

NEAR EAST UNIVERSITY

INSTITUTE OF GRADUATE STUDIES

DEPARTMENT OF INTERNATIONAL RELATIONS

FOOD SECURITY IN LIBERIA: THE DIFFICULT CHOICE BETWEEN CASH VS. FOOD CROPS

M.A. THESIS

Kelvin Mewaseh JOHNSON

Nicosia

January, 2023

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Approval

We certify that we have read the thesis submitted by Kelvin Mewaseh Johnson titled "Food Security in Liberia: The Difficult Choice Between Cash Vs. Food Crops" and that in our combined opinion it is fully adequate, in scope and in quality, as a thesis for the degree of Master of International Relations.

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Declaration

I hereby declare that all information, documents, analysis and results in this thesis have been collected and presented according to the academic rules and ethical guidelines of Institute of Graduate Studies, Near East University. I also declare that as required by these rules and conduct, I have fully cited and referenced information and data that are not original to this study.

KELVIN MEWASEH JOHNSON

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Abstract

Food Security in Liberia: The Difficult Choice Between Cash Vs. Food Crops

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Food security has become a major issue across the world. This is also reflected in academic and international policy discussions as they have been increasingly occupied with the problem of food insecurity in recent years, particularly in developing countries like Liberia. In light of this, this dissertation offers fresh knowledge on food security in Liberia by examining the debate between cash crops versus food crops, and what their implications are for ensuring the country's food security and self-sufficiency. Cash crops have historically dominated Liberia's agricultural sector, as seen by the country's long-term food security forecast. Various Liberian governments too have prioritized the development of the cash crops above that of the food crops farming, despite having developed a great deal of policy, seeing cash crops as a way to boost the economy and provide jobs, particularly in the rural area. As a result, some smallholder farmers in the food crop sector have also shifted their attention to the cash crop sector because of the higher potential for profit and the greater number of jobs it offers. At the same time however, there is now a significant concern about concessions using arable land for plantation development, which might otherwise be used to grow food crops, and the current target of devoting 10% of the annual national budget for agriculture to increase food production has not been achieved. Can Liberia's food security and selfsufficiency be ensured if the country switches from cash crops to food crops? And what has been the impact of over-reliance on cash crops for Liberia's food security? This dissertation seeks to answer these questions by evaluating the perspectives of national and local stakeholders, as well as foreign non-governmental organizations drawing on a rich set of primary and secondary data in the food security cycle of Liberia.

Keywords: Food security, cash crop, food crop, farmer, Agriculture

Özet

Liberya'da Gıda Güvenliği: Endüstri Bitkileri ve Besin Bitkileri Arasındaki Zor Tercih

Johnson, Kelvin Mewaseh Yüksek Lisans, Uluslararası İlişkiler Bölümü Doç. Dr. Mustafa Çıraklı Ocak 2023, 115 sayfa

Akademik ve uluslararası politika tartışmaları, son yıllarda, özellikle Liberya gibi gelişmekte olan ülkelerde, gıda güvensizliği sorunu üzerine çokça kafa yormuştur. Bunun ışığında, bu tezin odak noktası, endüstri bitkilerine karşı besin bitkileri arasındaki tartışma ve Liberya'nın gıda güvenliği ile kendi kendine yeterliliğini sağlamak için en sürdürülebilir şekilde neler yapılabileceğidir. Gıda güvenliği tüm dünyada önemli bir sorun haline geldi. Liberya, son yıllarda gıda güvenliği sorununun küresel olarak tırmanmasında bir istisna değildir. Yukarıda belirtilenlerle birlikte, ülkenin uzun vadeli gıda güvenliği tahmininde görüldüğü gibi, endüstri bitkileri, Liberya'nın tarım sektöründe tarihsel olarak besin bitkilerine hakim olmuştur. Liberya hükümeti, çok sayıda politika geliştirmesine rağmen, endüstri bitkilerinin geliştirilmesine besin bitkileri yetiştiriciliğinden daha fazla öncelik verdi. Sonuç olarak, besin bitkileri sektöründeki bazı küçük çiftçiler, daha yüksek kar potansiyeli ve sunduğu daha fazla sayıda iş nedeniyle dikkatlerini endüstri bitkileri sektörüne kaydırdı. Gerçekçi bir ifadeyle, hükümet besin bitkilerini ekonomiyi canlandırmanın ve özellikle kırsal alanda istihdam sağlamanın bir yolu olarak görüyor. Fakat başka türlü gıda ürünleri yetiştirmek için kullanılabilecek olan ekim geliştirme için ekilebilir araziyi kullanan imtiyazlar hakkında önemli endişeler mevcuttur. Nitekim, gıda üretimini artırmak için yıllık ulusal bütçenin %10'unun tarıma ayrılması sağlanamamıştır. Ülke endüstri bitkilerinden besine geçerse, Liberya'nın gıda güvenliği ve kendi kendine yeterliliği gerçekten sağlanabilir mi? Ve endüstri bitkilerine aşırı güvenmenin Liberya'nın gıda güvenliği üzerindeki etkisi ne oldu? Bu endişelere tatmin edici cevaplar verebilmek için ulusal ve yerel paydaşlar ile yabancı sivil toplum kuruluşlarının bakış açıları derinlemesine analiz edilecektir. Çalışma, gıda güvenliği döngüsündeki zengin birincil ve ikincil verilere dayanmaktadır.

Anahtar kelimeler: Gıda güvenliği, nakit mahsul, gıda mahsulü, çiftçi, Tarım

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List of Abbreviations

ACC: Agricultural Coordinating Committee

ATF: Agenda for Transformation

CAADP: Comprehensive African Agriculture Development Program

CARI: Central Agriculture Research Institute

CHAP: Community Agriculture Program

COP: Crude palm oil

DRDRE: Department of Regional Development Research and Extension

EAS: Extension Advisory service

FBB: Fresh fruit Bunches

FBO: Farmer Based Organization

FED: Food and Enterprise development

FSNS: Food security and Nutrition strategy

FUNL: Farmer Union Network of Liberia

GOL: Government of Liberia

IFAD: International Fund for Agriculture Development

INGO: International Non-Governmental Organization

LASIP I: Liberia Agriculture Sector Investment Plan

LASIP II: Liberia Agriculture Sector Investment Plan

LATA: Liberia Agriculture Transformation Agenda

LEAD: Liberia Entrepreneurial & Asset Development

LISGIS: Liberia Institute for statistic and Geo information services

MOA: Ministry of Agriculture

NGO: Non-Governmental Organization

PAPD: Pro-Poor Agenda for Prosperity and Development

PRS: Poverty Reduction Strategy

RCFP: Rural Community Finance Project

STCRSP: Smallholder Tree Crop Revitalization Support Project

TCEP: Tree Crop Extension

USAID: United States Agency for International Development

WFP: World food program

CHAPTER I

Introduction

When it comes to improving food security in underdeveloped and developing nations like Liberia, one of the most hotly debated topics is whether growing so-called cash crops is a good idea. Cash crops are agricultural crops that are planted for the purpose of selling on the market or for export to make profit. Developing countries depend on cash crops for foreign exchange, to enable these countries import development materials, buy western consumer goods and food. Due to the revenue potential of cash crops and the creation of employment for farmers, Liberia also has greater concessions in cash crops, which serves as a driving factor to transfer most smallholder farmers from food crop production to cash crop. In the era of executing such a transition however, food insecurity has increased dramatically.

The prioritizing of cash crops over food crops is indeed said to undermine food availability of food, one of the key dimensions of food security defined at the 1996 World Food Summit. The production of food is the key to ensuring its availability, but in this context where cash crops take precedence over food crops, problems of availability that could lead to widespread hunger will be the norm. Liberia also now imports the vast bulk of its food, thus if there is a problem in the supply chain or poor harvest in the nation from which the food is exported, Liberia will lead to food insecurity. Such factors that could undermine food security and self-sufficiency in Liberia are explored in this dissertation by examining the cash crops vs. food crops debate.

Food insecurity also has a number of political manifestations that may have a negative impact on social stability. As stated by the World Food Programme: "food insecurity, especially when driven by growing food prices, heightens the possibility of democratic failure, civil unrest, protest, rioting, and communal violence" (Brinkman, H. J., & Hendrix, C. S. 2011). This was the situation in Liberia's past, when the nation was engaged in a wave of food security protest. The government's 1979 effort to boost domestic food production, particularly rice, after the conclusion of the 1972–1975 global food crisis was met with riots in which many people lost their lives. After the release of

the Ministry of Agriculture's annual report for 1978–1979, it was speculated that the cost of an imported 100-pound bag of rice would increase by \$30 USD (Dunn, E. D., Beyan, A. J., & Burrowes, C. P.2000).

In 1979, the government said that raising the price of an imported 100-pound bag of rice from \$22 to \$30 would prevent rice farmers from abandoning their farms in favor of urban employment or rubber plantation jobs. A peaceful march organized by individuals in response to a projected increase in the price of rice became violent as a result of this policy.

More recently, the 2007-2008 global food crisis also affected Liberia, which at the time imported approximately 90% of its rice, other food commodities, and livestock under the administration of Madam Ellen Johnson-Sirleaf, who had been in power for just over a year. It was estimated that 60% of the grains eaten were imported, with cassava replacing rice as the most significant crop in the countryside. The current system of agriculture in Liberia is a holdover from the country's colonial past. However, this was shown by leasing 100,000 acres of prime farmland to the American-owned Firestone Company in the year 1926. Rubber now represents 17.5% of total export profits for the country, making it one of the most significant sources of governmental revenue. Up to 60,000 smallholder households are actively involved in rubber agriculture, while the commercial rubber sector employs over 30,000 people (MOA, 2017). Next in line of employment are cocoa and oil palm. The company diverted more Liberian farmers into rubber production. Additionally, to increase its purchase from smallholder farmers, Firestone used extended advisory service initiatives, which included supplying farmers with nursery rubber, agricultural equipment, and other resources.

Today the country's agricultural system has become severely enmeshed with the habit of emphasizing the development of cash crops above food ones and the likelihood that domestic food production can keep up with the requirements of an expanding population are diminished by over-reliance on cash crops but also because of low food corps productivity. And since Liberians are net consumers of food, they are especially vulnerable to shifts in the global food market. Between 2012 and 2016, import value climbed at an annualized rate of 46.7%, according to research by the European

Commission, while export value increased by an annualized rate of 2.6%. (European Commission Trade in Goods, 2017). As a result of low productivity in the food corps, it is less probable that domestic food production will be sufficient to feed the nation's rapidly expanding population. An important gap in the food crops industry in this regard is the difficulty of getting food crops to markets. Since concession companies and cash crop industry intermediaries benefit from buying directly from smallholder farmers, farm-gate sales are optimal for cash crop producers. The already limited markets for food items in rural areas are exacerbated by the lack of suitable rural infrastructure, agroindustry, and access to farmland. Farmers in Liberia have challenges getting their goods to market due to a lack of reliable transportation and inadequate feeder roads. It is also important to mention that cash crops like rubber, cocoa, and palm oil have often received more investment than food crops.

The impacts of cash crops vs food crops are seen at the national level by the government's main focus of raising revenue, via international commerce, which is said to boost smallholder farmers' incomes, and provide rural residents a chance to find However, others believe that the promised benefits have never gainful work. materialized, and that in areas where cash crops are produced, the is a deteriorating state of food insecurity and nutritional quality of impoverished families (Von Braun, J., & Kennedy, E. 1986). Also discussed are the effects of cash cropping on Liberian income and food consumption, the government's response of shifting its focus from cash crops to food crops. Increasing government spending on food crop farming has received less attention in recent years, although national policy papers have been developed with extensive sections on agriculture and clear agriculture programs meant to enhance agricultural efficiency, especially food crop output. The Poverty Reduction policy, the Agenda for Transformation, and the Pro-Poor Agenda for Development and Prosperity are all examples of such national development agenda with a section highlighting food security, strategies. Additionally, there are some straightforward agricultural programs and strategies, including the Agriculture Transformation Agenda, the National Food Security and Nutritional Strategy, and the Liberia Agriculture Sector Investment Plan I and the Liberia Agriculture Sector Investment Plan II. Furthermore, "grow what you eat and eat what you produce" has been the unofficial motto of Liberia's agricultural

dialogue, which has always been marked by a dispute over the relative merits of cash crop cultivation and food crop production. Liberia's food self-sufficiency is threatened, despite the country's tendency toward cash crops, in particular the utilization of what looks to be extensive acreage for cash crop cultivation. Food policy debates in Liberia center on whether cash farming is a viable option for increasing food availability. However, the potential effect of cash crops on food security is known and widely discussed. Yet the relationship between cash crop farming and food security is still not well understood. The food security of a family may be decreased, according to some authors, because they choose to focus on cash crops rather than food crops (Anderman TL, Remans R, Wood SA, DeRosa K, DeFries RS. Synergies, 2014). In addition, cash crop farming worsens food insecurity by diverting arable land away from the production of staple foods. This leaves families more susceptible to market price swings for staple foods, as these foods will need to be imported, which increases the risk of starvation in the event of a bureaucratic snafu in the trade sector. However, studies have shown that growing cash crops can increase a farmer's income, and thereby improve the farmer's ability to provide food for their families (Kuma T, Dereje M, Hirvonen K, Minten B. 2019). As to whether, farmers' families would have enough money from cash crops to meet their food demands remains uncertain.

Extension and advisor service (EAS) is a crucial part of any successful agricultural endeavor, but particularly one that involves growing food crops. Providing farmers with EAS, is about giving them access to tools, seeds, fertilizer, modern farming techniques, and training. Private EAS services are driven by NGOs and INGOs and are provided to farmers all throughout Liberia, while the Ministry of Agriculture handles the public EAS services. The yearly budget allocation to agriculture shows that national government expenditure on agriculture has been quite low over the previous decade or more (MOA 2017). Low sector investment has opened the door for local NGOs to better serve farmers and lobby for more financing for agriculture, particularly for food crops. To further bridge the gap on food security and self-sufficiency in Liberia, INGOs play a crucial role in giving funds to local NGOs execute projects in the sector, particularly food crop.

Research questions

Drawing from the historical context of Liberia's food security and self-sufficiency and taking into consideration the official focus for the two decades. On sourcing revenue for national development by collecting taxes from concession companies in the cash crop sector, the thesis attempts to address the following overarching research questions:

- Can Liberia's food security and self-sufficiency be really ensured if the country switches from cash to food crops?
- What has been the impact of over-reliance on cash crops for Liberia's food security?

Issues that surround food-self-sufficiency and reliance on imports for the majority of its food needs make these questions for Liberia very significant. Indeed, Liberia's food security sector appears too reliant on two of the five FAO's food security dimensions elaborated in detail in the "Conceptual Framework" below, a) access (sufficient resources to obtain food as required for nutrition) and b) utilization (nutritional food available food for consumption). The absence of availability, stability and sustainability of food also raises more questions. These questions are crucial, and they are reflected upon by investing the positive and negative of cash crops and food crop production. This thesis' major premise is that giving cash crop production greater attention will only increase household's economic access to food, not the availability or stability of the food system. On the other side, growing food crops increases the stability and availability of food at all levels, opening the door to self-sufficiency.

The choice between cash and food crops can coexist in Liberia's food security landscape if one of the FAO's food security dimensions is taken into account, which states that "Other household obtain available staple food via agriculture like cash crop production which generates revenue to allow purchase of food on the market." Additionally, Liberia may co-exist with both cash and food crops as long as food production is prioritized over cash crop development in order to achieve food self-sufficiency.

Methodology

This dissertation is based on a case-study research and employs a qualitative approach. Qualitative methodology is suitable for exploratory research to understand concepts, thoughts, experiences, opinions, trends, individual cases and their subjective interpretations (Marsh and Stoker, 2002) and formulating a theory or hypothesis. A case is analysed through summarizing, categorizing and interpreting data, and its common key terms are understanding, context, and complexity. Moreover, case-study research is recognized within many social science studies that employ a qualitative approach, case study research, and allows the exploration and understanding of complex issues. It can be considered a robust research method particularly when a holistic, in-depth investigation is required. In this vein, Yin (1984:23) defines the case study research method "as an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used."

Following this emphasis on multiple sources of data, the dissertation also uses both primary and secondary information. Primary data was gathered from reputable sources in the areas of agriculture and food security, including policy papers, statistical reports, and program evaluations published by the Liberian government and state agencies, various reports of the United Nations food and agriculture organization, and other material on Liberia from local and international non-governmental organizations. Along with the primary data, secondary data from articles, books, and news reports related to the key themes of the dissertation were used in order to address the research problem.

Outline of the thesis

Chapter I serves as an overview of the whole dissertation and provides context for the subsequent chapters. The research topics and methods are included as well.

Chapter II discusses the global relevance of food security and provides a conceptual framework for the dissertation. Subtopics of this chapter include the following: the concept of security; the broadening of the security agenda; the

securitization of food security; the definition of food security, and the five dimensions of food security the study draws from; together with the working definitions of the concepts of cash crops and food crops.

Chapter III provides a brief outline of the political history of Liberia, with special emphasis on food security. The rise in food prices that sparked riots in 1979 (known as the "1979 rice riot"), the global food crisis that occurred in 1972–1975, and the global food crisis that occurred in 2007–2008 are all examined in chapter III. The last section of this chapter provides a thorough evaluation of the Librarian agricultural production by addressing both the cash crop and food crop sectors.

The argument over the effects of national policy on growing cash crops versus food crops is introduced in Chapter IV. The chapter focuses on the reaction of the national government to the issue of "food security and self-sufficiency in Liberia," and with emphasis on policy response. As such, the chapter highlights some key national policies of the government's development agenda. It also includes a section on various strategic frameworks for food security and self-sufficiency, and a focus on the institutions that put these policies and frameworks into action.

Chapter V turns attention to local non-governmental organizations (NGOs) and how they have affected Liberia's ability to feed itself and provide food security, and is followed by Chapter VI which examines the reaction of INGOS that operate in Liberia. In this section, the research evaluates the role that INGOs play in identifying those financial gabp that have been created by national government and how they fill in those gaps. Chapter VII is a concluding chapter which provides a summary of the dissertation's key findings together with a set of policy recommendations.

CHAPTER II

Conceptual framework

Introduction

In academic discussions, there is no consensus on a single, definitive definition of security, confirming the existence of a fluid and adaptable field of study. Indeed, as Collins (2022) notes, its meaning changes depending on the audience and the circumstances in which it is employed. When Liberia was amidst its civil war, for instance, the scope of its security was military; in contrast, the scope of security in other countries in the region that were not experiencing a civil war was different. There are two main theoretical schools that may be used to categorize the multiple and competing security concepts according to their analytical emphasis. These can be categorized as "traditional" and "nontraditional" theoretical approaches. In addition to analyzing security, both traditional and nontraditional theoretical frameworks also assess and modernize security ideas and agendas.

This chapter begins with a review of the traditional theoretical frameworks for understanding security and then moves on to consider the many interventions among them, above all the infamous Copenhagen School that have sought to expand our comprehension of the concept in more recent times. The Securitization Theory is a helpful analytical tool since it divides the umbrella term "security" into subcategories, each of which may be examined independently to reveal the nature of a particular security concern.

The chapter also summarizes various definitions as they relate to food security, including the Food and Agricultural Organization's (FAO) definition and the more progressive definitions that have emerged over the years at several global food summits. Drawing from these definitions, and combining them with the sectoral approach of the Copenhagen School, the chapter also outlines a conceptual framework which allows for a thorough examination of the many ways in which food insecurity may compromise a state's security as well as an analysis of the cash crops versus food crops debate.

The concept of security

The notion of security in our international system has a long and complicated history (Padrtova, B. 2020). The earlier, and also more "traditional" understandings of security has been dominated by a rather narrow perspective ever since the Napoleonic wars, with an exclusive focus on the military and the state. It is also for this reason that modern theories of International Relations that begun emerging in the second half of the twentieth century also adopted this understanding. Realist theory, in this regard, has historically been the most popular both in the field of IR, but also in the field of security studies that again began emerging around the same time. As a result of the influence of the realist school of thought, the field of security studies became preoccupied with the analysis of armed conflict. This was also reflected in the fact that during the Cold War, the term "security studies" started to be used interchangeably with "strategic studies." In this sense, the state's physical safety was of fundamental importance, because it was largely endangered by war between other states (Collins, A. 2013). Strategic studies were prioritized, narrowing the field's emphasis, and obscuring the many other concerns that might compromise a country's safety.

Nevertheless, with the end of the Cold War, and the reinvigoration of academic discussions on the nature of the international system ushered in a new understanding of security, taking a more holistic approach. This approach, also came to be understood as the "broadening of the security agenda" whereby environmental security, economic security, social security, cultural security, health security, water security, and food security are only few of the many topics were included in the expanding field of Security Studies.

