



**UNIVERSITI PUTRA MALAYSIA**

***FACTORS INFLUENCING CROP PRODUCTION INTENTION AMONG  
FARMERS IN AFGOOYE DISTRICT, SOMALIA***

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**FACTORS INFLUENCING CROP PRODUCTION INTENTION AMONG  
FARMERS IN AFGOOYE DISTRICT, SOMALIA**

By

**AHMED MUHAMMAD AIDA**

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia,  
in Fulfilment of the Requirements for the Degree of Master of Science**

**September 2020**

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Master of Science

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**September 2020**

**Chairman : Associate Professor Norsida Man, PhD**  
**Faculty : Agriculture**

Food aid remains one of the most common responses to emergency situations given to support lives and livelihoods in areas or region experiencing a food shortage. As of May 2018, about 2.7 million Somalis did not meet their daily food requirements, with more than half a million on the verge of famine. They urgently needed immediate humanitarian assistance in the form of food to keep them from falling into crisis. It was estimated that there were 300,000 malnourished children under 5 years old, including 48,000 who were chronically malnourished and facing high risk of illness and death. Somalia has been facing many problems with livelihoods, climate change, epidemics, lack of agricultural inputs, all seeming to have no end. Despite heavy speculations of the impact of food aid on local agricultural production, there has been lack of empirical evidence on the need to understand farmers' intention to produce more food. The present study was undertaken primarily to identify and evaluate factors influencing farmers' intention on crop production in Afgooye district, Somalia. The study was also aimed at examining relationships among existing factors that influence sustainable crop production. The study was guided by an integrated conceptual framework predominantly developed from Theory of Planned Behavior in which a structured questionnaire was used to collect data from 400 selected respondents using multistage cluster sampling technique. An IBM SPSS Version 23 software was employed in data analyses in which descriptive, correlation and multiple regression analyses were applied. The descriptive results revealed that majority of farmers were males from Somali tribe, middle age and had both formal and informal education. Multiple regression analysis revealed that dependency, costs of farm inputs and epidemics were factors that affected farmers' intention towards agricultural production. At the conclusion of the study, it was observed that epidemics, cost of farm inputs and dependency were at moderate and high levels, respectively. When all was said and done, the study established that intention towards crop production among Somali farmers in the wake of food aids occurred because they were not prepared to embrace the use of new crop production technology, nor did they envisage starting crop production using improved technology. The study proposes that government and donor organizations or agencies support farmers with subsidized farm inputs, control

measures against major epidemics and new farming technologies with efficient extension services, in attempts to reduce farmer's dependency on food aid programs and prepare them to be self-reliance in food production.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

## **FAKTOR YANG MEMPENGARUHI NIAT PENGELUARAN TANAMAN DIKALANGAN PETANI DI DAERAH AFGOOYE, SOMALIA**

Oleh

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**September 2020**

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**Fakulti : Pertanian**

Bantuan makanan adalah satu daripada respons yang lazim dilakukan dalam situasi kecemasan yang dihulurkan untuk menyokong kehidupan di kawasan atau wilayah yang mengalami kekurangan makanan. Pada bulan Mei 2018, lebih kurang 2.7 juta rakyat Somalia tidak mendapat keperluan makanan harian, dan lebih daripada setengah juta berada di ambang kebuluran. Mereka sangat memerlukan bantuan kemanusiaan segera dalam bentuk makanan untuk tidak jatuh ke dalam krisis. Telah dianggarkan seramai 300,000 kanak-kanak di bawah umur 5 tahun yang kekurangan zat makanan, termasuklah 48,000 yang tak seimbang pemakanannya dalam keadaan yang kronik dan menghadapi risiko penyakit dan kematian yang tinggi. Somalia menghadapi banyak masalah mata pencarian, perubahan iklim, wabak penyakit, kekurangan input pertanian, kesemuanya seolah-olah tanpa kesudahan. Walaupun ada spekulasi yang berat mengenai impak bantuan makanan terhadap pengeluaran pertanian tempatan, terdapat kekurangan bukti empirik mengenai keperluan dalam memahami niat petani untuk menghasilkan lebih banyak makanan. Kajian ini dijalankan terutamanya untuk mengenal pasti dan menilai faktor yang mempengaruhi niat petani dalam pengeluaran tanaman di daerah Afgooye, Somalia. Kajian juga bertujuan untuk meneliti hubungan antara faktor-faktor yang sedia ada yang mempengaruhi kelastarian pengeluaran tanaman. Kajian telah dijalankan dengan berpandukan rangkakerja konseptual bersepadu yang dibangunkan daripada Teori Tingkahlaku yang Dirancang (Theory of Planned Behavior) dimana satu soal selidik berstruktur telah digunakan bagi pengumpulan data daripada 400 responden dengan menggunakan teknik persampelan kelompok pelbagai peringkat. Satu perisian IBM SPSS Versi 23 telah digunakan bagi menganalisis data dimana analisis deskriptif, kolerasi dan regresi berganda digunakan. Keputusan deskriptif mendedahkan bahawa kebanyakan petani adalah lelaki daripada suku Somali peringkat separuh umur dan berpendidikan secara formal dan tidak formal. Analisis regresi berganda mendedahkan bahawa pergantungan, kos input ladang, dan wabak merupakan faktor yang memberi kesan keatas niat dan motivasi petani terhadap pengeluaran pertanian.

Pada akhir kajian didapati wabak, kos input lading dan pergantungan masing-masing berada pada tahap sederhana dan tinggi. Apabila semua sudah dikatakan dan dilakukan, kajian mendapati bahawa niat terhadap pengeluaran tanaman di kalangan petani Somalia ekoran bantuan makanan berlaku oleh kerana petani tidak bersedia mengamalkan teknologi baru dalam pengeluaran tanaman atau membayangkan pengeluaran tanaman dengan menggunakan teknologi yang lebih baik. Kajian mencadangkan bahawa kerajaan dan organisasi atau agensi penderma membantu petani dengan input ladang bersubsidi, langkah kawalan terhadap wabak utama dan teknologi pertanian baru dengan perkhidmatan pengembangan yang cekap, dalam usaha mengurangkan pergantungan terhadap program bantuan makanan dan menyediakan mereka supaya tidak bergantung terus dalam pengeluaran tanaman.

