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“The Season of Famine” as a Challenge to Food Security in Northern Rural Togo: Addressing Seasonal Hunger through Household Coping Strategies

Jennifer Gorsegner
The University of Montana

"THE SEASON OF FAMINE" AS A CHALLENGE TO FOOD SECURITY IN NORTHERN RURAL TOGO: ADDRESSING SEASONAL HUNGER THROUGH HOUSEHOLD COPING STRATEGIES

By

JENNIFER SKYE GORSEGNER

Bachelor of Arts, Western Oregon University, Monmouth, Oregon, 2001

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Approved by:

Sandy Ross, Associate Provost for Graduate Education
Graduate School

Robin Saha, Co-Chair
Environmental Studies Program

Craig Molgaard, Co-Chair
School of Public and Community Health Sciences

Neva Hassanein
Environmental Studies Program

Peter Koehn
Department of Political Science

ABSTRACT

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"The Season of Famine" as a Challenge to Food Security in Northern Rural Togo: Addressing Seasonal Hunger through Household Coping Strategies

Co-Chairperson: Robin Saha

Co-Chairperson: Craig Molgaard

Improved understanding about food security has led researchers to develop increasingly holistic approaches to studying the effects of household food insecurity. This research, based in the remote prefecture of Dankpen in Togo, West Africa, presents insights into the lives of rural subsistence farmers, the role of population pressures, and the effectiveness of both international and national development work. Originally I wanted to identify positive deviants who were food secure living in the Dankpen prefecture. I conducted group interviews in five villages surrounding the prefectural capital, Guérin-Kouka in December 2009 and January 2010. There was combined total of 61 men and 47 women who participated in the group interviews. Results from this research demonstrate the need for community-based solutions to food insecurity, especially in rural settings in developing countries. Household coping techniques, such as reduced meal intake, are discussed in light of how families manage to get through the "season of famine," which occurs every July and August throughout the Dankpen prefecture. Recommendations, such as teaching food preservation techniques, to improve food security for families in northern rural Togo have been included as well as further research opportunities and broader development applications.

Keywords: food security, West Africa, Togo, household coping strategies, positive deviance, seasonal hunger

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TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION

"People in my village are starving." A group of Peace Corps Volunteers had gathered at a local transit house and were sharing stories of their experiences with new volunteers, of whom I was one in December 2004. A colleague said this phrase as he related a story of a man who died of starvation while leaning against a tree in a small village near the Togo-Ghana border. The man had been waiting for the cotton payments to come in from the government, but they never came. I had only just arrived in Togo and moved to Guérin-Kouka, a village in the Dankpen prefecture in northern Togo. The fact that my friend knew of someone who had died of starvation was nearly incomprehensible to me. This phrase and his story became my introduction to food security. So began my search to understand the connections between the man dying under the tree, the work of subsistence farmers, the role of international development (the role I was assuming at the time), and the responsibility of a national government.

I spent two years writing letters and occasional emails home in which I inevitably talked about food in Togo. The traditional Togolese meal consisted of corn pounded into a mush (or rice) and accompanied by a spicy vegetable oil-based sauce. Hot peppers, I learned, had anti-bacterial properties that protected the food and reduced some risk of food-borne disease. I could barely eat it for the first six months I lived in Togo because it was so hot. In the Dankpen prefecture, the corn was often replaced by cocoyams. These large tubers were known throughout Togo and people in the capital, Lomé, paid a premium price for them. The base (rice, corn, or cocoyams) is referred to as "pâte" (prounounced "pat"). The sauce could be made of tomato paste or baobob leaves with occasional protein provided by fish, beef, chicken, or cheese. Fruit, including papaya,

mangos, oranges, bananas, and pineapples was available during the weekly market.

Despite this description of available food, I often felt hungry living in Togo. At first, I thought it was because of the repetition in my diet: pâte for breakfast, lunch, and dinner, an occasional egg sandwich, and fruit. But after a year of living in Guérin-Kouka, I began to notice that there were times when I would go to get food only to find none. Local women who prepared food as an income-generating activity would suddenly run out of food in the middle of the dinner rush. At the time, I did not think much of it, but then I was introduced to the idea of food security and everything clicked.

