

EFFECTS OF OIL-RELATED DEVELOPMENT ACTIVITIES ON AGRICULTURAL GROWTH: A CASE STUDY OF KABAAL INTERNATIONAL AIRPORT CONSTRUCTION PROCESS IN BUSERUKA SUB-COUNTY, HOIMA DISTRICT

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A DISSERTATION SUBMITTED TO THE FACULTY OF BUSINESS AND ADMINISTRATION IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF A DEGREE OF MASTER OF BUSINESS ADMINISTRATION IN OIL AND GAS MANAGEMENT AT THE INSTITUTE OF PETROLEUM STUDIES KAMPALA IN AFFILIATION TO UCU.

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DECLARATION

I, BETTIE AMASO ATYAM do hereby declare that this dissertation report titled **“Effects of oil-related development activities on agricultural growth: A case study of Kabaale International Airport construction process in Buseruka sub-county, Hoima district”** has never been presented for any academic award in any institution or university. All sources used in this dissertation report have been rightfully acknowledged.

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Date

APPROVAL

I acknowledge that this dissertation report titled **“Effects of oil-related development activities on agricultural growth: A case study of Kabaale International Airport construction process in Buseruka sub-county, Hoima district”** has been under my supervision and is ready for submission.

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Assoc. Prof. Yawe Bruno (PhD)

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Date

DEDICATION

I dedicate this dissertation report to my children Michelle, Noelle, Dione and Ethan who endured my absence from home while I was undertaking my studies, and to my husband Moses Oyet for his priceless support.

ACKNOWLEDGEMENT

Psalms 23:6. 'Surely goodness and mercy shall follow you all the days of your life, and you shall live in the house of the Lord forever.'

I give all the glory, honour and praise unto the Lord for without His abundant grace, I would not have come this far.

I would like to thank my supervisor Associate Professor Bruno Yawe whose technical guidance and support has been invaluable.

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LIST OF ACRONYMS

CPF	Central Processing Facility
CSR	Corporate Social Responsibility
DRC	Democratic Republic of Congo
EPRC	Economic Policy and Research Centre
GDP	Gross Domestic Product
ICT	Information and Communications Technology
IPSK	Institute of Petroleum Studies, Kampala
MAAIF	Ministry of Agriculture, Animal Industries and Fisheries
MEMD	Ministry of Energy and Mineral Development
MPLA	People's Movement for the Liberation of Angola
NBOS	National Bureau of Statistics, Nigeria
NGO	Non-Governmental Organisation
PAP	Project Affected Person
PAU	Petroleum Authority of Uganda
SACCO	Savings and Credit Cooperative Society
UBOS	Uganda Bureau of Statistics
UNITA	National Union for the Total Independence of Angola
UNO	United Nations Organisation (now UN)
USD	United States Dollar
WB	World Bank
WTO	World Trade Organisation

ABSTRACT

The study investigated the effects of the construction of Kabaale International Airport on Agricultural growth in Buseruka sub-county. The central questions sought to discover the effects of the construction processes as well as land-acquisition activities on agricultural practices in the study area. A case-study design was used and qualitative data were obtained. A sample of 08 local leaders was chosen using purposive sampling technique to obtain the bird's eye view of the parameters in question. 03 Focus Group Discussions were also conducted, each comprised of 08 persons from the 13 villages that were affected by the project. Using the Colaizzi framework, data collected from respondents were then framed into different themes for further analysis.

The study findings indicate that the discovery of oil in the Albertine region has led to a reduction in agricultural practices in Buseruka Sub-County, and that this is largely driven by a shift in focus from agriculture to oil-related activities. The findings further reveal that the commencement of the airport construction project led to the eviction of over 7,000 people from 13 villages thereby affecting their land-based economic activities since many could no longer access and or use their land for agricultural activities. For persons who were relocated, farmlands were said to be far away from homesteads thereby limiting routine access while those who were compensated were reported to have acquired smaller pieces of land which is inadequate for large-scale farming. Respondents also reported that the acreage of land owned by persons who remained in the area had drastically reduced, and that this affected their agricultural productivity. With critical infrastructure such as markets and roads being edged out by the airport construction project, transport costs have increased thereby limiting access to markets. Additionally, government's seemingly reduced priority towards agriculture in favour of investments in oil-related infrastructure has reduced the local farmers' incentives to engage in farming. Air, water and noise pollution were some of the environmental concerns raised with some respondents citing their negative effects on agriculture, especially livestock rearing.

The study findings also reveal that the processes of land-acquisition for Kabaale Airport construction were fairly consistent with internationally accepted procedures of compensation and relocation. However, several complaints arose such as inadequate information sharing including the insufficient financial training given to the project affected persons (PAPs), who ended up squandering their compensation packages, whereas the relocated persons complained of long distances from their camps to the farms allocated to them. These have greatly curtailed the agricultural potential of the study area. It was recommended that the local SACCO's should be empowered in order to stimulate the local economy. Finally, since the oil industry is growing in Uganda and more land will be required for other projects, the government and concerned stakeholders should put in place a system that ensures adequate information flow, and preparation of project affected persons for the socio-economic situation ahead in order to ensure optimal investment or use of resources.

CHAPTER ONE

INTRODUCTION

1.0. Introduction

This chapter comprises of the background leading to the problem statement which gives a historic perspective of the study variables, both globally and locally. It also elucidates the problem of interest in this study, the objectives that guided the study as well the significance of the study. It ends with a conceptual framework and a brief description of it.

1.1. Background

Over the last century, the petroleum industry has proven to be the most lucrative in world, accounting for over USD 13 billion cash value in turn-over per day. However, despite its numerous benefits to economies and the windfall profits that it accords the oil companies and producing nations, a lot of criticism is usually met by countries that make new discoveries and opt to start exploiting this resource due to the catastrophic impacts it has on the environment, other non-oil sources of livelihoods such as agriculture, and the local people. In West Africa for example, Nigeria was revered as a regional food-basket before the discovery of the petroleum reserves in commercial quantities in 1956. Agriculture was the dominant sector as it contributed over 70 per cent of the Gross Domestic Product (GDP), employed about the same percentage of the working population, and accounted for about 90 per cent of foreign earnings and Federal Government revenue.

Indeed, the Niger delta in Nigeria, a region with fertile soils and good climate conditions which was ranked as the world's third largest producer of palm oil behind Malaysia and Indonesia has since fallen far behind over the past six decades, due to environmental pollution and deprioritisation of the agrarian industry. Today, the Niger Delta enjoys affluence as the region with the largest export volumes of crude oil (Omofonmwan & Odia, 2009). The region also had the highest production of cassava, timber, pineapple, fish and rubber in Nigeria in the 1950's, but these have since dwindled and can barely supply the local demand, let alone spare a surplus for export.

(Akpokodje & Salau, 2015) referred to the Niger Delta as a microcosm of the broader Nigerian state, a region characterised by endemic poverty in the midst of abundant natural and financial resources. The Delta has a high agricultural productivity potential due to its location in the

rainforest and mangrove forest vegetative zones of Nigeria with an estimated 31 million people (NBOS, 2006) that inhabit this vast stretch of land. However, this potential has not been exploited since this ecologically-sensitive system has been damaged by intensive exploitation of hydrocarbon resources over the years coupled with oil-related catastrophic consequences such as oil spills, gas leaks, gas flares and land degradation, flooding and erosion, that have massively curtailed its agricultural potential, leaving the natives who principally depend on agriculture and fisheries for their livelihood highly unemployed, and poor.

In Uganda, agriculture provides a livelihood for a vast majority of the population, especially women, and as a result, it has long been of fundamental importance to the economy in terms of GDP, export revenue and employment. Driven by favourable weather conditions from 2017 to-date, the agricultural sector has grown, alongside the bigger national economy averaging rates of 5 per cent per annum (World Bank, 2015) whereas the whole economy has been gradually expanding at rates over 5.7 per cent and is expected to surpass 6 per cent in the financial year of 2019-2020. Consequentially, driven by the high potential for food security as well as the high contribution to export earnings, the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) listed 12 agricultural goods (i.e. cotton, coffee, tea, maize, rice, cassava, beans, fish, beef, milk, citrus, and bananas) as investment priorities with exports expected to reach USD 4 billion by 2020 (up from USD 1.76 million in 2017). The government has also prioritised the sector, increasing budget allocations over the years, and several authorities and programs, like National Agricultural Advisory Services (NAADS) and Operation Wealth Creation (OWC) being implemented to boost agriculture in the country.

Uganda is the second-largest coffee producer in Africa, after Ethiopia, with coffee being its largest foreign exchange earner in merchandise trade, contributing an annual average of 20 per cent to the total export revenue (World Bank, 2015). Uganda is also the third-largest producer and exporter of tea, after Kenya and Malawi, which generates about USD 71.5 million in earnings (World Bank, 2015). The food crops and livestock sub-sectors contributions as of 2015 were 12 per cent and 4 per cent respectively of the total GDP in the period between 2012 and 2017. As a result, Uganda is a net exporter of agricultural products both to the regional neighbours and other overseas countries.

However, like Nigeria and Angola, Uganda has witnessed an influx of investments since the discovery of commercial reserves, geared towards exploitation of the petroleum deposits in the country. According to (Mugisa, 2015), oil exploration activities have already had severe effects

on the native population in Hoima district such as increase in prices of agricultural commodities due to destruction of people's farms to set up oil camps or conduct seismic surveys, which leads to an inherent shortage of food stuffs, increased land grabbing incidences and population increase in search of oil jobs. All these happenings have a severe impact on the growth of the agricultural sector in the Albertine region, both now and in the years to come when the oil industry in the region fully matures.

1.2. Statement of the Problem

Ordinarily, it is expected that as investments in the oil industry in the Albertine region increase, the other sectors such as agriculture, business, ICT or manufacturing should thrive as well due to inter-sectoral linkages that exist in a free-market economy. However, according to (Atuhairwe, 2012), as 13 villages in Buseruka sub-county in Hoima district were ear-marked for the construction of Kabaale International Airport and several projects such as the construction of a refinery, the pipeline, a central processing facility (CPF), a waste management plant and construction of settlement camps for oil-workers, over 8,000 persons were evicted from their land, most of which was initially used for agricultural purposes.

Over the years, several compensations and evictions have also been carried out to reserve land for other oil-related activities such as seismic exploration, to further create space for the oil roads that have been constructed in the region, and several military installations that have been set-up to protect the invaluable infrastructural and human resources in the region. Coupled with poorly planned compensation and relocation activities of people affected by the airport construction activities, the consequences have been land conflicts as well as exodus of the youth into urban centres (Winyi, 2016).

There has also been a net loss of labour force in the agricultural sector in the area, which is bound to have a negative impact on the agricultural productivity of the region. Several studies have been conducted to ascertain the different impacts of the oil industry on the socio-economic welfare of the society in the region, but scanty data exists that explains the effects of recent processes of constructing Kabaale International Airport on agricultural production and growth in Hoima district, particularly in Buseruka Sub-County. This study was intended to fix the existing knowledge gap.