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This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfillment of the requirement for the degree of Master of Science. The members of the Supervisory Committee were as follows:

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## LIST OF ABBREVIATIONS

ACU	Aid Coordination Unit
AfDB	African Development Bank
DoA	Department of Agriculture
DV	Dependent Variables
EU	European Union
FEWSM	Famine Early Warning Systems Network
FAO	Food and Agriculture Organization
FDI	Foreign direct investment
GAP	Good Agricultural Practice
GDP	Gross domestic product
IDA	International Development Association
ILO	International Labour Organization
IMF	International Monetary Fund
IOM	International Organization for Migration
IV	Independent Variables
MOA	Ministry of Agriculture
MCH	Mother and Child Health
MoF	Ministry of Finance
MoPIC	Ministry of Planning and International Cooperation
MoPIED	Ministry of Planning, Investment, and Economic Development
NGO	Non-Governmental Organisation
ODA	Official development
SEU	Somalia Economic Update

UPM	Universiti Putra Malaysia
UNAIDS	Joint United Nations Programme on HIV and AIDS
UNDP	United Nations Development Programme
UNFCC	United Nations Framework Convention on Climate Change
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNHCR	United Nations Refugee Agency
UNICEF	United Nations Children's Fund
UNMAS	United Nations Mine Action Service
UNODC	United Nations Office on Drugs and Crime
UNOPS	United Nations Office for Project Services
UNSOM	United Nations Assistance Mission in Somalia
USAID	United States Agency for International Development
UN	United Nations
WFP	World Food Programme
WHO	World Health Organization

# CHAPTER 1

## INTRODUCTION

This chapter gives the introductory aspects of the general background of the study, and then follows the research problem statement, research objectives, and problems. It is then followed by the limitation of the study and definition of relevant terms and concepts used.

### 1.1 Crop production in Somalia

Agriculture is an important economic activity in Somalia not only in terms of meeting the food needs of the population but also in terms of generating income through crop sales and agricultural labor opportunities. It accounts for about 65% of the GDP and employs 65% of the workforce (British Chambers of Commerce 2010). With roughly 50% of population's cereal requirements are met through domestic production, Agriculture is a major component particularly for two of the main rural livelihood systems in the Horn of Africa country: Agro-pastoralist, mix of agriculture and livestock production based livelihood and Agriculturalist, agriculture based livelihood (Noguera-Méndez et al., 2016).

Crop production performance and its potential is determined by the bi-modal rainfall. The two main agricultural seasons are: Guccrop production, from April to June and Deyr crop production is from October to December (Blouin & Pallage, 2016). Two areas are considered high potential for crop production with rainfall ranging from 400mm to 600mm: a small area in the Northwest (west of Hargeisa) and a much larger inter-riverine area between the Shabelle and Juba river valleys (Baur et al., 2016)..

There are four primary agricultural zones in Somalia: Northwest in parts of Awdal and W. Galbeed - rain fed maize and sorghum with some livestock herdings; Coastal Cowpea Belt Zone in Central and Southern Somalia; Shabelle and Juba Riverine Valleys - rain fed and irrigated maize, with sesame cash crops; Sorghum Belt in Bay and Bakool Region - rain fed sorghum with livestock production (Zorloni, 2012). Given the average rainfall of <500 mm and its variable pattern, rain fed crop production whilst widely practiced is successful only in areas which have slightly higher rainfall. Significant opportunities for crop production exist under irrigation along the Shabelle and Juba valleys.

However, even under maximum irrigation development before the war, Somalia remained a food deficit country. During this pre conflict period export crops such as banana, grapefruits and sesame were produced under irrigation in the lower and Middle Shabelle and Juba basin. Other economic activities were extremely limited and were

confined to services and trade and were mainly the preoccupation of urban dwellers.

This rather unenviable economic outlook of Somalia has worsened since the start of the civil war in 1991 which also caused the collapse of central government and the associated services. During the period between 1991 and 2009 there were a series of droughts and floods. Finally the loss of the banana market to Europe, particularly Italy, and the ban on livestock exports to Saudi Arabia and other Arab countries has added to the problems.

The European Commission has provided development assistance throughout this period of civil unrest using a variety of financial instruments to fund development programmes and projects and is presently the largest donor in Somalia. The EC is also the largest donor in the rural development and food security sectors. The E.C funded development programmes and projects are implemented and executed through United Nations Agencies, International Non-Governmental Organizations supported in most cases by local NGOs.

The majority of project activities funded by the EU have tended to concentrate on the provision of emergency aid, rehabilitation, agricultural development, water and sanitation, education and capacity building of local organizations. Most of the support from other donors in the food security and rural development sector has focused on similar activities to those of the EU programs. There are many examples where such funding has been in collaboration with EU funds and others where funds have been allocated independently. However most of all the funding has been channeled through the UN and International NGOs who then establish links with national NGOs as field implementers.

Major exports of crops include bananas; sugar, sorghum, and maize are domestic products (Noguera-Méndez et al., 2016). According to the Somali Central Bank, imports of goods equal about \$460 million per year and have recovered and even exceeded peak imports before the outbreak of the 1991 civil war. Exports, which total about \$270 million annually, have surpassed aggregate export rates in the pre-war period, but still result in a trade account deficit of about \$190 million annually. Nevertheless, this trade deficit is far exceeded by remittances sent to the diaspora by Somalis which helped maintain the level of imports (Blouin & Pallage, 2016).

