of agricultural policies. For a long period of time, application of inorganic farm inputs has been emphasized as a way of addressing soil fertility problem but this is constrained by the high costs which resource-poor farmers cannot afford.

Organic agriculture (OA) is a low-risk farming strategy with reduced input costs (El-HageScialabba and Hattam, 2002) due to availability of local farm inputs hence, it is a viable alternative for poor farmers. The coping capacity of the farm is increased and the risk of indebtedness is lowered (UNFCCC, 2007). It is a sustainable and environmentally friendly production system that offers developing countries a wide range of economic, environmental, social and cultural benefits and has particular advantages for small-scale farmers in Africa (UNEP-UNCTAD, 2006; UNCTAD, 2006).

One alternative production system is organic farming (OF). Organic farming incorporates both a farm management approach and the production of an undersupplied, and hence high-priced, health food product. The essential features of O.F are the removal of chemical inputs from production, an environmental philosophy, and an emphasis on soil husbandry. Conventional farming in Uganda is less chemical-intensive than in other developed countries production systems where producers have pioneered the use of nitrogen-fixing pasture plants in place of mineral fertilizers. However, this does not in itself constitute OF, which completely eliminates chemical use and is bound by strict production constraints and management guidelines (the Bio-Gro Standard for Organic Food Production). By excluding chemical inputs and augmenting them with biological processes and management techniques. OF shows promise as a low-cost, environmentally-benign farm system (Buttel et al., 1986). Their growing market for premium priced organic produce is a further incentive to farm organically.

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