1.3. Purpose and Objectives

1.3.1. General Purpose

The general objective of the study was to assess the effects of the construction of Kabaale International Airport on agricultural growth in Buseruka Sub-County, Hoima district.

1.3.2. Specific Objectives

- a. The study intended to assess how the Kabaale International Airport construction activities have affected agricultural growth;
- b. The study sought to assess how land acquisition processes (i.e. eviction, land compensation and relocation activities) affect agricultural growth.

1.4. Research Questions

- i. Do airport construction activities affect agricultural growth?
- ii. How do land acquisition processes affect agricultural growth?

1.5. Scope of the Study

The study sought to assess the effects of the construction of Kabaale International Airport, and related land acquisition processes on the growth of the agricultural sector in Buseruka sub-county, Hoima district.

1.5.1. Geographical Scope

The study was carried out in Kabaale Township, in Buseruka sub-county, Hoima district, which was initially predominantly an agricultural zone but is now a hub of several projects and increased oil-development activities.

1.5.2. Time Scope

The study was conducted for two months from January to February 2020 after successful proposal defence in January 2020.

1.5.3. Context Scope

The study focused on identifying and analysing the effects of the construction of Kabaale International Airport on agricultural growth in the study area. It targeted household heads from the affected villages in the local communities as well as the district, sub-county and local leaders in the study area.

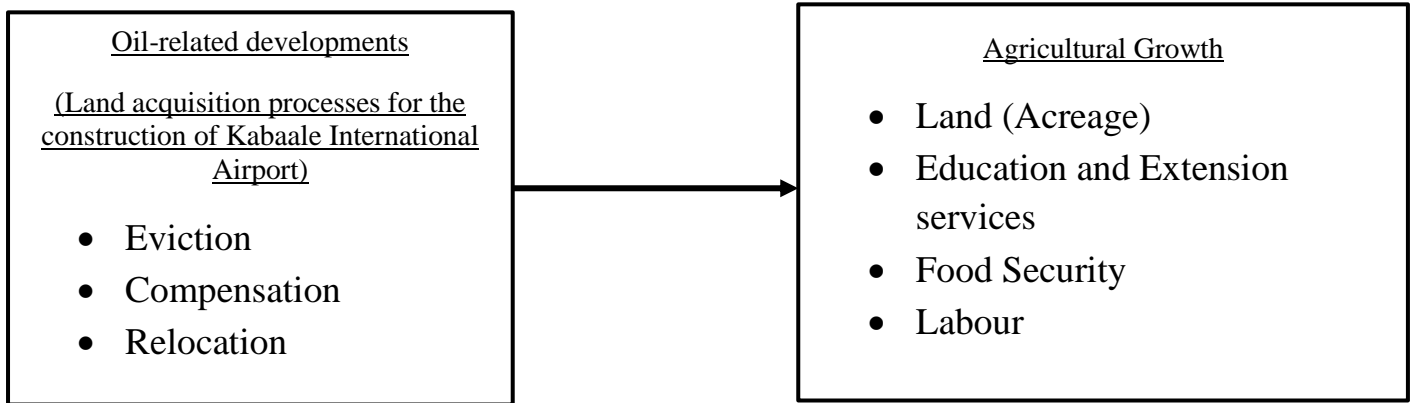
1.6. Significance of the Study

- a) The study findings will be of help to the Government of Uganda (GoU); Hoima district officials, Ministry of Energy and Mineral Development (MEMD), and the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) in making context-relevant decisions, policies and actions on how to steer oil activities while preserving the agricultural sector, and ensure that an all-inclusive community development system is put in place and maintained.
- b) The research findings will also inform and enable other stakeholders, especially civil society organisations who are charged with advocating for accountability and strengthening participatory mechanisms of development, to reign in and ensure that the development of the agricultural sector in the region is not overshadowed by the oil industry.
- c) As a Master's student, I am hopeful that the study findings will enhance my career in academia and research, and equip me with a more practical approach in analysing and presenting issues in the oil industry. I am also hopeful that the study findings will provide useful information to fellow researchers who wish to expound on the issues covered herein in future studies.

1.7. Justification of the Study

The construction of Kabaale International Airport is one of the several oil sector-supporting infrastructures being constructed in the study area. Undertaking a project of this magnitude calls for large-scale land acquisition and subsequent displacement and compensation or relocation of several households affected by the project. Since the population in Buseruka Sub-County was initially agrarian, such displacements have an impact on the agricultural practices, and inevitably on productivity of the study area. This study sought to uncover and understand how the construction of Kabaale International Airport has affected agricultural growth in the region.

1.8. Conceptual Framework



Source: Adopted from Apata, (2010) and modified by the researcher

The independent variable will be the oil-related development activities with a focus on land acquisition processes for the construction of Kabaale International Airport. The construction activities that are taking place in the study area are intended to facilitate easy transportation and access for the smooth operation of the nascent petroleum industry in the country whereas the dependent variable will be the growth of agricultural activity therein. Since the purpose of a conceptual framework is to establish a relationship between variables, and provide a schematic presentation of concepts that will be operationalized in the field study, a brief synopsis is given for the variables and an explanation of possible relationships between variables is included.

The airport construction activities include the acquisition of land and related compensation, eviction as well as relocation of households. All the variables are presumed to have considerable effects on the practice of agriculture in Buseruka Sub-County since land and labour, which are both important inputs in agriculture, are diverted. Agricultural growth as a variable has been conceptualised to include the increase in land (acreage) available for farming, increase in the use of agricultural inputs such as labour, technology, fertilizers, pesticides or herbicides, irrigation, as well as agricultural education and extension services, and an increase in food security.

CHAPTER TWO

LITERATURE REVIEW

2.0. Introduction

This chapter highlights findings from the review of secondary sources of literature on the effects of oil development activities on agricultural growth. It also assesses how eviction, land compensation and relocation activities affect agricultural growth. Literature that specifically pertains to the construction of airports in oil rich areas was limited and therefore, the theoretical and empirical information indicated in this chapter focus on oil related development activities in general. Because of the several oil-related activities taking place in the area, this study particularly focuses on the construction of Kabaale International Airport.

2.1. The effects of the airport construction activities on agricultural growth

This section provides theoretical and empirical literature that pertains to the relationship between the oil and agriculture sectors, and explains the effects of oil-related development activities (under which the Kabaale International Airport construction activities fall) on agricultural growth.

2.1.1. Theoretical Literature Review

The Resource Curse theory

The resource curse theory has been advanced and used in several studies to explain the relationship between resource extraction activity and economic growth within several resource-rich countries. Like most primary sectors, the extractives industry has historically been linked to several positive and negative environmental and economic externalities. The theory postulates that resource-rich countries (or regions) are inherently unable to economically grow as fast as non-resource rich ones (Cai & Newth, 2013). In their study, they also show evidence that natural resource windfalls worsen economic development, although several discrepancies exist in terms of the real causes of these negative effects. Some scholars have also considered the resources as more of a blessing, since they produce positive economic outcomes (Aragon & Rud, 2013). They also argue that tracking and addressing the potential causes of the curse are important tasks for national and regional planners that are often required to obtain and draw schematics and plans on how to optimally exploit these resources.

In an extensive review of the theoretical and empirical literature concerning the resource curse paradox, (van der Ploeg, 2011; Fleming *et al.* 2015) analyse and provide evidence of popular hypotheses explaining the channels through which these resources can negatively affect the economic performance of nations, regions or communities. It is important to note that though these channels mainly operate through macro-economic changes, some have distinctive regional or communal consequences beyond their national effects. The ensuing paragraphs briefly describe these channels and the levels at which they operate.

The ‘Dutch-disease’ syndrome postulates that countries with abundant natural resources tend to develop slower than countries with fewer or no natural resources due to over-dependence on the ‘easy’ money accrued from exploitation of these resources. This over-dependence tends to create a quick rise in sectors such as transport and construction, which thrive on the easily available financial capital whereas sectors such as industrialisation and agriculture are minimised, since the country and its people would rather import than produce internally. Inherently, the exchange rate appreciates due to increased value of exports from the resources bonanza, which produces deindustrialisation and consequently, the ‘loss in learning by doing’ type of economic growth. The ‘learning by doing’ type of economic growth is one which is generally driven by know-how and technical skills linked to manufacturing. Both of these phenomena operate at the national level.

The windfall revenues accrued from the export of natural resources often leads to corrupt policies. This is often referred to as rent-seeking where international players in the oil industry provide financial inducements to political actors, who in turn, grant access, extend contracts amongst other things. This corruption often leads to authoritarian regimes as the same individuals who are main beneficiaries of the resources increasingly develop mutual interest in maintaining the status quo. In developing countries, the rule of law deteriorates; the status quo assumes all decision-making authority, which culminates into weak institutions. Additionally, corruption, undermined democracy and weak institutions often create resentment in the general population; sectarianism develops along political, religious or ethnic lines which are usually an antecedent for strife and conflict. The civil wars in Angola, Liberia and Sierra Leone were perpetuated by warring parties trying to stay in control of resource-rich areas. In Nigeria, the long standing war between Boko-Haram and the Federal Government has been a result of the mismanagement of the oil resources therein (Bainomugisha & Mushemeza, 2006).

In anticipation of the windfall revenues expected from the oil industry, patterns of public spending usually change. Borrowing is usually made easy by the promise of oil and expected revenues thereof. Governments usually spend resources exorbitantly on such projects of infrastructure that would otherwise not be considered without the revenues expected from the natural resources, at times mortgaging the oil revenues for years to come. More so, (Fleming *et al.* 2015) also posits that at the micro-level, the saving culture and work ethic of the natives themselves usually deteriorates, since more cash is at their disposal to quickly improve their lives and solve their problems. Traditional reliance on the fruits of their own hard work and savings becomes increasingly undermined by such expectations as well as the benefits obtained, with such catastrophic results being manifested once the natural resources become depleted.

Finally, the labour demand shock generated by the extractives sector in any country is also considered a resource curse channel as evidenced by (Fleming *et al.* 2015)'s study. It showed that at a regional scale, labour demand shocks usually create smaller and less-diversified economies around the areas of extraction as compared to urban areas. As a result, employment patterns therein change exogenously, particularly driven by the mining boom or bust patterns that are evidenced globally. Given the high volatility of the global oil-industry, local economic growth will often times be dictated by the prevailing global conditions.

One of the commonest arguments against this theory however, is that vast majority of the empirical analyses carried out rely on cross-country models to provide insights into the relationship between resources and economic development. These analyses consequentially, are laden with macro-economic detail and evidence of the local, economic impacts of resource extraction across regions are not measured and represented adequately. Models within countries or regions have been proven to be more robust than cross-country analyses since the unobserved heterogeneity given by institutional, cultural and historical backgrounds across countries is reduced (Marchand, 2012). Similarly, considering within-country analysis allows resource regions to be considered as treatment groups, while regions without resource endowments can be considered as controls, providing natural experimental scenario for impact evaluation. Since this study is conducted within the Albertine region, it examines the conditions particularly within one country, eliminating this bias.