Only 1.6% of Somalia's total land area is cultivated, and 69% is permanent pasture. There are two main types of agriculture, one indigenous and the other introduced by European settlers. The Somalis have traditionally engaged in rain-fed dry-land farming or in dry-land farming complemented by irrigation from the waters of the Shabeelle and Jubba rivers or from collected rainwater. Corn, sorghum, beans, rice, vegetables, cotton, and sesame are grown by both methods. Somali and Italian farmers operating the banana farms practice more modern European-style techniques, as do some of the newly created Somali cooperatives. A system of state-administered farms grew rapidly during the early 1970s.

The commercial crops, bananas and sugarcane, are grown on irrigated land along the two rivers. Bananas constitute the nation's major commercial crop; output was 50,000 tons in 1999, down from 110,000 tons in 1990.

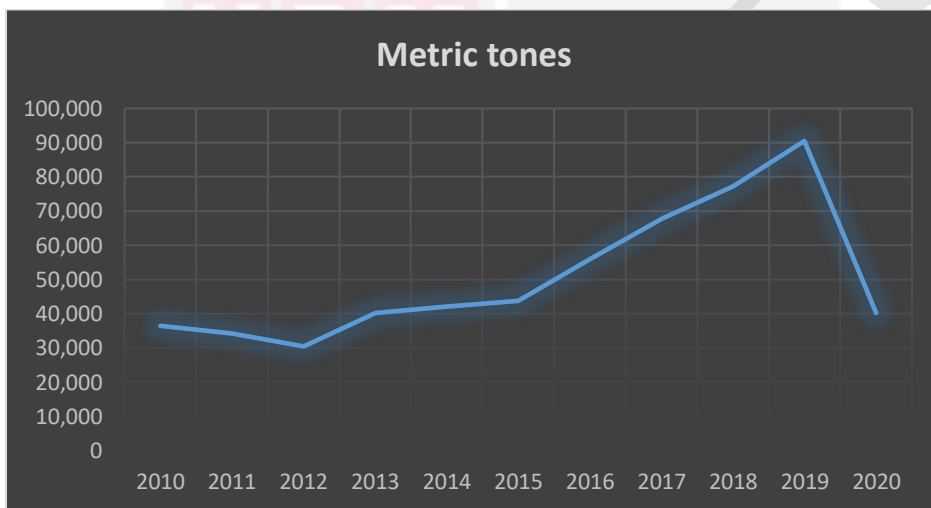
Sugarcane is cultivated at Giohar and Jilib by a state-owned company. Sugarcane production in 1999 totaled some 210,000 tons, down from 500,000 tons in 1985. Somalia is the world's leading producer of frankincense. Between 1975 and 1991, all land was nationalized. Existing customary rights were generally honored, but the state took over large areas of irrigable land in the river valleys. Plantations had to register to obtain a concession grant, with the value of the land itself excluded from the selling price. In 1993, privatization and assistance from Italy (the main market for banana exports) began to help revitalize the agricultural sector. In 2001, agricultural products accounted for 47% of exports and 17% of imports; there was an agricultural trade surplus of \$10.2 million.

## **1.2 Foods Aid in Somalia**

Nearly three decades of political instability in Somalia have resulted in widespread insecurity, contributing to the internal displacement of an estimated 2.6 million people and leaving many Somalis highly vulnerable to climatic, economic, and security shocks. Somalia is also prone to natural hazards, particularly drought and floods, which have led to recurrent food and nutrition crises. After a gradual recovery from the food insecurity and famine of 2011, Somalia's food security is once again under threat. The situation is worsening in rural areas following consecutive seasons of poor rainfall and low river water levels. These have resulted in near total crop failures, reduced rural employment opportunities, widespread shortage of water and pasture with consequent increases in livestock deaths. As local staple food prices continue to rise sharply and livestock prices decrease significantly, access to food is rapidly diminishing among poor families (UN, 2017). Cereal imports and food aid are completely distinct from each other. Cereal imports describe extra-territorially produced cereal grain that is brought into a country to be sold in the marketplace at market value. In contrast, food aid can be described as foodstuffs that are supplied to a population at no or reduced cost or in food-for-work or food-for education schemes.

Like total domestic cereal production, the amount of cereal imported into Somalia annually between 1961 and 2012 was highly volatile. During this time, the median annual change in total cereal imports was 0%, but the annual change in total cereal imports ranged from a single-year decline of 83% (1977-1978) to a single-year increase of 237% (1974-1975), with an IQR of 60%. However, while total domestic cereal production failed to increase between 1961 and 2012, several single-year increases in the amount of cereal imported resulted in a positive trend in annual cereal import rates, such that the mean annual change in cereal imports was an increase of 25% between 1961 and 2012. Year-to-year changes in cereal imports per capita closely reflected these changes.