Broadening of the security agenda

To be secure is to be safe from danger; this is the classic definition of security. So, something is only a security hazard if it threatens the very existence of the state. This was the understanding that underpinned traditional security risks which would usually originate from conventional international difficulties and disagreements, to escalate into conventional wars. This was also the lens through which the dynamics of the security

sector was long interpreted. As such, security is seen as synonymous with military security, to further explicate the view that 1) security threats originate from war, 2) war is the result of chaotic international relations, and 3) threats can be deterred through establishing a system of power balance or through nuclear intimidation (Buzan, B., Wæver, O., Wæver, O., & De Wilde, J. (1998).

Indeed, proponents of this traditional view of security, and realism, believe that nations must be self-sufficient and that collaboration between states in an anarchic environment is very unlikely. However, they do not account for the emergence of globalizing dynamics or the changes in the political scene. Yet, for others, the end of bipolarity has shown, through major shifts in the security policies of most states, that international structures significantly alter the security environment of actors. Under the impact of the globalization movement and the proliferation of powerful multinational organizations, the conventional understanding of security has shifted dramatically.

Further, the depletion and demise of the bi-polar security complex at the end of the Cold War prompted a fresh perspective on security in general. Consequently, the standard security strategy was seen as insufficient to account for the many new security threats and actors, and a new set of principles emerged. A discussion was sparked by the very attempts to add non-military concerns to the security agenda. This discussion arose because many were unhappy with how the Cold War's emphasis on military and nuclear issues had severely limited the study of security (Buzan, B., Wæver, O., Wæver, O., & De Wilde, J. (1998).

Critical security studies, as these nontraditional views came to be known, contribute to the development and refinement of the security concept by advocating a decentralized method of addressing security concerns. From this perspective, expanding or the broadening of the concept of security means looking at it from other angles, beyond only the military, such as the political, economic, social, and environmental spheres. This implies that variables from each of these fields have an impact on security. On the other hand, "deepening" of the security has meant that we are talking about expanding the scope of our analysis and adding additional "reference actors" or "objects" for security outside the state. (Buzan, B. (1991).

The characteristics of the security landscape at the end of the Cold War was also instrumental in offering significant value to this new understanding of security that has since become an influential cannon within both Security Studies and International Relations. While the security climate at the end of the Cold War was crucial to start the search for such new thinking, the current security climate has continued to raise the profile of several previously neglected threats, including cyber security, food security, financial security, energy security, biosecurity, and pandemic security. Others have also stressed that within this climate, the state and the people are equally significant, that is, equally vulnerable to new security risks, as reference objects of security in relation to the stated types of security. Therefore, a more in-depth and comprehensive understanding of security is what is needed to understand the complexity that surrounds the current security climate; "what we need is a new way of thinking, but not a better old thinking about security" (Homer-Dixon, T. F., & Levy, M. A. (1995).

Securitization of Food

From the abovementioned perspective, one particular approach provides a suitable framework for examining if and how food security may be seen as a security concern: namely the so-called "Copenhagen School", since the reconceptualization of the notion of security and the broadening of the security agenda that began to emerge in the early 1990s was to a large extent, originated in the 1980s in a research group at the Copenhagen Peace Research Institute.

It is important to underline here that the Copenhagen School approach is credited for two distinct theoretical contributions toward the study of security. The first contribution relates to the broadening of the security agenda, while the second can be described as the "deepening" of the security agenda in which the approach suggests a process of "securitization" to describe how issues enter into the security agenda. Theoretically speaking, security here refers to a state when there is both a security threat and a countermeasure in place. On the other hand, a state of insecurity exists when there is a security threat but no countermeasures in place. Given its potential catastrophic effects, the question of securitizing it as a priority has opened the door to the need for exceptional steps to be taken to address it (Wæver, O. (1993). What this indicates is a

process being driven by a critical problem that must be addressed by senior leaders with prompt action before anything else can be done.

In this regard, food security has entered onto the agendas both through the broadening of the security agenda but also through securitization. From the securitization point of view, the mere term "Food Security" implies that it is a problem that has been securitized from the start. Even though topics like agriculture and food assistance are often discussed in political debates, when a politician brings up the concept of "food security," they insinuate that there is a danger to food safety. Others also add that politicians or securitizing actors must still convince an "audience" that a threat to a given security sector exists as a result of that particular security threat. This may prove harder or simpler depending on the issue at stake. Here the Copenhagen School identifies 5 sectors. The list of sectors is primarily an analytical tool created to spot different dynamics. In *Security: A New Framework for Analysis*, the authors list the following sectors: military/state, political, societal, economic and environmental.

Drawing from these insights and suggestions, this study also loosely utilizes the Copenhagen approach to understand food security. Though it is important to stress that the primary focus here is on the implications of food security on other sectors rather than on the process of "securitization". In this regard, food insecurity is a considerable threat to most of the security categories set out by the Copenhagen School. For instance, political security can be threatened by food insecurity (Fox, C. N., & AM, C. (2015). Increases in food insecurity may cause discontent that promotes participation in rebellion and increased levels of instability, which might threaten the established political order. In fact, during times of famine or great starvation, civic obedience is seldom unexpected in the developing countries. According to the World Food Programme, "food insecurity, particularly when driven by rising food costs, heightens the likelihood of democratic collapse, civil unrest, protest, riots, and community violence," suggesting that a hungry populace might have a detrimental effect on social stability (Brinkman, H. J., & Hendrix, C. S. 2011).

Rising food and gas costs in particular have been linked to rising levels of urban protest and violence (Brinkman, H. -J. & Hendrix, C., 2013) During the global food price crisis of 2007-2008, for instance, the rise in food prices throughout North Africa

and the Middle East contributed to a wave of protests that eventually led to the overthrow of the regimes of Tunisian President Zine El Abidine Ben Ali and Egyptian president Hosni Mubarak, an event known as the Arab Spring. It is important to remember that preexisting political institutions, economic growth, social welfare, and population pressures all had a role in determining as to whether there is a connection between food insecurity and regime change.

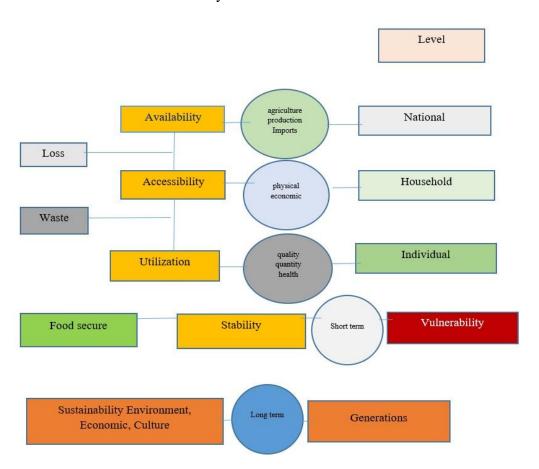
Defining food security

Numerous definitions of "food security" found in academic literature and policy contexts attest to the difficulty of the task at hand. Fifty years ago, in the early 1970s, when there were widespread food shortages throughout the world, the idea of food security was first uttered. Even only 20 years ago, there were already over two hundred published definitions of food security, illustrating also the context-dependence of its many components (Maxwell, S., & Smith, M. (1992).

In the early 1970s, when the price of agricultural commodities was very unstable and the currency and energy markets were in disarray, the concept of food security relied on ensuring the continued availability and affordability of staple foods (Peng, W., & Berry, E. M. (2019). Recognizing the critical needs and behavior of potentially vulnerable and affected people, the 1974 World Food Conference defined food security as "the availability at all times of adequate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices" (Shaw, D. J. (2007). Later, when food security concerns became better understood, attention shifted from food availability to a broader perspective. The idea of food security eventually included the ability to afford food (Peng, W., & Berry, E. M. 2019). A later definition of food security shifted to emphasize "ensuring that all individuals at all times have both physical and economic access to the essential food that they require" (FAO, 1983). The World Bank's publication of its seminal report on poverty and hunger in 1986 was a significant moment in the evolution of policies concerning food safety. Access to "enough food for an active, healthy life" (Berry, E. M., Dernini, S., Burlingame, B., Meybeck, A., & Conforti, P. 2015). was included in the concept of food security.

A new definition of food security was formulated from the World Food Summit in 1996, "Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (FAO 1996). This definition indicates achieving food security at all levels. Food security was referred to in four separate dimensions: Food availability, access to food, utilization of food, and stability of food are the four dimensions which reflect the physical flow of food from production to its use by the body for metabolic processes and the future-oriented perspective on food security. Moreover, at the 2009 World Food Summit on food security, sustainability was included as a fifth dimension to the long-term temporal dimension. A conceptual framework drawing on all these dimensions interact on food security is shown in the chart below.

Figure 1. Dimensions of Food Security



Source: The pathway of the dimension of Food Security. After Berry et al., 2015.

A key dimension of food security relates to adequate food availability for everyone in a family or a country. Dietary staples needed here may be obtained via commercial imports, international food assistance, local food production, or home cultivation. Additionally, food availability also includes enough variety of food supply to ensure that a healthy diet. Access, even if food is readily available, doesn't guarantee that everyone will be able to eat. Households and individuals only have access to food when they have the means to buy the food they need to maintain a healthy diet. Meanwhile, in the context of access, there other methods household used to obtain available staple food via agriculture like cash crop production and forestry; revenue to allow purchase of food on the market; or entitlements to non-commercial public or private food sources. The other group also obtain have access to food by means of employment or the business cycle. Many families in Liberia rely heavily on their purchasing power, which is influenced by their income and the cost for food, to ensure that family members have access to nutritious meals. Local food market efficiency might also have a role in setting food costs.

To put it another way, when people or families have access to enough food, they are able to satisfy their dietary requirements. Of course, there is more to ensuring food security than just making sure people do not go hungry. Instead, the desire of food utilization preferred that food eaten may help one reach and maintain a level of nutritional health that permits an individual to have a full, active life. Thus, the efficiency with which one's body converts the food eaten into energy is an important indicator of nutritional constancy. Effective food utilization is dependent on more than just having access to food; it also requires the ability to make full use of the meal's energy and nutrients.

Stability, on the other hand, emphasizes the threats to food security at the individual, family, community, and national levels. Inadequate agricultural productivity, the loss of revenue from jobs and other sources, market failures, and so on all put individuals and communities at danger of starvation. An individual's, family's, community's, or country's level of food insecurity is dependent on their vulnerability to and resilience in the face of negative shocks to their food systems. In order to address

stability, it is necessary to provide safeguards against or responses to all potential shocks.

Last but not least, sustainability, a recently suggested fifth dimension to add as a long-term temporal component, is crucial to food security. As defined by the United Nations, sustainability is "food system practices that contribute to long-term regeneration of environmental, social, and economic systems, guaranteeing that the food requirements of the current generation are satisfied without compromising the food needs of future generations" (HLPE, 2020) It is sometimes assumed that sustainability is different from stability. The latter is there in case there are any short-term disturbances that threaten food security soon, such market fluctuations, war, or natural catastrophes. To keep food systems going and ensure food security well into the future, sustainability places a premium on the interdependencies among ecosystems, livelihoods, society, and political economy. Sustainability is emphasized through broader policy efforts like the Sustainable Development Goals (SDGs). In its demand to "end hunger," "achieve food security," "improve nutrition," and "promote sustainable agriculture," SDG 2 makes a direct connection between sustainability and food security. Nonetheless, the diagram of the theoretical framework summarizes these concepts well. A breakdown of food loss and waste throughout production, storage, and retail distribution is shown in the following graphic (from processing and consumption in the household and community).

Cash crop versus food crop debate

A farmer who plants a crop with the intent of selling it for a profit, either locally or internationally, is said to be growing "cash crops. On the other hand, it can be easily recognized from crops grown for human consumption and sustenance. As an example, in Liberia's setting, rubber, cocoa, oil palm coffee, etc. are all considered cash crops. Rice, cassava, beans, maize, and other cereal grains are examples of food crops since they are eaten. Large swaths of land in emerging nations are now devoted to cash crops. In order to import the materials needed to build roads, construct buildings, or purchase Western consumer goods and food, nations devoid of mineral or oil resources rely on cash crops for foreign currency. But detractors claim that the planting of cash crops on land that might be used to generate food for the local people contributes to hunger around the

globe. It has a significant impact on the environment if the finest agricultural land is diverted to commercial crops, forcing local farmers to utilize marginal land to raise food for local consumption.

First, leftist perspectives often see cash crops as a kind of ruthless capitalism that is badly exploiting many rural farmworkers, much as it did in colonial Africa. Second, some on the right believe that exporting cash crops is the only option for Africa to generate the necessary revenue to invest in its people's health, education, and nutrition in the global marketplace. However, the evolution of cash crops in Africa over the previous several decades reveals that they have generated decreasing returns (Jarzebski MP, Ahmed A, Boafo YA, et al) The actual returns from cash crops have been falling over the last three decades. Further research realized that food crops are the basis for selfsufficiency, whereas cash crops are grown primarily for export. However, this debate is sometimes framed as a clash between the diffusionist approach to development (exemplified by the export-led growth model) and the auto centric approach (characterized by an emphasis on food self-sufficiency. In general, there is still a lack of clear empirical data about the connection between cash crop farming and food security. Some writers argue that growing cash crops instead of food does not improve food security but rather makes families more vulnerable to fluctuations in food prices (Anderman TL, Remans R, Wood SA, DeRosa K, DeFries RS. Synergies, 2014). On the other hand, cash crops have been shown to improve farmers' food security by raising their earnings, according to some research (Kuma T, Dereje M, Hirvonen K, Minten B. 2019). But it's unclear whether farmers' families would have enough money from cash crops to meet their food demands.

Conceptualizing food security in environments where cash crops are produced has proved particularly difficult, although issues with definition and measurement of food security are universal. Food availability, one of the four tenets of food security covered in our conceptual framework, would be inadequate in a cash crops family's diet. The connection between cash crops and food security has been thoroughly investigated. The dispute about the complementarity vs competition of food crops (Storey, A. 1986), is seen as a secondary issue by those who are promoting the development of cash crops. Some people think that growing cash crops instead of food is good as long as it is done

in accordance with the principle of comparative advantage. This is because the money brought in from outside should be spent on food imports or invest it in to food crops production that will increase or at least keep local consumption levels constant. The competition argument seems intuitively plausible: countries with limited resources of land, labor and capital can only allocate those resources to a limited number of activities. If priority is accorded to cash crop production, then food production seems certain to suffer as a result. Land devoted to the production of coffee cannot be used to grow food staples. There are, however, several factors which could allow production of cash crops and food crops to be complementary.

Assessing food security in Liberia

This study will draw on the abovementioned framework to understand how Liberia can attain food security and self-sufficiency. In this regard, all aspects of the chart above will be operationalized to understand whether they are applicable and practical. Availability (which is concerned with national food production), accessibility (which is concerned with the physical and economic ability of households to access food), utilization (when households and individuals have access to sufficient or healthy food for consumption), stability (constantly having access to adequate food) and sustainability (viability of food systems and the safety of food supply) will be assessed in relation to existing policies, practices and perceptions. In addition, the study will draw from the Copenhagen School approach toward security to understand the ways in which food security may be categorized as a security threat in Liberia.

CHAPTER III

Food Security in Liberia

Introduction

Liberia is the first and longest-standing African nation to achieve and maintain its own sovereignty. In 1847, independence was finally achieved for the nation. Most of the world's sub-regional, regional, and international organizations count Liberia as a founding member. Food security, peacekeeping, and economic stability are just few of the areas where the United Nations has helped Liberia as founding member of the organization. This section of the dissertation explains the geographical socio-economic and political landscape of Liberia, the 1979 rice riot, the global food crisis of 1972–1975, an in-depth analysis and causes of the global food crisis of 2007–2008, which had a trickle-down effect on Liberia. Furthermore, the chapter looks at food security in Liberia, and give a comprehensive analysis of Liberia's agriculture sector.

Geographical Landscape

Liberia, officially the Republic of Liberia, is a tiny country in West Africa. It occupies the top half of the void created when South America and Africa separated, making it the continent's western most nation. To the northwest is Sierra Leone, to the north is Guinea, to the east is Côte d'Ivoire, and to the south is the Atlantic Ocean. Liberia, which is located at 6°North and 9°West, is larger than 40,000 square miles and has a coastline of around 360 miles.

The country of Liberia sits on Africa's western coast. A considerable portion of the southern half of the nation, along its Atlantic coast, consists of low, flat coastal plains with swamps and beaches. To the interior, you will find woody hills and woods. The north and particularly the northeast are characterized by high plateaus and gentle mountains. We find tropical rainforests in these regions. The St. Paul, the St. John, and the Cestos are the three largest rivers of Liberia, and they all flow into the Atlantic.



Liberia has consistently hot and humid weather throughout the year. Nearly 40% of the tropical rainforest in Africa is in West Africa. It is dry and hot during the day and cool at night in Liberia during the winter. Liberians face risks throughout the winter months due to dust storms. Especially between May and October, Liberia's rainy summers see heavy precipitation.

Political history of Liberia

The first documented evidence of Liberia's indigenous people's dates to the 12th century. They are said to have migrated from farther north and east before settling in Liberia. The inhabitants of Liberia were fast to strike agreements with the Portuguese, Dutch, and British after the arrival of commercial posts to the area. Many of these ports were hubs for the trade of slaves throughout the Middle Ages and thereafter. The American Colonization Society (ACS) established Liberia in the 1820s so that slaves who had escaped may live in peace. This also prompted free Americo-Liberians from the Americas to begin making the trip across the Atlantic. Many of these new arrivals had their roots in the southern United States, and they carried with them not just their

unique culture and traditions, but also the concept of cash crop cultivation, which was their primary occupation during the period of slavery.

The first Liberian coup d'état took place on April 12, 1980, exactly one year after the April 14 rice riot of 1979, validating the World Food Programme's claim that "food insecurity, particularly when driven by rising food costs, heightens the likelihood of democratic collapse, civil unrest, protest, riots, and community violence" (Brinkman, H. J., & Hendrix, C. S. 2011). Moving forward, the Liberian civil war began in the late '1989 and lasted until 1996. From 1997 through 2003, Liberia was once again gripped by civil strife. Peace agreements and a transitional government were concluded on August 18, 2003. Liberia conducted largely calm and legitimate elections in 2005. The elections were peaceful, and a winner was announced before the end of November, even though no contender obtained a majority of the vote. Ellen Johnson-Sirleaf made history in January 2006 when she was elected the first female president in Africa. Years of civil conflict made it difficult for Liberia to recover, even under Madam Johnson's leadership.

The 14-year civil war in Liberia destroyed the country's agricultural program and infrastructure, making it impossible to feed the country's huge population. Damage to the agriculture sector caused by the conflict was severe. Tens of thousands, if not hundreds of thousands, of Liberians were compelled to leave their homes and seek sanctuary in refugee camps in neighboring nations. At the time of the conflict, agriculture was not cultivated. Up until 2016, the administration of President Ellen Johnson Sirleaf had over 15,000 UN troops conducting security reform, but food security was not a top priority. Food security was included in national development strategy papers, but other major concerns were the rule of law, economic stability, and infrastructural development. Since President Sirleaf's inauguration in January 2006, the country has seen an influx of foreign investment in its iron ore, gold, timber, and cash crop plantations of rubber and oil palm (see Table-3), while some smallholder farmers have returned to cocoa and coffee cultivation.

Little was done during this time for rice, cassava, vegetable, fruit, livestock, fishery or aquaculture producers. Yet, the 2007-2008 global food crisis occurred during Madam Sirleaf first term in office, and its effects were seen in Liberia (see section 3.5). Furthermore, Liberia was one of the nations hit by the Ebola outbreaks in 2014, during

President Sirleaf's second time in office. According to World Food Program research on global food security, the spread of the Ebola virus has led to several issues, including increased unemployment among farm laborers, border restrictions, roadblocks, temporary market closures, and problems with cooperative crop harvesting (WFP 2020). The aftermath of the fighting in Liberia was already difficult before the Ebola virus hit. There were 10,666 cases and 4,806 fatalities between March 20, 2014, and May 9, 2015. (De La Fuente, A., Jacoby, H. G., & Lawin, K. G. (2020). The country's GDP, crop yields, and general progress all took major hits as a result of the epidemic.