Theories of Agricultural Growth

i. Frontier model

This model was based on the premise that expansion of the area that is cultivated or grazed in a country represented the main way of increasing agricultural production, especially in Western Europe. With the invasion of Africa, Asia and South America by the Europeans in the 18th and 19th centuries, these areas became increasingly important sources of food and agricultural raw-materials for the metropolitan countries of Western Europe.

In areas where soil conditions were favourable, such as in the great river basins and plains, the new villages gradually intensified their systems of cultivation. Whereas in areas where soil resources were poor, such as in many of the hill and upland areas, new areas also opened up to shifting cultivation or to nomadic grazing. However, over many years, the model became limited by the rapid population growth which led to the reduction of the land available for agriculture. Crop yields per unit of crop area or per unit of seeds tended to plummet except in delta areas of Egypt, South East Asia as well as in the inter lacustrine regions of East Africa. The result was the gradual worsening of the peasantry conditions as relatively few remaining areas in the world were available for agricultural development.

ii. Diffusion model

This model rests on empirical observation of technology knowledge from farmers and regions of high land and labour productivity to those of low productivity. With the narrowing of the productivity differences that abide amongst farmers in different regions, the diffusion of better husbandry practices is still a major source of productivity growth in the modern-rural agricultural societies. Several developing countries have instated agriculture research systems in a bid to test and refine farmers' innovations, and to test and enable farmers adapt to the exotic crop varieties and animal species. Farm operators are usually viewed as rational, purposeful agents of change with specific personalities, characteristics and education accomplishments that would enable them to learn, change and adapt to new systems. However, (Udemezue & Osegbue, 2018) argue that agricultural development policies designed on the foundation of the diffusion model gradually fail to generate either rapid modernisation of traditional farmers through community development programs and technology assistance or rapid growth in agricultural output.

iii. Conservation model

This model developed to explain the inconsistencies in the Frontier model in explaining the diminishing yields as obtained from the decreasing land areas being cultivated or grazed upon. Knowledge advances in crop and animal husbandry as associated with the English agricultural revolution as well as the concepts of soil exhaustion as advanced by the early German chemists and soil scientists emphasized the evolution of a sequence of increasingly complex land and labour-intensive cropping systems as well as production and use of organic manures to more effectively exploit both land and water resources. However, the Conservation model was only able to explain a sustained growth rate in agricultural production of about 1% per year, over long periods of time, which is far less and obviously incongruous with the modern growth rates of 3-5% required in developing countries.

iv. High-Payoff Input model

After the noticing the inadequacies inherent in the policies derived from the Frontier, Diffusion and Conservation models, a new view point, the key to transforming a traditional agricultural sector into a productive source of economic growth in investment was designed to make modern, high-payoff inputs available to farmers in poor countries. Peasants in traditional agricultural systems were viewed as rational, efficient resource-allocators. In his paper, *Transforming Traditional Agriculture*, T. W. Schultz insisted that peasants in traditional societies remained poor because there were only limited technical and economic opportunities to which they could respond. The new, high-payoff inputs were classified into three categories according to (i) the capacity of public- and private-sector research institutions to produce new technical knowledge; (ii) the capacity of the industrial sector to develop, produce, and market new technical inputs; and (iii) the capacity of farmers to acquire new knowledge and use new inputs effectively.

The enthusiasm with which the high-payoff input model has been accepted and translated into economic doctrine has been due in part to the proliferation of studies reporting high rates of return to public investment in agricultural research. It was also due to the success of efforts to develop new, high-productivity grain varieties suitable for the tropics. New, high-yielding wheat varieties were developed in Mexico beginning in the 1950s, and new, high-yielding rice varieties were developed in the Philippines in the 1960s. These varieties were highly responsive to industrial inputs such as fertilizer and other chemicals and to more effective soil and water management. The high returns associated with the adoption of the new varieties and the

associated technical inputs and management practices have led to a rapid growth in investment in agricultural research and, to the development and adoption of the new and more productive crop varieties by farmers in a number of countries in Asia, Africa, and Latin America.

But the acceptance of the high-payoff input model has been incomplete. Many countries have not yet freed their private sector to produce and market the new technical inputs which enhance productivity. Those are the functions which the public sector typically performs poorly. The constraints placed on market development continue to deprive farmers and consumers of gains from the new technology that is becoming available. There has been even greater reluctance, in a number of developing countries, to accept the implication of the high-input model for the schooling of farm people. The intellectuals and planners in many developing countries find it difficult to understand the importance, for agricultural development, of a literate and a numerate peasantry.

When advances in agricultural technology occurred slowly, the apprenticeship mode of learning, without formal schooling, from family and village elders was adequate. But when a continuous stream of new biological and mechanical technology becomes available, the returns to the acquisition of new skills in production and marketing are driven up. It becomes important not only to accept but also to be able to adapt or reject the new "packages" of practices and inputs being recommended by research and extension services. Agricultural extension services themselves must be able to advance beyond simply recommending a package of practices or delivering technological and managerial messages to farmers. They must advance from teaching practices to teaching principles.

It seems quite clear that Pakistan has not yet made the investment in the schooling of rural people to enable it to take full advantage of the potentially high-payoff technology that is becoming available. In spite of one of the world's great pieces of agricultural real estate — 35 million acres of irrigated land in the Indus basin — yields remain low by Asian standards. It is hard to avoid a conclusion that underinvestment in human capital has dampened the rate of return to investment in land and water development and to agricultural research and extension.

2.1.3. Discussion of Literature

Agriculture, Oil and the Economy

Agriculture plays a key role in food security and economic development, especially in Uganda. Most of the Ugandan population in rural areas today largely depends on agricultural activity, either directly or indirectly for their livelihood. As the population today increases and with intensifying migration of people from villages to urban centres, so has the proportion of people not producing food directly, this has a major impact on the food security situation today (Udemezue & Osegbue, 2018). Agricultural development is a multi-sectional activity that supports and promotes positive change and, is said to be synonymous with rural development since over 67.9% of the households in Hoima district are involved in agriculture as a major source of income and livelihood (Uganda Bureau of Statistics, 2016). Economic growth of a country is viewed as the sustainable, long-term rise in its ability to supply increasingly diverse economic goods to its population as well as in the gross national output. Therefore the role of agriculture in transforming both the social and economic framework of this country cannot be over-emphasized.

According to (Adegoye & Dittah , 2013), development of the agricultural sector also entails an increase in the production of export crops with an improvement in the quantity and grades of the crops in question as well as the increase in capacity of the sector to supply enough materials to the agro-allied industries in that economy. The agricultural sector is often times accompanied with innumerable benefits to an economy since it is a source of gainful employment from which any nation can also ably feed its population. It is also a source of cheap, reliable raw materials to a nation's manufacturing sector, foreign exchange from export of crops and hence a generator of government revenue.

Agricultural development has also been proven to address issues of gender disparity, especially in sub-Saharan Africa where productivity of women has been hampered greatly by their inaccessibility to improved seeds, better techniques and technologies, and markets (Udemezue & Osegbue, 2018). Addressing this gap can help households become more productive and reduce malnutrition within poor families. Therefore, creating a sustainable agricultural development path means improving the quality of life in rural areas, ensuring enough food is available for present and future generations as well as generating enough income for the farmers. Several models have been proposed in the existing literature concerning the theory guiding agricultural development (and briefly discussed hereafter and have been used in the study, highlighting the important tenets from these models that this research study is based on.

With an abundance of natural resources, Nigeria is Africa's biggest producer of crude oil today, and it holds the largest reserves of natural gas on the continent. However, due to the oil price shocks between 2000 and 2014, Nigeria's economic growth has remained generally muted since 2015. In 2018, economic growth averaged 1.9 per cent and stabilised at 2 per cent in the first half of 2019 (World Bank, 2019). Whereas the oil GDP growth has remained high and stable over the years, agricultural GDP growth has remained far-below its potential due to the fact that it is mainly subsistence farming that is carried out, the continued insurgencies in the North-East as well as the on-going farmer-herdsmen conflicts. These systemic weaknesses in the agricultural sector have weakened the prospects of the rural poor to come out of poverty while the high-food inflation crisis in the country has adversely impacted the livelihoods of the urban poor. As a result, inequality in terms of income and opportunities has been growing rapidly and has adversely impacted poverty reduction in the country. These occurrences are not a recent development in the country, but rather a phenomenon that has been unfolding ever since the discovery of oil in Nigeria in 1956.

Like Nigeria, the country of Angola has a huge agricultural potential due to its fertile soils, good climatic conditions with ample rainfall patterns and extensive hydraulic resources; it is for this reason that the United Nations Organisation (UNO) classified Angola in its (WTO, 2015) report as the sixteenth country with greatest agricultural potential in the world. Before independence, agriculture dominated the Angolan economy, particularly coffee for which Angola was the fourth largest producer in the world. Coffee was also Angola's largest export-income earner until it was overtaken by oil in 1973 when oil represented 30 per cent of total export earnings. Angola was also a net exporter of food until 1975, predominantly maize, and it also had a stable fishing industry. Despite its vast potential, in 2013, a decade after the end of the civil war, the contribution of the agricultural, forestry and fishing sectors to the Angolan economy was estimated at a meagre 5.4 per cent; with Angola still being a net importer of agri-food products. Several reasons can account for such stunning underperformance.

The attainment of independence in 1975 marked the onset of political strife and civil unrest in the country, fuelled by the competing liberation factions under the UNITA and MPLA, which plunged the country into decades-long economic depression until 2002, when the fighting stopped. With the exodus of the Portuguese, the internal conflict led to immense human, material and financial losses, rural-urban migration, destruction of infrastructure and degradation of public services. The agricultural sector was most affected, with over 80 per cent of the plantations abandoned by the owners, especially the Portuguese (and left under the

management of the unskilled natives), the destruction of infrastructure, deterioration of security in the rural areas and the huge presence of anti-personnel mines which all led to the complete isolation of rural areas: agricultural exports virtually disappeared and food production declined rapidly in the country. By the end of the civil war in 2002, only about 3 per cent of the 58 million hectares of arable land available for crop growing was being utilised. It is important to note however, that the decline in the agriculture (and manufacturing) sector in the first two decades after independence happened against the backdrop of increasing reliance on earnings from oil exports (Baumgartner, 2016).

