

**ANALYZING THE IMPACT OF DONOR AID ON
FOOD SECURITY IN WEST AFRICA**

THESIS



By

LANSANA ALHASSAN SESAY

8061901002

Supervisor 1:

Dr. Theresia Gunawan, MM., M. Phil

Supervisor 2:

Dr. Rulyusa Pratikto

UNIVERSITAS KATOLIK PARAHYANGAN
FACULTY OF SOCIAL AND POLITICAL SCIENCES
MASTER PROGRAM OF SOCIAL SCIENCE

BANDUNG

2021

THESIS APPROVAL PAGE
ANALYZING THE IMPACT OF DONOR AID ON FOOD
SECURITY IN WEST AFRICA



By
Lansana Alhassan Sesay
8061901002

Approved for Submission of Final Examination on Tuesday, 3rd August 2021.

Supervisor 1

Supervisor 1:

Supervisor 2:

Dr. Rulyusa Pratikto

MASTER PROGRAM OF SOCIAL SCIENCE
FACULTY OF SOCIAL AND POLITICAL SCIENCE
UNIVERSITAS KATOLIK PARAHYANGAN

BANDUNG

2021

STATEMENT LETTER

With this statement below I,

Name: LANSANA ALHASSAN SESAY

NPM: 8061901002

Study program: Faculty of Social Science and Political Science Postgraduate
Parahyangan Catholic University Bandung.

Declaring that the thesis with the title,

ANALYZING THE IMPACT OF DONOR AID ON FOOD SECURITY IN WEST AFRICA

It is the product of my original research work under the guidance of my supervisors. In line with the standards of the University and the academic code of conduct, I have acknowledged all sources used and have cited these in the reference section.

In the future, if any violation of scientific ethics and academic code of conduct is found related to my work, either formal or non-formal demands from other parties related to the work. I am ready to bear all the risks, consequences, and/or sanctions imposed on me, including the cancellation of the academic degree I obtained from the Catholic University Parahyangan.

Declared: in Bandung

Date: 3rd August, 2021.



Lansana Alhassan Sesay

ANALYZING THE IMPACT OF DONOR AID ON FOOD SECURITY IN WEST AFRICA

Lansana Alhassan Sesay NPM 8061901002

Supervisor 1: Dr. Theresia Gunawan, MM., M. Phil

Supervisor 2: Dr. Rulyusa Pratikto

Master Program of Social Science

Bandung

August 2021

ABSTRAK

Meskipun banyak bantuan donor pertanian yang diberikan kepada negara-negara yang termasuk dalam kategori kurang maju di negara-negara Afrika Barat, namun sangat terbatas informasi yang diketahui mengenai peran dari donor yang diberikan dalam meningkatkan ketahanan pangan. Untuk itu, peneliti ingin mengetahui seberapa besar dampak aliran bantuan dari donor pada ketahanan pangan dalam mengatasi tantangan kerawanan pangan negara-negara penerima. Oleh karena itu, dengan mengisi kesenjangan ini, penelitian ini bertujuan untuk menganalisis dampak bantuan donor pertanian dan pangan terhadap ketahanan pangan di 16 negara Afrika Barat antara 2009-2018.

Penelitian ini mengadopsi data panel lintas negara kuantitatif dan memanfaatkan model Regresi Dua Tahap Least Square (2SLS) untuk memeriksa sejauh mana bantuan donor telah berdampak pada indikator ketahanan pangan terpilih di sub-wilayah. Metode ini diadopsi untuk mengatasi masalah endogenitas dalam spesifikasi model penelitian ini, di mana diasumsikan bahwa ada kausalitas terbalik antara bantuan donor dan indikator kerawanan pangan. Temuan ini menyimpulkan bahwa bantuan pertanian berdampak pada aksesibilitas dan pemanfaatan pangan, sementara bantuan pangan berdampak pada stabilitas di Afrika Barat. Dari hasil yang didapat, penelitian merekomendasikan bahwa pemerintah dan bantuan donor perlu meningkatkan investasi pada nilai agrikultur yang ditambahkan berdasarkan modernisasi agrikultur dan inovasi, dan juga persiapan terhadap perubahan cuaca ringan untuk meningkatkan produksi makanan domestik di Afrika Barat.