There was a disruption in the local labor system, the 2014 local rice production was somewhat lower than usual as a result of an effect on a Local farming cooperative called "kuu". Typically, "kuu" involves as many as fifty individuals, this group has farmers from different areas traveling to one another's fields to do agricultural work in exchange for either money or other services. (New, M. B. (2014). Mercy crops) The Government of Liberia recommended reducing the number of people working in kuus¹ from 10 to 5 in August 2014, while the Ebola crisis was at its height, so that people would be less likely to congregate in large numbers and spread the disease, indicating that just 5% of day laborers were legally allowed to work on farms. Upland rice yields fell by as much as 10 percent because of certain key farmer labor that could not be done with fewer personnel. Due to the emergency declaration, lowland rice planting was also affected, leading to a fall in yields of 50-25% (Mercy Corps, 2014). Conducting a third general elections in a row, after long period of civil wars show that Liberia was continuing along the democratic path. George M. Weah, was elected President of Liberia in 2017 and took office in January 2018. International observers mostly applauded the elections as a peaceful transition of power in Liberia for the second time since the end of the country's civil war. There are 15 counties that make up the political divisions of Liberia. The counties of Bong, Lofa, and Nimba are particularly noteworthy since they are considered agricultural counties in the context of Liberia's food security research. National population estimates from 2008 indicate that there are presently more

¹ The term "kuu" is used in Liberia to refer to huge groups of day laborers and local farmers who have banded together to do work for one another, either to help a member of the group who owns farm or to generate income for a member of the group who does not have a farm.

over 5 million people residing in the country. The indigenous population is composed of sixteen distinct cultural groupings. There are an estimated 2.5% of Americo-Liberians as part of the population of Liberia.

1979 rice riot in Liberia

The year 1979 was a watershed moment in the fight for food security in Liberia, when a massive, peaceful rally against a proposed rise in the price of rice erupted into violence. In an unprecedented move, former president William Tolbert raised the price of a hundred-pound bag of rice from \$22 to \$30, although most Liberians at the time were living on less than \$1 US per day. When the Ministry of Agriculture's annual report for 1978–1979 came out, it suggested a \$30 price rise in a 100-pound bag of rice (Dunn, E. D., Beyan, A. J., & Burrowes, C. P. 2000).

Florence Chenoweth, the country's Minister of Agriculture, during rice riot said that "the hike will encourage rice farmers to continue growing the crop for both sustenance and profit, rather than leaving the countryside in search of urban employment or positions on rubber plantations".

The Progressive Alliance of Liberia (PAL) and many other organizations and citizens approached the government to begin a discussion. Despite PAL's best efforts, the government insisted that it would take into consideration all opinions before making a final decision, including those of the farmers whom the agricultural Ministry's advice was intended to safeguard.

The government's goal in coming up with this plan was to get Liberians to stop purchasing rice from other countries and start buying rice grown in their own country. Additionally, the majority of Liberians would purchase the locally produced rice. Most African nations at the time faced the same predicament that was discussed at length among the government's different organizations and people in a series of debates.

The rice crisis reflected the tension between economic considerations and political implications. The economic choice was based on the idea that if rice were grown domestically, the nation would be able to feed itself, farmers would benefit economically, and the country would import less of its main food. The research unveil that political opponents denounced the idea as an attempt at self-aggrandizement since

both Chenoweth and the family of President William Tolbert had extensive rice fields and would benefit financially from the price hike. But the administration of the day had to deal with this predicament amid heightened political tensions.

When the government denied PAL a license to protest the 14 April 1979 rise in the price of imported rice, PAL went ahead with the march anyhow. A brawl broke out, with government soldiers being overwhelmed by the horde. Within a matter of hours, the lives of 70 Liberians were taken, 500 were wounded, and millions of dollars' worth of property was destroyed. As a result, there was a wave of arrests and indictments, which was broken up after a few weeks when the president issued a blanket pardon to everyone who had been implicated. Few years later, the country experienced its first military coup bringing an end to democratic rule.

1972-1975 global food crisis

Famines broke out in various Asian and African nations in the early 1970s due to a lack of grain on the global market and resulting price spikes. Food aid funding was cut as the commercial grain trade expanded. There followed a short discussion of a few initiatives whose stated goal was to assist small farmers in becoming more proficient in modern agricultural practices. This section of the chapter will also examine those factors that led to the food crisis that occurred between 1972 and 1975, as well as the impact that policies had on relief efforts, such as the insufficient supply of food aid, the distribution of food that was not of any use, and the delays in delivery caused by efforts to connect food aid to regional changes in agricultural output and population distribution.

Between the years of 1972 and 1975, two million people may have perished in famines and Asia, particularly in Bangladesh, Ethiopia, and the West African Sahel. This era came to be known as the "global food crisis" (Gerlach, C. 2015) A new era of global food shortage seems to have begun at that time. Causes of the food shortage that hit the United States in 1972–1975 were many.

Surprisingly, the demand for goods imported from communist countries, especially the Soviet Union, increased. Demand for food at an all-time high during the twilight of a long economic expansion, followed by a speculative commodities bubble

(during which meat consumption rose) and finally an energy catastrophe and global economic devastation. More than a year's worth of international grain commerce was lost due to earlier limitations in key exporting nations, which eliminated 100 million tons of grain from production. At the height of the crisis in November of that year, the United States and the non-aligned nations convened in Rome for a United Nations World Food Conference that lasted for 12 days. The meeting did produce with some useful outcomes, despite widespread disillusionment, however the nature of the conclusions and their execution was odd. The capitalist industrial countries effectively stymied the implementation of any effective emergency measures. Conversely, steps were taken to encourage "self-help" and a globally coordinated, long-term development program for rural areas and staple food production. The industrialized nations did not agree to or commit to removing trade barriers protecting their agriculture at the 1974 World food conference, nor did they implement price-stabilization systems for agricultural goods. At first, the industrialized countries generally opposed proposals for a large globally maintained food reserve. Registrations of national and foreign stockpiles fell short of the agreed upon 10 million tons by at least eight years. In addition, pledges to place 500,000 metric tons of emergency food at the disposal of the United Nations were not met for years, even though this amount would have been insufficient to alleviate the effects of even a single big famine (Gerlach, C. 2015).

Instead, a renewed push for a global program to end hunger via production arose. Based on the assumption that small farmer and sharecropper households are among the most vulnerable to hunger and a primary source of basic foods in developing nations, this theory sought to alleviate the problem. The new concept presented at that meeting proposed giving farmers access to any agricultural inputs they wanted, such as high-yielding seeds, fertilizer, insecticides, and irrigation. The small farmers, investors, financing, and marketing infrastructure were all needed for the success of these schemes. A second understanding existed in a period of demand crisis, the implementation of such schemes benefitted the manufacturers of such inputs, particularly in Western Europe. This basic-needs strategy, also known as the small-farmers approach, was developed to help the estimated 100 million subsistence-farming families, or 700-800 million people, who were thought to be largely identical with undernourished during the 1972-1975

global food crisis, become economically active participants in the global economy (Gerlach, C. (2015). At the World Food Conference, three new United Nations institutions were established to implement this policy, although now only the International Fund for Agricultural Development remains.

2007-2008 global food crisis

The food crisis of 2007-08 was the worst since 1974. As the cost of staple crops like wheat, rice, soya, and corn rose on global markets, an unprecedented number of people became hungry. Although food prices dropped somewhat during the summer of 2008, the number of people going hungry increased steadily throughout 2009. Because of the worldwide food shortage that occurred in 2007 and 2008, ending world hunger was a priority for Nations around the world. Since the food crisis of 2007-2008, when governments, United Nations (UN) agencies, and various social groups all took a stand on the reasons and solutions to the problem, access to food had been a topic of intense debate. For the first time ever, the UN Secretary-General assembled a high-level task force comprised of the leaders of several UN agencies addressed the issue of hunger and malnutrition. The rising cost of food imports and the share of household budgets devoted to food caused by the increase in global prices for staple crops including wheat, rice, soya, and maize in 2007-2008 triggered a global food crisis. A record number of hungry persons were counted in 2007, 2008, and 2009 because of food price increases on local marketplaces. The number of hungry individuals on the globe had increased dramatically as a result of the food crisis. For example, on World Hunger Day in 2008, 16 October, FAO Director-General Jacques Diouf estimated that over "923 million people were faced with hunger throughout the world. As of the end of 2007, 75 million of them were impacted by the 2007 food crisis" (FAO 2008b, 6). Moreover, by the end of 2008, an additional 40 million people have been impacted, bringing the total number of people to 963 million. Identifying the main reasons of the 2007-2008 food crisis requires splitting hairs between the variables that contributed to soaring food costs on the one hand and a growing population of people that are food insecure on the other hand. It is also important to separate the factors that led to the market price surge from March 2007 to March 2008.

The Impact of the 2007-2008 global food crisis in Liberia

Liberia was particularly vulnerable to the 2007-2008 food crisis which increased the cost of food. The country relies heavily on imports to meet its food needs. Half of the country's imports were food, making Liberia vulnerable to the macroeconomic impact of higher prices. Before the food crisis, 60% of rice consumed nationally was imported, but in Greater Monrovia where there was no local production going on, the consumption of rice was close to 95% (LIGIS 2008). During that time, most vulnerable Liberians were already struggling to make ends meet due to extreme poverty, food insecurity, and hunger. In 2007-2008, households would have to spend more of their money on rice, the country's primary grain, meaning that they will have a worse diet overall. Daily wage workers, palm oil producers, tiny merchants, the rural dwellers, small farmers, and the urban poor were the most hit families. Imported rice was believed to account for 60 percent of consumed cereals while Cassava was becoming an increasingly important alternative, especially in rural areas. The most consumed variety of rice was the 25kg bag broken, short-grain japonica rice from China, locally called 'butter' rice. This 'butter' rice accounted for over 90 percent of Liberian commercial rice imports. Some quantities of US parboiled rice were also imported to the Liberian market. In 2007, Liberia commercially imported 214,000 tons of rice. An economic downturn was sparked by the spike in the cost-of-living essentials including food and gas in Liberia. A cup of "butter" rice has grown in price by 16 percent in nominal terms in March 2007, according to the Central Bank of Liberia, (CBL 2007). From March 2007 to May 2008, the wholesale price of rice was raised from USD 22 to USD 30 (a 36% rise in dollar terms) Ministry of Commerce and Industry (MCI 2008).²

Price increases for locally grown rice were blamed on rising prices for transportation and production inputs in 2008, with farmers citing the rising cost of labor as one of those factors. Workers, however, claimed that the day's wage had altered due to the rising cost of food on the Liberian market. The increasing prices of food and other consumer products, and also the high cost of labor, which rose from L\$100 to L\$150-

² Folklore has it that a blind tasting test was once conducted to see whether or not the Liberian public would buy Chinese japonica rice. The taste of the cooked japonica rice sample was enhanced by the addition of margarine. The tasters agreed that this 'butter' rice was delicious, and the name stuck for what would become the most popular kind of rice in Liberia.

L\$200 per day in June 2008) more than offset the greater revenues gained from agricultural output (fas-usda 2008). Locally grown rice went risen in price from LD 10–LD 15 per cup in 2007 to LD 20 per cup in 2008.

Cash crop growers in the northern region of Liberia reported an increase in food spending during the global food crisis of 2007-2008. To put it simply, rising prices have led to a rise in farmers of coffee and cocoa have complained that the higher prices they are receiving do not cover the increased costs of production (LISGIS 2008). In 2007, farmers who grew cocoa and coffee spent 38% of their income on food, 24% on tuition and fees, 18% on medical care, 10% on clothing, and 10% on casual work. Nonetheless, the 2008 poll showed a rise compared to the 2007 one. In 2008, money was spent more on food (48%), less on schools (18%), less on healthcare (12%), more on casual labor (12%), and the same amount on clothing (10%).

Table 1 100% 10% 10% 10% 10% 80% 12% 18% 18% 60% 24% 40% 48% 20% 38% 0% 2007 2008 casual Labor 10% - 10% clothes 10% - 10% health 18% - 12% school fees 24% - 18% Food 38% - 48%

Table 1. Coffee/cocoa farmers Household Income and Expenditure Survey

Source: Liberia (2008), Institute of Statistics and Geo-Information Services Liberia, (2008) Institute of Statistics and Geo-Information Services (LISGIS) Household Income and Expenditure Survey

Food security in Liberia

Approximately 80% of Liberia's population depends on agriculture for their primary means of subsistence. Since it makes a considerable contribution to employment, food security, and household income, the sector is essential to Liberia's economic and social growth. About 26% of the actual Gross Domestic Product (GDP) in 2016 was accounted for by the agriculture sector, with the livestock subsectors accounting for about one-third of this (LISGIS 2017). As a country, Liberia has been mired in a system that favors the growth of cash crops over food crops.

The government of Liberia has been stuck in a system that prioritizes the production of cash crops above food crops. There are three main types of production in Liberia's cash crop sector: concession plantation, which emphasizes on perennial cash crops;(rubber, and palm oil), there are also medium-sized commercial farms owned by locals who cultivate export income commodities including cocoa, coffee, rubber, and palm. In addition, small farms also maintained by families with few employees and few technological advancements.

In 2017, rubber contributed for 17.5% of total export revenues, making it one of the state's most significant sources of income. About 30,000 people work in the commercial rubber business, while up to 60,000 smallholder households grow rubber trees for their own use (MOA 2017). Firestone Rubber Plantation, stretching over almost 200 square miles, is the biggest private employer in Liberia. Traditionally, oil palm, another significant cash crop, has been cultivated for both domestic and the international market. As a result of the country's great climate and outstanding soil, Liberia is receiving significant investment in the revitalization of cooperative and smallholder farms. Many of the same problems that plague the agricultural business also plague smallholder cocoa farmers and local cooperatives, including a dearth of storage space, an absence of familiarity with measurement, quality standards, and a scarcity of up-todate price and market information. However, the cultivation of cash crops remains predominant because of the opportunities it presents to local farmers. Sime Derby and Golden Veroleum, Firestone, Liberia Agriculture company (LAC), and Cavalla are only few well-known and enormous instances of industrial farms. There are just a handful of commercial farmers responsible for the very modest cocoa and coffee industries. While cash crops have historically dominated the agricultural sector in Liberia, this analysis of historical data reveals that cash crop's dominance is one of the major contributors to the country's current food insecurity.

Cash crops

During the early stages of Liberia's history, governmental power was held by people of American origin, who started annexing territories that had previously belonged to indigenous communities engaged in food crop production for the sake of self-sufficiency (Humphreys and Richards, 2005; MOA, 2007). In time, the American-Liberian minority came to own most of the nation's prime farmland and other natural resources (Unruh, 2009). Plantation farming was common among Americo-Liberians, although most of the country's indigenous farmers either worked on plantations or stuck to smaller plots of land. Until the end of the 1970s, the plantation model ensured competitive yields of both food staples and cash crops (MOA, 2007). Its exports of cocoa, palm oil, and rubber helped turn the country into a net exporter.

The expansion of Liberia's agriculture sector reached its zenith during this time period as well. Throughout Africa in the late 1970s, the World Bank invested substantially in training and extension to facilitate the spread of Green Revolution technology (Swanson and Rajalahti, 2010). By expanding the number of extension officers and stationing them in every county, district, and (township), the World Bank helped Liberia greatly increase the number of farmers who had access to extension services (MoA, 2007). In 1926, the government of Liberia leased 100,000 acres of valuable agricultural land to the US-owned Firestone Company, an arrangement that was later condemned for favoring "elite" Americo-Liberians at the expense of indigenous farmers who were growing food crops (Saha, 1988). Also, not all Liberians were given access to the same extension programs. Due to the widespread adoption of the Green Revolution paradigm and its associated technology transfer method, farming has expanded to unprecedented proportions, and support systems was increasingly focused on plantation-style operations (Saha, 1988; Pham, 2004). Due to indigenous farmers' status as either workers or small-scale subsistence farmers, extension programs were seldom adapted to their specific requirements (MOA, 2007).

The 1926 government lease plan to give 100,000 acres of agricultural land to the US-owned Firestone firm, which caused many of the country's native farmers to turn their focus to rubber, one of the country's principal cash crops. Firestone was the country's most important investment at the time; hence it was in dire need of more rubber export capacity. More Liberian farmers were redirected by the firm to produce rubber. Firestone used extension advisory service strategies to provide smallholder farmers with nursery rubber, agricultural equipment, and other resources in order to generate sales from these individuals. It was a boon to cash crop cultivation after World War II, but it damaged local food production.

a) The Rubber Sector

The majority of Liberia's rural landscape is taken up by rubber plantations, which are both abundant and distinct from the everyday rural life of the nation. Despite the arduous work involved in running a rubber plantation, smallholder farmers who specialize in the crop tend to be particularly fond of it. As a result, the farmer is unable to lean towards any food crops but must rely on rubber sales to fund his or her diet. There are a few large-scale rubber plantations in Liberia, including those owned by Firestone, the Liberia Agricultural Company (LAC), Nimba rubber incorporated (formerly Cocoapa Rubber company), Salala Rubber Corporation, Cavalla Rubber corporation (CRC) (originally part of the Firestone concession), and Sinoe Rubber Corporation (SRC). Hundreds of family-run farms provide these corporations with raw rubber. Most smallholder Liberian farmers considered rubber as their top income crop. (Milbrandt, A. April 2009).

b) Cocoa / coffee sector

Many smallholder farmers in Liberia's forested areas depend on cocoa (Theobroma cacao L) for income. Ninety percent of the world's cocoa is grown on small farms (ICCO, 2018), most of which are in regions with a high level of biodiversity. Liberia, a nation that has almost half of West Africa's remaining tropical rainforest, has seen an increase in the number of cocoa fields, particularly those operated by smallholder farmers. Many rural families still rely on income from smallholder cocoa

plantations; however, production is low due to factors such as aged trees, poor farm conditions, and unsuitable agronomic approaches (Dukuly MU 2012). Only over ten thousand families in Liberia are supported by cocoa exports, which only make up about five percent of the country's total export revenue (Eriksson Skoog G. 2016). The agricultural sector of Liberia has made substantial contributions to rural development, industrial materials, food security, and awareness of strategies to expand cocoa output, all of which have contributed significantly to national export, increased quality of life, and poverty reduction (Lujala P, Hooper A, Purcell MJ.). To ensure long-term food production and a surplus in the country's balance of payments, the Liberian government recognized the need of bolstering the cocoa industry rather than relying only on rubber exports. A cocoa tree may produce fruit for decades, with a peak yield between of 40 and 50 years. (Ziegleder G. Flavour 2017).

Research comparing cocoa revenue with family food security found that cocoa might help to enhance food security in a roundabout way. The money earned from selling cocoa beans allow farmers to buy adequate food for their families. Liberia's cocoa sector, unlike its rubber counterpart, already has a smallholder plantation and extension services to cocoa farmers, but both sub-sectors could need some improvement. Additionally, cocoa practices in Liberia are still at a relatively rudimentary stage, so additional investment is required to bring about meaningful change. For coffee on the other hand, is produced at a very low level for so many years across the country. Farmers often considered cash crops as a source of revenue for ensuring their family's continued access to nutritious food. It is Liberia's hope to replicate the success of nations like Cote d'Ivoire and Ghana, whose thriving cocoa and coffee industries provide billions in income to their governments. In contrast, these two states have a rather even distribution of cash crops and food crop output, notably in staple food.

c) Palm oil sector

For export purposes, GOL took a strategic choice in the 1970s and 1980s to plant oil palm as an alternative tree crop. The country's north, northeast, and northwest were all transformed into plantations. The Tenera kind of palm, which is more productive, was used to cultivate these farms. Small-scale farmers also rely on a wild palm type

called Dura. Plantations and factories were mostly destroyed or abandoned because of the Civil War. After years of inaccessibility, Liberia's formerly isolated metropolitan areas once again became major demand centers for palm oil when the war ended. This need has been supplied in part by imports; however, some consumers prefer to purchase raw palm nuts for in-house processing, while others choose acquiring a portion of the upcountry harvest (MOA 2007).

Nearly half of Liberia's 2007 palm oil output (35,000 tons) came from oil palm trees grown in uncultivated or "wild" areas (Milbrandt, 2009). Production occurs both on tiny family farms and on larger, state-owned estates. The MOA 2008 estimates reveal that of the total of 35,000 tons, a large percentage was generated by smallholders, who have accounted for the vast bulk of output throughout the postwar years (USAID) Biomass Study of 2009. There are now three types of companies operating in the Liberian oil palm industry: small operators working with Dura/Tenera, people performing different intermediation roles/providing support services, and huge concessionaires. Oil palm cultivation on a small scale is often carried out with little use of contemporary agronomic practices, resulting to much lower yields and efficiency. These farmers tend to work with very tiny plots of land, frequently in the midst of natural woods, or manage very small, intercropped plantations. Greater use of improved plant types and other agronomic practices is more common in plantations of medium to large size (including fertilizers, pesticides and other technologies). These farmers often rely on nurseries to get superior seedlings. Whether it's agronomy, logistics, manufacturing, or sales, every aspect of the concessionaire zone is specified down to the smallest detail on an industrial scale. Two of Liberia's four largest concessionaires, Sime Derby and Golden Veroleum, are global market leaders and pull in hundreds of millions of dollars annually. The other two major players in the palm industry are Equatorial oil palm and Maryland oil palm.