The concept of food security was defined at the 1996 World Food Summit in Rome as a condition in which "all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life" (WHO 2010). The World Health Organization's (WHO) interpretation of this definition clarifies food security as "including both physical and economic access to food that meets people's dietary needs as well as their food preferences" and distinguishes three interrelated but distinct concepts: food availability, food access, and food use (WHO 2010). Food availability is the presence of reliable and adequate amounts of food in a given area where people would typically obtain (purchase or grow) their food. Food access takes into account the resources (income or access to land and seeds) people need to acquire suitable foods for a nutritious diet. Food use is the knowledge of basic nutrition and food preparation and storage.

Since the creation of international development agencies, food shortages have been characterized by a lack of availability of food, instead of access to food. In the 1970s and 1980s, West Africa experienced famines which were addressed by large

donations from developed countries and their citizens. Relief agencies delivered food to the country or region in need and the distribution was left to the governing body. These food crises were characterized by delayed action and large benefit concerts. Deaths numbered in the hundreds of thousands (Paarlberg 2008). The plight of the starving and malnourished people in developing countries has led several international development-focused non-governmental organizations (NGOs) and governments around the world to focus on food security. NGOs including Médecins Sans Frontières (Doctors Without Borders) (MSF), CARE International, Action Contre le Faim International (Action Against Hunger International) (ACF), and Save the Children are addressing malnutrition and starvation in new increasingly holistic ways. ACF and Save the Children, for example, have recently developed Food Security and Livelihood departments and positions. These moves suggest that international development organizations are beginning to look at food security in a more holistic way.

The implementation of a Famine Early Alert System in the early 1990s, which analyzes rainfall patterns and food prices, has led to a dramatic decrease in famine-related deaths that were seen in during the 1970s and 1980s. However, famine is at the end of a food security spectrum. On the other end of this spectrum, people live with ample availability, access, and use of food. As this research explores, the rural subsistence farmers of the Dankpen prefecture must deal with inadequate food availability and access on a more frequent basis than the headline-grabbing humanitarian crises that are typically associated with food crises in developing countries.

There are specific differences between food insecurity, hunger, and malnutrition that require some clarification. Food insecurity refers to the lack of access or availability

of food to a given population. Hunger is used in this research to refer to the physical and social condition of undernourished people. Malnutrition is most commonly used to describe the condition that results from a poor diet and can be used for both over - consumption or under-consumption of calories. It can also result from a lack of specific minerals and nutrients (Shroeder 2008). Malnutrition can have long-term health consequences, as described in the following chapter. In this research, the term malnutrition refers exclusively to the state of being undernourished.

Organizations, including agencies within the United Nations, are now attempting to address the root causes of food insecurity by developing programs to improve livelihoods, food production, and access to water and irrigation technologies. The focus on food security has broader appeals than agriculture alone, which is typically limited in donor's minds, to soil, water, and farming practices. Food security encompasses agriculture, but also brings in trade and market forces, international aid policies, livelihoods, and infrastructure. This wider classification creates the possibility of a system-wide approach to address hunger and malnutrition issues.

Subsistence farmers in rural northern Togo face various challenges. Increasing population puts pressure on the amount of available land. Export demand for cotton and teak has intensified in the Dankpen prefecture. Cotton producers in Togo (and other sub-Saharan African countries) must deal with subsidies in developed countries, especially the United States, which has lowered market prices and made it more difficult for Togolese cotton farmers to compete on a global scale. Political unrest has negatively impacted the business investment and development loans given to the Togolese government, which has slowed infrastructure advancements, such as road maintenance

and improved health care facilities. Subsistence farmers in Dankpen also deal with an increasing gap in socioeconomic status between themselves and their counterparts in the prefectural seat, Guérin-Kouka.

Research Purpose

This research seeks to understand the lives of rural and remote subsistence farmers in Togo, the role of changing climates and populations, and the effectiveness of both international and national development work, specifically related to food security. I wanted to identify food secure families to determine if there was a behavior or behaviors which helped them to be food secure and whether these strategies could be applied to other families in the area. I wanted to be able to offer recommendations to international aid agencies, local officials, and residents of Dankpen to improve food security of families in northern rural Togo.