The prolonged war between the two warring factions in Angola became increasingly costly and detrimental to the national economy. For example, between the years of 1996 and 1999, over 18 per cent of the country's GDP was devoted to defence and security expenditure, a staggering amount of over USD 1.2 billion per year, considering the other developing countries in the region brought together just 2.4 per cent of their combined GDPs to the same cause, which by comparison, was eight times less. This kind of superfluous expenditure on one sector of the economy was only made possible because of the high proportion of Angola's GDP (averagely 44 per cent between 1996 and 1999) that was directly accrued to the government in the form of oil rents. As a result of no foreign currency constraints, the government of Angola was able to engage in high level purchases of overseas military equipment to protect the establishment which drained the national economy and led to neglect of the government's social services responsibilities (Cole, Tse, & Esposito, 2015).

Even today, the scars of the prolonged civil war in Angola persist, the agricultural sector, despite its vast potential and several policy reforms such as imposing import tariffs on agri-foods, subsidised credit for farmers, lending material and equipment to farmers, provision of free veterinary services and many others meant to boost the sector, the oil sector still belittles the agrarian one. Poor infrastructure networks, fragmented domestic market, small-scale subsistence farms and low-levels of mechanisation are still some of the reasons hindering the development of this sector. From the examples set by both Nigeria and Angola, who are the leading crude oil producers and exporters in Africa, it is evident that several measures should be put in place to support the agricultural sector which is highly vulnerable to its counter-bully, the oil industry.

Following the discovery and exploration of hydrocarbon reserves, several activities have taken place in the Albertine region, especially in Buseruka Sub-County in Hoima district to facilitate

the smooth exploitation of the said resources. Several infrastructural projects have been commissioned and embarked on, such as the construction of a new international airport to bring in the heavy cargo such as derricks, well pads, derricks and other heavy pipping that are required to support the industry; the construction and tarmacking of 90 km of oil roads from Hoima Municipality to Kaiso-Tonya, from Kyangwali to Buhuka and many other places; the construction of a refinery for processing the crude oil as well as a pipeline for transporting the crude oil from several collection points in the region to Tanga port in Tanzania; and lastly, semi-permanent residence camps for the workers in the oil companies, amongst others. It is important to note therefore, that Hoima district, especially Buseruka Sub-County, has become an attractive and dynamic hub of economic activity at an accelerated rate, with Hoima town being elevated to municipality status recently.

Specific to airport construction, literature reviewed reveals very limited information on its effects as opposed to operational effects. According to (Lawton and Fujiwara, 2016), airport construction has environmental and social impacts. (Franssen et. al., 2004) maintain that in terms of operations, airports are associated with annoyance, sleep disturbance, higher levels of stress, anxiety, depression, possible increased rate of hypertension, reduced performance and stroke. Development projects' social impacts differ in each stage. In the planning stage, social effects actually begin the day the proposed development project is announced as residents' hopes and hostilities can both begin to grow. In the construction stage, actions take place, such as land acquisition, clearing, building access roads, developing utilities and relocating people. It is therefore important to know communities' views before and during airport construction as they may mean the project's success or failure. According to (Johnson, 2018), airport construction has adverse effects on the environment. It causes deforestation, as plants have to be cut down to pave way for construction activities. Where there are wetlands, they have to be drained and this endangers plant and animal species. Additionally, air pollution from the materials used onsite causes acid rain and reduces agricultural crop yields in the surrounding areas. (Li & Loo, 2016) maintain that the effects of airports during construction require further studies. This report is therefore contributing to the body of knowledge on airport construction and its effects but with a broader focus on oil-related developments within which the construction of Kabaale International Airport falls.

Much as this report focuses on the construction stage of Kabaale International Airport as a case study, much of the empirical data refers to the effects of oil related development activities generally on agricultural growth. This is because the construction of Kabaale International

Airport is part of the infrastructural developments being put in place to bolster oil-related development activities in Hoima district, and the country as a whole.

2.2. Effects of land acquisition processes (eviction, land compensation and relocation activities) on agricultural growth.

2.2.1. Theoretical Literature Review

In order to understand issues that relate to land acquisition processes, there is need to appreciate the links between property ownership, compensation and relocation. When persons are being evicted from their property, they should be compensated and or relocated based on the laws of the country in which it is happening. Denyer (2009) defines property as ‘a well-defined and exchangeable bundle of rights with value’. In Uganda, the government can acquire land for public works or use but their owner(s) have to be compensated beforehand. The Land Act (1998) defines public work ‘as the construction of railways, roads, canals or airfields; the placing of telegraph lines and electric lines, and the erection of supports for those lines; the laying of sewer and water pipes; the construction of drains; the prospecting, exploration, mining and extraction of petroleum resources; the construction of dams and hydropower plants; the establishment of hydrogeological, meteorological and water quality stations; the construction of water and sewerage treatment plants, storage reservoirs and pumping stations; and any other works, construction of public buildings and other public institutions declared by statutory instrument to be public works.

Koenig (2001) classifies relocations into two: voluntary or forced. Forced relocation could take the form of development-induced movements perpetuated by for instance construction works, human-induced disasters, socio-political upheaval, conflict, natural disasters. The relocation referred to in this report relates to the construction of an international airport.

Indemnity theory of compensation.

Green (2014) who is one of the indemnity theorists maintains that compensation should consider ‘the whole range of losses to put expropriates on a similar status as before the expropriation but not worse-off.’ Indemnity theorists take into consideration the market value

of property to be taken, compensation for severance, disturbances, consolation payments, special value and injurious affection. They argue that the property owners' losses should be considered first. They also go ahead to define the above-mentioned types of compensation. To them, market value is the principal basis of compensation; severance compensation is for loss in value of any remaining property; injurious affection relates to likely depreciation in value of any remaining property because of the works that will be done (Barnes, 2014). (Baum et. al., 2008) says that disturbance compensation is based on financial calculations and includes income and business losses, relocation costs, and transport costs while solatium caters for consolation payments. (Keon, 2002) defines special value as compensation which considers the owners' sentimental attachments to the property.

Indemnity theorists are behind the concepts of adequate compensation, equivalent compensation, appropriate compensation, commensurate compensation, full compensation, fair compensation, and full indemnity. They argue for prioritisation of not only the market value of property to be taken but also the additional considerations of severance, solatium, injurious affection, disturbances and special value in order to put the owner of the property on a similar status as before the acquisition of his/her property.

Conceptual theory of relocation

In explaining relocation and self-concept change, (Hormuth, 1990) maintains that 'relocation usually constitutes a radical change from one social context and physical setting to another one, thereby providing the opportunity for change. In a new environment, the individual is exposed to new contacts and role models, acquires new behavioural types, and undergoes role transitions. The opportunity to seek out new and different aspects of the self-concept is given. Absolute continuity in the person-environment relationship is impossible. However, continuity in selected aspects can be estimated by the way one's personal environment is created, for instance through furniture or other long-term personal possessions'.

2.2.1. Discussion of Literature

How do land-acquisition activities impact the rural economy?

Oil exploration and development activities are taking place in the Albertine region, in the western arm of the rift valley. This area is generally politically sensitive as it lies in the midst of two countries, Uganda and the Democratic Republic of Congo (DRC), with a history of violent conflicts and border disputes. The Albertine region also embraces a multiplicity of local government authorities, traditional institutions and various ethnic groups, which further widens the fragmented status quo in the region. In Uganda where rural livelihoods largely derive from agriculture, careful management of land issues in this area is crucial for ameliorating the livelihood vulnerabilities of rural households. The government of Uganda embarked on a drive to obtain the necessary land to enable the oil companies carry out several oil activities such as exploration, development as well as production.

As a result, displacement of several households due to the related oil-activities is one of the issues that have been cited as a potential source of conflict in the region. Development of the oil refinery is expected to displace over 30,000 people from over 29 square kilometres, in the nine villages of Nyahaira, Kyapoloni, Bukona, Kabaketo, Nyamasoga, Katooke, Rugashare, Kitegwa and Kijumba. The oil pipeline as well will displace a similar number of people, passing through nine districts, originating from Hoima district up to the border of Uganda and Tanzania, at Mutukula, in the south. According to (Mugisa, 2016), the on-going road construction activities happening in Hoima district has led to the displacement of households, an influx of migrants and increased rural-urban migration. These displacements, according to (Cernea, 1988) have a profound effect on the individuals as well as the economy, and unless carried out meaningfully, usually cause unsustainable strain on communities where the displaced people have been resettled.

While reflecting on the displacement of people by development projects and their resettlement, (Maldonado, 2012) notes that those who are forcibly displaced by these projects continuously experience intense impoverishment and increased marginalisation in their new settlements. He further states that when it comes to impacts of forced displacement, the cause is irreverent, be it development-related, environmental disaster or any cause, the mere relocation of people from one place to another physically distorts people's lives, economically, socially and culturally. It collapses social structure and exposes the displaced to generations of impoverishment. He further notes that taking appropriate action prior, during and after the displacement averts and/or reduces the extent of negative impacts.

Most of the empirical studies available locally are largely ‘activist-based’ and as a result, a bias exists in reviewing such literature. The (Global Rights Alert, 2017) report on the acquisition of land for oil projects tracked the progress in the resettlement of project-affected persons (PAPs) and those who opted for land compensation. Influx of foreigners, withdrawal of children from schools, increased disputes and disintegration of families were some of the impacts of such activity, which has a profound effect on the agro-sector in the study area. Less people as well as households were involved in the cultivation of crops and rearing of livestock, which implies less production due to less land available, less labour and general deprioritisation of the sector in favour of the development of oil-infrastructure.

According to (Downing, 2002), areas affected by displacement in favour of mining development projects are often impoverished, as the main direct effect of such activity if it is not in adherence with internationally acceptable standards of resettlement. This is so because such displacement often leaves people without effective livelihood strategies and thus marginalisation. He also reasserts that local community reallocation often provides a fertile ground for the breeding of communicable diseases, ethnic tension and dire situations that are ruinous to the affected person’s livelihood. This on top of being a severe infringement on their human rights, deprives them of the opportunity to labour, especially in agro-based societies, which often leads to a decline in agriculture,

According to (Uganda Land Alliance, 2011) report, due to increased oil-activity and the need to secure land to house the oil projects; land grabbing and encroachment issues accounted for the greatest number of land-related problems mentioned at 42%, increased land disputes due to oil discovery accounted for 27% and land fragmentation accounted for 21%. The report further justifies that these problems have had a major, negative impact on the agriculture sector in the study area. With both the local leaders as well as the natives equipped with scanty knowledge about land- and oil-related laws, the natives reported general dissatisfaction in the whole displacement/compensation process since the inception of the oil industry in Uganda in 2006.

Desmond (2016) studied the trends of evictions in Milwaukee, United States of America and concluded that it is not only a condition of poverty but also a cause. He argued that when one is evicted, one loses not only their house but also livelihoods, social attachments and connections, children leave their schools but that their mental health is also tremendously affected. He goes further to say that women face high depression levels even two years later.

These personal effects of forced evictions on an individual could be relevant in any context including Buseruka Sub-County where the construction of Kabaale International Airport has caused the eviction of several persons.