The impact of cash crops

The dissertation uses the examples of rubber, cocoa, coffee and oil palm to highlight the differences between cash crops and food crops; however, the palm oil industry is distinctive in that the vast majority of smallholder farmers' output is used domestically, with the remainder sold to those large concessions for export. Oils obtained from the monocarp (the fruit's fleshy section) and the seed or kernel of the oil palm fruit are quite different from one another. Palm oil (more than 75% of international output) is used in food items as a cooking oil, shortening, margarine, milk fat replacer, and cocoa butter replacement, while kernel oil is used mostly in the oleo chemical sector for creating soap, detergent, toiletries, and cosmetics. Even though crude palm oil (CPO) is the country's main cash crop, a few hundred people rely on the production of crude palm kernel oil (CPKO) to get by.

Liberia is home to two distinct species of palm trees, the Dura and the Pisifera, both of which have been cultivated locally for hundreds of years. Both natural stands in the woods and garden plots in rural communities are home to Dura trees. Typically, the Dura palm grows in colonies, the consequence of successful seed dissemination. The most common version of this type is called dura, and it has long been a staple in West African recipes (FAO Small-scale Palm Oil Processing in Africa). Due to its widespread usage in Liberia's traditional cuisine, this oil helps to ensure the country's continued access to nutritious meals. Traditionally, males have been responsible for harvesting and processing dura into CPO, sometimes known as "red oil" because to its distinctive dark red hue.³

When the fruit is harvested from the tree, it is known as Fresh Fruit Bunches (FFB). Once the FFBs have been harvested, hauled down, cooked, rinsed, mashed, and mechanically filtered, the oil is skimmed out by hand. This method has a lot of wasted time and potential for contamination and spoiling. Reports from the (FAO) and (MOA) indicate that loss is quite significant, amounting to between 50 and 35 percent during harvest and production, respectively. Free fatty acids quickly accumulate, and the shelf life is cut short because of the system's reliance on human labor.

Reliable data and anecdotal evidence from small-scale exporters indicate that Liberian red oil is highly sought after not just by Liberians in the diaspora but also by other West Africans, notably in the United States. This seems to be the case even in

³ Through selective breeding, namely between the shell less variety Pisifera and the more common Dura, a hybrid with a bigger monocarp and a thinner shell, called Tenera, was created. This later variety is currently used in all breeding and planting programs; its fruits contain far more palm oil than those of the native Dura variety. A palm kernel may be readily extracted from the tiny Tenera nut. However, although the Tenera palm bunch is bigger than the Dura bunch, the Tenera palm kernel is smaller. In all practical terms, the Tenera variant is superior.

local and regional marketplaces. Acidity in oil is often appreciated since it improves the oil's flavor. External applications of red oil are common due to its therapeutic benefits, which include their usage as a laxative, an aid in digestion, and for other medical purposes. As the most popular oil palm hybrid, Tenera is a cross between the two wild oil palm species, Dura and Pisifera. Tenera has a far greater oil producing capability than either Dura or Pisifera, although its major usage has been in industrial applications, such as soap production, rather than human consumption.

Only Tenera was planted in the medium-sized plantations that GOL established in the 1970s and 1980s. More importantly, Tenera palm is fully engaged in those new concessions, which are many hundred times larger than what the GOL had in the 1970s and 1980s, for the express purpose of export. Over 10% of Liberia's agricultural workforce is engaged in oil palm cultivation, according to data from the (MOA) and (LISGIS) for 2010-2011, Given its high demand on the West African market, it is a highly traded commodity in the area's commercial infrastructure. The oil palm is the primary source of fat in Liberian and West African diets. About (8.2%), or 23,860 homes, are headed by men, while only about (18%), or 5,220 houses, are led by women. There are 29,080 households in total that contribute to production in this area. (MOA/LISGIS 2010-2011).

In the table below, the results of a MOA/LISGIS 2010-2011 household survey on cash crops demonstrate the importance of cash crops as a means for smallholder farmers to make a living. Among the 48,280 families engaged in rubber production, 41,800 (84.8%) were headed by men, while the remaining 7,490 (15.2%) were headed by women. There were 29,080 families involved in oil palm production, with men accounting for 82% (23,860) and women accounting for 18% (5,220), or 10.2%. In addition, there are 24 240 homes (79.4% men and 20.6% women) responsible for producing coffee and 35,960 households (80.8% men and 19.2% women) responsible for producing cocoa, for a total of 12 6% of total production. Conversely, when these farmers abandon their fields, food production becomes more unstable.

Table 2: Cash crops household survey.

Description:	Both	General	male	female	Percentage	Percentage
Agriculture	sexes	percentage			male	female
households	number					
Rubber	48,290	17.3%	41,800	7,490	84.8%	15.2%
producing						
households						
Oil palm	29,080	10.2%	23,860	5220	82%	18%
producing						
households						
Cocoa	35,960	12.6%	29,050	6910	80.8%	19.2%
producing						
households						
Coffee	24,240	8.5%	19,250	4,990	79.4%	20.6%
producing						
households						

Source: MOA/LISGIS statistics 2010-2011on cash crops household survey.

Food crops sector

The agricultural industry is essential to any plan that seeks to increase food security, boost economic growth, and build up foreign currency reserves. Out of a total population of slightly over 5 million, the great majority engaged in agricultural production for the sole purpose of meeting their own needs, with little excess for sale in the domestic market or export. Meanwhile, cash crops like rubber and oil palm attract other actors and are managed at a different level. Over 80% of the total workforce may be involved in agriculture. Traditional subsistence farming is the backbone of Liberia's agricultural industry. Rice and cassava are the country's principal basic crops. Over half of Liberia's total land area and nearly 90% of fertile land is in the country's north and central belt, where farming methods are mostly forest-based and are concentrated. Northern and central Liberia formerly supplied majority of the country's food supply. Lofa, Bong, and Nimba Counties, for example, produced more food than they required and helped fed the rest of the country.

The productivity of many food crop farms have not yet rebounded to pre-war levels. farmers in the rice sector considered growing swamp rice as more profitable than

upland rice since it only takes three months from planting to harvest and there is availability of water all year round. Rice production in Liberia is favorable on a wide scale if the swamp is correctly managed. Farmers that grow upland rice must wait for the wet season to begin planting despite the low yield of this crop. The ability to intercrop gives upland rice a leg up. Intercropping is the ability of the upland rice farmer to plant the rice along with other food crops. Returns to cassava production in 2006 were quite outstanding, illustrating the crop's value for food security. Cassava is second only to rice in terms of significance among basic foods in Liberia.

Low productivity of food crops

A major issue is the low food corps productivity that makes it less likely that domestic food production can meet the needs of the growing population. Despite vast unrealized potential, output in the cattle, poultry, aquaculture, and horticulture sectors remains low due to a lack of investment in the sector and research development. Many issues contribute to the stagnation of this sector, such as the prevalence of small farms, the difficulty of gaining access to productive land, the high cost of feed, the scarcity of breeding stock, and the absence of grazing pastures. In an already economically unstable area, rising food prices have had a negative impact on the country's ability to feed its people. Furthermore, imported food goods face stiff competition in the domestic market. Another factor limiting agricultural growth is the high cost of farming inputs that are essential for domestic production. Because of the increased cost of food, this is a huge problem for the poor, who must spend the vast bulk of their little income on food. However, things would not get better in Liberia unless the government prioritizes investments in increasing local production from food crop and critical sub-sectors like livestock and poultry.

High dependency on food imports and markets

There is a high degree of vulnerability to changes in food prices for Liberians since they are net purchasers of food. According to a study by the European Commission, import value increased by an annualized rate of 46.7% between 2012 and 2016, while export value increased by an annualized rate of 2.6% over the same time

period (European Commission Trade in Goods, 2017). In fact, much of the food that people consume, including rice and wheat, is imported. In 2015, it was anticipated that 445 000 tons of cereals were available inside the country; this included an estimated 350 000 tons of rice, 67 000 tons of wheat, and 28 000 tons of maize (FAO and WFP, 2014). For example, when the nation was attacked by the Ebola virus and the borders were closed, 73% of food imports posed a major danger to food supplies (LISGIS 2014).

Because of "poor agricultural activity and output," the (CFSNS 2018) projected that 81% of families relied on the market as their major food supply. Liberia's largest imports are food and livestock, according to the country's central bank of Liberia (CBL, 2018). During those years, they accounted for 22.31 percent, 25.41 percent, and 24.2 percent of all imports. Food and livestock imports were US\$ 244.6 million in 2018, down from US\$ 268.03 million in 2016. Consequently, the nation is very susceptible to food price fluctuations, as happened in 1979 and 2008. In 2016, rice accounted for about 35.51 percent, in 2017, it accounted for about 48.78 percent, and in 2018, it accounted for around 37.8 percent of Liberia's total food and live animal imports.

Food crops` limited access to markets

Farm-gate sales are advantageous for cash crop producers since both concession firms and middlemen operating in the cash crop industry buy directly from smallholder farmers. However, inadequate rural infrastructures, agroindustry, and access to farmland all contribute to the already-scarce markets for food products in rural regions. There are limited feeder roads in Liberia's transportation system, which makes it difficult for farmers to get their produce to consumers. For instance, the whole Southeast region is isolated from the rest of the nation during rainy seasons owing to bad road conditions, leaving residents there vulnerable to increased food costs. High pre- and post-harvest losses and transaction costs are caused by a combination of a poorly operating market system, high levels of informality in the distribution system, and a lack of market knowledge and financial resources. Food insecurity and poverty are on the rise in Liberia because of these causes, which lead to a reduced supply of food on the market and higher prices for consumers.

Low private and public investment in food crop

Investment is often higher in cash crops like rubber, cocoa, and palm oil than in food crops. A rice project started in Liberia but never came to fruition, as seen by the following chart below. The government and transnational corporations (TNCs) enter into agreements in which the TNCs pledge to spend heavily in major concessions. Due this, food and nutrition security may be at risk because the growth of food production is undervalued despite its enormous potential.

Table 3 Private sector investment in large agricultural concessions

	Concession	Date	Tenure	Location	Budget	Investment	status
		signed			USD	Area	
1	ADA/LAP	2007		Lofa	30m	Rice	Inactive
2	Equatorial oil palm	2008	43years	Grand Bassa	100m	Oil palm	Active
3	Sime Darby	2009	63years	Bomi/Cape mount	800m	Oil palm	Active
4	Golden	2010	65years	Sinoe/Grand	1.6b	Oil palm	Active
	Veroleum			Kru			
5	Maryland oil	2011	33years	Maryland	64m	Oil palm	Active
	palm						
6	Cavalla	2011	50years	Maryland	78m	Rubber	Active
	rubber						
	plantation						
	extended						
	agreement						
7	Liberia cocoa	2014	40years	Lofa	12m	Cocoa	Active
	corporation						
	Total				2.684B		

Source: "Liberia policy effectiveness analysis", p.25

CHAPTER IV

Cash Crops versus Foods Crops: Responses at the national level

Introduction

In the long run, the introduction of cash crops to Africa undermined the continent's ability to sustain itself economically and paved the path for broad national economic reliance. With the cash crop economy serving as a conduit between African economies and those of industrialized, capitalist countries, a great deal of money was siphoned out of the continent via an inherently uneven system of trade. The interior served as a pivot point for the local economy. Over time, politicians regarded it as a model for which development should be promoted. Africans produce a large amount of cash crops that they do not need and have little control over setting the price. Liberia is not an outlier to the economic norm that prices decline when most countries raise production of the identical cash crops at the same time (Darkoh, M. B., & Ould-Mey, 1992). With this data in mind, it is very evident that investing more into cash crops would eventually lead to food shortages throughout the country. In this context, the Liberian government's attempts to shift from cash crop to greater food crop production have not resulted in the desired increase in the quantity, quality, accessibility, and stability of the country's food supply. This chapter examines a number of national development policy papers with agriculture segments, nationwide agriculture plans, and government institutions designed to strengthen the country's food supply as part of the national government's reaction, which is meant to change its emphasis from cash crops to food crops.

Poverty Reduction Strategy

In 2006, President Ellen Johnson Sirleaf of Liberia unveiled an interim plan to reduce poverty called (IPRS). The Government's 150-Day Action Plan served as the blueprint for the (PRS). However, before being renamed "PRS" in early 2008, the national policy document was known as the "Interim Poverty Reduction Strategy" (IPRS). The PRS was a quick, inclusive strategy for sustainable development and poverty eradication that included moving closer to the Millennium Development Goals

(MDGs). It was a product of the government's long-term strategy, which included an agriculture component. From April 2008 through June 2011, the PRS spanned three full years. This strategy's anticipated activities and efforts were grounded on four "Pillars": 1) Establishing and Maintaining Stability; 2) Boosting the Economy; 3) Improving Government and the Rule of Law; and 4) Restoring Infrastructure and Providing Necessary Services. However, agriculture as a basis for equitable, sustainable development, and tackling the poverty crisis in all its aspects was at the heart of the major strategic areas represented by Pillars II of the PRS reviving the economy. The strategy's second pillar, "Revitalizing the Economy," details goals and measures for reworking the farming industry. The plan's objective was to improve agricultural output while also ensuring its long-term viability (PRS,2008). During the PRS era, the primary objective of the agricultural sector was to reinvigorate the sector so that it may contribute to inclusive and sustainable economic development and growth, provide food security and nutrition, employment and income, and demonstrable poverty reduction. Moreover the PSR policy also included, Increasing food crop yields by adopting new techniques and technologies; enhancing access to seeds, fertilizers, and other inputs; strengthening linkages to output markets, primarily by rebuilding farm-to-market roads; restoring value chains and increasing community participation in supply and value chains; and strengthening key agricultural institutions that were destitute and were identified as the primary challenges for transformation of the agriculture sector prior to the creation of the PRS.

As part of Pillar II's focus on economic revitalization, goals and measures for remaking the agriculture sector were outlined. The plan's goal is to increase agricultural output and ensure the long-term viability of the forest and fishery sectors. During the PRS era, the agricultural sector's primary objective was to be revitalized so that it can contribute to inclusive and sustainable economic development, growth, to offer food security and nutrition, employment, income, and quantifiable poverty reduction. Others include, improving access to seeds, fertilizers, and other inputs, strengthening linkages to output markets, and primarily by rebuilding farm-to-market roads, were some of the most pressing concerns for agricultural transformation. The PRS further targeted restoring value chains, increasing community participation in supply and value chains,

and rehabilitating key agricultural institutions that were damaged or destroyed during the conflict.

Despite these efforts, early warning of food security difficulties, risk reduction from disasters, and disaster mitigation were all crucial. The PRS policy paper established the foundation for government-wide monitoring of food security and malnutrition trends, with the goal of informing decision-making and allowing for rapid responses to developing issues. The PRS also addresses the need to increase agricultural sector human and institutional capacity. The government's goal was to build strong institutions that are able to deliver essential services in a conducive setting and with the resources necessary to help those in need. Another major goal of the PRS was to strengthen farmer-based organizations (FBOs) as representatives of agricultural communities and to guarantee their position in local level planning, while also reestablishing the government's role as custodian of Liberia's natural resources. The policy established FBO as the primary means of bolstering farmers' capabilities and the arbiter of what services would be offered to them. Also, the PRS served as a guide for determining where to place resources for agricultural research and extension based on the priorities set by FBOs.

Food Security and Nutrition Strategy

The National Food Security and Nutrition Strategy (2008), a cross-sectoral strategy meant to address food security and nutrition, included the establishment of a technical committee and a food security and nutrition monitoring mechanism, both of which was aimed to strengthen and improve inclusive food security possibly in reaction to the global food shortage that occurred in 2007–2008. With the publication of this Food Security and Nutrition Strategy (FSNS), the government of the Republic of Liberia declared its commitments to undertake activities that will put in motion to substantially reduce food insecurity and improve nutrition in the country. During that period, government recognizes that to further its ambitions of peace, reconciliation, stability, and development, for the nation as a whole, Liberian household must achieve food security and improved nutrition (FSNS 2008). Certainly, the Liberian economy during that time relaxed heavily on the food security and the nutritional well-being of its

citizens. By ensuring that all its citizens have reliable physical and economic access to sufficient safe and nutritious food to meet their dietary needs. Moreover, the food preferences of the government were laying a strong foundation for not only a prosperous nation, but also a more peaceful and secure nation. The key objectives of the FSNS were to make certain that all Liberians have reliable access to the food they need and can utilize that food to live active and healthy lives (FSNS,2008). However, the government, realized that food security and good nutrition was not a policy choice of government that it can decide to accept or reject, but a right of the citizens of Liberia which the government is obligated to respect, promote, and protect. The FSNS was neither an agricultural nor a rural strategy, despite its formulation being led by the Ministry of Agriculture. Its objectives were achieved through the joint actions of multiple sectors and agencies of government, working with local and international partners, both in civil society and in the private sector.

Agenda for Transformation

The Government of Liberia adopted a five-year development plan called the Agenda for Transformation (AFT). It follows the Lift Liberia Poverty Reduction Strategy (PRS), which was implemented over the course of three years (2008-2011) and helped Liberia move from emergency rebuilding to economic recovery. after the country's experienced the impacts of the 2007-2008 global food crisis. The Agenda for Transformation (AFT), often known as Liberia (rising 2030), was not only designed to bring about change in the agriculture sector for five years (2012-2017). Instead, it was a baby step toward accomplishing a major objective in Liberia by the year 2030. To help Liberia achieve structural economic change, prosperity, and inclusive growth, the AFT developed a long-term vision that lays out clear aims and objectives of corresponding initiatives. The AFT was developed as a follow-up to the PRS in order to improve upon its successes and address its shortcomings. Since agriculture and food security provide the most jobs and food to the most people, they are addressed in AFT pillar II, which is concerned with economic change. To achieve economic growth, increase in national wealth, and a decrease in poverty, agriculture in Liberia was strategically placed at the center of the country's development agenda (AFT, 2012). The AFT's agricultural

mission was to foster a strong, competitive, and modernized agriculture sector that supports sustainable economic growth and development. As this chapter analyzes these important government policy papers that focused on the reaction towards agriculture and food security, the AFT inherited certain constraints from the PRS implementation, including: Low productivity among small-holder farmers may be traced back to a number of factors, lack of access to necessary inputs like fertilizer, irrigation, quality seed and breeding stock, as well as a lack of financing. Others include, equipment, infrastructure for transport, storage, and marketing. This was due to the dearth of a food processing sector to help farmers and ranchers get their goods ready for distribution in regional, national, and ultimately global markets. Those who farm or fish on a smaller scale often had a poor understanding of market trends, available technologies, and industry best practices. Investment, adoption of better technology, and economies of scale are all stifled when land ownership is unclear.

Transforming the industry was a primary strategic goal for the AFT. Nevertheless, these Goals included boosting small-farmer output, value-added, and environmental sustainability, with a focus on women and young people. Grow the participation of small farmers in both national and international markets. The ATF further highlighted sustainably boost for fish output, Improve the availability of agricultural tools, fertilizer, storage, finance, training, technical aid, market information, upgraded technology, and associated services such farmer cooperatives and small farms. The availability of land and the assurance of ownership for farmer was also expanded and that all Liberians would benefit from better nutrition (AFT, 2012,).

The AFT's agricultural policy component tasked the MOA with facilitating the development of cooperatives and aligning small farmers whenever possible so that they may better access markets for inputs and produce. Economic growth in agriculture was expected to help alleviate poverty and enhance people's standard of living, and cooperatives. Small farms were going to play a key role in this. The agreement was made to collaborate with local agricultural groups and plantation proprietors to determine the best appropriate intervention strategy for each location.