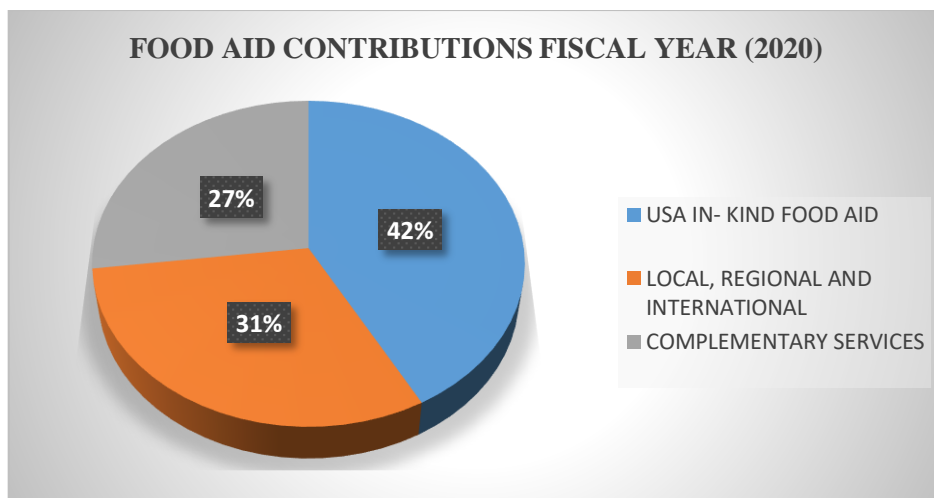
According to Famine Early Warning Systems Network -FEWSN- (2019). As of May 2018, 2.7 million people cannot meet their daily food requirements today and require urgent humanitarian assistance, with more than half a million on the brink of famine. Another 2.7 million Somalis need livelihood support to keep from sliding into crisis. An estimated 300,000 children under age 5 are malnourished, including 48,000 who are severely malnourished and face a high risk of disease and death. This instability takes its toll on the food production, food security and wellbeing of the Somalia population. Such calamities are known to have damning effect on livelihoods, conversely the world has for a long time relied on food aid as a major to alleviate the sufferings and sustain life in such areas. As such, nations and regions that are bedeviled by wars are used to the presence of humanitarian agencies within them supplying food aids (Blouin & Pallage, 2016; Chabot & Dorosh, 2007).



**Figure 1.1 : Food for Peace Contributions** (Awokuse, 2010; Ahmad-Esfahani & Locke, 2006; Ferrière & Suwa-Eisenmann, 2015; Sharaunga & Wale, 2013)

Food aid has been the main source of supplementing the inability of most war ridden nations Somalia inclusive to produce and feed their population since the 50's when food aid was triggered by America to get rid of its surplus from 2010 to 2020 through its United States Public Law 480 PL480 (Awokuse, 2010; Ahmad-Esfahani & Locke, 2006; Ferrière & Suwa-Eisenmann, 2015; Sharaunga & Wale, 2013). Initially, food aid was espoused to be of great help in at least short term major in supporting populations. However, overtime growing concerns started to arise. The flow of food aid into developing nations is seen to have some mix effect on the development, agricultural production and food security of these nations, depending on the context and nature of the supplies. It is posited that long and sustained food aid flow can injure the livelihood of agricultural livelihoods. It has been for example hinted to have a negative impact on agricultural production of staple foods in recipient countries, it also promote risky behavior in farming activities through venturing into products that are alien to the community and even encourages the drain of labor supply (Zant, 2012). Consequently,

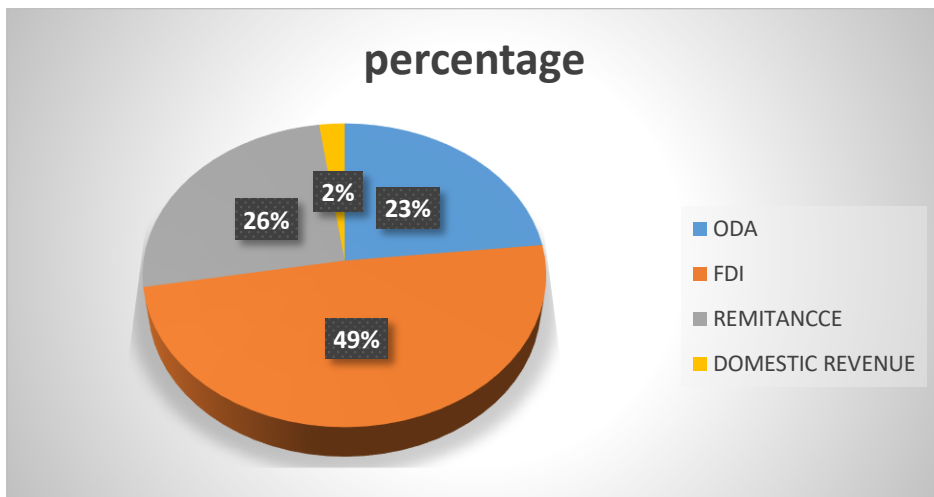
it is seen to have an disincentive effect on the farmers intention and or behavior towards production due to its effect on demand and price of locally produced products (Sharaunga & Wale, 2013), this is hinted to be the precursor for eroding both short term and long term sustainability of food security (FAO, 2006).



**Figure 1.2 : Food Aid Contributions Fiscal Year (2020)**

### **1.2.1 Dependence on Aid and Remittances**

Reported official development assistance (ODA) for Somalia totaled US\$ 1.3 billion in 2016. With an ODA to GDP ratio of 23%, Somalia is a highly aid dependent country (Fig. 1.2). Remittances are another key flow for Somalia, estimated at US\$ 1.4 billion in 2016 (26% of GDP). According to the 2017 Somalia Economic Update (SEU), remittances and aid are fueling Somalia's consumption-driven growth. Greater focus on enabling private sector investment and domestic revenue mobilization would lessen Somalia's long term dependence on aid. Foreign direct investment (FDI) totaled US\$ 756 million (49%) in 2016, according to IMF estimates. At US\$ 113 million, domestic revenue represented just 2% of GDP in the same year.



**Figure 1.3 : Financial Flows 2017 Somalia Economic Update (SEU)**

For the past three years, aid flows in Somalia have been tracked through an annual mapping exercise. Significant progress has been made in improving aid transparency, which has informed better coordination. Aid data has also proven useful for monitoring aid effectiveness principles. This report presents the key findings from the aid mapping exercise conducted in 2016. The mapping exercise was led by the Aid Coordination Unit (ACU) in the Office of the Prime Minister. Analytical support was provided by the World Bank and UN. Coordination support was also provided by the Ministry of Planning, Investment, and Economic Development (MoPIED). A total of 45 development partners and funds reported their aid flows to the ACU in 2016 (Table 1.1).