My research questions included: *Are there food secure subsistence farmers living in the Dankpen prefecture?*; *If so, how does their behavior relating to farming practices, selling their crops, or an unidentified strategy differ from their food insecure neighbors?*; and *How could these behaviors be taught and applied to a larger population at the village, prefecture, or even regional level?* To answer these questions, I selected as a research site the Dankpen prefecture, where I had lived from 2004 to 2006, to determine if I could identify people who were food secure living among those who were food insecure, and what behaviors, if any, helped them achieve this. I wanted to find out if, in the absence of international development projects, people exist who are able to meet and maintain the food needs for themselves and their families.

The Dankpen prefecture was an ideal site for this research given the high acute malnutrition rate (24%) in the Kara region of Togo and the absence of food aid, notable development projects, or well-funded local and national infrastructure relating to health, education, and transportation (IRIN 2007). This provided an environment where one could reasonably expect to find food secure families able to withstand socioeconomic, political, and transnational forces because previous research in positive deviance had identified examples from a seemingly consistent population. I hoped to identify a behavior, such as a different method of food storage, of selling crops at higher market prices, or of improved agricultural techniques that could potentially create a path that could be reasonably followed by less food secure families.

The audience for this paper includes organizations currently working in Togo, such as Cor Afrique (a Dankpen-based NGO), the United Nations Children's Fund (UNICEF), and CARE International, which focuses on nutrition and health initiatives. These organizations are in the best position to create meaningful programs that have a positive impact on the ground. Their reputations within the Togolese community, their constant search for innovative ideas in development, and, for the larger NGOs, their access to funding, make them an appealing primary audience for this research.

I used two theoretical frameworks: positive deviance and household coping. The positive deviance approach focuses on identifying solutions applicable to specific geographic, economic, or social conditions. Positive deviance assumes that there are beneficial behaviors that a small number of people are engaging in that could benefit a wider population. Positive deviance seeks to identify "positive behaviors that diverge from … norms in a beneficial, rather than detrimental, way" (Spreitzer and Sonenshein

2004:828). Using a positive deviance approach, I sought to identify household food security strategies in the Dankpen prefecture with the hope that the lessons learned could be shared with organizations working there and other areas of northern Togo.

Household coping examines the strategies used by families during times of food insecurity, though it certainly has relevance in relation to any other household level concern. Adams, Cekan, and Sauerborn (2000:263) explain why the concept of household coping should not be overlooked:

> All too often, rural development policies and programs are a hasty response to crisis and political exigency. For instance, when drought occurs, the large-scale distribution of food aid is a rapid and routine policy reaction. At best, policy and program responses of this nature are palliative, with only passing attention paid to the issues of differential needs, or the long-term implications. At worst, they exacerbate inequity and undermine the capacity of rural people to help themselves. Against this experience, however, is a growing realization that development efforts might be more sustainable and constructive if they were sensitive to the origins, dynamics and differential experience of rural adversity, and supportive of what communities and households do themselves to minimize risk and cope with crisis.

The concepts of household coping and positive deviance overlap in their search for local examples and reliance on the capacity of the people to find mechanisms to cope with stress. However, an important distinction can be made. Positive deviance takes a group of people struggling with a stressor, such as food insecurity, and looks for the exceptional few who are addressing the issue in a unique way. For example, a woman may fish for small crustaceans in rice paddies, going against traditional behaviors (Berggren and Wray 2002). According to the literature (Adams et al. 2000), household coping strategies seem to be a shared response across a community and may be a typical reaction to the stressor. For example, a household may reduce the number of meals given

to adults when food supplies are low, which is seen in the community as a common experience. Ultimately, my research provides examples of household coping mechanisms used to manage food insecurity in northern rural Togo.

Research Overview and Paper Organization

I conducted research in five villages in the Dankpen prefecture over one month. During this time, I met with directors of non-governmental organizations, agricultural experts, health care workers, and residents of Guérin-Kouka and the five villages. I also observed well-baby checks and the weekly and daily markets, as well as life generally in the Dankpen prefecture. Upon returning to the United States, I analyzed my interviews by transcription and coding to search for recurring ideas that may provide insight into food security in the Dankpen prefecture.