Increased productivity output, domestic sales of food crops, export large quantity of cash crops, and animal production are all goals the AFT's planned result indicator

aims to be realized. There are a few more possible results. Acreage devoted to irrigated agricultural production rose, and both the quantity and quality of fish were enhanced. The strategy aimed to enhance family nutrition, particularly for disadvantaged families, and lower the country's reliance on rice imports. Priority interventions were established in the MOA to ensure the AFT's agricultural and food security provisions were carried out. The policy's successes were further implemented via the MOA's provisions for the purchase of approved food crops from smallholder farmers in order to stimulate employment in the agricultural sector and the provision of lenient credit terms to the farming community. The MOA, carried out, improved smallholders' access to financing and agricultural equipment via cooperatives, small farms, leasing services, and also addressed the training requirements of farmers through research and extension services. MOA supported research that was applicable to local farmers since better agricultural technology are a public benefit, particularly for smallholder's farmers. The problem of infrastructure was crucial in order to have a productive and effective agricultural environment. The Ministry of Public Works (MPW) addressed some of the infrastructure requirements for farmers to have decent roads for transportation as part of the national government's response to enhancing food security in Liberia through the AFT road plan. The AFT may succeed in part because of improved farm-to-market highways, which would allow for the warehousing and shipping of agricultural goods for the private sector and cooperatives. The government also created and advocated for the adoption of product standards that were on par with those of competitive imports.

Pro-Poor Agenda for Prosperity and Development

The current government development program for Liberia is called the Pro-Poor Agenda for Prosperity and Development (PAPD) 2018–2023. It is the latest in a long line of national development policies that aim to solve national development challenges. The PAPD, like the PRS and the AFT of previous President Ellen Johnson Sirleaf, featured a pillar containing a part that dealt with agriculture on a national scale. In focusing on agriculture, as outlined in Pillar 2 of the PAPD, it is recognized that this industry is responsible for the creation of almost half of the existing work force (Labor Force Survey 2010). Additionally, the industry is connected to fighting poverty and

ensuring adequate nutrition. However, the majority of the sector's workforce is concentrated in cash crop production, which is a significant contributor to the country's balance of payments (BOP) since it generates significant amounts of foreign currency (PAPD 2018). When it comes to long-term economic diversification, the PAPD policy's primary emphasis is on reforming the industry. The primary objective of PAPD is the development of a more competitive and diversified agricultural sector in Liberia that supports value chains to achieve food self-sufficiency, higher exports, more jobs, and improved living standards. Private sector cooperation with agricultural concessions and smallholders were also highlighted in the strategy statement as a means of increasing local food production and processing. To increase exports of cocoa, palm oil, and coffee, three of Liberia's most important cash crops and sources of foreign currency—the government plans to speed up the creation of the Liberia Agricultural Commodity Regulatory Agency (LACRA) to provide a regulatory role and quality control only in the coaco, coffee and palm oil local industry. The PAPD's stated goal was to develop a plan that would increase the competitiveness of selected growth-driving commodities such rice, cassava, cocoa, fisheries, horticulture, livestock, oil palm, and rubber. Because of the anticipated rise of 5 percent in public investment on boosting agriculture productivity. The plan on agriculture expects a minimum gain of 5 percent in agricultural output at the national level (PAPD 2018).

About 67.5 percent of family income was spent on food in 2016, and rice accounted for 22.4 percent of the total (HIES 2016). Supporting private sector engagement, such as via contract farming to lure farmers to join and to stimulate production surrounding processing facilities, is a crucial strategy to enhance food production in line with the PAPD policy purpose. The government hoped that this would help Liberia become less reliant on rice imports. There was to have been a general lessening of food insecurity, and the agricultural sector's share of GDP was supposed to have gone up from 26% to 35% over the course of the next five years.

Approximately 264,00954 farms out of a total of roughly 400,000 are dedicated to growing cassava (LISGIS, NCS 2016). The government's objective is to improve cassava value chains by expanding access to inputs, particularly for women farmers who are overrepresented in subsistence agriculture. Research and development

(R&D) efforts should be bolstered in order to improve suitable production technology and processing throughout the value chain, smallholder groups should be given more agency, and farmers' cooperatives should be encouraged to adopt an entrepreneurial attitude. Liberia needed 36,500 metric tons of vegetables per year, to address the problem of vegetable scarcity. After accounting for inflation, it was predicted that demand would increase to 41,261 tons throughout the PAPD era. To ensure a steady supply of veggies, the government, via the Ministry of Agriculture, is encouraging the use of cutting-edge methods of cultivation and the processing of a variety of crops. Equipment, a wide variety of enhanced seeds and planting material, and warehouse space were all part of the supplied technology. The government was directed to establish a duty-free program for agricultural equipment and goods.

It is clear that within the programme, the government has prioritized the cash sector. Palm oil has enormous export potential and is already important for several West African countries to the economies of the United States and the European Union (EU). By resolving issues with land access and investing in the training of out-growers and the workforce in close cooperation with the sector, national government can increase the productive potential of the agricultural sector, especially at the smallholder level. Cooperation and Farmer Field Schools (FFS) were bolstered via training and the provision of business and extension services. The PAPD saw the crucial need to expand oil palm cultivation and trade. The potential for oil palm production was so importan that the government pledged to find a peaceful resolution to land conflicts so that more land may be used for oil palm plantations. It was projected that 13,000 new employment, \$150 million in exports, and \$48 million in tax revenues would result from expanding oil palm output to include an additional 84,000 hectares farmed by independent farmers. In addition, 34,000 people in rural areas may have their lives improved if they were assured of a stable income, and their dependents' lives would improve as a result. The PAPD response to food security also highlighted the rubber industry. The government strategy for the largest cash crop sector rubber, was mentioned in the PAPD. The agriculture policy document considers the export of rubber as crucial to Liberia's economy. More than US\$86 million, a 12 percent increase was expected to be earned during the PAPD implementation period from exporting rubber, making it the single most important agricultural export. Production and direct export of rib smoke sheets improved the value of involvement by Liberian businesses and people. One of the government's objectives in the PAPD was to enhance the availability of essential infrastructure and services in the rubber industry, as well as to boost the overall trade support network. Improving production and processing at each stage of the value chain is a priority for the government, therefore it is helping to increase access to inputs and funding for Research and development(R&D). Even further, the government intended working with a group of local rubber farmers and other small producers to spread an entrepreneurial spirit and expand financial opportunities.

Cocoa was also acknowledged by the government as having the potential to become the second most valuable agricultural export product. The PADP estimated export profits of around \$US27 million. The average annual cocoa harvest grew from 200 to 800 kg per hectare between 2010 and 2017. In a span of five years, total output was predicted to rise from 6,773 to 52847 metric tons (PAPD 2018). The government plans to increase the cocoa industry's total trade assistance network. Because of this, businesses will have easier access to trade information and a greater capacity to put that data to use. As a result, Licensed Buying Agents are now of higher quality and more effective than before. The government's efforts to strengthen the sector's cooperatives and Farmer Field Schools (FFS) have helped build the reputation of Liberian cocoa and position the country to take advantage of the growing demand for certified cocoa exports. In order to hasten the pro-poor agenda in agriculture, the government has pledged to pursue novel policy prescriptions in the areas of incentives, research and innovation, investment, industry, and marketing. Policy coordination, agricultural research, and the extension system will be strengthened, and national agricultural instruments will be brought into line with regional and international norms.

Liberia agriculture sector investment plan (LASIP- I)

Liberia has various agricultural policies that are geared towards direct investment in the industry, in addition to a national development policy plan that captures agriculture. As part of Liberia's commitment to the Comprehensive Agreement for Agriculture Development Program (CAADP), (see chapter six), the country launched

the Liberia Agriculture Sector Investment Program (LASIP-I) in 2010. The LASIP-I paper outlines Liberia's long-term, ecologically responsible, and economically viable goals for agricultural expansion and development over the next decade. The LASIP-I prioritizes sectors from which national goals may be aligned with investment initiatives. The initiative was a public-private partnership (PPP), with private companies driving export sector investment growth and the government supporting the expansion of farms with less than five acres of land.

While the government controls and fosters development via the provision of access to smallholders and women, the LASIP-I plan included an investment subprogram focused on the private sector called the Food Agriculture Policy and Strategy. Large commercial investors, SMEs in agricultural production and services, and smallholders all make up the private sector. In order to encourage businesses to engage in certain sub-sectors within the agricultural sectors, the national government has devised a strategy, outlined in the LASIP-I agriculture investment policy. It's time for a shift in the agricultural industry's attention from rubber to other crops including rice, palm oil, cocoa, coffee, and bananas. The private business sector invested approximately 800,000 hectares and created 40,000 to 60,000 formal employments in 2010 (representing 6% of the labor force) (MOA 2010). Government revenue was anticipated from the commercial private sector in line with growth objectives set in the LASIP-I investment plan for agriculture. Four primary initiatives made up the bulk of the LASIP-I investment plan.

Because of low production, poor road conditions, significant post-harvest losses, low-income levels, and weak systems of coordination and information management, ensuring that people have access to and are able to use food was a key obstacle that the first program aims to address. As a result, lowering food prices was a top priority during that time period to provide food security for the Liberian people, who were net purchasers of food. In 2010, problems with ownership and administration, outdated tree stocks and varieties, unimproved germplasm, and a lack of value addition plagued the cash crops subsector. Another thing that the investment brought to light Weak institutional capacity for planning, guidance and monitoring, and surveillance; a lack of infrastructure (such as ports); and a lack of storage, processing, and handling facilities

all impeded the fishing industry, especially artisanal fishing. Under the LASIP-I initiative, efforts were also made to restore, increase, and diversify smallholder cash crops. Import trade strategy was also studied in order to enable Liberian manufacturers compete with foreign goods. With the help of the LASIP-I during the first program, Liberians were able to permanently solve the problem of food insecurity, move on from emergency food aid to regular food aid, and make strides toward the Millennium Development Goals (MDGs), notably in the areas of poverty and food insecurity.

Under LASIP-I's second initiative, Liberia was tasked with establishing competitive value chains and linking to established markets. The road network in rural areas is both inadequate and in poor condition. Food safety and quality control systems were already difficult to implement because of a lack of storage, drying, and processing facilities. Farmers were unable to make informed marketing choices due to a lack of knowledge and weak links between producers and markets. In 2008, agriculture received just 5% of total commercial bank loans, (CBL, 2008) indicating a chronic shortage of this resource. Rural areas often lacked access to basic financial services. Liberian farmers at that time lack the expertise and skills to use and maintain labor-saving technology, hence agriculture was still done mostly using basic hand tools. Nationwide and industry-wide capacities for effective deployment of cutting-edge technologies and administration of agricultural breakthroughs and gear were quite inadequate. In a rush to improve farmers' and consumers' access to marketplaces, the LASIP-I program upgraded and expanded its transportation and agricultural facilities. Storage and processing facilities and infrastructures for crops, livestock, and fisheries will be upgraded, and farm-to-market routes were renovated and extended as part of this component. Increasing small farmers' and other value chain members' capabilities via training in agricultural practices, sharing of relevant data, implementation of new technological solutions, and access to affordable loans in rural areas. Access to rural financing and improved transportation networks made it possible for small and medium-sized enterprises (SMEs) in Liberia to expand their businesses. These actions constitute the first phase of a multi-stage strategy known as "farming as a business."

At that time, there were emerging of new agriculture technologies in developing nations, which places a greater emphasis on innovation systems, value chains, and the creation of adaptive research in partnership with regional institutions. However, LASIP-I chance to adjust to the new paradigm that was not actualized due to the what seen to be the underfunding of the program. Many smallholder farmers were uneducated and based in rural areas where they had limited access to modern resources for agricultural and economic growth.

Through this third program, the Ministry of Agriculture (MOA), the corporate sector, and others intended to convey to Liberian farmers more advanced means of producing, enhancing the value of their goods, and selling them. Land and Water Management was the LASIP-I's last and fourth program. It was the goal of the Land and water management program to maximize the benefits of the country's natural resources in terms of increased food production and increased economic activity. Farmers' access to land, security of tenure, and sustainable use of this resource will be prioritized. The fourth pillar also the program establishes a road map for increasing farmers' yields and opening the agricultural market to investors of all sizes.

Liberia Agriculture Sector Investment Plan II (LASIP II)

The majority of the projects were not put into action in order to better understand the underlying causes of food insecurity in Liberia from 2010 to 2018 (the LASIP-I implementation period). As a result, LASIP II was created in 2018 to enhance LASIP-I. Additionally, LASIP-II, whose implementation span was from 2018 to 2022, emphasized the reasons why food insecurity and malnutrition were prevalent at the time. Some of these causes were: the usage of outdated farming techniques, the effects of climate change, and the lack of investment in infrastructure (including roads) that have a direct bearing on the lives of resource-poor farmers. Depleted soils, a lack of technology, external inputs, and the associated poor productivity. Other include, revenue, exacerbate existing issues of food scarcity, lack of dietary variety, the challenge of integrating nutrition into agricultural practices, and the inability of women to gain ownership of land. LASIP- II further addressed food and nutrition security; competitive value chain development, market linkages, agricultural extension, research and development sustainable production and natural resources management; improved governance and institutional strengthening; these were major interrelated strategic

components proposed by LASIP II. The LASIP II foundation rests heavily on the stability of food and nutrition systems. A sustainable supply of food that is both abundant and varied, with enough nutrients for people to have active, healthy lives is the goal. The document's creation was guided by a requirements assessment and feedback from relevant parties. There are specific steps outlined in the text that may be taken to combat hunger and malnutrition. By working with private agricultural concessions and smallholders, the government of Liberia hopes was to raise domestic food production and processing through the LASIP II.

The strategic goal of LASIP II was to improve the lives and resilience of Liberia's most marginalized people and to guarantee them access to adequate food and nutrition. As such, it focuses on economically disadvantaged persons such kids under 5, mothers, and the elderly. Given that men and women have uneven access to resources, it suggested, for instance, that "nutrition be mainstreamed into agricultural initiatives with high gender sensitivity," and that "gender and environment sensitive technologies and practices" be promoted. Through social protection programs for vulnerable people, innovative financing systems, and improved access to natural resources by the poor, LASIP II sought to address acute food insecurity situations like droughts, floods, bushfires, and unexpected pest and disease outbreaks on crops and livestock.

The root causes of food insecurity and malnutrition are more thoroughly addressed in LASIP II. Whereas other national development programs and strategies did not devote as much attention to the issues of food availability, usage, and stability as LASIP II did, it did so in a major manner. For instance, one of LASIP II's main goals is to ensure people have "sustained access" to "enough, diverse nutritious and essential food for utilization for active and healthy lifestyles." Increased productive capacity and incomes of poor and vulnerable farmers; better nutrition and food availability; and a dependable and functional food and nutrition security information and monitoring system are all goals (LSAIP II, 2018). But as mentioned above, Component 2 of LASIP II's strategic objective to develop and support competitive value chains and market linkages complements Strategic Objective 1 by tackling some of the root causes of food insecurity and malnutrition, such as limited access to markets and infrastructure, as well as a lack of funding for smallholder farmers. Positive results are anticipated in the form

of an improved business environment for farmers, the growth of agro-industries, the improvement of agricultural infrastructure, the establishment of competitive value chains and market linkages, and the promotion of inclusive and innovative agrofinancing (LASIP II, 2018).

Liberia Agricultural Transformation Agenda

Government of Liberia announced the Liberia Agricultural Transformation Agenda in 2015 as a presidential endeavor in response to the post-Ebola virus epidemic period (LATA). A major focus for LATA was on establishing reliable and sustainable value chains for certain crop types. The goal of LATA was to foster market systems and implement industrial strategy in order to develop value chains for agricultural products at every stage of the supply chain, from harvest to final sale. On the other hand, LATA used of strategies to adopt an export-driven industrial policy for the 21st century, with targeted government interventions, including (1) bolstering the agricultural sector as an additional economic pillar by focusing on the value chains for which Liberia has comparative advantages; (2) dramatically increasing the amount of sustainable livelihood in the sector by promoting self-sustaining market systems linking farmers all the way to the final consumer.

Several governmental bodies and agencies have been established throughout the years to roll out and implement LATA and other aforementioned programs and policies. These are also briefly outlined below.

Central Agricultural Research Institute

In Liberia, the Central Agricultural Research Institute (CARI) operates with some independence. It is an institution reasonable to do research in the agriculture sector. Most studies focused on rice and cassava, and efforts were made to mass-produce and enhanced rice seeds. Unfortunately, there are no currently published inventories of successful technology or clear-cut advice for farmers based on their unique resource situation. The connection between study and teaching has not improved (McNamara, Swanson, & Simpson, 2011). Some blame CARI for the longstanding gap between academic study and practical application for this situation. A new strategic plan to direct

CARI activities and the academic training of incoming personnel may, however, set the stage for closer cooperation between research and extension. Graduates of this generation may have received training that equips them to promote research-extension connections and reap their advantages. CARI has formulated a new five-year plan for the years 2015–2025. The strategy is based on the agriculture innovation system (AIS), a paradigm that has been developed through studies of agricultural production and its effects on society. The revised goal of this strategy is to create "a commercially-oriented agricultural sector powered by research, technology transfer, innovations, knowledge, and techniques that will contribute to an enhanced quality of life for all Liberians" (CARI, 2014, p. 33). Agricultural research, information and knowledge dissemination, capacity enhancement, and advocacy are CARI's primary tasks. Extension (public, private, and civil society) is an integral part of AIS and a key stakeholder in research, and it is within this framework that the vision will be realized, and the functions will be carried out. The strategy calls for extension to help identify research gaps and collect study findings (CARI, 2014, p. 30). CARI's role in developing capacities includes fostering productive partnerships with public and private sector extension organizations to facilitate the transfer of innovations (CARI, 2014, p. 35).

Department of Regional Development Research & Extension

The Department of Regional Development Research & Extension (DRDRE) of the MOA provides EAS on behalf of the public sector. For administrative purposes, the Republic of Liberia is divided into 15 counties and around 130 districts. DRDRE services have been centralized at the county level in order to devolve them to the district level. District agricultural officers (DAOs) at the district level and the County Agriculture Coordinator (CAC) collaborates in a decentralized manner. Currently, each county has a CAC that is in charge of managing EAS activities throughout the whole county. Although there is a County Livestock Officer for each county who works in a different agency, DRDRE lacks some subject matter expertise.

Before the war, Extension agents were posted at the clan (township) level and in each district. The number of extension officers to farmers was estimated to be between 1: 1,000 and 1: 5,000 in 2014, drastically reducing coverage (Moore, 2014).

The primary goal of DRDRE is, however, severely hampered by the high extension staff to farmer ratio. The MOA and DRDRE's coverage clauses are purposefully and practically broad. The MOA coordinates the work of a number of field agents who are not regular government employees but are instead privately employed by NGOs and supported by individual donors. When the services offered are well-coordinated, the coverage-increasing goal that underpins pluralism has a higher chance of being accomplished. The Agricultural Coordinating Committee (ACC), a committee created to bring the many agriculture and EAS stakeholders together to coordinate activities in the sector, share information, reduce duplication of services, and increase EAS delivery. Meanwhile, the ACC was established by the MOA in an effort to coordinate such activities. The need for coordination is crucial, and if it is adequately handled, it may help more farmers receive better services. If given the necessary training (coordination involves certain knowledge, abilities, and attitudes) and resources, DRDRE/MOA is qualified to take the lead in the coordination effort. The National Policy for Agricultural EAS, which was previously discussed, proposes an EAS-specific platform for coordination at the national, county, and district levels. The ACC was made open to all parties involved at all levels, with a focus on farmer participation, especially at the district level. According to the traditional, sequential view of EAS, researchers give extensionists agricultural production technology, and the latter in turn trains farmers on how to apply it. The definition of "extension & advisory service" (EAS) has been broadened to encompass "all the various activities that provide the information and services that are needed and demanded by farmers and other stakeholders along value chains to know about and make informed decisions regarding agricultural practices in order to improve their livelihoods and well-being" (Christoplos, 2010; Hird-Younger & Simpson, 2013). Examples of practices include those involved in production, processing, marketing, and finance.

Conclusion

The present collection of policies and initiatives defines and analyzes the root causes of food insecurity, malnutrition, and the need to increase food production in Liberia in great detail. However, unlike LASIP II, several of these other planned and

existing national policies and initiatives target both immediate and underlying problems at the national level. The Liberian government's long-term goal is for the country to achieve fast, inclusive, and sustainable growth and development from 2008-2011, and the Poverty Reduction Strategy (PRS) lays out the main tactics that will be used to achieve this goal. The transition from post-conflict stability to establishing the groundwork for inclusive and sustainable development, poverty reduction, and advancement toward the Millennium Development Goals is a time of fundamental significance in Liberia (MDGs). The PRS was developed after extensive outreach to Liberian individuals in urban centers, rural areas, the business community, civil society organizations, the Liberian Legislature, and foreign partner organizations. The agricultural section of the PRS draws on discussions from throughout the society for its primary topics. Based on the findings, a fully implemented PRS would have persisted far beyond 2011 and served as a stepping stone toward a program of long-term food security and self-sufficiency. The 2007–2008 global food crisis may have prompted the development of the National Food Security and Nutrition Strategy, which sought to reinforce and promote inclusive food security via the creation of a technical committee and a food security and nutrition monitoring system. Instead of being a short-term fix, the AFT Agriculture section served as a continuation of the PRS as a long-term plan for the country's progress. According to the findings, the AFT was implemented as a solution to PRS's shortcomings. The AFT was optimistic because it built upon the PRS's achievements but looked farther into the future, all the way to the year 2030. In 2018, innovations such as PAPD and LASIP II were created. Though LASIP II does a better job of explaining what's going on, the PAPD is concerned with what might be done to reduce food insecurity by strengthening commercial agricultural supply networks. In the PAPD, LASIP II was developed further. Every new administration between 2008 and now have considered developing their own policy after analyzing all these national programs. The PAPD, which is currently being carried out, is highly thorough, but it lacks the implementation of a move toward diversifying the food security sector. It seems to benefit the cash crop industry more than the food crop industry with a clear idea of focusing and investing in the cash crops sector of Liberia.