According to Goodin (1989), compensation is a mechanism ensuring that a property owner is given reimbursements in the event that their property is being taken away for public use. This is called compensatory damages for public taking of private property. He further says that gainers have to compensate losers based on governing policies, and that it would be wrong for society to assume that people's property can be taken away at any time as long as they are compensated for their losses.

Kabanga and Mooya (2018) indicate that market value is always the basis for most compensations whether for customary or other land tenure systems. They also maintain that market value as the basis for compensation often leads to inadequate compensation and further aggravates impoverishment of the persons affected. The construction of public infrastructure requires vast pieces of land which might not be available to governments. Location also matters because the activity for which it is being acquired could be location-specific.

CHAPTER THREE

METHODOLOGY

3.0. Introduction

This chapter focuses on the presentation of the methodology that the researcher employed when conducting her study. It describes the research design that was used, the study area as well as the techniques. This chapter also discusses the data collection methods that were employed by the researcher, data analysis methods as well as the ethical considerations that guided the study.

3.1. Research Design

(Creswell, 1998) defines a case-study as a research activity that attempts to examine and understand a system, bounded by time and place. According to (Wyk, 2012), the research design relays an important plan for connecting the conceptual research problems to the pertinent and achievable empirical research. This study employed the case-study research design, which used qualitative methods of data collection and analysis to assess gather data on the effects of the oil-related activities on agricultural growth as well as the resultant issues.

3.2. Study Area

The study was conducted in Buseruka sub-county in Hoima district. This area was earmarked for this study due to the increase in oil-related activities that have been taking place there in the past decade or so. Since agriculture was the main source of livelihood of the native population, the study intended to discover how the oil sector has impacted on the agrarian one.

3.3. Target Population

According to the (Uganda Bureau of Statistics, 2016) report, there were 5,425 households in Buseruka sub-county in 2014 that derived their living off produce from subsistence farming; these were considered as the total population in this study. The household was the unit of interest in this study because in Uganda, it forms the basic unit of sharing resources such as land, food and other basic resources. In this study, the household can also mean a group of people living together in the same shelter, similar to a family. As a result, this small conglomerate of people usually exerts its labour on the land to obtain food for sustenance and any surplus for sale, hence, its importance in this study.

The study also targeted a special population of 10 respondents for this objective who were district and sub-county leaders. These were selected as best suited respondents due to their

extra knowledge concerning happenings in the study area beyond areas of their abode. These leaders were presumed to have over-arching knowledge concerning oil-related activities in the study area and their effects on the agricultural sector in Buseruka sub-county.

3.4. Sampling

Sample Size

(Karanja, 2017) recommends that for focus group studies, the participants should not exceed eight (08). This study therefore considered three (03) focus groups each comprised of eight people from the different villages that make up Buseruka sub-county. Meetings conducted in the areas where major construction/land-acquisition activities related to the oil sector have occurred in the recent past.

As regards the local leaders, according to the Krejcie & Morgan (1975) table, a sample size of 10 respondents is prescribed. Three district and five sub-county leaders in the study area were engaged to obtain a more comprehensive perception about the study variables.

Sampling technique

Concerning the general population, the study employed both random and non-random methods of sampling. The study employed cluster random sampling technique to obtain respondents around the specific areas in which the oil-related development projects have been situated. In these clusters, due to the size of the study area and, the financial and time limitations, convenience sampling was used to obtain data from the most accessible respondents from each village in the sub-county. Only two respondents were obtained from each of the 13 villages that were affected by the Kabaale International Airport project in Buseruka sub-county.

The study also incorporated non-random methods of sampling that is purposive sampling targeting the concerned district and sub-county leaders to obtain important information for the research study. Due to financial and time constraints however, and the dynamic schedules of these district officials, only eight respondents were obtained.

3.5. Data Collection Methods

Secondary Data Sources

The secondary data used in this report were obtained from textbooks, journal articles, newspapers, previous dissertations, reports as well as other documentation from the internet concerning the variables in the study.

Primary Data Sources

The primary data used in the compilation of this study report were collected from the respective respondents and recorded in the interview guides. This data equipped the researcher with first-hand information from the respondents about the study parameters.

3.6. Data Collection Instruments

Interview Guides

An interview schedule was used during the focus groups to guide the discussions therein. Each focus group lasted between 45 minutes to an hour ensuring that each participant contributed optimally to the discussion.

During the face-to-face interaction with selected respondents, the researcher used the semi-structured interview guides with open-ended questions to obtain valuable information, especially pertaining to the attitudes and perceptions that the leaders have towards the interaction of the study variables.

Voice Recorder

During the focus group discussions, cassette voice recorders were used to record the interactions and discussions between the participants. Voice recording was used since the researcher was unable to write down everything that was being spoken during the group discussions.

3.7. Data Quality Control

Reliability

This test intends to determine the degree to which an assessment instrument produces stable and consistent results under varied conditions (Sekaran, 2003). Similarly, the reliability of a measure indicates the extent to which there is no bias and hence ensures consistency measurement across time and various items in the instrument (Nunnally, 1978). To ensure the reliability of the data, the researcher determined the sources and the time in which it was collected. Since this data were collected from leaders that have served for a long time, and

community members whose lives have been impacted by the events and processes and, having witnessed the proceedings in the study area, the data collected were considered valid and reliable to be used in the study.

3.8. Data Analysis

The data were obtained and compiled on new documents from the interview guides and voice recordings that were received from the respondents in the area of study. These documents were then cross checked for completeness and, the rest of the data were coded, interpreted, and analysed. While carrying out data analysis, the researcher used the Colaizzi framework to organise the data into different themes and come up with an analysis of the different meanings of the information pertaining to the study variables (Shosha, 2010).

After the data had been analysed, it was then be discussed. This process involved the interpretation and presentation of the findings through narration in accordance with the objectives of the research. The findings are presented first as the main study themes and then followed by the views in relation to the findings. This was done co-currently in order to remain on track.

3.9. Ethical Considerations

Before and during the research study, the researcher exhibited discipline and maintained an acceptable level of ethical behaviour when collecting data from the several respondents. The following was done to ensure that the exercise is acceptable and does not interfere with or bring about any contentious issues in the study area;

- a) The researcher initially obtained an introductory letter and permission in form of a stamped letter from both the academic registrar at the Institute of Petroleum Studies as well as from the sub-county chief respectively due to the sensitivity of the topic under investigation. The letters helped inform respondents about the identity as well as intentions of the researcher and the study activity.
- b) The researcher also first obtained permission from the respondents before conducting the interviews; they were informed about the researcher's intentions and no promises of any rewards were made in exchange for the information given. No coercion was used to solicit information from any respondent.
- c) Finally, the researcher treated all the personal information collected with utmost confidentiality and respect during the submission and discussion of results.

3.10. Limitations of the Study

Given the financial and time constraints of the researcher and the nature of the study, the data collection instruments were not designed to exhaustively question and measure the variables involved in the study.

Given the high illiteracy levels in Buseruka Sub-County (Uganda Bureau of Statistics, 2016), with over 83.95% of the population having stopped at primary level and below, the researcher faced a language-barrier problem since she is not also conversant with the local dialect.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

4.0. Introduction

This section presents findings from the field study, interprets this data and discusses its implications. The study intended to examine the effects of oil-related development activities on agricultural growth with a focus on the construction of Kabaale International Airport in Buseruka Sub-County. It also provides an assessment of the effects of the related land-acquisition processes including compensation and relocation of project-affected persons on agricultural growth. Data collected using the interview guides and voice recordings were analysed using the Colaizzi framework where different themes guided the activity. This chapter also includes a discussion of findings, which shed more light on the context of study. These include ethnic groups in the area, the different kinds of farming activities being practiced, and the other oil-related activities in Buseruka Sub-County. It also includes a discussion of key results in relation to the different study objectives, and concludes that investments in the oil sector should not be at the expense of the agricultural sector.

4.1. Preliminary Results

4.1.1. Ethnic groupings in Buseruka Sub-County

According to the views from respondents that participated in the Focus Group Discussions, there are over twenty tribes from which the people living in these areas obtain their origin. These tribes include the Abamba, Alur, Bagisu, Baganda, Jopadhola, Lugbara, Bakiga, Banyankole, Banyoro, Rwandese, Bafumbira, Madi, Acholi, Bagungu, Bakonjo and Basoga from Uganda. The area is also inhabited by people from the neighbouring Democratic Republic of Congo (DRC); these include the Lendu, the Kebu, the Bagerere and the Kebu. The Bakiga are the most prominent ethnic group in the area. It is of little wonder therefore that a parish in Buseruka, Kabaale, was named after their place of origin. However, Lunyoro is the most widely spoken language in the area.

The researcher found it necessary to document the ethnic composition of the population in order to provide evidence of the cultural diversity in Bunyoro which has a profound effect on agricultural practices in an area. This is because different cultures usually have their preferred orientation, for instance the Bakiga prefer to practice crop husbandry whereas the Bahima are

renowned cattle keepers. The presence of Congolese people in the area also shows the porosity of African borders which were created without considering the interconnectedness of the African people. The multi-ethnic nature of the population in Hoima district, and the population increase in the past decade or so as indicated by (Zziwa, Imaka, Mabala, & Tumusiime, 2014) is evidenced by this influx of different ethnic groups in the area as they seek to benefit from the more lucrative opportunities that the oil and gas sector provides. One respondent had this to say:

‘Developments in the oil sector have attracted people from different districts. People expect to gain from ongoing activities and numbers increase day by day’.

4.1.2. Farming activities in Buseruka

Study respondents also reported that in the past, the people in the study area practiced both crop and animal husbandry. However, crop husbandry is currently the major activity in the sub-county. This has been attributed to the changes in the area that have rendered the place inhabitable for most domestic animals. These conditions include increased dust and noise from oil activity as well as less green pastures available for the animals to feed on. Cows, pigs, sheep, hens, goats and rabbits are some of the animals that are being reared in the area, albeit on a small-scale. Some of the foodstuffs grown in the area include cassava, sweet and irish potatoes, millet, *matooke*, beans, sorghum, maize, cabbages, onions, tomatoes, groundnuts, soya beans and rice. These are mainly grown on a small-scale for subsistence purposes because of the small size of land available for agricultural purposes. Watermelons, *simsim*, mangoes, oranges, coffee, pineapples and tobacco are some of the commercial crops grown in the study area.

4.1.3. Oil-related Activities in the area

In addition to the construction of Kabaale International Airport, several projects are underway to prepare the region and its people for first oil. Some of the main projects include the East Africa Crude Oil Pipeline (EACOP) project under the Chinese National Offshore Oil Company (CNOOC) for which Environmental and Social Impact Assessments (ESIA’s) were completed, and the project-affected persons (PAP’s) are being sensitized about the compensation and relocation procedures to follow. Total E&P is steering the East Africa Refinery project which is to be undertaken in the industrial park. Its ESIA’s are underway, and the sensitisation of masses is being done concurrently. Additionally, the construction of the Kabaale-Kiziranfumbi road is also on-going.