**Table 1.1 : Reporting Status of Development Partners**

Bilaterals		Multilaterals	
1. Australia		14. AfDB	27. UNESCO
2. Canada		15. European Commission	28. UNFPA
3. Denmark		16. FAO	29. UNHCR
4. Finland		17. IFC	30. UNICEF
5. Germany		18. ILO	31. UNMAS
6. Italy		19. IMF	32. UNODC
7. Japan		20. IOM	33. UNOPS
8. Netherlands		21. UN RCO	34. UNSOM
9. Norway		22. UN WOMEN	35. WFP
10. Sweden		23. UN-Habitat	36. WHO
11. Switzerland		24. UNAIDS*	37. World Bank
12. UK		25. UNCDF*	
13. USA		26. UNDP	
<b>Funds</b>			
38. AfDB Somalia Infrastructure Fund		42. UN Multi Partner Trust Fund	
39. Somalia Stability Fund		43. UN Peace building Fund	
40. Somaliland Development Fund		44. WB Multi-Partner Fund	
41. The Global Fund		45. WB State- and Peace-building Fund	

(Sources: Development partner reporting of envelopes to ACU-led Aid Mapping, supplemented by data from the OCHA FTS and reporting of on-treasury grants by the Ministry of Finance)

Development aid to Somalia continues to be stable. The slight decline seen in 2017 may be attributed to the falling value of several donor currencies relative to the United States Dollar, the diversion of funds to humanitarian activities in response to the drought, and late reporting of 2017 forward projections. With multi-year funding cycles, development envelopes are more predictable and therefore, less likely to increase significantly from the currently reported levels.

**Table 1.2 : Development and Humanitarian Aid, 2014-17, US\$ Millions**

	2014	2015	2016	2017	Total
Development	607	611	692	613	2523
Humanitarian	672	588	620	614	2494
<b>Total</b>	<b>1279</b>	<b>1199</b>	<b>1312</b>	<b>1227</b>	<b>5017</b>

(Sources: Development partner reporting of envelopes to ACU-led Aid Mapping, supplemented by data from the OCHA FTS and reporting of on-treasury grants by the Ministry of Finance)

### 1.3 Problem Statement

After a gradual recovery from the food insecurity and famine of 2011, Somalia's food security is once again under threat. The situation is worsening in rural areas following consecutive seasons of poor rainfall and low river water levels. These have resulted in near total crop failures, reduced rural employment opportunities, widespread shortage of water and pasture – with consequent increases in livestock deaths. As local staple food

prices continue to rise sharply and livestock prices decrease significantly, access to food is rapidly diminishing among poor families.

As of May 2018, 2.7 million people cannot meet their daily food requirements today and require urgent humanitarian assistance, with more than half a million on the brink of famine. Another 2.7 million Somalis need livelihood support to keep from sliding into crisis. An estimated 300,000 children under age 5 are malnourished, including 48,000 who are severely malnourished and face a high risk of disease and death. Somalia has faced a lot of livelihood problems including climate change, epidemics, lack of agricultural inputs so it evokes another effect that was hard to reduce but this impact can be avoided. Owing to persistent political instability Somalia has failed to produce enough food for its population. Hence, relies on the food aid it gets from the international community to meet up its demand for food. The apparent disenchantment reflected in the farming groups is the single greatest measure of the precarious food security. Terrorist groups Al-Shabab managed the region of most field farms and most farmers are afraid to visit and grow their farms naturally due to insecurity. The constraints facing crop production can be classified into health, social and cultural, ecological / environmental degradation, availability of farm tools, and demand and prices.

Several literature have hinted on the possible disenchanting effect of food aids on the producer's motivation to produce, but none has brought out the empirical evidence from their perspective, this is a gap that needs to be filled. For developing countries like Somalia, the need to fight poverty, malnutrition and food insecurity is of special importance due for their development. Particularly with regards Somalia being ravaged by the war and high position in the of hunger and underdevelopment profile (Maxwell, Majid, Adan, Abdirahman, & Kim, 2016). The use of theoretically proven approach to change behaviour has been always recommended in informing policies. The consideration of psychosomatic state has been espoused by many researchers as relevant to the changing of behavioural acts of a population. When such motivation indicators are identified, it then become easy and provides impetus for policy formulation. Theory of Planned Behaviour (TPB) is especially exceptional in predicting indicators that facilitate certain behaviour of interest to researchers. As such its application will help bring out the factors that will help in explaining the aspects that will aid agricultural productivity in the presence of food aids in Somalia.

This study is therefore proposed to address these knowledge gaps, which will help both the government of Somalia and the international community in developing new policies and programs geared towards having efficient and relevant food aid program for the country without harming the farmers.

## **1.4 Research Questions**

- 1) What are the levels of farmers' intention to produce crop, climate change, dependency, farm inputs and epidemics?
- 2) What is the relationship between the climate change, dependency, farm input, epidemic and farmers' intentions to produce crops?
- 3) What are the contributing factors to crop production intention.
- 4) What are the challenges faced by the farmers in Afgooye district

## **1.5 Objectives of Study**

### **1.5.1 General Objective**

To examine the factors influencing crop production intention among farmers in Afgooye district, Somalia

### **1.5.2 Specific Objectives**

This specific objectives are:

- 1) To identify the levels of farmers' intention to produce crop, climate change, dependency, farm inputs and epidemics.
- 2) To determine the relationship between the factors and farmers' intentions to produce crops.
- 3) To examine the contributing factors towards crop production intention.
- 4) To determine the challenges faced by the farmers in Afgooye district

## **1.6 Significance of the Study**

The studies is of help to the Farmers in Afgooye District particularly it suggested better and consolidated strategies towards agricultural production intension in the area. The findings are also expected to assist in programme planning and policy formulation in the area of agricultural production amidst the crisis and dependency on foreign food aid in the country. The findings of this study are of great importance to students and other researchers that might want to venture into similar study in future. In addition, the finding of this study is an addition to existing literature.