Kata kunci: *Ketahanan pangan, bantuan donor, pertanian*

**ANALYZING THE IMPACT OF DONOR AID ON FOOD
SECURITY IN WEST AFRICA**

Lansana Alhassan Sesay NPM 8061901002

Supervisor 1: Dr. Theresia Gunawan, MM., M. Phil

Supervisor 2: Dr. Rulyusa Pratikto

Master Program of Social Science

BANDUNG

August 2021

ABSTRACT

Despite the abundance of agricultural donor aid to the less-developed nations, especially in West African countries, little is known regarding its role in enhancing food security. This study argues that the flow of donor aid on the food security would have a sustainable impact since it has a multiplier effect on addressing the recipient countries food insecurity challenges. Therefore, by filling this gap, the research aims to analyze the impact of agricultural donor aid and food on food security in 16 West African countries between 2009-2018. The study adopted quantitative cross-country panel data and utilized the Two-Stage Least Square Regression model (2SLS) to examine to what extent donor aid has impacted food security selected indicators in the sub-region. This method was adopted to address the endogeneity problems in this research model specification, where it is assumed that there is a reverse causality between donor aid and food insecurity indicators. The findings concluded that agricultural aid impacts food accessibility and utilization, while food aid impacts stability in West Africa. From the result, the study recommends that government and donor partners need to increase investment in agricultural value-added through agricultural modernization and innovation, and also climate change mitigation measures to improve domestic food production in West Africa.

Keywords: Food security, donor aid, agricultural

FOREWORD

First, I would like to appreciate the Almighty Allah for his guidance and favor throughout my master degree program.

I would like to express my sincere gratitude to the Government of Indonesia for such an opportunity; my Master's degree studies have been conducted under the auspices of the KNB scholarship program funded by the Government of Indonesia. I am immensely grateful to the Institute for Research and Community Service (LPPM) of Parahyangan Catholic University for providing me with the financial means to support my thesis research project.

This thesis project would not have been completed without the joint support of different people.

A special word of thanks and appreciation to my first advisor Dr. Theresia Gunawan., MM., M. Phil. for all her patience, guidance, and support throughout this research, who at any time could respond to my emails and chat, taking her time to read every revision to help make complete sense of my research. I am extremely grateful to my second advisor, Dr. Rulyusa Pratikto, who mentored me on the research methodology and analytical framework that has led to the final result.

My deepest gratitude to the Dean of the Faculty of Social and Political Sciences, who doubled as my chief examiner, Dr. Pius Sugeng Prasetyo, M.Sc. From starting the Food Security course with him, where my research idea originated, he has always offered me his technical expertise and professional advice until the end of my research project. I am also grateful to Dr. Indraswari; her detailed comments and suggestions have supported the accomplishment of this project.

I am delighted to have had the opportunity to study in the Department of Social and Political Sciences (FISIP). I wish to express my special thanks and appreciation to all the lecturers and classmates we shared ideas with.

Further, I would like to recognize and extend my gratitude to the Head of LPII Unpar Dr. Catharina B. Nawangpalupi and her staff, particularly Mr. Frank Landsman, MA for his free proofreading and editing of all my writing since the start of my Master's degree program.

My heartfelt thanks and appreciation goes to Mr. Tejan Jalloh; I am honoured and blessed to have a mentor who opens the door for me to have this opportunity to study outside Sierra Leone. I will also like to thank Mr. Moses Osman Bangura for his financial support, encouragement, and inspiration during my studies.

Further, and most importantly, I am grateful to my father for his sacrifices, prayers, and support keep me motivated. My warm and heartfelt thanks go to my lovely mother, Mrs. Millicent Freeman; my accomplishments and success are reached because she believed and invested in me. I am forever thankful for her unconditional love and support. Deepest thanks to my uncles, brothers, friends everyone who contributed to my success.