Several oil wells have been drilled and completed, awaiting commissioning and production. There are also several projects that are run by Enviro-Serve whose mandate is to ensure proper management of all wastes produced in the area.

Other projects in place include several sensitization meetings, training and campaigns by institutions such as the Petroleum Authority of Uganda (PAU), the Ministry of Energy and Mineral Development (MEMD) and other Non-Governmental Organisations that are trying to prepare the people of Buseruka sub-county for the oil industry. HOGACHA is a program funded by the World Bank in Kabaale that trains and skills the natives, especially the youth for employment and entrepreneurship, delivers lessons on financial literacy and human (especially children) rights. SBC, the contractor in charge of construction at the airport has also been involved in several Corporate Social Responsibility (CSR) projects as a way of giving back to the community. It has built several boreholes to deliver clean water to the natives of Kabaale, provided computers to secondary schools to increase IT literacy levels in the area, constructed toilets and latrines, and distributed seedlings to the local farmers.

4.2. Effects of Kabaale airport construction on agricultural growth

The first objective sought to study the effect of the construction of Kabaale International Airport on agricultural practice and growth in the study area. The Kabaale International Airport project sits on 29.5 square kilometres of land and covers over 13 villages in Buseruka and Kabaale sub-counties. Respondents reported that over 7,000 persons were affected by the project most of whom were either relocated to a new place or compensated for their land. The relocated households were usually given a house as well as land elsewhere, equivalent to what was owned initially. This implies that a huge population of the people in the study area were pushed elsewhere from their land. As a result, the number of people actively engaged in agriculture in Buseruka sub-county reduced drastically, since the number of farmers as well as the farms also reduced.

Respondents reported that most of the project-affected persons who were relocated and given land elsewhere are still engaged in agriculture despite several challenges such as long distances between their homesteads and the new farmlands that they have been allocated. On the other hand, most of the local council officials involved in the study reported that the PAPs who had been compensated for their land are now mostly out of agriculture since the concerned companies and government did not follow standard procedure to guide and sensitize them about financial literacy and how to handle their compensation packages. They reported that most of

the funds received were squandered or invested in non-viable businesses. Some people were said to have purchased small pieces of land which cannot support viable agricultural activities. Respondents reported that this has affected wealth distribution and capability of these people to engage in sustainable and rewarding agro-practices in the study area.

In reference to the plight of the Project-Affected Persons who did not prioritise the acquisition of land after being compensated, a local council official had this to say:

‘Money blinded most people. They did not think about investing it in land in order to continue with their agricultural livelihoods. Some people did not purchase land because they feared that they would again be evicted since the whole area has prospects for oil-related investments’.

In Least Developed Countries (LDCs), land and labour are the most important factors of production. As a result, the derivation of a certain livelihood and the sustenance of a robust rural economy are closely linked to the land use patterns and the labour force in that area. With displacement of farmers and reduction in the arable land as well as that used for livestock rearing, Buseruka sub-county has seen considerable decline in the agricultural yield in the previous years as reported. These findings are in accordance with the Frontier Model of agricultural development as well as the findings of (Delgado, Hopkins, & Kelly, 1998) which postulate that increase in agricultural produce, especially in low-technologically advanced regions is mainly dependant on the land area being cultivated (implying that the vice versa is also true). The study area is still underutilised in terms of agricultural potential and as a result, the inherent population growth has no significant effect on agricultural growth. In fact, (Binswanger-Mkhize, 2009) explains the high likelihood of agricultural growth and prosperity in areas with high population growth, if only there are vibrant markets to serve the agricultural output as well as favourable market access.

According to the data collected, respondents also reported general disregard of agricultural programs and activities by the government in the area in favour of the airport construction and other oil-related projects. Most respondents reported that logistical support in terms of feeds was reduced, especially towards livestock farmers. This has greatly reduced the number of livestock reared in Kabaale sub-county. Respondents also reported that government agencies have greatly relegated their role of service-provision to the oil companies and NGOs in the region. Instead, the private companies are engaged in the sensitization of the public, provision

of agricultural inputs such as seedlings, fertilizers, and spray chemicals among other things, which could have far-reaching negative impacts.

With the discovery and production of hydrocarbons, (Fleming, Measham, & Paredes, 2015) postulate that a subnational resource curse can emerge in regions surrounding the extractives industry, despite nationwide, macro-economic gains from the same. They expounded on this stating that with increased investment in the country, especially to expedite the extraction of the natural resources, other sectors of the economy such as manufacturing or agriculture are usually deprioritised. This is in line with the above finding that spells general disregard of agricultural practices in the area by the government and other concerned private agencies and as a result, livestock practice has greatly reduced.

In order to further understand the relationship between the construction of the airport and agricultural growth, and the resultant effects, the study sought to find out the current employment patterns in the area. Several respondents reported that they did not know of anyone who was employed by the airport contractors at the time of the study but that many locals were given jobs at the start of the construction activities, and that majority were later laid off citing incompetence. Respondents who had a relative or knew someone who had worked at the airport construction site reported that they were employed for casual jobs such as drivers, turn men, mechanics, traffic officers, porters and masons. Those in mid-level jobs included storekeepers and a security manager with SBC. Some people who were employed in the airport construction activities were initially engaged in agriculture but did not go back to the practice after they were relieved of their duties. Only two respondents reported knowing two people (one each) who continued practising agriculture while employed at the construction site, and are still practicing it, albeit at subsistence level.

In the same vein, (Fleming, Measham, & Paredes, 2015) acknowledge the loss of economic diversity in regions surrounding the extraction areas. They acknowledge the change in employment demand in these areas, which usually has a significantly negative impact on other sectors of the economy. With an inflow of more financial resources through investment in the oil industry without improving farming incentives, the people are bound to abandon the practice of agriculture since the oil industry usually brings job spill-overs in other sectors such as small-businesses (Aroca & Atienza, 2011).

The construction of Kabaale International Airport also led to the blockage of several roads, which has greatly hindered the agricultural potential of the area. Several farmers reported that

this has reduced not only their access to outside markets but also their selling prices since the middle-men pay them based on the relative ease of access to their produce. As a result, local produce has failed to attain viable market in the region. According to respondents, this has curtailed the will to invest in and practice agriculture on a large scale.

‘The airport and other oil-related activities seem more important to government than our roads. Most of our roads including those that lead to markets have been blocked. We have complained but nobody seems to care’

Female respondents in a Focus Group Discussion.

With an influx of people into the area, it was also noted that there has been an increase in incidences of insecurity and conflict. Farms have been destroyed during several fights over land as well as lootings and attacks from neighbouring Congo. These have contributed to an overall reduction in agricultural activity in the area.

In some other instances, villages in Kiziranfumbi and Kigorobyia reported that the infrastructure, such as the *murrum* roads being put in place as well as several sensitization programs have had positive externality effects on the livelihoods of the local people in the area which has had a spill-over effect into increased agricultural productivity. Sensitization and skilling initiatives have for instance enabled a few farmers in the area to engage in improved and commercial agricultural practice, especially production of foodstuffs such as tomatoes, cabbages and beef to suit the high international standards required by most oil companies. The housing and water facilities in the area have both increased in quantity and quality. This has had substantial impacts on the living standards and livelihoods of the natives. Some respondents reaffirmed that improving such facilities as housing, health centres, schools, roads and markets among other things has had a positive effect on the agricultural output in the area.

Fluctuations in prices of foodstuffs in the area were also reported. Price decreases were mainly caused by the monopoly of intermediaries that set low prices for commodities. Also, there’s very low purchasing power from the external manpower working at the airport construction site and other projects in the area citing poor standards. Price increases on the other hand have mainly been attributed to scarcity during certain seasons, and high demand. This issue is further compounded by the population boom which implies more people with limited land resources. As a result, people own small pieces of land on which large-scale agricultural

production is almost impossible to achieve. This has a negative impact on the gross agricultural output of Buseruka sub-county as a whole.

According to (Apata, 2010), there exists a link between a decrease in livelihood in agriculture due to destruction of eco-systems and weakening rural economy while an increase in livelihoods and basic services lead to an improvement in rural economy. Strengthening of rural infrastructure has been cited by (Majumder, 2002; World Bank, 2010) as a means of reducing production costs which augments agricultural output as well as incomes for rural farmers and their communities.

The study findings are in line with the work of (Seid & Holger, 2008) who discovered that better infrastructure in fact accentuates the process of commercialisation of agricultural and the rural sectors. (Lockesha & Madesha, 2016) also discovered that once rural connectivity between the farmers and their markets is improved, agricultural production increases, inputs and transport costs reduce, cropping patterns improve (from largely subsistence to commercial) and output prices also increase.

Using rural roads as an example, (Lockesha & Madesha, 2016) posit that they aid agriculture directly by enlarging the areas under cultivation since it becomes easier to transport inputs such as manures, good seeds, agricultural equipment and the pesticides. Better rural roads also prompt a change in the cropping patterns and reduce transport costs, especially to the markets or urban centres which in turn reduces the marketing costs. Rural roads also benefit agriculture indirectly by breaking up the isolation between villages which facilitates the sharing of information and knowledge: this creates a general sense of awakening therein.

Respondents also reported a drastic reduction in livestock rearing as a result of the new, unfavourable conditions brought about by the airport construction activities in the study area. Air pollution has predominantly worsened the local air quality. Such pollutants include vehicular emissions from several trucks and other cars that transport both materials and people in the affected area, and residues from combustion of fuels. These emissions have been proven to include gases such as CO₂, CO, NO₂ and SO₂ (Field & Field, 2017) that have adverse respiratory effects on both humans and livestock animals. Fugitive dust was also suggested as another major pollutant produced by pulverisation and abrasion of surface materials due to application of mechanical forces during the construction activities. Additionally, due to the exposure of the land surface as a result of the extensive clearing of the vegetation in the study

area, soil erosion was reported to have intensified, which has had adverse effects on the quality of water.

Noise pollution from earth works and site preparation activities, rock drills, dump trucks, concrete mixers, air compressors amongst others is also on the rise. Increased noise levels were reported to cause sleep disturbance, anger, powerlessness and frustration to control the noise which increase stress levels hence deteriorating the mental health of both humans and animals. This combination of factors has negatively affected the livestock agricultural potential in the study area since it renders the area inhabitable for these domestic animals such as cows, goats, sheep, pigs amongst others.

These study findings are in congruence with the work of (Johnson, 2018) who postulates that the litany of airport activities produce various kinds of wastes. Emissions are produced from the vehicles, and fossil fuel combustion for heating and electricity supply. Other non-exhaust emissions, such as fugitive dust are caused by abrasion of surfaces by the different machinery on site. The author further states that the physical and chemical properties of these emissions are associated with several health risks such as respiratory problems, skin irritations, eyes inflammation, blood-clotting and different allergies. These can affect both humans as well as animals found in close proximity with them; this is probably why the stock of animals being reared in the area has drastically reduced.