The government perceived food security at the national level as households having access to food, regardless of how stable and long-lasting that food may be Consider Liberia, where the bulk of food consumed is imported and where the agriculture sector is dominated by cash crops. Therefore, the national government's perspective and knowledge of food security are always grounded in a short-term strategy: which is the availability of food through importation rather than local production. Having enough imported food on hand or for sale on the local market, is viewed at the national level as ensuring food self-sufficiency. But from a policy perspective, it is apparent that national government favors a long-term strategy that relies on objectified local food production to increase food supply. However, authors of the food security component in the PAPD document were certain that the PAPD implementation process would bring in income for the government and provide jobs for the people.

The Liberia Agriculture Sector Investment Plan (LASIP) of 2010 was created to catalog the country's efforts toward greener, more sustainable agricultural expansion and improvement. The LASIP prioritizes sectors from which national goals may be aligned with investment initiatives. The initiative was a private public partnership, meaning that private companies led the charge in increasing investment in export-oriented industries. However, this strategy did allow agribusiness capitalists to begin investigating which agricultural functions had the most investment opportunities. The Liberia Agricultural Transformation Agenda was first implemented as a reaction to the post-Ebola period (LATA). LATA's mission was to promote and encourage farmer-centric market systems via the creation of value chains for agricultural commodities at every stage of the supply chain, from cultivation to processing to final product. But again, the cash crop market has been the main focus of these programs.

CHAPTER V

Cash Crops versus Food Crops: Responses at the Local NGO level

Introduction

Some countries on the African continent have been investing in local NGOs to prioritize food crop production above cash crop in order to obtain food security and self-sufficiency. Liberia is no exception to the need that developing nations' rural farmers require assistance of nongovernmental organizations (NGOs) to meet food security and self-sufficiency demands, notably in the realm of extension advisory services (EAS). This chapter looks at the ways in which local NGOs are responding to the discussion on cash versus food crops by providing agricultural extension services, and how they are contributing to close the service delivery gap experienced by producers of food crops. Since the end of the civil war in 2003, the government has been unable to devote as many resources as possible to providing agricultural extension advisory services, especially in food crop production (MOA 2008). This has given rise to an increased role for non-governmental organizations (NGOs) in providing these services.

It is important to remember that non-governmental organizations (NGOs) were already active in Liberia's agricultural extension programs before the civil war and they provide a wide range of services, including but not limited to agricultural information assistance, input and credit supply, training, technology transfer, and project assessment and monitoring. They are also involved in campaigns to increase funding for agriculture from its current 1 percent of the national budget to 10 percent. Local non-governmental organization (NGO) work in a certain field is coordinated by the MOA's DRDRE (Department of Regional Development, Research, and Extension) (MOA 2017).

Advice and information exchange are also key parts of agricultural extension (Garforth, 1997). Liberia's attempts to better its agricultural sector and national food supply have been hampered by the country's limited access to extension advising services. The current agricultural extension system is supported by the Ministry of Agriculture (MOA) and a variety of non-governmental organizations (NGOs) and international NGOs (INGOs), such as the Food and Agriculture Organization (FAO) and the United States Agency for International Development (USAID), among others. Local

EAS, moreover, is often supplied by NGOs and other charitable groups including individual farmer's NGOs, farmer-based organizations (FBOs) such farmer associations, cooperatives, and faith-based NGOs respectively. The Farmers' Union Network of Liberia (FUNL), (ACDI/VOCA), and the Community of Hope Agriculture (CHAP) are some examples of local NGOs in Liberia that provide services to farmers. Non-governmental organizations (NGOs) in Liberia such as these, often rely on donor funds to participate actively in agricultural and food security. Almost all these organizations' budgets come from international or private donors concerned with food security. Transitioning from cash crop to greater food crop production is a noble goal, but this calls into question the long-term viability of local NGOs' operations or involvement in the discussion.

Local NGOs and the "cash crop" versus "food crop" debate

The rise of NGOs on the local and international scene is an important phenomenon which has implications for the development prospect for the poor marginalized rural households, for the future of these organizations themselves, and for the wider political economy of which they form a small but a growing part (Edwards, 1998). Even Liberia has seen a rise in the number of NGOs in recent years, and they have been seen as a potential answer to the issue of food insecurity in rural households.

Food insecurity is a serious problem, and non-governmental organizations (NGOs) may help alleviate this problem by supporting the efforts of the poor to address its root causes. Along with national and international plans for economic development in the 1980s, there was a growing focus on the possible role of NGOS in ensuring food security for rural households (Sahley, 1997). Africa's indigenous nongovernmental organizations (NGOs) are receiving a growing share of foreign aid dollars, and their success is helping the continent become more self-sufficient in terms of development. However, a robust NGO sector can also become a pervasive part of African society, with the potential to shape public policy, strengthen farmer-led organizations, and forge public-private dialogue.

Food insecurity is a major issue in Liberia, especially in the Eastern Areas of the Country (EAS), which makes the presence of non-governmental organizations (NGOs)

in these rural regions more necessary. NGOs also have a lot of leeway in expanding their programs into food security by partnering with government services, since there is a weak government presence in rural regions and a generally supportive attitude towards NGOs. Liberia's high rates of rural food insecurity and poor food crop production, along with the government's limited ability to undertake development efforts, provide ideal conditions for the growth of grassroots nongovernmental organizations (NGOs). This provides concrete details on the environment in which local Liberian NGOs work in the agricultural sector.

Farmer-based organization

Over the course of many decades, African governments and donors have actively fostered and supported the growth of farmers' organizations for both pragmatic and strategic reasons. Farmer-based organizations (FBOs) like cooperatives, savings and credit societies, commodity farmer associations, and others have been advocated as part of a broader strategy for agricultural modernization and structural transformation of national economies, alongside planned economy in some cases and free-market economy in others. Liberia is no exception to this trend. However, different farmers' groups are formed for various reasons and are required to carry out various responsibilities. In certain cases, FBOs' contributions to the execution of government and donor-supported initiatives may be confined to ancillary activities like facilitating service delivery, mobilizing local resources, and collective marketing. On the other hand, FBOs may have a legal responsibility to help their members gain influence in their communities and work with policy and service providers by erecting more formalized systems and bolstering their capacities.

FBOs may play a wide variety of functions, and the ways in which they function may also vary according on location and circumstance. Because of this, it is difficult to provide a universally applicable definition of farmers' groups. For the purposes of this investigation, a description of FBOs as "institutions of participatory governance with grassroots structures created by smallholder farmers and processors as building blocks, reflecting their interests, and with a certain amount of responsibility to them" would serve (Uphoff and Esman 1974). FOB is essential in Liberia's effort to switch from

producing cash crops to producing food crops. According to the findings, an FBO, particularly one with legal status, may help with the bundling of goods and connections to the market, including gathering orders from buyers and distributing information to its members, negotiating minimum rates, and establishing a delivery date.

For rural areas to benefit from demand-driven, market-oriented advice services in the future, the development and capabilities of FBOs are crucial. Almost all development success stories may be traced back to group effort. However, there is a lack of knowledge about the many ways in which FBOs contribute to extension initiatives. In many cases, local rural development attempts tell the narrative of disbanded farmer associations. These organizations, formed for a variety of reasons by governmental agencies or development organizations, often lacked the foundations necessary to ensure their survival. Clearly, finding alternatives and tactics for fostering effective rural advisory services (RAS) depends on a deeper understanding of the role farmer groups play in development outcomes. However, restricted access to money and the absence of responsive financial services is a success for FBOs throughout the nation in their advocacy for farmers, making it a struggle for FOB in Liberia. It was difficult for the organizations, especially new unions, to get the finance they need to invest in necessities like new buildings and equipment and to maintain daily operations like buying crops when they were ready. The funding needs of farmer and cooperative unions are never fully met, even though some of these groups can get loans from savings and credit unions. One of the most important components in a company's success is its ability to have access to reliable and sufficient financial services.

Evaluating Local NGOs impacts on food security in Liberia

The Farmers Union Network of Liberia (FUNL) is a non-political, non-profit, and membership- based organization that represents all farmers in Liberia. Its purpose is to advocate for farmers' rights and provide them the tools they need to boost agricultural output, ensure adequate food supplies, and raise farmers' socioeconomic standing in Liberia. Further, it acts as a lobbying group representing Farmer interests (FUNL). Donors supported FUNL's efforts to increase farmers' involvement in advocating for policy change in the food crops production sector, increase farmers' involvement in

advocating for policy change in other sectors, and improve EAS services. They also saw their efforts as a right-based lobbying strategy for opening doors for farmers to participate in initiatives that would improve their living conditions. (Roppa, Gyapong, A. Y). Most farmers in the country's rural regions don't have a voice in national government discussions of issues impacting their ability to grow food crops, which threatens food security and keeps agriculture's primary focus elsewhere.

Against this backdrop, FUNL also provides quality, effective, and efficient service to farmers by, for example, increasing farmers' motivation to grow food crops, altering farmers' and community members' perceptions of certain aspects of traditional farming, and ingraining the idea that they can play an active role in advocating for policy change within the food crop sector. To help coordinate local FOB in the agriculture sector, FUNL, as one of the key FOB, also worked closely with the regional agricultural coordination committee (ACC) of MOA. As recently as 2013, farmers' voices were heard calling for a ten percent increase in the yearly national budget allocated to Agriculture.

Local Liberian non-governmental organizations had a distinct take on the discussion on food versus cash crops. Liberia's staple meal is rice, hence the Community of Hope Agriculture (CHAP), a local NGO, focuses mostly on rice production. For Liberia to make the shift from producing cash crops to producing food crops, the rice problem is of paramount importance. Since 2008, at the height of the 2007–2008 global food crisis, the group has been pushing for the Liberian government and farmers to put more resources into local rice production to increase the country's food security, selfsufficiency, and the debate over whether to prioritize food crop production over cash crop production (SRI international 2012). (CHAP) has been advocating for more funding for local non-governmental organizations (NGOs) working with farmers. Community of Hope Agriculture Project (CHAP) initiated ways of keeping her outgrower scheme farmers under the "Rice Investment for Empowerment" (RISE) growing food during this crisis period in support of Government Liberia COVID19 Food Security Plan through the Ministry of Agriculture, calling on everyone to grow something during Government Liberia COVID19 Food Security Plan through the Ministry of Agriculture, calling on everyone to grow something during the COVID19 outbreak May 15, 2020,

global health crisis is also affecting At the time of the outbreak of the health crisis, the farmers who were receiving help from CHAP were at varying stages of their agricultural endeavors. On April 29, 2019, the local NGO launched the "I Love Liberian Rice Campaign," an initiative designed to increase food security in Liberia through increased rice production, processing, and marketing. This initiative was developed in collaboration with officials from the Ministry of Agriculture (MOA).

As a result of CHAP's efforts, Liberians are now able to harvest rice for their own use. Due to Liberians' reliance on imported items like rice, a local NGO grew rice to feed the market. In order to adapt to changing weather patterns while reducing water use, CHAP implemented the System of Rice Intensification (SRI) during dry seasons (TM Thiyagarajan and Biksham Gujja). The Liberian NGO feels the millions of dollars annually spent on rice subsidies by the government should be better invested in the country's rice industry, point out that if more money was put into agriculture, particularly the rice industry, it might provide jobs for young Liberians and make the country more self-sufficient in terms of food production (Front-Page Africa article (2019) CHAP Liberia).

However, local NGOs feel that some Liberian rice farmers are prepared to lower prices provided the government subsidizes part of the cost; without such support, it is very difficult for local producers and millers to offer high-quality Liberian rice at affordable costs. As an example, one objective of the NGOs is to have Liberian farmers put more effort into producing rice domestically, which would lessen the government's need to import rice and the country's reliance on expensive food imports. Even though it has the potential to do so, Liberia imports over 95% of the rice it consumes even though rice is a basic meal for more than 4.5 million people. The primary goal of the local NGO is to enhance the capacity of local farmers, women, and youth to boost food production and reduce food insecurity. It is obvious that certain holes in Liberia's food security have been uncovered by the reaction of local NGOs to the debate over cash crops vs food crops.

Notable contributions to the agriculture industry in Liberia have also been made by ACDI/VOCA. NGOs engage in direct operations inside the EAS region. To improve food security in Liberia, local NGOs connect farmers there with American volunteer farmers who have technical competence in agriculture and are willing to share their knowledge with Liberian farmers or other agricultural players (such processors) (USAID farmer-to-farmer west Africa program 2017). This project was implemented by ACDI/VOCA as part of their farmer-to-farmer initiative (F2F). The F2F initiative served primarily as a kind of extension outreach. Face-to-face (F2F), in 2011, volunteers helped women's organizations double their vegetable harvest via direct assistance to members. Post-harvest procedures at a women-run cooperative were enhanced by a 2014 F2F activity. To further educate EAS field workers and farmers, the F2F volunteers are also helping the MOA create short, educational movies on the program in both English and several native languages.

Increased agricultural outputs, improved farmer capacity, and new job possibilities are the goals of BRAC's local non-governmental organization (NGO) initiatives, which focus on empowering women and young people in rural regions by bolstering activities throughout the agricultural value chain. As this study examines the responses of non-governmental organizations (NGOs) to the cash crops vs. food crops issue, it becomes clear that BRAC is one of the NGOs that has significantly contributed to improving food security and extension service in the food crops sector. The local NGOs worked to create resilient agriculture, markets, and people in order to combat world hunger, enhance food security and nutrition, and spread the word about sustainable agriculture. From 2015 to 2020, 18,690 smallholder farmers in agriculture, poultry, and livestock would have had their income, resilience, and access to enough, nutritious food (BRAC 2020). Moreover, BRAC also engage in reducing livestock deaths, higher farm earnings, and more autonomy for rural communities.

In most cases, a small number of NGOs play a major role in funding EAS. LEAD, the Liberia Entrepreneurial & Asset Development Network, is a faith-based NGO working to improve agricultural economies via microfinance and entrepreneurship. In order to qualify for a loan, borrowers must first complete agricultural and company growth courses. The LEAD operation is rather small. The work it does, however, helps to modify technology for locations, which are subsequently made available to farmers and help to reduce the risks that farmers face when adopting new technologies.

To better the cash crop industry, certain non-governmental organizations have taken it upon themselves to do so. There may always be questions about self-sufficiency, but these NGOs get that cash crops can create jobs and improve access to nutritious food. Solidaridad, a local NGO, has been working on a long-term plan to enhance the cocoa quality in Liberia and thereby revitalize the country's cocoa industry through the Cocoa Sector Improvement Programme (LISCIP) Roadmap (Solidaridad 2021). As a result of strategic input from farmers and other sector players, such as exporters, the road plan is of critical importance. Not only did the NGO initiative increase the quality of cocoa cultivated, processed, and exported, but it also gave a boost to other industries vital to the country's economy. By raising standards, boosting output, and diversifying revenue streams, the Solidaridad initiative helps cocoa farming families make a livelihood. In order to better position and commercialize Liberian cocoa on the worldwide market, the NGO collaborated with farmers to promote and sell the crop. As part of its Liberia Cocoa Sector Improvement Scheme (LICSIP), Solidaridad has also established a loan program to provide financial assistance to the country's cocoa producers. The money was given to increase cocoa producers' access to credit and boost their earnings. NGO leaders think that if small-scale cocoa farmers had easier access to credit, they might increase output and modernize their operations. Its secondary purpose was to help farmers expand their exports and get access to new forms of capital. Even though many people in the nation make their living from farming, agricultural output is poor due to a number of factors (Solidaridad 2021) However, the NGO simplified the formalities required to get access to financing by instituting a Village Saving Loan (VSL) whose interest rate is pegged to the local rate of production. The idea behind this was to aid farmer company growth.

Conclusion

While some progress has been achieved with the intervention of local NGOs, it is not nearly enough to address the food insecurity facing our population. The Liberian government has not yet fulfilled the Maputo 10% to agricultural accord, which would increase food production in Liberia. A growing number of international aid dollars are finding their way to Africa's indigenous NGOs, which play an important catalytic role in

the continent's efforts to build its own economic and social infrastructure. However, a well-established NGO sector can also become a permanent part of the economy by shaping public policy, giving voice to farmers' groups, and facilitating dialogue between the public and private spheres. As a local institution, FOBs help execute government and donor-supported projects by doing things like enabling service delivery, mobilizing local resources, and coordinating marketing efforts.

On the other hand, FBOs may be required by law to do things like empower their members locally and encourage them to interact with policy and service providers by establishing formal channels of communication and expanding their capacities. (FUNL), which serves in order to fulfill the needs of contemporary agriculture, traditional (EAS). Therefore, the FUNL will need to evolve into more cutting-edge programs. Rice is a major food in Liberia, making it an important subject in the ongoing debate over whether the country should transition from cash crops to food crops. With the global food crisis of 2007-2008 in mind, local NGOs like CHAP have been pushing for more investment in local rice cultivation as a means of bolstering Liberia's food security and independence since 2008. The goal of the CHAP is to decrease Liberia's reliance on expensive imported rice. The work of ACDI/VOCA, on the other hand, supplements the EAS knowledge-sharing component by connecting Liberian farmers with American volunteers who have technical competence. In addition, NGO efforts demonstrate that they are the primary impetus behind improving agricultural yields in Liberia. When it comes to improving food security and extension service in the food crops sector, BRAC is among the NGOs that have had the most impact. Local nongovernmental organizations (NGOs) have been working to reduce hunger, boost food safety and nutrition, and support sustainable farming practices through strengthening agricultural systems, commercial marketplaces, and individual farmers. A faith-based organization which aims to empower farmers, LEAD's work is dedicated to promoting agricultural prosperity via microfinancing and enterprise growth. Farmers may take out loans, but only after they completed training in agricultural and commercial development. Nevertheless, as outlined earlier in Chapter I and III, cash crops are also important when it comes to providing a livelihood and income for most farmers in rural areas, and taking this into consideration, the Solidaridad's intervention was also highlighted here as essential to enhancing the livelihoods of those farmers who rely on the cash crop sector.

The local NGOs view food security from a domestic viewpoint, holding that a country like Liberia with arable land and lush soil must rely on local food production in order to be secure. They also believed that if local food production were given top priority, the high amount of food imports, particularly of the nation's staple grain rice, would drastically decrease, enabling local farmers to produce more food. Additionally, ensuring that Liberia has access to food. Local NGOs and, by extension, FBOs, believe that putting food crops ahead of cash crops will enable the nation to feed itself and in more comfortable direction to self-sufficiency.

CHAPTER VI

Cash Crops versus Food Crops: Responses at the INGO level

Introduction

In the past twenty years, the issue of the "African state" has dominated discussions about the continent's political and economic progress. The crisis of the state has also left a gap in Liberia. Like many other African countries, in the area where agriculture is the engine of growth (Puplampu, K. P., & Tettey, W. J. 2000), but without the necessary institutional framework to foster development, international nongovernmental organizations (INGOs) have arisen to fill the void as credible institutions. Furthermore, the participation of international non-governmental organizations (INGOs) in the argument between food and cash crops is a consequence of a decline in food crop sector autonomy, the very thing that underpins food security.

This chapter examines INGO involvement in the debate on food versus cash crops to ascertain whether they really empower local NGOs, Cooperatives, farmer's organizations and the government to enhance food security. Moreover, through the kind mechanisms of the Comprehensive African Agriculture Development Programme (CAADP), endorsing the AU mandate of 10% allocation the national Budget to Agriculture which has excessive implications on food security development in Liberia, the role of the INGOs have become more pertinent. Considering that the official responses have prioritized the cash crop to generate revenue leaving the food crops sector vulnerable, supporting the extension advisory services (EAS) has been a priority agenda of those INGOs in order to boost farmers' ability to produce foods. Other areas of support include aid in the areas of small agribusiness development, farm-to-market road restoration, and value addition.