Bandung, 3rd August 2021

Lansaan Alhassan Sesay

TABLE OF CONTENT

TITLE PAGE	
THESIS APPROVAL PAGE	
STATEMENT LETTER	
ABSTRAK	
ABSTRACT	
FOREWORD	i
TABLE OF CONTENT	ii
LIST OF FIGURES	iv
LIST OF TABLES	v
LIST OF ACRONYMS AND ABBREVIATIONS	vi
CHAPTER I INTRODUCTION	1
1.1 Background.....	1
1.2 The food security situation in Africa	2
1.3 Problem Formulation.....	5
1.4 Research Motivation/ Rationale.....	6
1.5 Research questions	7
1.6 Research objective	7
1.7 Brief description of the research methods	7
1.8 Thesis outline	8
CHAPTER II CONCEPTUAL LITERATURE REVIEW	9
2.1 Introduction.....	9
2.2 Theories and concept of International aid	9
2.2.1 The role of Agricultural Aid on West Africa food security.....	11
2.2.2 Descriptive analysis of agricultural Aid disbursement.....	13
2.2.3 Agricultural Aid sub-categories	14
2.2.4 The role of the agricultural sector	16
2.2.5 Food Aid in West Africa independent variable	18
2.2.2 The dimension of food aid	21
2.3. Theories of government the main actors in aid effectiveness.....	24
2.4 Food security Dependent variable.....	26
2.5. Food Security Dimensions.....	28

2.5.1. Impact of Aid on Food availability	28
2.5.2 Impact of Aid on Food Accessibility.....	30
2.5.3 Impact of Aid on Food Utilisation	32
2.5.4 Impact of Aid on Food Stability.....	33
2.6 Underlying Causes and Consequences of Food Insecurity	34
2.6.1 Poverty and inequalities.....	34
2.6.2 Population growth	35
2.6.3 Climate change and other environmental disasters	36
2.6.4 Political instability and conflict in developing countries	37
2.6.5 Social and demographic factors	38
2.7 Methods on how other studies have been analyzed	38
2.8 Summary of research Gaps identify in the current study	39
2.9 Research Hypothesis	40
CHAPTER III RESEARCH METHODOLOGY	42
3.1 Research methodology	42
3.2 Data collection methods	42
3.3 Main dependent variables	42
3.4 Donor aid - Main Independent Variables	44
3.5 Control and instrumental variables	44
3.6 Empirical method.....	47
CHAPTER IV RESULT AND DISCUSSION	50
4.1 Result and discussion	50
4.2 Impact of donor aid on food availability dimension	51
4.3 Impact of donor aid on food accessibility	53
4.4 Impact of donor aid on food utilization.....	55
4.5 Impact of donor aid on food stability	56
4.6 Result of the control variables	58
CHAPTER V CONCLUSION AND POLICY RECOMMENDATION	62
5.1 Conclusion	62
5.2 Policy Recommendation.....	64
5.3 Direction for future research.....	64
REFERENCES	66

LIST OF FIGURES

Figure 2. 1 <i>Conceptual classification aid to food security</i>	10
Figure 2. 2: Total average value of Agricultural aid disbursement (Constant Price 2017 USD millions).....	14
Figure 2. 3: Total average value of food aid disbursement (Constant Price 2017 USD millions).....	20
Figure 3. 1: Food security dimension and indicators.....	43

LIST OF TABLES

Table 2. 1 Tested hypothesis.....	40
Table 3. 1 Operationalization and definition of variables.....	46
Table 3. 2 Summary statistic.....	47
Table 4. 1 Agricultural aid regression result.....	60
Table 4. 2 Food aid regression result.....	61

LIST OF ACRONYMS AND ABBREVIATIONS

ADB: Africa Development Bank

ECOIWAS: Economic Community of West Africa State

FAO: Food and Agriculture Organization of the United Nations

FS: Food Security

FAOSTA: Food and Agriculture Organization Corporate Statistical Database

GDPPC: Gross Domestic Product Per Capita

IMF: International Monetary Fund

MDGs: Millennium Development Goals

OECD: Organisation of Economic Cooperation and Development

OAD: Official Development Assistance

SDGs: Sustainable Development Goals

WB: World Bank

WDI: World Development Indicators

WFP: World Food Program

UN: United Nations

UNDP: United Nation Development Programmer

2SLS: Two Stages Least Square

CHAPTER ONE

INTRODUCTION

1.1 Background

Food insecurity is one of the main unrelenting and implacable problems affecting the global population and stunting many nations' development, especially in developing countries in West Africa (Gassner et al., 2019; Ehlers, 2019). The negative implications of the food insecurity problem continue to remain the primary concern for determining the United Nations global policy vision on sustainable development goals, with the main focus on SDG 2 intending to address global hunger and enhancing sustainable and food quality for everyone (Pawlak & Kołodziejczak, 2020, FAO, 2019 and Nwozor & Olanrewaju, 2020). This vision is faced with several internal and external challenges.