In Chapter 2, I examine sub-Saharan Africa in the context of the Millennium Development Goals. I look at international food aid and development loans. I discuss the importance of community-based adaptation strategies and note the challenges associated with depleted natural resources and climate change.

In Chapter 3, I give an overview of Togo and, specifically, its northern rural prefecture, Dankpen. I introduce Togo's current political and economic situations, health and educational conditions, and agricultural and climate characteristics. These subjects are framed within a larger scope of reference that includes transnational influences and existing development policies and practices in sub-Saharan Africa.

In Chapter 4, I describe my research methods, including my planning and preparation for my field research. I give detailed information on the frameworks within which I developed my research questions and analyzed my data. I describe the villages

where interviews were held and my data-gathering process. Finally, I describe the analysis of my interviews.

In Chapter 5, I share the stories of subsistence farmers in Dankpen. I explore the major themes of this research including seasonality, household coping techniques, and climate change adaptation. I introduce the title's theme, The Season of Famine.

In Chapter 6, I conclude the paper by offering ways to improve food security for rural people, specifically living in Dankpen, but with an eye toward broader applications. I also offer locally-appropriate solutions and suggestions for further research.

CHAPTER 2: THE UNITED NATIONS' DEVELOPMENT GOALS, FOOD SECURITY, AND COMMUNITY-BASED ADAPTATION

In this chapter, I present the United Nations' Millennium Development Goals (MDG) and the challenge of meeting the first MDG. I explain the consequences of food insecurity and the role of international aid in addressing food security over the last decade. I also delve into the concept of community-based adaptation. Finally, I introduce climate change as a new challenge for subsistence farmers in sub-Saharan Africa.

At the Millennium Summit in September 2000, national representatives converged in New York to sign the United Nations Millennium Declaration. From this meeting, eight goals, known as the Millennium Development Goals (MDGs), were established to reduce extreme poverty. These goals are: 1) to eradicate extreme hunger and poverty; 2) to achieve universal primary education; 3) to promote gender equality and empower women; 4) to reduce child mortality; 5) to improve maternal health; 6) to combat HIV/AIDS, malaria, and other diseases; 7) to ensure environmental sustainability; and 8) to develop a global partnership for development (UN Millennium Project 2006). All of these goals have specific targets and indicators. For example, the first target of MDG 1 is to "halve, between 1990 and 2015, the proportion of people whose income is less than $1 a day" as indicated by World Bank statistics (UN Millennium Project 2006).

The challenge of meeting MDG 1 (eradication of extreme hunger and poverty) has been difficult to meet for many reasons. In regards to the recent economic crisis, the Food and Agriculture Organization of the United Nations (FAO) cites "The fact that nearly a billion people remain hungry even after the recent food and financial crises have largely passed indicates a deeper structural problem that gravely threatens the ability to achieve internationally agreed goals on hunger reduction" (FAO 2010). The FAO urges

governments to address the root causes of hunger by increasing agricultural investment, expanding social assistance programs, and improving income-generating activities for the rural and urban poor.

Developing countries must face these challenges with weak infrastructure and consequential poor health, sanitation, and food security for their citizens. Lack of access to and education about family planning strategies are contributing factors to population growth, which further stresses the ability to meet the food needs of families, communities, and countries. The United Nations estimates that 925 million people in the world continue to confront hunger, 239 million of whom live in sub-Saharan Africa (FAO 2010). Caroline Hurford of the World Food Program stated,

> There has been a slight dropping off in the number of hungry people in the late 1990s but then it rose again of course during the financial crisis of 2007-2008…. And then the very high food prices together with the high fuel prices really knocked everything off track again and we're just finding that more and more people are unable to afford to buy food and then of course climate change has come in and that's made it more difficult to grow food (Hennessy 2010).

The consequences of food insecurity can be seen in many forms. These include malnutrition, decreased life expectancy, and populations susceptible to disease. Increasingly, food insecurity can also contribute to societal consequences, including out-migration from rural areas, rapid urban population growth, child trafficking, and, as seen in Mexico over the price of corn, riots (Mortimore 2010; Kiting 2009; Schroeder 2008).

Malnutrition causes developmental and cognitive delays and weakened immune systems in children. It increases their susceptibility to disease, especially diarrheal disease, which is prevalent in developing countries, and can lead to stunting, wasting, anemia, and other micronutrient deficiency diseases (Schroeder 2008). Malnutrition can

also occur at any phase in life and can be especially devastating to mothers, who may have low-birth weight babies as a result.