Currently, some notable funders or lenders working with local agricultural NGOs to enhance Liberia's agriculture sector include the International Fund for Agricultural Development (IFAD), World Bank, African Development Bank (AFDB), USAID, FAO, and CAADP. After being ignored for many years, the international non-governmental organization (INGOs) sector of the global food system began to pay attention to agricultural extension and advisory services (EAS) during the global food crisis of 2007-

2008. Unlike its forebears, today's EAS are increasingly seen by international nongovernmental organizations (INGOs) working in the food security sector as an essential component to boosting agricultural growth and resolving the difficult riddle of decreasing hunger and poverty. Achieving inclusive economic development, as well as reducing hunger and poverty, requires several agrarian preconditions, including EAS, research that is tailored to farmers' needs, readily available markets, inputs, land, and profitable technologies, affordable financial services, and a conducive enabling environment.

It is true that private investment in agriculture, particularly the cultivation of food crops, is very difficult to come by due to the widespread absence of essential infrastructure like roads, water and power; and in rural areas where subsistence farming is the main source of food and income for most of the population, Liberia's agricultural sector would be far worse off without the help of international non-governmental organizations (INGOs) and multilateral projects (MNPs). However, it is also difficult to assume that the situation would improve much if Liberia only relies on these organizations, the implications of which are outlined below.

United States Agency for international Development (USAID) and Food Security in Liberia

In 2013, USAID drafted the country development cooperation strategy (CDCS) for Liberia as one of the guiding papers for its development projects there. Administrative Orders from the President: The CDCS has its roots in the Presidential Policy Directive on Global Development (PPD6) and other U.S. Government policies, concepts, and strategies for global and regional development. Both the PPD16 Presidential Policy Directive and the Quadrennial Diplomacy and Development Review outline the United States' approach to the continent of Sub-Saharan Africa. In particular, it acknowledges the strategic importance of the United States' assistance in enabling Liberia to establish "sustainable mechanisms for achieving high impact development that helps people satisfy their fundamental requirements," as stated in PPD6.

In line with the overarching strategic direction of this CDCS, USAID/Liberia prioritized assisting GOL reforms in redefining and reorganizing its processes for

providing extension, market development services, and infrastructure development to rural farmers in its capacity building efforts. However, the goal was to improve agricultural research and retool the Ministry of Agriculture's training programs so that its professional cadres had access to the most cutting-edge information and techniques. The Mission works with the business sector to strengthen farmer-market connections in rural areas.

Corresponding with these long-term measures to strengthen capacity, the Mission offered direct services and other urgent assistance to market-driven businesses in high-priority value chains (such as rice, cassava, vegetables, and cattle). The United States Agency for International Development (USAID) increased supply in rural and urban markets by introducing better crop management techniques and better storage both before and after harvest, as well as by bolstering public and private provision of extension services to raise horticultural output and quality. Bong, Lofa, Nimba, Grand Bassa, Montserrado, and Margibi were prioritized by USAID/Liberia in their plan to close the gap on the shift from cash crops to food crops, hence these counties were the focus of economic development efforts under this response. The majority of Liberia's population, over 70%, resides in these six counties, where roughly 75% of the people are located. Additionally, over two-thirds of all agricultural households are located in these six counties (LISGIS 2008).

The counties of Bong, Lofa, and Nimba, known together as Liberia's "breadbasket," are among the focal counties for USAID/operations Liberia's because they provide the highest potential for agricultural growth. In contrast, after a war, donor organizations spent significant resources on extension programs. Since there was a void in public services while the government rebuilt, and since there was an urgent need for basic agricultural programs, donor-led projects mushroomed in Liberia. Multiple significant donor initiatives and international non-governmental organizations (INGOs) ran in the country, spending over US\$100 million each year (Moore, 2014). Despite Liberia's tiny size and population, reports indicate that INGOs in Liberia received more funds from USAID than any other African nation, and the Food and Enterprise Development (FED) programme was the biggest effort overall.

Extension services and the development of rice, cassava, vegetable, and animal value chains were at the heart of this project, which is part of the Obama administration's Feed the Future strategy to combat global poverty and ensure food security (Ho and Hanrahan, 2011). The Feed the Future initiative has actively participated in food security programs in Liberia and other African countries. Feed the Future has spent the last several years collaborating with municipal governments and agricultural groups to increase agricultural production and sustainably increase farmer productivity. The program's goals include easing food insecurity for families with young children, strengthening public-private partnerships, and increasing access to helpful technology. Together, the Feed the Future initiative and the African Union's Comprehensive African Agricultural Development Program help ensure that African countries commit at least 10% of national budgets to agricultural and rural development. Liberia and seven other African nations are "target countries" for the United States' concerted effort to alleviate poverty, hunger, and malnutrition by focusing on their food systems. This effort is supervised by USAID, which leads the Feed the Future interagency program (US embassy Liberia).

USAID FED works in partnership with the government of Liberia and local civic organizations to provide food security for everyone. This includes farmers, processors, suppliers, women, and youth. USAID FED aimed to create an indigenous incentive system to assist agricultural players in adopting commercial methods to food production and distribution. Access to agricultural inputs (such as better seeds), extension services, healthy food items, processing services, market information, transportation, finance, agri-business education and training, and enterprise services is another priority for MOA, civil society, and the private sector. Five years into the FED's push to boost market connections, the economy has seen significant gains in both income and employment.

The goal of the Food and Economic Development program (FED) was to considerably increase the production, processing, marketing, and nutritious usage of rice, cassava, and vegetables in the counties listed above and to increase the productivity of goat farming. In addition, FED prioritized these counties because to their location along regional development corridors, which play a crucial role in fostering trade within

and across regions. By focusing on these expansion routes, the government of Liberia hoped to increase citizens' access to affordable, nutritious food. In the agricultural industry, FED uses a market-led, value-chain-driven approach. It promised to help Liberian women and young people learn new skills and advance in the agricultural sector. As a policy, FED takes a team-based approach. Some of its goals were boosting agricultural production by encouraging the adoption of improved inputs, better farming methods, and technology; increasing the income of rural livelihood; and enhancing food security for food insecure Liberians by increasing household dietary variety scores.

The United States Agency for International Development (USAID), as a minor diversion from its primary focus, made some interventions in the rubber sector in 2006, seeing it as one of the sectors in the agriculture landscape that generated more employment after the end of the Liberian civil war in 2003. In 2006, Liberia sent out a total of 100,000 tons of natural rubber; almost two-thirds of it was in the form of block rubber, while the remaining third was in the form of liquid latex. Over 60% of the world's rubber exports went via Firestone (MOA 2006). With no intermediate or tertiary rubber processing industries, Liberia exports raw rubber, a low-value commodity. United States Agency for International Development (USAID) and the Agriculture Ministry of Liberia teamed together in 2010 to create the "Rubber Industry Master Plan 2010 - 2040: A National Agenda for Rubber Sector Development" (MOA 2010). RDFI (Rubber Development Fund Incorporated) is a public-private partnership that was established as part of the master plan and is responsible for carrying out all of the plan's initiatives. The initiative restores, replants, and expands smallholdings in Liberia using fresh rubber clones. Achieving facility accreditation and implementing best practices was also components of the strategy. Liberia's strategy is for the country to produce at least 30% more value-added goods from its raw rubber and 10% more from its rubber wood by the end of the year (USAID 2010).

International Fund for Agricultural Development (IFAD) and Food Security in Liberia

While the United States Agency for International Growth (USAID) has focused primarily on increasing the output of food crops to boost global food security, the

INGOs regard the development of cash crops as fundamental to the agricultural sector. In contrast, these INGOs see cash crops to put farmers to work in the fields. Farmers increased financial independence and the greater variety of healthy food options they enjoy thanks to cash crops. The Government of Liberia (GOL) implements projects through the MOA's Smallholder Tree Crops Rehabilitation Support Project (STCRSP), which is primarily for cocoa, coffee, and palm farmers, and the Rural Feeder and Farm-to-Market Roads Rehabilitation Program, both of which are funded by The International Fund for Agricultural Development (IFAD). It opens new opportunities for commerce and helps link rural regions to urban hubs. The IFAD Executive Board green-lit the "Smallholder Tree Crop Revitalization Support Project" in November 2011 (STCRSP). It was subsequently negotiated on September 23, 2011, signed by the Ministry of Finance and IFAD on January 10, 2012, and ratified in June 2012. (MOA 2012).

It went into effect on July 13th, 2012. Specific goals of the STCRSP included increasing the amount of cocoa and coffee sold and the price received by poor farmers through the rehabilitation of plantations, improving access to markets through the rehabilitation and maintenance of rural roads, and bolstering the Ministry of Agriculture (MOA), private extension services, and Farmers Based Organizations. The IFAD provided funding as concessional loan the government as Beneficiaries contributed that rehabilitated cocoa and coffee plantations, access to farm and market roads the works of both public and private extension officers and FBOs in the cocoa sector (MOA 2012). Nevertheless, seven cooperatives, working directly with private sector exporters, were tasked with reviving 15,000 hectares (ha) of cocoa/coffee plants via the implementation of a sustainable and cost-effective value chain model. IFAD was also coordinating with agricultural departments at the state and regional levels to provide workshops to farmers on both methods.

To guarantee the MOA's County Agriculture coordinator (CAC) and District Agriculture officer (DAOs') full participation in the project with direct support to carry out their activities, IFAD also sought to strengthen their institutional capacities by providing funding for the institutional development of seven cooperatives in all areas and the MOA at the county and district levels. Working capital will be supplied to the cooperatives so they may implement their business strategy (MOA 2012).

The Rural Community Finance Project (RCFP) was established by IFAD in the middle of 2019 and includes a loan and grant to promote access to financial services on a sustainable basis and make it easier for farmers in rural areas to have access to financing. The cash crop Extension Project was another initiative geared toward cash crop growers (TCEP). TCEP included a loan from the IFAD to grant from the Adaptation for Smallholder Agriculture Programme (ASA) for rural roads. This initiative aimed to create a sustainable smallholder cocoa industry in Liberia's primary cocoa producing region. After being passed in 2019 and kicking up implementation in January of that year, the TCEP had a profound effect on cocoa producers throughout the nation. Using a value chain strategy, TCEP connected smallholder cocoa farmers in cooperatives and private sector partners to larger markets and services.

The debate on cash crops food crops is so significant that food crop becomes a key issue even if INGOs decided to invest in farmers to generate income. Moreover, with all the income farmers will generate, there will always be a provision for spending on food for every cash crop farmer. As the IFAD project was on going COVID-19 hit in early 2020 which created a demand for food. The IFAD had to transition to create a project for food crops. The Rural Poor Stimulus Facility (RPSF) project was a part of a programmatic intervention combining attributes from TCEP. RPSF's goal was to improve the livelihood and COVID-19 resilience of rural households in Nimba and Lofa Counties. The overall objective was to improve food crops production, as well as nutritional status and livelihoods of most smallholder farmers who traditionally depend on cash crops (rubber, cocoa, coffee and oil palm) and food crops (rice, cassava and vegetables) as part of their interventions.

Food and Agriculture Organization (FAO) and food security in Liberia

FAO, as an international organization, is aware of the substantial gap in domestic food production and hence makes important contributions to enhancing crop cultivation, cultivation techniques, and post-harvest crop management. The FAO is also disseminating high-quality seeds and technologies to help ensure that marginalized farmers have better access to essential agricultural inputs. Partners in the agricultural sector recognize FAO's importance in advocating for and fund-raising for agriculture, as

well as in developing the capacity of local institutions. If we compare FAO's work in Liberia to the organization's global framework, which is comprised of below overarching strategic goals, we can see where FAO excels sustainable intensification of agricultural output:

- (1) More animals were produced in a sustainable manner. Aquaculture and fishing need to be managed sustainably if they are to continue providing food for humans. Protecting and preserving tree populations over the long-haul Improved responses to global environmental concerns in food and agriculture via sustainable use of land, water, and genetic resources. A better guarantee of food and nourishment FAO can aid in the improvement of agricultural infrastructure and technology in rural areas, as well as the growth of related markets and businesses.
- (2) As part of the institutional development program, FAO strengthens the capabilities of the Ministry of Agriculture by bolstering its ability to provide extension services and improve the quality of its information, knowledge, and technology; it also does the same for farm-based organizations; it helps revitalize agricultural research and education and training; and it trains new agricultural workers.
- (3) FAO may aid in better land husbandry, irrigable land extension, and other initiatives via the land and water development project.

FAO can significantly contribute to several the main programs and sub-programmes in the MOA national agricultural plan, the Liberia agriculture sector investment plan (LASIP): FAO promotes and supports the improvement of fisheries and livestock, as well as the increase of agricultural yield, better nutritional status, and the management of food crises. FAO conducts certain interventions in cash crops and agro-forestry, promotes value addition, and runs a project on competitive value chains, all of which were formerly undertaken by USAID.

Comprehensive African Agriculture Development Programme (CAADP)

When it comes to cash crops versus food crops, the Continental African Agricultural Development Programme (CAADP) is directly involved to ensure that African countries invest more in agriculture, particularly food production, which will accelerate Agricultural Growth and Transformation for Shared Prosperity and Improved

Livelihoods (Zimmermann, R., Brüntrup, M., Kolavalli, S., & Flaherty, K. (2009). The Comprehensive Africa Agricultural Development Programme (CAADP) has progressed in Liberia since its inception in 2003. Agriculture and food security were declared in a statement during the 2nd Africa Union Assembly in Maputo, Mozambique in July 2003. The agricultural sector has been brought back to the forefront after the Maputo Declaration. The primary promise of the Maputo declaration, allocating 10% of public resources to agriculture, it was reaffirmed in the 2014 Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods. It also clarifies several agricultural pledges, such as those to expand irrigation and automation, decrease post-harvest losses, and so on.

As a result of CAADP's efforts, governments have provided greater funding for the industry. African leaders pledged to speed up agricultural development, decrease post-harvest losses, boost agricultural production, and enhance nutritional status as part of the Commitment to eliminate hunger in Liberia and all of Africa by 2025. Farmers are encouraged to make more investments, which boosts production and benefits the environment when land is owned and the rights to use it are protected.

Even after ten years, there was still a lot of room for improvement in this metric, even though a favorable trend toward allocating 10% of public funding to agriculture had been seen. Progress was also achieved toward the goal of a 6% annual growth rate in agriculture, although this rate varied widely among nations and was frequently not distributed fairly, as seen by the pervasiveness of food insecurity and low incomes. Perhaps the trickiest question to answer is whether private investment in agriculture has risen as a direct consequence of CAADP's over 10 years of existence. In order to achieve more fair economic development, more comprehensive data on private investment, particularly that which pertains to small and medium-sized (domestic) businesses, is required.

It has been shown that private investments in agriculture are necessary to support agricultural development in Liberia, even though they have not been significantly stimulated during the last decade. After analyzing the results of CAADP's first decade, researchers concluded that the expansion of farmland was more important than gains in output per acre in fueling agricultural development. However, defined plans that

emphasized domestic economic potential (informed by the CAADP stocktaking studies) did lead to greater investments to the sector, although in many countries they have not yet achieved the 10% as committed in Maputo. Since most agricultural investments are made in cash crop production, this dissertation argues that shifting the focus of CAADP from cash crops to food crops and allocating a larger portion of Liberia's national budget to agriculture would improve food security. Local food production in areas where donors have been investing for years will expand with a state financing commitment of only 10%.

The Maputo Declaration also taught us that not everything that has to happen for agricultural development to occur really happens in the agriculture sector or falls under the purview of the Ministry of Agriculture. It has become abundantly clear from experience with implementation that Agriculture Ministries cannot mandate that Finance Ministries allocate 10% of public funds to agriculture; nor can Agriculture Ministries create the right business environment, which includes attractive interest rates and favorable import and export regulations, for the agriculture sector alone. Therefore, the issue of agriculture and food security was discussed at length when the Heads of State gathered for the 23rd AU Assembly in Malabo, Equatorial Guinea, in June 2014. However, this time they looked outside of agriculture in the hopes of overcoming the challenges that have plagued agricultural expansion in the past. The government anticipates that the flow of donor funding via the national budget will increase as it improves its budgeting procedures, internal and external audit systems, and ability to efficiently and openly distribute financial resources and provide public services. From such anticipation, investing in food security had been a transfer responsibility of the national government.

Agriculture is a fundamental predictor of nutrition, education, poverty reduction, and rural development, and it also provides a significant net contribution to the economy in terms of foreign currency profits. The government's pledge to invest in agriculture's growth has been grossly underfunded. The Maputo Declaration, for instance, has not been carried out in full. Unfortunately, agriculture received less than one percent of the national budget between 2003 and 2005. Reviewing government funding to the industry supports the low budgetary proportion as well. If the host government invests more

money in agriculture, Liberia will be able to increase food crop output and so attain food security and nutrition. In 2005/06, for instance, when the national budget was US\$80m, agriculture received US\$0.74m, or less than 1% of the overall budget. The Ministry of Finance and Development Planning (MFDP) reports that the total amount allocated to agriculture during the 2006/2007, 2007/2008, and 2008/2009 fiscal years was US\$3.1 million (2% of the national budget), US\$3.8 million (1.8% of the national budget), and US\$7.0 million (2.3%) respectively. The international community of INGOs provides the vast majority of the sector's funding.

The sector has been neglected and underfunded as its share from the national budget Over the years, the country has not been able to be self-reliant in food security after 10 of the 2007-2008 global food crisis. Liberia was an early signatory to the CAADP process, signing its Compact in 2009.2 As part of the Compact, the GOL committed to the target of allocating 10 percent of its budget to the agricultural sector. Government budget allocated to agriculture for 2015/16 and 2016/17 indicate a contribution of 0.96 percent and 1.98 percent, respectively (MFDP, 2016). Funding of the sector has always been a key detriment to farmers. For example, the draft National Budget for the 2018/2019 fiscal year was US\$488.8 million, with US\$8.3 million being appropriated for agriculture, amounting to 1.69% of the total National Budget of Liberia (MFDP,2018). Moreover, allocating 10% of the annual budget to agriculture in keeping with the Maputo Declaration will see a nation in which 70% of its households get their income from agriculture moving towards self- sufficiency. In a most recent budget, national government allotted only 1.16 % of total annual budget for the sector. That is, 2019-2020 fiscal year's allotment for agriculture was US\$6,208,754 (MFDP, 2019).

The industry has been overlooked, and its allocation of national budget resources has been inadequate. As a result, the nation has not been able to achieve food security independence since the global food crisis of 2007-2008. Liberia signed the CAADP Compact in 2009, making it an early participant in the process. 2 According to the terms of the Compact, the GOL has pledged to devote 10% of its budget on agriculture. Allocations of 0.96 and 1.98 percent of the government budget to agriculture in 2015–16 and 2016–17, respectively (MFDP, 2016). Constraints on the sector's funding have long been a major issue for farmers. For the 2018–2019 fiscal year, for instance, out of a total

draft National Budget of US\$488,8 million, US\$8.3 million was allocated for agriculture, or 1.69 percent of the overall National Budget of Liberia (MFDP,2018). As a result of investing 10% of the yearly budget to agriculture in accordance with the Maputo Declaration, a country whose 70% of its households rely on agriculture for income would be able to move closer to self-sufficiency in food. The most recent national budget allocated just 1.16 percent of the overall yearly budget to the sector. Therefore, the budget for Agriculture in the 2019-2020 fiscal year was \$6,208,754 (MFDP, 2019).

Conclusion

The United States Agency for International Development (USAID) developed its Country Development Cooperation Strategy (CDCS) for Liberia in 2013. This strategy is one of the guiding documents that helped carry out USAID's development activities in Liberia. Delivering extension services, market development services, and infrastructure development to rural farmers were the primary focuses of this program's agricultural sector component. However, the goal was to improve agricultural research and retool the Ministry of Agriculture's professional training programs so that they are more relevant and up to date. Private businesses in rural areas were given assistance by the Mission in order to better connect farmers with consumers. There was a need for basic agricultural programs and a void in public services, therefore donors flooded the country with ideas. Despite its modest size and population, Liberia received the largest amount of USAID funds in all of Africa.