This challenge makes the path to the 2030 vision very rough and highly questionable as policymakers are currently losing track of the problems. These problems are connected with global population growth, environmental issues, civil conflict, climate change, global economic recessions, and financial crises that continue to trigger global food price inflation (Tal, 2019; United Nations, 2019).

The past decade has shown extensive academic research and policy reformations strategies to decrease global food insecurity status. However, this has not fully translated into resolving and addressing the challenges as expected. According to (Petrikova 2016), the fundamental shift from Millennium Development Goals (MDGs) to Sustainable Development Goals (SDGs) implies that food insecurity and poverty will remain an urgent issue on the United Nations global policy agenda for the successive eras, especially for developing countries.

As studies continue findings sustainable solutions to the numerous problems, the United Nations 2019 report highlights that the world is currently not yet on track to eradicate poverty and improve food insecurity by 2030". Despite the long history of continuous policy aspiration and renewed commitment made by development partners and international organizations, the challenges continue to manifest (United Nations, 2019).

However, despite the above challenges, data has shown that food insecurity declined from 27.6% to 20% between 1992 to 2014. Additionally, in the 2019 report published by the Food and Agricultural Organisation, the world had made progress in increasing global food production, where supply exceeds demand, indicating sufficient food is available to feed the current and future generations (FAO, 2019). Admittedly, the study acknowledged that tremendous progress had been made when comparing data security in the past decades.

However, there are still challenges, as 820 million people globally cannot have access to utilize the available food to meet their essential minimum requirement of calorie intake per day (FAO, 2019). The expectation of the sustainable development goals is ending hunger in the entire world by 2030, implying that everyone has the fundamental human right to access the required minimum calorie intake per day; this aspiration prompted different policies in developing countries to address food security.

1.2 The food security situation in Africa

Generally, food security and poverty in Africa have been very challenging and devastating phenomena, which continue to hold against the development priority indicators, specifically among the ECOWA countries (Dar et al., 2019 and United Nations, 2019). Even though in 2015 the United Nations report revealed that the Africa continent attained the MDGs target by declining the rate of poverty between 1990 to 2015, this achievement enormously contributed to decreasing the level of the food insecurity situation on the continent, reducing it from 24.5% in 2000 to 18.2% in 2014 (United Nations, 2015: 15 and The, Of, Insecurity, & Africa, 2020). However, despite the progress being achieved with the MDGs, the African continent's food insecurity situation remains deeply disappointing. In 2018 over 257 million people were estimated to suffer from chronic hunger and starvation in Africa (FAO., 2019 and ECA., 2018).

West African is one of the worst-case scenarios of food insecurity situation. The recent statistical data published by the Food and Agricultural Organisation in 2019 indicated that the Economic Community of West African State (ECOWAS) frequently experienced a progressive increase in most food insecurity. For instance,

chronic undernourishment increased from 38.7 million people in 2014 to 56.1 million in 2018, while severe food insecurity steadily rose from 44.4 million in 2014 to 67.2 million in 2018 (Peng & Berry, 2018).

In the same vein, 43% of the 462-million population in Africa living on less than \$1.90 per day inhabits West Africa (African Development Bank, 2018). Thus, countless factors continue to push millions of people into the cycle of hunger. Agriculture is the primary source of food and income, has been highly affected by drought, climate change, and other environmental challenges, which hinder agricultural staple food production in many countries in the sub-region.

Responding to the long-standing global trajectory of food security (especially in developing countries), the international development partners, namely The United Nations (U.N.), the International Monetary Fund (IMF), the World Bank (W.B.), humanitarian organizations, and developed countries have frequently conveyed vital policy concern and commitment through the global partnership agreement on ending hunger globally (Petrikova, 2016 and Journal, 2019).