Research conducted by Reardon, Matlon, and Delgado (1988) in Burkina Faso indicates that most subsistence farmers are in fact net food purchasers. This means that despite growing significant amounts of food which could be consumed at the household level, farmers are actually buying more food than they produce, providing they have the necessary resources. This significant finding gives insight into how higher food prices could substantially impact the world's poorest people. A report by the United Nations Agency for International Development provides this description of the impact of increasing food prices on food security:

> Between March 2007 and March 2008, global food prices increased an average of 43 percent, according to the International Monetary Fund. During that time period, wheat, soybean, corn, and rice prices increased by 146 percent, 71 percent, 41 percent, and 29 percent, respectively, according to the U.S. Department of Agriculture … Approximately 1 billion people—or one sixth of the world's population—subsist on less than $1 per day. Of this population, 162 million survive on less than $0.50 per day. At the household level, increasing food prices have the greatest effect on poor and food-insecure populations, who spend 50 to 60 percent or more of their income on food, according to the International Food Policy Research Institute (IFPRI) (USAID 2009).

The prospect of eliminating extreme hunger has become an even more daunting challenge since 2000. When the MDGs were developed, there was not a large budget deficit in the United States, world militaries were not involved in Iraq and Afghanistan, climate change was not on every agenda, and the global economy was not running in crisis mode. These obstacles complicate the response to development goals. In an effort to recognize the function of international aid in this new world situation, the next section focuses on the responsibility of governments and supranational agencies in development.

International Aid and Community-Based Adaptation

Governments, transnational organizations, and supranational agencies raise new questions and continually improve their strategies on the ground to address each of the MDGs. However, the inclusion of local communities tends to be overlooked, but is nevertheless imperative to the progress of reducing food insecurity. People living their day-to-day lives with limited resources and access to information currently use strategies to reduce threats to their livelihoods, food security, and may be adapting to climate change in a way not previously considered by development organizations.

Africa is particularly vulnerable to climate variability and change. Only 5% of agriculture in Africa is irrigated, thus compromising crop production (yield) during times of climate fluctuation. In some countries yields could be reduced by up to 50% by 2020. Further aggravating food insecurity and malnutrition, "The area suitable for agriculture, the length of growing seasons and yield potential, particularly along the margins of semi-arid and arid areas, are expected to decrease" (APF and NEPAD Secretariat 2007:9). This would further adversely affect food security and exacerbate malnutrition in the continent.

At the Second International Workshop on Community-Based Adaptation to Climate Change held in February 2007, Arivudai Nambi Appadurai from Swaminathan Research Foundation in India shared the story of a community-based project directed at improving food delivery systems, and promoting multi-level policy dialogues, and general awareness of climate related impacts. He noted "community-driven strategies and actions related to water, agriculture, land use, and livestock" and also addressed "perceived barriers to adaptation including lack of: knowledge; appropriate technology; credit and savings; and timely information covering weather forecasting" (IISD 2007:3).

The United Nations Development Program (UNDP) states that community-based adaptation (CBA) "recognizes the need for context-specific adaptation projects that identify local vulnerabilities, draw upon local knowledge and capacity, improve local adaptive capacity, and directly involve local stakeholders" (UNDP 2010). The UNDP identifies that programs using CBA will be planned, proactive, and anticipatory and is really an approach to development, rather than a theoretical concept. It ensures local solutions to specific problems in a given community. The UNDP is working to include CBA in programs related to gender equity, water, and community mobilization, among others.

Increased collaboration among development agencies and climate change groups has recently shown hopeful outcomes as a result of programs incorporating community-based adaptation (Eldis 2010b). Ayers and Huq (2009) of the International Institute on the Environment and Development described community-based adaptation as a necessity for building functional relationships between the MDGs and communities. The authors found that community-based adaptation strategies that include local stakeholders and development professionals build on existing knowledge and culture while reducing vulnerability.