The (Port Columbus International Airport, 2008) also reasserts these findings in the Environmental Impact Statement produced after construction of the Port Columbus Airport. There was severe soil erosion as a result of massive deforestation which degraded the natural water catchment reservoirs as well as loss of soil fertility. Noise pollution was also cited as a major outcome of these activities, leading to several physical and emotional consequences such as increased frequency of migraines amongst workers and, stress and fatigue respectively.

The respondents also reported a loss in the aggregate communal infrastructure such as markets and roads in the study area. This has had adverse impact overtime on agricultural growth. Communities were neither compensated for the local markets that were in place before construction work begun nor were these markets relocated or built elsewhere. As a result, some farmers have been unable to sell their produce due to long distances to the next available market. This factor alone reduces the incentive for a farmer to produce more than he/she requires for self-sustenance.

Additionally, as a result of construction of the airport, some roads were blocked whereas others were completely removed off the surface invariably altering the traffic patterns in the study area. This has severely affected the ability of farmers to transport and sell their produce to both near and far away markets in the study area. Travel times as well as transport costs have increased since the farmers have to use alternative, more distant routes or more impassable roads to transport their produce to the market. This also severely demoralises the farmers and results in low agricultural produce overtime as reported by the respondents in the study.

Generally, the relationship between agricultural growth and construction activities in the study area is mostly disruptive and detrimental to the agricultural sector according to the responses obtained during the study. This is because with the advent and increase of construction activities, there has been cuts in logistical support, especially to livestock farmers, a net reduction in the number of farmers in the area since most people that were initially into farming sought work at the airport or are engaged in trade elsewhere and only two people were reported to be employed at the airport and still engaged in small-scale agriculture. This phenomenon alone is telling enough of the disruptive impact that airport construction has had on agriculture.

4.3. Effect of land-acquisition processes on agricultural growth

The land tenure system in the study area is predominantly customary as supported by (Winyi, 2016). Families inherit land from their ancestors passed down from generation to generation. As a result, most families in the area did not see the need to acquire titles for their land, a factor that highly disfavoured them during the acquisition of land for airport construction. This reluctance was further exacerbated by the tedious and expensive process of attaining a land title. As a result, very few households and other landowners in the area had land titles.

The land-acquisition process was conducted in a systematic process which begun with community consultations by the Ministry of Energy and Mineral Development (MEMD) officials. These consultative meetings were meant to inform local community members of the general land value in the area, land valuation processes and considerations. The meetings also deliberated on the best options for compensation or relocation depending on the choice made by the affected persons. The affected persons who chose to be compensated later underwent several sensitization programs to prepare them to manage their packages to ensure financial stability thereafter. These sensitisation programmes were however said to be brief and insufficient to cause behavioural change, whereas those that were to be relocated were taught about stress management and how to cope with new situations and environments that they were

to be relocated to. Simultaneously, several land valuation activities were carried out to ascertain the value of land, the structures, plants or any other valuable possessions therein. This was done in order to come up with uniform and fair packages for the project affected persons. From the registers of PAPs that was compiled, proof of land ownership had to be presented before compensation or relocation.

The amount of the compensation packages depended on the size of the land, possession of land titles, crops on the land (it is important to note that all crops were valued at the same price despite differences in market price or difference in maturity levels; this stirred a lot of controversy and complaints were rife amongst the affected people), the structures on the land such as houses, graves, stores amongst others as well as the location of the land, whether near the main road or in a town centre were also considered. A disturbance package was also given to the affected persons to help in their relocation. Once the agreed compensation requirements were met, the project-affected persons were given three months to vacate the land. For the compensated persons, the process was reported to have been faster than that of relocation where houses had to first be built for them. Most respondents reported that most of the affected people were happy with the size of their compensation packages, except for a few cases that are still in courts of law.

Two outstanding issues were raised, and said to have affected the sustainability of livelihood of the compensated persons, these are; the inadequate and haphazardly done sensitization on financial management, and how to invest their packages in order to ensure sustenance of their livelihoods and households. This was said to have resulted in most people squandering their money on lavish lifestyles and alcohol consumption which left them worse off than before being compensated. Most respondents also decried the utter discrimination of women in the negotiations and payment of the compensation packages because only family heads were considered and yet most of them were men. These two issues were reported to have had negative effects on agricultural activity in the area because people did not only lose their farmland but also squandered money which could have been used to re-invest in agriculture through purchase of land in their new places of abode, and buying of inputs.

Persons who put their compensation packages to good use invested in businesses such as shops, or small-scale real estate such as rentals or are currently not into farming. On the other hand, women who are the main actors in agriculture in Bunyoro (Economic Policy Research Centre, 2015) were highly demotivated by the clear discrimination during compensation proceedings.

This was said to have discouraged them from engaging in agricultural activities because they felt that their contribution had been disregarded.

The relocation process took longer because houses had to be planned for, resources mobilised and then the necessary structures built before the beneficiaries could inhabit them. The affected people were initially sensitized and counselled on how to cope with the stresses of changing their environment. A camp was then built in Kyapaloni to accommodate the 77 households that opted for relocation. They were also given a piece of land elsewhere equal in surface area with the one they had before and a disturbance allowance to cater for transportation of their families as well as movable properties such as graves, livestock amongst others. Challenges encountered in regards to relocation include the following;

The project-affected persons were promised housing structures on their own pieces of land elsewhere, which was not the case. Instead, the houses were all built in Kyapaloni camp and their individual pieces of land, presumably for agricultural activities, were given in another area far away from the camp. The quality of soil in the new farmlands was said to be far less compared to that in the study area/original area of abode. Additionally, respondents raised concerns over the safety and security of especially women and girls who have to move long distances to the farms with some reporting incidences of sexual assault and abuse. These issues have had a profound impact on the sustenance of agricultural practices after relocation. Since then, most people have been demoralised by the long distances from the camp to their farms, safety concerns and the quality of soils in the new farmlands which is said to be yielding far less than when they were resident in Kabaale. As a result, most people have moved to the adjacent towns in search of other opportunities in business or in the lucrative oil industry, forsaking the agro-based industry in the study area.

4.4. Conclusion

The above findings reaffirm the literature review findings, which indicate that land acquisition, evictions, compensation, and relocation can impact negatively on agricultural growth if not well-handled. The limited sensitisation on the management of compensation funds, failure to honour pledges of finding adequate land for both construction of houses and farmland for relocated persons, and the consideration of male family heads as beneficiaries of compensation

all worked to the detriment of the agricultural sector. For persons living in the vicinity, road blockades reduced their access to markets. Commodity price fluctuations were also reported due to variations in supply and demand. The large-scale acquisition of land for the construction of Kabaale International Airport was said to have led to these predicaments.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter provides the summary and conclusion of findings pertaining to the study objectives, recommendations on how construction and land-acquisition activities ought to be handled to ensure continued growth in the agricultural sector as well as limitations encountered. It also proposes further areas of study.

5.1. Summary of the Findings

According to the responses collected from the Focus Group Discussions, the researcher was exposed to a rich mix of people and cultures with over twenty tribes co-existing in Buseruka sub-county. Lunyoro is the most-widely spoken dialect in the study area where as the Bakiga make up the majority of the population. This phenomenon is an indication of growing interest in the area of study as a result of the discovery of commercial hydrocarbon reserves in the region. Additionally, the agricultural practices in the area have invariably become mixed with both livestock rearing and crop farming co-existing albeit on a smaller scale since different cultures and ethnic groups are inclined to practice different forms of agriculture. Crops like millet, potatoes, *matooke*, beans, sorghum, maize, cabbages, and cassava among others are widely grown in the area whereas the commonest livestock reared include cows, pigs, goats, sheep and rabbits. Subsistence farming is mainly practiced with very little spared for sale.

In addition to the construction of the Kabaale airport, the other main oil-related projects are underway in a bid to prepare the region for oil extraction in the coming years. Respondents reported that the East Africa Crude Oil Pipeline (EACOP) project which is steered by the Chinese National Offshore Oil Company (CNOOC) is underway, and that relocation and compensation activities are being undertaken in order to prepare local communities to free-up the land that will house the pipeline. Additionally, impact assessment studies were said to be underway for the East Africa Refinery project which is steered by Total E&P. The Kabaale – Kiziranfumbi oil road is also under construction. Other programs such as HOGACHA are in place to equip the natives with skills that will enable them to benefit from the oil sector. SBC – Uganda, which is in-charge of construction works at the airport, is also conducting several Corporate Social Responsibility (CSR) activities in the area such as the drilling of boreholes,

construction of latrines, and distribution of seedlings to local farmers. These programs and activities have a major impact on the agricultural sector in the region.

5.1.1. Objective One: To assess how the Kabaale International Airport construction activities affect agricultural growth.

The relationship between construction activities and agriculture in the study area was found to be both disruptive and detrimental towards the agricultural sector based on responses obtained from the interviews conducted. As discussed, there has been general disregard of the agricultural sector in the area in favour of the oil sector which is evidenced by the reduction in the provision of logistical support to farmers and yet these services were initially in place. Feeds to livestock farmers were reduced and in some areas are no longer distributed by the government agencies.

Respondents were of the view that the government has relegated some of its services to private companies, especially NGO's which now handle things to do with sensitization, distribution of agricultural inputs such as seeds or fertilizers among others thereby demoralising farmers, and cutting short their capacity to increase the number of animals on their farms while others have abandoned the practice completely. Employment of some members of the community at the airport when construction begun further reduced the number of people engaged in agriculture since most of the airport employees usually spend a considerable amount of their time at work, and have little time left to engage in agriculture. Closure of markets and obstruction of roads has also greatly affected the selling and transportation of agricultural goods. This was said to have greatly demotivated farmers in the area.

The advent of the oil industry in Uganda has also attracted people of different cultures and religion to settle in the Albertine region, and as a result, this area has experienced a population boom as people migrate to benefit from the lucrative industry, the airport construction project notwithstanding. Despite the numerous advantages that come with a big population such as a bigger market for local produce, and a bigger labour force, increased crime rate and insecurity have been reported, and said to have contributed to the detriment of the agricultural potential of the study area. Some respondents also reported incidences of looting of agricultural produce allegedly perpetrated by Congolese nationals who cross into Hoima and back and therefore difficult to apprehend.

Appreciation in the value of land has also increased the severity of land wrangles in the area. This too has a negative impact on the agricultural practice in Buseruka sub-county. However, some respondents reported that gains to farmers include improvements in infrastructure, such construction of new housing and water facilities, hospitals and health centres amongst others. Through sensitization and skilling of the natives, some farmers have been able to supply agricultural produce to the oil companies on a very small scale because they expect high international standards.