However, a different policy commitment has been agreed upon; the most exclusive policy instrument adopted by development partners is providing official development aid to address food security in developing countries (Petrikova, 2016). According to the Organisation of Economic Cooperation and Development (OECD), official development assistance to food insecurity in West Africa has a long history, even though this has not transformed in declining food security status in most countries in West Africa considering the recent data.

Furthermore, regarding the official development aid flow to address food security in West Africa, the current research views it as twofold: First, the agricultural aid serves as the significant blueprint for increasing productivity and improving domestic availability sub-regions. Second, food aid use as an alternative policy approach in West Africa, where domestic production can meet the demand for food, especially in emergencies such as conflict and disaster (Diriye et al., 2013).

Since donor aid flow to food security can be divided into sub-categories, agricultural aid being the primary flow to improve food availability through

domestic production. Previous literature works have shown that the agricultural sector plays a vital role in enhancing food security and eradicating poverty at all levels (Pawlak & Kołodziejczak, 2020). A series of statistical and empirical evidence has indicated that the agricultural sector's growth is far more effective in reducing poverty and improving food security.

This growth is mainly recorded in developing countries where agriculture is the primary source of food production and the cash flow for the rural population engaged in farming, accounting for more than 60% of the sub-region. Additionally, the sustainable agricultural approach improves farmers' socio-economic development and contributes to national GDP growth (Ssozi, Asongu, & Amavilah, 2019a, Christiaensen, Demery, & Kuhl, 2011; Africa, 2017). The empirical findings (Christiaensen, Demery, & Kuhl, 2011) stated that a 1% increase of GDP in the agricultural sector decreases the poverty rate by five times more than a 1% increase from any other sector in the national economy.

Surprisingly, despite the significant role that the agricultural sector plays in addressing food security and its multiplier effect on the economic development in West Africa. The following studies (Islam, 2011, and Enahoro, Njuri, Thornton, & Staal, 2019) have established that the sector has received less attention from donor and recipient countries. Their findings concluded a significant decrease in national budget allocation to the agricultural industry by recipient countries in West Africa.

The meta-analysis of foreign agricultural aid by (Qian 2014) found that aid commitment to the agricultural sector in Africa declined from 10.5% to 3.2% between 1995 to 2005. In 2014, the FAO report stated that both bilateral and multilateral total support distributed to the agricultural sector only accounted for 9% in 1980 and later decreased by 4% towards the 1990s, having 5% as the standard for the said period until after the food crisis in 2007 and 2008 when the agricultural sector started to realize its potential in African countries.

Food aid is the second policy alternative provided to improve food insecurity in developing countries. Historically, food aid has been a consistent policy instrumental in addressing various emergencies like conflict, natural disaster, political instability, and health underlining problems affecting the poor people in

West Africa, as in the case of the Ebola outbreak in 2014 (Tranchant et al., 2019; and Brück et al., 2019).

This policy instrument's motive is to increase food availability and improve accessibility through supply to vulnerable groups. Since the agricultural, domestic production capacity in West Africa is insufficient to meet the demand (especially during emergencies) or due to climate and other environmental problems that affect the agricultural harvest in the sub-region. Food aid serves as a policy alternative to fill the gap and liberate poor households from their food insecurity condition (Diriye et al., 2013).

Conceptually, humanitarian development food aid provides foodstuff to developing countries to complement the food scarcity problems among the underprivileged population; food aid can be provided as emergency programs and projects (Nugusse, 2013, and Diriye et al., 2013). These different food aid categories all have one significant role in closing the food accessibility gap and shortage. Despite the other forms of development aid to food security in West Africa, both have one common objective to achieve the agenda 2030. In a nutshell, this commonality of donor aid to food security in West Africa underpins the thesis's decisions to independently investigate and analyze its impact on the food security dimension.

1.3 Problem Formulation

Conceptually, food security at all levels only exists when food is available for everyone to economically and physically access it, with the proper condition to utilize it effectively to obtain the right diet, without the threat of future instability for a healthy life. According to the 2017 FAO report, progress has been made in global food availability as the production is sufficient to feed everyone (FAO 2017a, and 2018). However, even at this current proclamation of adequate food availability, the recent data paints a different picture about West African countries. Chronic undernourishment in West African has been steadily increasing from 38.7 million people in 2014 to 56.1 million in 2018; the statistics indicated that food security remains a highly challenging sub-region.