The role of international aid has been questioned repeatedly over the last three decades, but typically by citizens in developed countries (see, for example, Maren 1997). These criticisms are now emerging from experts in the developing countries themselves. In her recently published book, *Dead Aid: Why Aid is Not Working and How There is a Better Way for Africa*, Dambisa Moyo, a Zambian economist, explored and critiqued the role of aid in Africa. She presents insightful criticism of an international aid system,

which she argues has perpetuated poverty on the African continent, and +then argues for food assistance that can support sustainable and equitable solutions in recipient countries, stating:

> Aid effectiveness should be measured against its contribution to long-term sustainable growth, and whether it moves the greatest number of people out of poverty in a sustainable way. When seen through this lens, aid is found to be wanting. That said, the approach to food aid … has tried to push aid in a new direction, one which can potentially help African farmers. The proposal would allow a quarter of the food aid of the United States Food for Peace budget to be used to buy food in poor countries, rather than buying only American-grown food that has to then be shipped across oceans. Instead of flooding foreign markets with American food, which puts local farmers out of business, the strategy would be to use aid money to buy food from farmers within the country, and then distribute that food to the local citizens in need (Moyo 2009:44-45).

In this way, Moyo does not suggest that aid in itself stop. Instead, she believes that are ways to include local people, those directly affected or geographically closer, in the solution. In much the same way, Médecins Sans Frontières (Doctors Without Borders), a French NGO, is now manufacturing its peanut-based nutrition supplement either in countries directly impacted by malnutrition or in a neighboring country, as seen in the famine in Niger in 2006 (Shepherd 2009).

These approaches to including developing countries not only in the conversation about development, but also in the solution seem like common sense, but it has not historically happened. As development agencies and businesses investing in developing countries begin to realize innovations happening on the ground in these countries, there will likely be a need for people who can understand the interrelatedness of household, community, national, and transnational issues.

Natural Resources, Climate, and Climate Change

As developed countries attempt to address climate change, sometimes without the voice of developing countries, it is relevant to include a section on climate change in sub-Saharan Africa. Climate change experts, including the International Panel on Climate Change, suggest that the consequences of climate change will impact the world's poorest citizens at a disproportionate rate (Mortimore 2010: Roncoli, Ingram, and Kirshen 2001; Toulmin 2009).They indicate that subsistence farmers in Africa, will experience increased challenges relating to food and water security, access to land and other natural resources, and decreased yields due to unpredictable weather patterns. In this paper, I suggest that these are the very people from whom strategies and lessons can be learned about how to adapt to climate change. To better understand the difficulties of farming in Africa, the following paragraphs describe Africa's climate and related information.

Robert Paarlberg, a researcher whose work is largely focused on international agricultural policy, stated perfectly, "In Africa, rainfall is destiny" (Paarlberg 2008:149). In all other developing regions of the world, irrigation technologies are actively used. However, in Africa where crops are grown, only four percent is irrigated. This reliance on rainfall is especially precarious because of the unpredictability of weather in most of sub-Saharan Africa. Decisions based on last year's rainfall or a recent trend can have devastating effects if the rains are too early, too late, too little, or too much. Farmers must then cover the expenses related to purchasing seeds and, rarely, fertilizers, even if these investments do not pay off because of a poor harvest. This may lead to increased debt through borrowing (if available) or by selling household assets, including land, animals, stored food, or other goods.

Irrigation projects built in the 1970s in the Volta Basin of Ghana cost an exorbitant $45,000 per irrigated hectare (Van de Giesen et al. 2005). This excessive price, in addition to poor infrastructure, irregular topography, and limited technical expertise, makes irrigation technologies a difficult investment for both developing countries' governments and their farmers. Complicating matters, rainfall patterns can vary dramatically even within a small geographical range. The West African coast can get as much as 4,000 mm (157.48 inches) of rain, with less than 100 mm (3.94 inches) falling towards the border of the Sahel (Paarlberg 2008). This variation can have remarkable long-term consequences as explained by Paarlberg (2008:152):

> Rainfall patterns in Africa are also irregular year by year and over longer periods up to decades or even millennia. Rains can be inadequate for two, four, or even six years in a row. Particularly in West Africa, rainfall fluctuations often last seven years or longer. The famine-inducing Great West African Drought of 1972-74 had its origins in a longer pattern of below-average rainfall that began in 1967 (Derrick 1977). Rainfall fluctuations that are centuries long have been noted as well: between 1600 and 1860 in West Africa average rainfall declined enough to dry up the important grazing lands south of the Sahara and force livestock herding communities to relocate 200-300 km to the south.