## **1.7 Operational Definition of Key Terms**

**Climate change:** Climate change is the variation in the earth's global climate or in regional climates over time and it involves changes in the variability or average state of

the atmosphere over durations ranging from decades to millions of years. The United Nations Framework Convention on Climate Change (UNFCCC, 2007; IPCC, 2009),

**Dependency:** relying on the help, support from another person, agency, institution or organization for day to day livelihood (Zadoks 2008)

**Farm input:** Farm inputs are products permitted for use in organic farming. These include feedstuffs, fertilizers and permitted plant protection products as well as cleaning agents and additives used in food production (Shapouri and Rosen, 2001).

**Epidemics:** is the rapid spread of disease to a large number of people in a given population within a short period of time. Epidemics of infectious disease are generally caused by several factors including a change in the ecology of the host population (e.g. increased stress or increase in the density of a vector species), a genetic change in the pathogen reservoir or the introduction of an emerging pathogen to a host population (by movement of pathogen or host) (FAO 2011)

**Intension:** Personal willingness or an act to either participate in a particular activity, but that participation depends on certain factors that might occur which will determine final will of an individual to act or decline (Ajzen 1985).

**Food aid:** Refers to the provision of **food** or cash to purchase **food** in times of emergency or to provide longer-term solutions in areas where **food** shortages exist. Food aid can also be targeted at creating **food** security – a situation in which people need not be vulnerable to hunger and starvation (Lentz et al. 2005)

**Crop production:** Crop production includes all the feed sources that are required to maintain the dairy herd and the resource inputs used to produce the crops (Noguera-Méndez et al., 2016).

## 1.8 Thesis Organization

There are five (5) chapters in this study. The first chapter comprises of introduction that discusses the background to the topic of the research addressed by this study; problem statements, objectives of the study, the scope and limitation of the study, the significance of the study and organization of the thesis.

Chapter 2 contains a literature review relevant to history of food aid, sources, roles and types of food aid, food aids as livelihood support, arguments for and against food aid, types of food aids, its impact on agricultural production, and the Somali government

approach to it. The Theories were discussed followed by reviews of all relevant literature on independent variables and dependent variable.

In Chapter 3 of this study focuses on the methodological approach of the study; this comprises of the conceptual framework (research design), location of the study, sampling and data collection techniques, validity and reliability, data analysis and summary of the chapter.

In Chapter 4 the analyses of the results of the study will be presented. It consists of an introduction, data collection process and survey responses, responses rate, descriptive analysis of respondent, mean score analysis and level for all variables, correlation analysis results, factor analysis results, and regression analysis results.

Finally, Chapter 5 will present the discussion on the findings and conclusion per the objectives of the study, research questions of the study and its implication. In this chapter, a limitation and suggestions for the future research will also be discussed and suggested.

## REFERENCES

- Abdulahi, A., Barrett, C.B. and Hoddinott, J. (2005), "Does Food Aid really have disincentive effects? New Evidence from Sub-Saharan Africa", *World development*, 33 (10), 1689-1704.
- Aden, A.I. (2015). Impact of food aid on grain food security in Gabiley Region; A case study of Arabsiyo and Galoley.
- Ary, D., Jacobs, L. & Sorensen, C. (2010). Introduction to Research in Education. (C. C. C. Shortt, Ed.) (Eight edition). United States: Wadsworth 10 Davis Drive Belmont, CA 94002-3098 USA.
- Ajzen I (1985). From Intentions to Actions: A Theory of Planned Behavior. In: Kuhl, PDJ, Beckmann, DJ (Eds.) *Action Control*, SSSP Springer Series in Social Psychology. Springer, Berlin, Heidelberg, p. 11–39
- Awokuse, T. O. (2010). Don't mourn, organize. *Journal of International Development*, 96(1), 10–14. <http://doi.org/10.1002/jid>
- Babbie, E. R. (2013). The practice of social research. International Edition, Wadsworth Cengage Learning Center, Asia.
- Barrett, C.B. and Maxwell, D.G. (2005). Food aid after fifty years: Recasting its role. Routledge, New York.
- Baur, I., Dobricki, M., & Lips, M. (2016). The basic motivational drivers of northern and central European farmers. *Journal of Rural Studies*, 46, 93–101. <http://doi.org/10.1016/j.jrurstud.2016.06.001>
- Blouin, M., & Pallage, S. (2016). Warlords, famine and food aid: Who fights, who starves? *European Journal of Political Economy*, 45, 18–38. <http://doi.org/10.1016/j.ejpoleco.2016.09.002>
- Bolarinwa, O. (2015). Principles and methods of validity and reliability testing of questionnaires used in social and health science researches. *Nigerian Postgraduate Medical Journal*, 22(4), Pp 195.
- Borges, J. A. R., Oude Lansink, A. G. J. M., Marques Ribeiro, C., & Lutke, V. (2014). Understanding farmers' intention to adopt improved natural grassland using the theory of planned behavior. *Livestock Science*, 169(C), 163–174. <http://doi.org/10.1016/j.livsci.2014.09.014>
- Bradbury, M. (2010) 'State-building, Counterterrorism, and Licensing Humanitarianism in Somalia', Briefing Paper, Feinstein International Center, and Somerville: Feinstein International Centre, Tufts University.