Generally, the construction activities at the airport have had a negative effect on the agricultural sector in Buseruka sub-county. The project that sits on nearly 29 square kilometres of land affected over 7000 households from 13 villages. This implies that the occupants who were initially involved in agriculture were either compensated and evicted or relocated to a new area. Hence, the land area directly being cultivated or utilised for livestock rearing in the area reduced considerably. Additionally, respondents reported that most of the people who were compensated and evicted are no longer actively engaged in any form of agriculture since they squandered or poorly invested their packages. The relocated persons are however still engaged in agriculture despite several challenges such as long distances between their camps in Kyapaloni and the land for agriculture. Some of the natives who were initially engaged in agriculture are currently employed in other sectors and as reported, no longer in active agricultural practice. This implies a reduction in the labour force for the agricultural sector. The double loss in land for agriculture as well as labour has inadvertently reduced the agricultural potential of Buseruka sub-county.

Respondents also reported that pollution from the construction activities in terms of dust, noise and emissions have created unfavourable conditions for animals, and reduced the aggregate stock of livestock in the study area. The loss in communal infrastructure such as roads that were blocked and, markets that were closed and not replaced has impacted negatively on the ability of farmers to transport and sell their produce. This has been a demotivating factor to farmers thereby affecting agricultural growth.

5.1.2. Objective Two: To assess how land acquisition processes (compensation, eviction and relocation activities) affect agricultural growth.

It is important to note that customary land tenure is the predominant land tenure system in the study area, and that most people/families do not have titles for their land. Also, bureaucracies in title acquisition processes have hindered most people from registering and obtaining their

land titles. Project affected persons had two options; being compensated for their land or being given land elsewhere and subsequently relocated. Majority opted for compensation which has had a grand impact on agricultural practice in the area. Consultative meetings steered by the Ministry of Energy and Mineral Development (MEMD) in collaboration with oil companies and civil society organisations initially engaged the affected persons in consultative meetings to obtain their views on aspects regarding the value of their land, value of structures and crops therein, certification of land ownership, and other related issues. This process also involved sensitisation of the masses on how to handle themselves and their packages after the eviction/relocation processes.

Several factors were considered in calculating the compensation packages of different households. These include ownership of land, possession of land titles, the acreage of the land in question, crops on the land, houses, other structures, and graves. A disturbance package was also given to the affected persons to help in the transportation and relocation of their families and properties. Inadequate sensitization and preparation of the local communities has been blamed for the misuse and squandering of compensation packages. This was said to have left many people languishing in abject poverty, and that their living conditions are worse than before they received the packages. Respondents also reported that women who are the main actors in the agricultural sector in the region were largely excluded from the entire compensation process. Female and male respondents alike said that this largely demotivated the affected women because their spouses made financial decisions without their inputs and therefore the money which could have been re-invested in agriculture was misused. These factors coupled with the general loss of a huge chunk of land to airport construction activities have been attributed to the decline in agricultural activity in Buseruka Sub-County.

In regard to relocation, the process took more time since a camp had to be built first, and several chunks of land allocated to the affected persons. Most of the relocated households were reported to still be involved in agriculture despite several challenges such as the low levels of soil fertility in the farmlands and safety and security concerns especially for women and girls. It was also reported that government had initially promised to provide a housing facility for each household on their own piece of land. The farms were also expected to be on the same piece of land. This promise wasn't kept, and all relocated persons were accommodated in a camp which is far away from the farmland. As a result, they have to travel long distances under arduous conditions moreover on a daily basis to work on their farms, something that has greatly demotivated these farmers. The above-mentioned issues and accompanying reasons were

reported to have forced most people to abandon agricultural practices for work in the town centre.

5.2. Conclusion

The study highlighted the effects of oil-related activities (especially the construction of Kabaale airport and land-acquisition processes) on agricultural growth in Buseruka Sub-County. Despite the fact that several activities and measures have been undertaken to ensure that the oil industry does not negatively affect the agricultural economy in the area, the study found out that the land-acquisition as well as construction activities in Buseruka have had a negative impact on agricultural practices in the area. The study ascertained that a considerable number of people had been pushed off their land, with most of them completely abandoning agriculture to be employed at the airport, and upon losing their jobs, majority joined other economic sectors like trade.

The emissions, noise and dust from the construction activities have worsened the living conditions of livestock in the area, and as a result, their number has dwindled overtime. Generally, there has been disregard of the agricultural economy as inputs given to farmers have reduced overtime; certain roads have been closed thereby limiting access to markets because farmers are no longer able to transport and sell their produce and intermediaries are taking advantage of the situation.

As regards the land-acquisition processes, the study found out that majority of the people who were compensated are no longer engaged in agriculture because most of them misused or ill-invested their packages and are no longer able to invest in agriculture. As a result, some project-affected persons have either been employed in other oil-related activities in the area or invested in other businesses. The relocated persons are more engaged in agriculture because they have farmland despite a few hiccups. Other paramount issues that have affected agricultural productivity in the area include the exclusion of women from compensation processes and their subsequent demoralisation from re-engaging in agricultural activities and yet they are the main actors in the sector.

5.3. Recommendations

5.3.1. Short-term recommendations

The government, oil companies and civil society organisations ought to develop extensive sensitization and training programs including provision of extension services in order to enable the local farmers gain expertise, and increase their productivity in accordance with the standards required by the oil industry employees and other potential buyers. Empowering SACCOs in the region with capital and inputs that can be used in agricultural production is expected to help farmers tap into the highly lucrative oil and gas industry. This could ensure growth in both the agricultural and oil sectors.

Since the population is expected to continue growing due to the oil boom, the government should ensure the safety and security of people and property in the area through sensitization that targets the foreigners, and unemployed youth. The youth could also be trained as local defence units so that they protect the local communities from both local and foreign threats. This will motivate them to work even harder and produce more, hence boosting the rural economy.

Respondents also recommended that the destroyed communal infrastructure such as markets and roads should be reconstructed elsewhere since they offered significant services to the communities. The roads will improve accessibility to different areas, not only for farmers but also for buyers. The markets will also provide a venue for selling off produce. These recommendations if implemented are expected to motivate persons who had neglected farming, and boost production thereby fostering agricultural growth in the study area.

Government through relevant institutions such as the National Environment Management Authority (NEMA) should draft pollution abatement strategies and guidelines that operating companies ought to follow if the environment is to be conserved. These should be enforced, and monitored to ensure that the airport construction activities do not have adverse impacts on the eco-systems as well as the life in them. Air pollution through dust for instance can be reduced through wetting or flushing the dusty roads and surfaces to ensure that it does not rise to contaminate the atmosphere.

In regards to promoting gender equity and women's empowerment in compensation, and relocation of project affect persons, the government and oil companies should ensure that women are involved in deliberations and decision making at all stages right from land

acquisition processes so that their views are heard and integrated in the implementation of ensuing decisions.

5.3.2. Long-term recommendations

It was widely recommended by respondents that the government should conduct a national land census to document the different landowners in the country, and ascertain their ownership claims. With such data in place, the bureaucracies involved in land title acquisition will be eliminated. This is expected to reduce the severity of land conflicts in the country, and ease acquisition processes.

Since several oil related activities that require huge chunks of land are yet to begin, it was also recommended that a system be put in place through which the compensation packages are administered periodically as though it were a ‘drip-by-drip’ process to reduce excitement and possibilities of squandering the entire package. This would also allow the concerned government institutions and oil companies to monitor the utilisation of funds received, and ensure optimum use.

5.4. Body of Knowledge

I have identified the key role of government in monitoring and enforcing standard procedures in communities that are hosting oil-related large scale land based investments to ensure that the locals optimally benefit from the sector. The relegation of some roles by government to oil companies that instead perform them as a form of Corporate Social Responsibility (CSR) has disadvantaged the rural economy in Buseruka Sub-County since these companies are profit-oriented and therefore offer minimal services whose costs do not have huge financial burdens on them. Sensitization and counselling programs, especially concerning financial management should be spearheaded and controlled by the government to ensure that project-affected persons are well prepared for life after eviction. Without proper planning and execution of such land acquisition activities, and understanding of the underlying issues pertaining to the different cultures, gender roles and communities, challenges are bound to exist and affect the economic growth in the area, and other similar contexts.

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APPENDIX I:

RESEARCH INTERVIEW GUIDE

UGANDA CHRISTIAN UNIVERSITY

INSTITUTE OF PETROLEUM STUDIES, KAMPALA

Dear respondent(s),

I am a student at the Institute of Petroleum Studies (IPSK), pursuing an MBA in Oil and Gas Management. As part of the requirements to graduate, I must conduct a research study and write a report. This guide as part of the study is designed to enable the researcher to obtain the perspectives and opinions of the respondents who include local and sub-county leaders and household heads in Buseruka sub-county, Hoima district. The study examines the effects of the construction activities of Kabaale International Airport on agricultural growth therein.

You have been identified as a key informant in this study, so please spare a few minutes of your busy schedule to respond to the following questions. The responses will be aggregated to the project and used purely for academic purposes. Your honest and sincere responses are highly appreciated and shall be treated with utmost confidentiality and respect.

Resource Curse Theory

1. Apart from the construction of the Kabaale International Airport, which other oil-related projects are being implemented in your area? When did each of these projects commence?
2. Apart from agriculture, from which other economic activities do the people in this area derive their livelihood?
3. Has there been general disregard of these activities in this area by the government recently in favour of the oil and gas activities?

Agricultural Growth

4. What kind of food stuffs are majorly grown in this area? Have the prices of these food stuffs gone up or down since the inception of the petroleum industry? Give any reasons to support your answer.
5. Between animal and crop husbandry, which is the most practiced form of agriculture in this area? How many farms of each are there in the area?
6. Have the natives been pushed to use land elsewhere for agriculture in the last 5 years?
7. Do you have relatives, friends or acquaintances that are now employed in the construction work at the new airport? If yes, what kind of work do they perform there today?
8. Were these relatives, friends or acquaintances engaged in agriculture before being employed at the airport? If yes, are they still engaged in active agricultural production today?
9. Does the government (as well as the other stakeholders) still engage the farmers in research and training to improve the quality and increase their yields?

Oil economy vs. Agricultural economy

10. Which are the indigenous ethnic groups as well as the new comers in the area?
11. Which are the predominant land tenure systems in this area?
12. How was the land in this area acquired by the government or oil companies for the aforementioned projects?
13. What criteria guided the compensation activity for the airport project? Were the PAPs happy with their packages?
14. How were the evictions and the relocations carried out in the area?
15. Are the PAPs still engaged in active agricultural production?

Recommendations

What can you recommend the leaders and the general population to do to ensure balance and prosperity for both the petroleum and agricultural sectors in the Albertine region?

How should the government and other stakeholders carry out the land-acquisition activities (including the compensations and relocations) in order to ensure that it does not negatively affect the people and the rural economy at large?