Complicating matters, deforestation, desertification, and population growth contribute to the increasing unreliability of historic methods of dealing with climate-related problems. For example, groups that would have migrated to a better climate or water source in the past no longer have that option as populations have increased and settled in these previously unclaimed regions.

In this chapter, I introduced the problem of development in sub-Saharan Africa and examined the role of international aid. I also explored the issues of climate and

natural resources on the African continent. In the following chapter, my focus narrows to Togo and the Dankpen prefecture.

CHAPTER 3: TOGO BACKGROUND

In this chapter, I briefly examine the history of Togo. I look at the country's demographics, health and food issues, social and educational concerns, and climate and agricultural characteristics. This chapter provides helpful background and context on the Dankpen prefecture and the Konkomba people.

Geography, People, and Politics

With a port on the Atlantic Ocean, Togo is a narrow West African country located between Ghana to the west, Benin to the east, and Burkina Faso to the north. From east to west, Togo is 30 to 60 kilometers (19 to 37 miles) across, but from north to south, it is about 500 kilometers (311 miles) long. The southern half falls within the Guinean Forest-Savanna Mosaic which stretches from western Senegal to eastern Nigeria. "The interlacing forest, savanna and grassland habitats are highly dynamic, and the proportion of forest versus other habitat components has varied greatly over time" (WWF 2001a). The major river of the south is the Mono River, which runs from the Centrale region to the Bight of Benin. It also has one major hydroelectric dam. The northern half of Togo rests within the West Sudanian Savanna described as "a hot, dry, wooded savanna composed mainly of large tree species and long "elephant" grass. The habitat has been greatly reduced, degraded and fragmented by agricultural activities, fire, and clearance for wood and charcoal, while populations of most of the larger mammal species have been decimated by over-hunting" (WWF 2001b). The major river of the north is the Oti River, which runs from Burkina Faso and forms a portion of the border between Togo and Ghana. It empties into Lake Volta in Ghana.

Togo is home to more than six million people, with 41 percent of the population

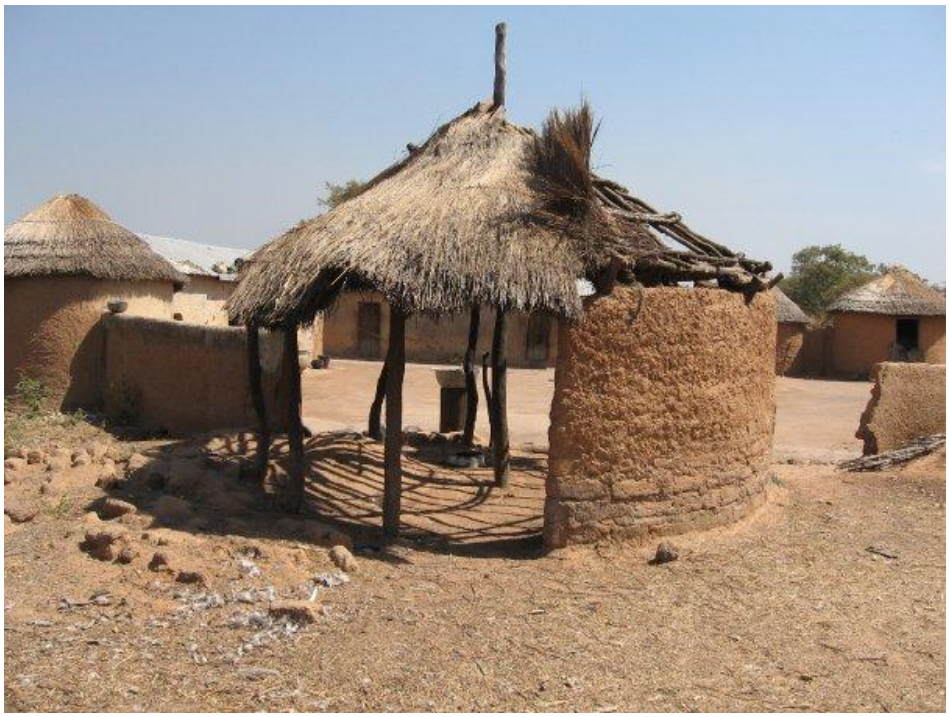
under the age of 15 (CIA 2009). The population growth rate is estimated to be more than 2.77% annually, making Togo the twentieth fastest growing national population in the world (CIA 2010). This population growth rate places Togo among its French-colonized West African neighbors: Burkina Faso at 3.10%; Benin at 2.94%; and Mali at 2.61% (CIA 2010). Ghana, in contrast, has a 1.86% population growth rate (CIA 2010).