- British Chambers of Commerce (2010). Guide to African Markets". Retrieved 20 August 2010.
- Boserup, E. (1965). The Conditions of Agricultural Growth: The Economics of Agrarian Change under Population Pressure. Chicago: Aldine Publishing Co.
- Chatty, D. (1996). Mobile Pastoralists: Development Planning and Social Change in Oman. Columbia University Press. p. 84. ISBN 9780231105491
- Chabot, P. & Dorosh, P. A. (2007). Wheat markets, food aid and food security in Afghanistan. *Food Policy*, 32(3), 334–353.
- Central Bank of Somalia (2013). Economy and Finance". Archived from the original on 2009-01-24. Retrieved 2013-11-01.
- CIA World Factbook. (2015). Somalia. <https://www.cia.gov/library/publications/the-world-factbook/geos/so.html>. Retrieved 15 July 2015.
- Clay, Edward J., S. Dhiri, and C. Benson. (1996). Joint Evaluation of European Union Program 5+me Food Aid: Synthesis Report. London: Overseas Development Institute.
- Cronback L.J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrical*, 16(3), Pp. 297-334.
- Cuny, FC and Hill, R. (1999). Famine: conflict: a basic guide and response. Bloomfield: Kumarian.
- Devereux, S. (2000). Food insecurity in Ethiopia. *Discussion Paper for DFID*, (October 2010), 16. Retrieved from <http://www.addisvoice.com/wp-content/uploads/2010/03/FoodSecEthiopia4.pdf>
- Djurfeldt, Goran, Hans Holmen, Magnus Jirstrom, and Rolf Larsson, editors. 2005. The African Food Crisis: Lessons from the Asian Green Revolution. Wallingford, UK: CABI Publishing.
- European Commission. (2000). EU Food Aid and Food Security Programme: towards recipient country ownership of food security. Bi-annual Report. EU.
- Fiedel, S. J. (2005). Man's best friend–mammoth's worst enemy? A speculative essay on the role of dogs in Paleoindian colonization and megafaunal extinction. *World Archaeology*, 37(1), 11-25.
- Fishbein M, Ajzen I (1975). Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research. Addison-Wesley, Reading

- F.Z. Ahmad-Esfahani, & Locke, C. G. (2006). Food Aid- A substitute for domestic production and commercial import?.pdf. In *Proceedings of the 6th International Working Conference on Stored-products Protection-Volume 2*.
- FAO. (2006). Food Aid for Food Security? State of Food and Agriculture Report (SOFA).
- FAO. (2011). <http://faostat.fao.org>. Accessed 15 February 2017.
- Ferrière, N., & Suwa-Eisenmann, A. (2015). Does Food Aid Disrupt Local Food Market? Evidence from Rural Ethiopia. *World Development*, 76, 114–131. <http://doi.org/10.1016/j.worlddev.2015.07.002>
- Fitzpatrick, J., & Storey, A. (1989). Food aid and agricultural disincentives. *Food Policy*, 14(3), 241–247. [http://doi.org/10.1016/0306-9192\(89\)90041-9](http://doi.org/10.1016/0306-9192(89)90041-9)
- Grothmann T, Reusswig F (2006). People at risk of flooding: why some residents take precautionary action while others do not. *Nat Hazards* 38:101–120. <https://doi.org/10.1007/s11069-005-8604-6>
- Hammond, L. and Vaughan-Lee (2012). “Humanitarian Space in Somalia: A Scarce Commodity.” HPG Working Paper. London: Overseas Development Institute.
- Hair, J. F., Black, W. C., Babin, B. J. & Anderson, R. E. (2013). *Multivariate data analysis: Pearson New International Edition*. Pearson Higher Ed.
- Hertel, B. R. (1976). Minimizing error variance introduced by missing data routines in survey analysis. *Sociological Methods & Research*, 4(4), 459-474.
- Harris, D. (2007). Food Aid and Agricultural Trade Reform, Publication No. 07/136, Project No. DAH-3A.
- Jabareen, Y. (2009). Building a conceptual framework: philosophy, definitions, and procedure. *International Journal of Qualitative Methods*, 8(4), 49-62.
- Jellason, N. P., Baines, R., Conway, J. & Ogbaga, C. C. (2019). Climate change perceptions and attitudes to smallholder adaptation in Northwestern Nigerian Drylands. *Social Sciences*, 8(2), 31.
- Ingram, J. (2011). A food systems approach to researching food security and its interactions with global environmental change. *Food Security*, 3, 417–431.
- Khalil, M., Abdullah, S., Abd Manaf, L., Sharaai, A., & Nabegu, A. (2017). Examining the Moderating Role of Perceived Lack of Facilitating Conditions on Household Recycling Intention in Kano, Nigeria. *Recycling*, 2(4), 18.
- Kumar, R. (2014). *Research Methodology: A Step By Step Guide For Beginners* (Fourth Edi). Sage Publications.



- Lentz, E.C., Barrett C.B. and Hoddinott. J. (2005). Food Aid and Dependency: Implications for Emergency Food Security Assessments, World Food Programme desk study
- Lissitz, R. W. & Green, S. B. (1975). Effect of the number of scale points on reliability: A Monte Carlo approach. *Journal of Applied Psychology*, 60(1), 10. Lewis, I.M. (1999). A Pastoral Democracy. LIT Verlag Münster. p. 31.
- Macrea, J. & Leader, N. (2000). Shifting Sands: The theory and practice of 'coherence' between political and humanitarian responses to complex emergencies. HPG Report 8. London: Overseas Development Institute. Humanitarian Policy Group.
- Makenete, A., Ortmann, G. and Darroch, M. (1998). Food-aid dependency in Lesotho: issues and policy implications. *Development Southern Africa*, 15(2).
- Maunder, N. (2006). The impact of food aid on grain markets in southern Africa: implications for tackling chronic vulnerability. Unpublished document. Regional Hunger and Vulnerability Programme.
- Malhotra, N. & Birks, D. (2007). Marketing Research: an applied approach: 3rd European Edition. Pearson education McIver, J., & Carmines, E. G. (1981). Unidimensional scaling (No. 24).
- Sage, M.c., John W. (2013). Good Things Grow in Scaled Packages: Africa's Agricultural Challenge in Historical Context. Working paper, Africa Growth Initiative, Brookings Institution.
- Madden, T. J., Ellen, P. S. & Ajzen, I. (1992). A Comparison of the Theory of Planned Behavior and the Theory of Reasoned Action. *Personality and Social Psychology Bulletin*, 18(1), 3-9.
- Maxwell, D., Majid, N., Adan, G., Abdirahman, K., & Kim, J. J. (2016). Facing famine: Somali experiences in the famine of 2011. *Food Policy*, 65, 63-73. <http://doi.org/10.1016/j.foodpol.2016.11.001>
- Menkhaus, K. (2007). Governance without Government in Somalia. Spoilers, State Building, and the Politics of Coping. *International Security*. 31 (3): 74-106.
- Menkhaus, K. (2007). The Crisis in Somalia: Tragedy in Five Acts. *African Affairs*. 106(204): 357-290.
- Miller M. (1981). Case study of Food Aid and the Disincentive Effect in Tanzania.
- Mohajan, H. K. (2017). Two criteria for good measurements in research: Validity and reliability. *Annals of Spiru Haret University. Economic Series*, 17(4), 59-82.