In a vision to address the food security trajectories, global policymakers have invested a considerable amount of funds in West African countries through the agricultural aid policy and food aid policy as a measure to help improve food security in the sub-region. Unfortunately, from the above statistics, donor aid to food security in West Africa has not changed the food insecurity status, which has raised an alarming concern where this research problem was formulated. Given the amount of official development assistance disbursed to West African countries through the agricultural aid and food aid policy, little is known about its impact on food security indicators in the sub-region.

Therefore, contributing to existing academic knowledge, this thesis intends to fill the vacuum by analyzing the impact of donor aid on food security in West Africa. In doing so, the study seeks to know the relationship between the different donor aid and food availability, accessibility, utilization, and stability indicators in the sub-region. The research further needs to understand why other regions are making progress on food security, and West Africa continues to face the challenges.

The findings in this study will inform policymakers and development partners on the realities of food security conditions in West Africa and will further provide policy recommendations to improve food security at the national level.

1.4 Research Motivation/ Rationale

The West African countries are endowed with natural resources to enhance their economic development and a vast agricultural landscape that can produce enough to feed the current and future generations. Evidence has shown that official development assistance (aid) to food security has a long history in the sub-region, mainly provided to help improve the agricultural sector as a significant policy pronouncement to improve food security. However, despite the endowment and donor aid flow, agricultural production has not reached a consensus growth in achieving the policy objective on food security for the past decades. The current study is concerned about the factors influencing food insecurity and why donor aid to food security has not created a sustainable impact in decreasing food insecurity in the sub-region. Therefore, the research seeks to investigate "Does donor aid work in West Africa?" If it does, to what extent has it addressed food security problems?

Such an important question required an empirical analysis, especially when there is a literature gap on the impact of donor aid on food security in general. The majority of the available literature works mainly focus on the efficiency and effectiveness of development aid, primarily to support the agricultural sector. The thesis research acknowledged that development aid could be efficient and effective; however, the long-term impact cannot be realized or translated into improving food security status in West Africa, which leads to the research project's motive.

1.5 Research questions

It is from the realization of the significant role of donor aid to food security in West Africa that the thesis further seeks to address the following research questions:

- i. To what extent agricultural aid impacted food security in West Africa?
- ii. What is the impact of food aid on food security in West Africa?
- iii. What policies are required to improve the status of food security?

1.6 Research objective

- i. Analyzing the impact of donor aid on food security in West Africa forms the primary research objective which guides the project work.
- ii. To provide policy recommendations for both donor provider and recipient.

1.7 Brief description of the research methods

These research questions were answered using a quantitative research method; this research design is the most acceptable method when cross-country or longitudinal panel data is involved. The secondary data was collected from the Global Quantitative Research Groups from 2009 to 2018. The purpose of this method is to enable the researcher to provide a statistical and generalization of the result driven from the impact of a single independent variable on the dependent variable while moderating other variables to mitigate possibilities of the error terms. The Two-Stage Least Squares (2SLS) econometrics model was adopted to address endogeneity problems

1.8 Thesis outline

In the pursuit of answers to the research questions stated above, this thesis is logically organized. In Chapter One, the research addresses the background leading to the study, followed by a brief literature review of the research topic. The problem formulation builds the foundation on which this research has been conducted, objectives guiding the project, followed by a concise, methodical approach, and concluded with an outline of the study. Chapter Two discusses the main conceptual and theoretical framework for development aid, followed by agricultural and food assistance aid, both being the independent variable for food security, which forms the dependent variable. Furthermore, since the government is critical to donor aid effectiveness, the research uses government and other vital development indicators as moderating variables in the model. Chapter Three is where the methodology, sources of data, followed by variables description, and the model adopted to run the cross-country panel data analysis for the West African countries are discussed in detail. Chapter Four presents the result of the regression and addresses the research questions by examining the findings. Finally, Chapter Five briefly summarises the findings, provides policy recommendations, future research, and concluding remarks.