The Feed the Future initiative has been actively working to improve food security in nations throughout Africa, including Liberia. To increase agricultural production and farmer productivity in a sustainable way, Feed the Future has collaborated closely with local governments and agricultural groups over the last several years. To combat poverty, hunger, and malnutrition in Liberia and seven other African nations, the United States is focusing on improving their food supply chains now. This project is led by USAID, which is responsible for organizing the global Feed the Future effort. Whether or not food crops should take precedence has been called into question since certain INGOs see the expansion of cash crops as important to the agricultural

sector. Farmers may make a profit while producing nutritious food by focusing on cash crops. It facilitates commerce between formerly disconnected areas and links rural areas to larger cities. A sustainable and low-cost value chain strategy that put quality and quantity first was essential for restoring 15,000 acres of cocoa and coffee fields. These INGOs have come to consider cash crops as a means of providing farmers in rural areas with direct economic opportunity. Because of the importance of cocoa, coffee, and palm oil to the Liberian economy, the GOL utilizes IFAD funds to assist the Rural Feeder and Farm-to-Market Roads Rehabilitation Program and the Smallholder Tree Crops Rehabilitation Support Project (STCRSP).

There is no longer any doubt about the FAO's stance on the debate over food versus cash crops. As well as providing policy and technical support for production, value addition, and marketing, FAO has supplied high-quality seeds and equipment (upland and lowland rice, vegetable gardens, root and tuber, fisheries, and livestock). Repairing and upgrading agricultural infrastructure and instruments in Liberia's outlying areas is one area where FAO has shown itself an industry leader. The United Nations' Food and Agriculture Organization (FAO) works to alleviate hunger and malnutrition and to stabilize food markets across the world. As with USAID, the FAO intervenes in cash crops and agro-forestry to progress its agenda on competitive value chains and increase value addition. The government of Liberia has to show that it is committed to the agricultural sector by being a strategic and key actor, making predictable interventions, and facilitating the flow of private investments and thriving agricultural markets. Spending more money on agriculture is a good way to show "political will," but only if that money goes toward programs that are based on evidence, designed to improve measurable outcomes, and developed with an eye toward careful assessment of their effectiveness.

The CAADP had been working with the Liberian government to improve food production and self-sufficiency, and the goal of obtaining 10% to of the to support agriculture are one of the key objectives. Nearly all government's projects in the food crop development are supported by donors, international multilateral and regional multilateral organization. however, those organizations decide which projects to undertake in the sector. Increasing Liberia's agricultural spending and moving the

country's emphasis from cash crops to food crops will lead to greater food security. If the state invests merely 10%, local food production will increase in regions where donors have been contributing for years. Although many Liberians still rely on their harvest for sustenance, the country's agricultural industry has shifted its focus away from food crops and toward cash crop development.

International non-governmental organizations (INGOs) see food security in Liberia as a bridge to human development, the avoidance of humanitarian crises, the reduction of poverty, the eradication of child malnutrition, the improvement of nourishing food for households, and the country's overall peace and security. INGOs take the position of local food production with a primary focus on emancipating local farmers in food crops farming and rural residents from poverty, taking into account all of these important viewpoints and the idea of globalization. Self-sufficiency was seen by INGOs as a way to give local farmers greater chances for trade and better living standards by lifting them out of poverty. In addition, according to INGO, self-sufficiency lessens hunger and keeps rural residents from migrating both within their own communities and outside of them in search of nourishing food.

CHAPTER VII

Conclusion and Recommendations

Food security has been a major issue for Liberia since it existence as an independent country. The 1979 rice riot centered around one of the pillars of food security which is accessibility, albeit in economic terms. In this case, the economical reason was the steep and sudden increase in the price of the country's staple food, rice. The riot was followed by the collapse of government just one year after. Issues of accessibility and availability, resulting from the 2007/2008 global food crisis also affected the country greatly. Daily wage workers, palm oil producers, tiny merchants, rural dwellers, the vast majority of smallholder farmers, and the urban poor were the most hit families. During this time, imported rice was believed to account for 60% (MOC 2008) consumed cereals, though domestic produced cassava was becoming an increasingly important alternative, especially in rural areas. And most consumed variety of rice was the short grain "japonica" rice from China, locally called "butter rice". This "butter rice" accounted for over 90 percent of Liberian commercial rice imports (MOC 2008). Taking into consideration of such dependencies and historical developments, this dissertation recognized that there is need for a context-specific approach toward the issue of food security in better understanding the age-old problem and offering a way out in terms of increasing Liberia' local food production in order to meet domestic demand and decrease the country's import dependency which would in turn provide some self-sufficiency. The main contention of this dissertation is that prioritizing cash crops over food crops would only lead to household food purchases while disregarding the notion of a reliable food supply in our food system. However, the production of food crops promotes the consistency and availability of food at all levels, maintaining selfsufficiency.

If one of the FAO's food security dimensions is taken into consideration, which states that "Other households obtain available staple food via agriculture like cash crop production which generates revenue to allow purchase of food on the market," the choice between cash and food crops can coexist in Liberia's food security landscape. As

long as food production is given priority over cash crop growth in order to attain food self-sufficiency, Liberia may also coexist with both cash and food crops.

Two interlinked and overarching questions guided the analysis that was undertaken in the study.

- Can Liberia's food security and self-sufficiency be really ensured if the country switches from cash to food crops?
- What has been the impact of over-reliance on cash crops for Liberia's food security?

Following the introductory chapter which set out the problem statement, a working of definition of food security was outlined following a brief discussion of the concept of security. The definition adopted here was that also offered by the FAO which indicates that the condition occurs when "all people, at all times, have physical and economic access to adequate, safe, and nutritious food that fits their dietary requirements and food choices in order to engage in active and healthy lifestyles" (FAO 1996). In the meanwhile, the Food and Agriculture Organization of the United Nations (1999) provided the definition of food self-sufficiency adopted here: " The idea of food self-sufficiency is commonly interpreted to indicate the amount to which a nation can meet its food demands from its own domestic production." Drawing from these definitions, Liberia's food security and self-sufficiency was understood as the ability of developing the necessary various techniques and producing its staple food domestically, giving it control over its food demands and guaranteeing its citizens constant, easy access to food.

On the whole, the dissertation has shown that the primary goal of Liberia's agricultural investments is the expansion of internationally traded cash crops including coffee, cocoa, rubber, and oil palm through foreign investors. Those investors have two top priorities. The first obligation to the government is to pay their taxes and social corporate responsibility and create jobs for the citizens. The cash crop versus food crop debate in this study unveiled the difficult choice which can be considered as to be between income or employment versus food security or self-sufficiency. In this case the government and most Liberians are opting for income and employment. Furthermore,

the analogy above simply means that cash crop production is stronger in turn than the food crop production in Liberia's agriculture sector.

Cash may enhance food security one way of the other by providing income to purchase food. It also creates a long-term employment for farmers at the local level. Furthermore, at the national level, cash crop is seen by the government as means of generating revenue for country and also creating jobs opportunities for its citizens. Nevertheless, in a cash crop economy, it is expected that revenue generated from cash crop export should be invested in food crop production but that has not been the case. The issue of land is very important as it relates to food security. As it was discussed in Chapter 3 of this study, those four major cash crops grown in Liberia are not compatible to mix cropping, which means they cannot grow alongside other food crops. Due to this, large amount of land intended for food crop production are taken over by smallholder cash farmers and concession for extension of their farms or plantation, thereby putting food crop farmers out of production.

Although food imports and their effects on food security and nutrition are often debated, no long-term, comprehensive solution has been found. In addition, this research highlights the need of expanding food production, by encouraging private sector engagement via contract farming and developing production near processing facilities in order to decrease food imports. In 2017, imports were \$175 million, with rice making up the bulk of this total (MOCI Trade Bulletin, 2017). Most Liberia's rice farmers, an estimated 69.3 percent, are at risk of poverty. Therefore, the rice industry is often cited as a top choice for capital investment.

The country's dependence on rice imports has sometimes been reduced in part because of the success of cassava as a food crop (USAID, 2013). Since more than 60% of farm households depend on cassava as their alternative staple food. against this background, the government has strengthened the value chain for this crop to (about 26,4009 households). The official review concluded that Liberia produces substantially more cassava than rice. But there is no data on the amount of land utilized to cultivate cassava. Similarly, Liberia imports poultry and vegetables to meet domestic demand. In rural areas, food shortages and high prices are common because of the need to import food. Public and commercial entities may be encouraged to increase their spending on

agriculture by facilitating the adoption of suitable production equipment and the processing of numerous crops to boost productivity and ensure a steady supply of (rice, cassava, vegetables poultry and livestock). Moreover, foods should be prioritized above cash crops in the most prolific regions of the country. Notwithstanding, rubber, oil palms, cocoa, and coffee beans are all cash crops that may help rural communities earn more money and hence improve their food security and employment prospects.

Drawing from such context, the study also aimed to shed light on the fact that at the national level, building synergies between policies and strategies through better coordination could help bridge some of the gaps in Liberia food security and self-sufficiency problems. The lack of clarity in terms of geographical targets in particular appear to raise questions on all these problems highlighted in those national policies and strategies discussed in detail in Chapter 4.

Consequently, and as Chapter 5 has discussed, smallholder farmers in food crop production often lack the resources and money to effectively run their farms. Apart from local NGOs' loan programs, national government loan policy toward farmers does not appear to be as effective. However, the lack implementation of effective policy in food crop production is more often due to the lack of budgetary support to the sector - even meeting the targets of the Maputo agreement since 2003 had not been possible up to date and political will still appears lacking. Local NGOs also report the high incidence of low food crop production and food insecurity in the rural areas of Liberia, together with weak government capacity to implement development initiatives, which in turn undoubtedly calls for more action by local NGOs. This gives a tangible context in which local NGOs in the agriculture sector operate in Liberia. FBOs in particular have very key role to play at the local level since they are made out different farmers groupings. The role of FBOs may be limited to providing local institutional support towards the implementation of government and donors assisted programs, such as facilitating service delivery, mobilization of local resources, and collective marketing. Alternatively, the legal roles of FBOs may encompass members' empowerment at local level and engagement with policy and service providers by creating higher level structures and building their capabilities. In the case of Liberia, there is for the time being a great diversity in relation to FBOs both in their roles, but also in terms of their modes of operation.

Beyond the local NGOs and FBOs, international nongovernmental organizations (INGOs), consistent with globalization dynamics, have also emerged with a claim to fill the vacuum as viable institutions in fostering and driving agricultural development in Liberia. Nevertheless, the weakness of the state institutional structures and inadequate capacity appears to be the main factor that can explain the involvement of INGOs in this area. The lack of human capacity building in the food crop sector, in particular, is an issue that needs be addressed by the state authorities. Suh limited institutional capacities are best shown by the Ministry of Agriculture's severe shortage of human resources. Indeed, human capacity building is one of the areas that donors, INGOs, NGOs and FOBs are focusing through the EAS services. To achieve this goal, extension services must be enhanced so that they can accommodate the requirements of all intended populations.

This study has shown that agriculture in Liberia is based on a paradigm that emphasizes the cultivation of cash crops in order to attract substantial investment and, conversely, suffers from a heavy dependence on foreign resource partners. International donors also have great influence in the country's agriculture, food security, and nutritional investment sector. This is an important finding that adds to an emerging body of knowledge which looks at the issue of food security in Western Africa. The study's holistic approach, which identifies and traces the ways in which this insecurity is created, sustained and also challenged, also offers fresh empirical knowledge for future studies in this area. A key limitation of the study is of course in relation to the perceptions of ordinary Liberians. To lessen Liberian's reliance on food imports, especially rice, Liberia needs a shift in public opinion towards local food production. As such, this is an exciting area that would greatly benefit from future research.

Climaxing of a conclusive evaluation, the main contention of this dissertation is that prioritizing cash crops over food crops would only lead to household food purchases while disregarding the notion of a reliable food supply in our food system. However, the production of food crops promotes the consistency and availability of food at all levels, maintaining self-sufficiency.

The FAO's food security aspects, which declare that "Other households receive accessible staple food from agriculture like cash crop cultivation which creates income to allow purchase of food on the market," might be taken into consideration while deciding whether to grow food or cash crops in Liberia. Liberia may also coexist with both cash and food crops if food production is given priority over cash crop development in order to attain food self-sufficiency.

The government defined food security as households having access to food on a national basis, regardless of how stable and durable that food may be. In Liberia, where the majority of food consumed is imported, and where cash crops dominate the agricultural sector. The national government's understanding of and perspective on food security is thus always based on a short-term strategy: the availability of food through importation rather than local production. At the national level, establishing food security is seen as being ensured by having enough imported food on hand or available for purchase at the neighborhood market. However, it is clear from a policy standpoint that the national government supports a long-term approach that relies on locally produced food that is not objectified in order to expand the availability of food.

The local NGOs have a domestic perspective on food security, contending that a country like Liberia with arable land and fertile soil must rely on domestic food production to be secure. They also predicted that by prioritizing local food production, the high level of food imports, notably of the country's staple grain rice, would significantly decline, allowing local farmers to produce more food. likewise making certain that food is available in Liberia. Local NGOs and, consequently, FBOs are of the opinion that prioritizing food crops above cash crops will help the country become more self-sufficient and enable it to feed itself.

International non-governmental organizations (INGOs) see food security in Liberia as a bridge to human development, the prevention of humanitarian crises, the alleviation of poverty, the elimination of child malnutrition, the improvement of nourishing food for households, and the nation's overall peace and security. INGOs, which take into account all of these crucial points of view and the notion of globalization, adopt the stance of local food production with a major focus on

emancipating local farmers in food crops farming and rural people from poverty. INGOs viewed self-sufficiency as a method to elevate local farmers out of poverty and provide them more opportunities for commerce and higher living standards. In addition, INGO asserts that self-sufficiency prevents rural inhabitants from leaving their villages in search of good food and reduces hunger.

Policy Recommendation

The purpose of the following proposals is to draw attention to those factors that contribute to Liberia's excessive dependence on food imports, as well as to the obstacles to food security and self-sufficiency that these factors create. Food security and self-sufficiency are two goals that will be highlighted and recommended for further consideration in these suggestions for Liberia.

The Ministry of Agriculture (MOA), as the key player in the execution of Agriculture policy in Liberia, and Liberians with contributions to the sector should be held primarily responsible for the future implementation of these future policy proposals. On May 11, 1972, the National Legislature passed legislation establishing the MOA with the mandate "to produce an adequate, self-reliant, and sustainable agriculture sector by the year 2020." Its goal is to improve Liberia's business climate so that agriculture may thrive and grow, providing stable jobs and a reliable food supply for the country's population (www.moa.gov.lr).

In order to fulfill its goal of agriculture sector development, the Ministry of Agriculture must establish an efficient organizational structure and staff it with individuals who are skilled in agricultural development program design, coordination, implementation, monitoring, and evaluation. Further, it provides training for both its employees and farmers so that they may meet the difficulties of expanding the agricultural industry. In addition, MOA guarantees that farmers have access to the necessary resources and a conducive atmosphere to cultivate their crops, and that any problems that arise are thoroughly addressed and given a long-term solution. (www.moa.gov.lr).

The study also found that the MOA lacked the following: enough funding from the national government, sufficient human resources, adequate infrastructure, effective extension service delivery, a reliable data repository system, and effective coordination procedures. The Ministry of Agriculture (MOA) and the National Investment Commission (NIC) do not seem to be working together to promote investment in food crops rather than cash crops. Budgetary constraints prevent the MOA's policies and plans from being put into action. However, inadequate government spending on agriculture, food security, and self-sufficiency has led to heavy reliance on outside aid. To add, donors, both international and bilateral, have financed the majority of the government's plans and programs. Nonetheless, this study suggests that the government intends to increase funding for agriculture through assistance loans and grants. Stakeholders are a thorny subject on the regional level. Cooperation among small farmers is often ineffective because cooperatives cannot muster the manpower or financial backing to effectively represent their members in political debates. Donor money is essential for local NGOs to carry out any kind of activity.

The bulk of foreign donors in agriculture in Liberia have concentrated on the food crop sector, which has not garnered big investments because of the cash crops-oriented model of agriculture in the country. The use of external resources to advance food crop growth, on the one hand, offers international nongovernmental organizations (INGOs) substantial sway over the sector. Lack of interest and political will is responsible for the little funding allocated to these fields. Some farmers, middle-class Liberians, the commercial sector, and governmental elites clearly prioritized the promotion of cash crop cultivation above food crop development. It's not uncommon, for instance, for members of national Legislature. or the executive branch to also be involved in cash crop farming. These powerful people are on the side of the big concessionaires, who stand to gain the most from the cash crop profits, as seen by their lobbying to get the Concession Act passed in the national Legislature. Historically, these groups and their political allies have shown a marked preference for cash crops over food crops due to the former's far higher profit margins.

The average Liberian also contributes to the problem of insufficient funding for agricultural production. To raise the country's degree of self-sufficiency, the few Liberians who have summoned the confidence to invest in local food production have found that they are not being supported by the Liberian consumer market. This mentality

is prevalent among the upper classes of Liberia, who choose imported rice and other foods over those grown in the country. The vast majority of Liberians would rather eat something that was not grown or raised there.

A number of steps may be done to lessen the impact of the aforementioned issues, and the following suggestions are backed up by study results. Further, this has the potential to improve the future of important decision marking and make decisions simpler soon. The following suggestions should be considered by the MOA and Liberians:

- 1) Increases in public investment in agriculture, which in turn increases food security and self-sufficiency, are called for, so that a larger portion of the national budget is devoted to agriculture.
- 2) That the government put money into the processing industry, quality control, road networks, and value addition to have an already-existing cash crops sector more productive. Raw cash crops materials from might be transformed into finished commodities by a processing industry.
- 3) That rather than establishing new policies, significantly increasing domestic resource mobilization is necessary to fulfill the Government's promise to aid with agriculture, notably food production.
- 4) In order to alleviate food insecurity and achieve self-sufficiency in accordance with the rest of the West African area and fulfill its obligations under the Maputo and Malabo Declarations, that government shall gave agricultural development, and food crop production in particular, a high priority.
- 5) That additional extension staff be hired and trained by the Ministry of Agriculture so that they can reach the poorest farmers. Meanwhile, this is compounded by a serious shortage of personnel across all levels of government, particularly in the Department of Extension Services and Technical Services at the national and county levels.
- 6) That the Ministry of Agriculture construct satellite offices of the Agriculture Coordination Committee (ACC) in each of Liberia's 15 counties in order to monitor and coordinate agricultural programs effectively.

- 7) In order to make better-informed policy decisions, it is recommended that the MOA maintain and expand its database of foreign partners, local NGOs, and farmers.
- 8) That MOA takes charge of one of its key responsibilities by ensure that cooperatives and the private sector throughout Liberia have access to rice mills, rice harvesters, mechanized equipment, and support services.
- 9) That with the goal of increasing Liberia's economic independence, the MOA prioritized food crop development, particularly rice, above cash crop production.
- 10) That Agricultural Extension Service (EAS) Officers adapt to provide EAS services using cutting-edge agricultural technology.
- 11) To further fulfill the requirements of all target groups, the MOA should set up an agricultural mechanization service center to provide extension services directly to farmers.
- 12) That there is an urgent need for a mental shift among Liberians so that more money may be put into food crop production and so that less food, especially rice, can be imported.
- 13) That locally produced food to be processed to meet international standards, and it be imperative that local farmers upgrade from their inferior historical methods.
- 14) That in order for farmers in Liberia to make a living off of food crops, it is crucial that Liberian customers buy these goods in the local market.
- 15) That the MOA would encourage agricultural enterprise and help to establish a favorable legal and regulatory climate for it in Liberia.
- 16) More importantly, that MOA exercise the five dimension factors of food security as a yardstick by which food systems around globe used to evaluated and improved food security and self-sufficiency.

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Appendix A

FOOD SECURITY IN LIBERIA: THE DIFFICULT CHOICE BETWEEN CASH VS. FOOD CROPS

ORIJINALLIK RAPORU	
% 15 % 13 % 5 BENZERLÍK ENDEKSÍ ÍNTERNET KAYNAKLARI YAYINLAR	%2 ÖĞRENCİ ÖDEVLERİ
BIRINCIL KAYNAKLAR	
www.foodsecurityportal.org	%1
www.digitalgreen.org	%1
documents.wfp.org	%1
leap.unep.org	% 1
www.gafspfund.org	% 1
flex.flinders.edu.au	% 1
docshare.tips Internet Kaynağı	<%1
docplayer.net Internet Kaynağı	<%1
9 www.imf.org internet Kaynağı	<%1



SCIENTIFIC RESEARCH ETHICS COMMITTEE

18.04.2023

Dear Kelvin Mewaseh Johnson

Your project "Food Security In Liberia: The Difficult Choice Between Cash Vs. Food Crops." has been evaluated. Since only secondary data will be used the project does not need to go through the ethics committee. You can start your research on the condition that you will use only secondary data.

Prof. Dr. Aşkın KİRAZ

BV: 5

The Coordinator of the Scientific Research Ethics Committee