- Neda, T., Khairuddin, I., Azimi, H. & Jegak, U. (2010). Teaching method competencies used by extensionists in transferring the good agricultural practices to Malaysian farmers. *Australian Journal of Basic and Applied Sciences*, 4(10), 5379-5387.
- Nunnally, J. (1978). *Psychometric theory*. New York: McGraw-Hill.
- Nur, W., Wan, T., H., Zakaria, H., & Nasir, M. (2015). Knowledge Sharing and Lesson Learned From Flood Disaster: A Case in Kelantan. *Journal of Information Systems Research and Innovation*, 9(August), Pp 1-10
- Noguera, M. P., Molera, L. & Semitiel-García, M. (2016). The role of social learning in fostering farmers' pro-environmental values and intentions. *Journal of Rural Studies*, 46, 81–92.
- Oerke, E. C. (2006). Crop losses to pests. *Journal of Agricultural Science*, 144, 31–43.
- Ramle, K.P. (2012). Contribution of group dynamics factors to technology adoption among Malaysian cocoa farmer clusters (Doctoral dissertation, PhD thesis, university Putra Malaysia (Unpublished))
- Raffer, K. and Singer, H.W. (1996). *The foreign aid business: economic assistance and development co-operation*. Canterbury: Edward Elgar.
- Rogers RW (1983). Cognitive and physiological processes in fear appeals and attitude change: A revised theory of protection motivation. In: Cacioppo BL, Petty LL (eds.) *Social Psychophysiology: A Sourcebook*. Guilford, London, p 153–176
- Rogers R.W, Prentice-Dunn, S. (1997) Protection motivation theory. In: Gochman DS (ed.) *Handbook of Health Behaviour Research. I: Personal and Social Determinants*. Plenum Press, New York, p 113–132
- Rupiya, M. (2004). Food aid: the implications for food security in Africa. *African Security review*, 13(1).
- Ruttan, V.W. (1993). *Why food aid?* Baltimore: Johns Hopkins University Press.
- Samatar, A.I. (2007). Somalia's Post-Conflict Economy: A Political Economy Approach. *Bildhaan: An International Journal of Somali Studies*. 7(8): 126-168.
- Shah, A. (2005). Sustainable development: the US and foreign aid assistance. <http://www.globaissues.org/TradeRelated/SustainableDevelopment>. [Accessed on 9 November 2017].
- Shah, A. (2003). Food dumping (aid) maintains poverty. <http://www.globaissues.org/TradeRelated/Poverty/Food Dumping/Intro.asp> [accessed on 6 June 2017].

- Shaw, J.D. (2001). *The UN World Food Programme and the development of food aid*. New York: Palgrave.
- Shaw, J. and Clay, E. (1993). *World food aid*. Tonya: Reed Publishing.
- Sijm, J. (1997). *Food security and policy interventions*. Amsterdam: Thesis Publishers.
- Schubert, J. N. (1981). The Impact of Food Aid on World Malnutrition. *International Organization*, 35(2), 329–354.
- Straub, D. W. (1989). Validating instruments in MIS research. *MIS quarterly*, 147-169
- Strange, R. N. & Scott, P. R. (2005). Plant disease: a threat to global food security. *Annual Review of Phytopathology*, 43, 83–116.
- Senger, I., Borges, J. A. R. & Machado, J. A. D. (2017). Using the theory of planned behavior to understand the intention of small farmers in diversifying their agricultural production. *Journal of Rural Studies*, 49, 32–40.
- Sharaunga, S. & Wale, E. (2013). The dis-incentive effects of food aid and agricultural policies on local land allocation in developing countries: The case of Malawi. *Development Southern Africa*, 30(4–5), 491–507.
- USAID, (2017). *Food Assistance Fact Sheet – Somalia*.Se
- United Nations, Department of Economic and Social Affairs, (2011). <http://esa.un.org/unpd/wpp/index.htm>. Accessed online October 2011
- World Factbook (2009). Central Intelligence Agency. 2009-05-14. Retrieved 2009-05-31.
- Zadoks, J. C. (1967). Types of losses caused by plant diseases. In L. Chiarappa (Ed.), *FAO papers presented at the symposium on crop losses* (pp. 149–158). Rome: FAO.
- Zadoks, J. C. (2008). *On the political economy of plant disease epidemics. Capita Selecta in historical epidemiology*. Wageningen: Wageningen Academic Publishers.
- Zant, W. (2012). The economics of food aid under subsistence farming with an application to malawi. *Food Policy*, 37(1), 124–141. <http://doi.org/10.1016/j.foodpol.2011.09.004>
- Zorloni, A. (2012). "Somali". *Breeds of Livestock*. Oklahoma State University. Archived from the original on 2012-07-02. Retrieved 21 July 2012.

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