There are 37 ethnic groups and approximately 60 languages spoken within Togo's borders where the official (and colonial) language is French. The country itself is divided into five political regions (see Map of Togo, Appendix A). Kara, the second northernmost region, contains seven prefectures. The Dankpen prefecture is 2,690 square kilometers and comprises the northwest quadrant of the Kara region (Law 2007) (see Appendix A: Map of Togo).

Originally part of the Bassar prefecture to the south, Dankpen is one of the newest prefectures in the country, established in 1995. There are roughly 74,000 people living here on the southern fringe of the Sahel (see Appendix B: Map of Study Area – Dankpen Prefecture). An official census of neither Dankpen nor Togo has been completed since the 1980s; therefore, these estimates are based on projected growth rates. The population is overwhelmingly rural. Although two-thirds of Togo's population lives in rural areas, over 90 percent of the population in Dankpen is classified as rural – although one would be hard pressed to classify Guérin-Kouka, the population center, as urban.

Guérin-Kouka is home to about 10,000 people, but there are no paved roads, limited cell phone or other communications infrastructure, one tiny and dilapidated hospital, and irregular electricity. The Dankpen prefecture is the historic home of the Konkomba ethnic group. However, other major ethnic groups including Bassar, Ewe,

Kabiye, Lamba, and Kotokoli are represented in the area. The Konkomba, who speak a language by the same name, are part of the Voltaic language group and largely hold animist beliefs (Decalo 1996). Though the Konkomba make up the majority of Dankpen, they are rarely found elsewhere in the country. The Konkomba ethnic group is divided by the Oti River, the border between Togo and Ghana, with the more than half of the group living in Ghana.



Konkomba compound. Rains destroyed the front "reception" in 2008.

Konkomba houses (also referred to as compounds) are constructed in the same way. A circular reception building made of mud with a thatched roof is the entrance to the compound. There are often two long rectangular buildings that are also made of mud. A thin layer of concrete is also added to protect the building from the rain. These buildings are the bedrooms and have tin roofs. There are several other round mud buildings that include a kitchen area, storage for cotton, and animal spaces. There are two

or three showers – circular mud walls about four feet tall. All of the buildings are connected with a mud fence.

The Konkomba have been displaced various times over the last several centuries. In the sixteenth century, the Dagomba, a neighboring ethnic group, displaced the Konkomba and established their capital on former Konkomba land. Due to the Konkomba's lack of centralized governance, they have "been vanquished numerous times in the past by neighboring ethnic groups. They have also suffered from deep interclan fissures that have sapped their collective strength and resulted in protracted interclan fights" (Decalo 1996:181). In 1897, a German general, faced with Konkomba resistance, slaughtered 79 men, women, and children. The impacts of this single act and resulting insurrections are still felt today in the Konkomba's general distrust of outsiders. At least five times in the twentieth century, interethnic conflicts involving the Konkomba took place, one as recently as 1994 (Decalo 1996).

The Konkomba's history in some ways mirrors the rocky path of Togo itself. Like other countries that gained independence from colonial powers in the 1960s, Togo had a tumultuous beginning. The assassination of Sylvio Olympio, the first president of Togo, in 1963 by the man who would become president only four years later, has perhaps divided the country irreparably between the ruling Kabiye in the north and the populous Ewe in the south. In the early 1980s, "the nomination of opportunistic and corrupt 'yes men,' cronies, relatives, and friends who were neither reined in nor disciplined" (Decalo 1996:131) led to a World Bank decision to refuse to help Togo with structural adjustments in 1984. In effect, the corruption that had been held off for several years following independence seeped into the country and has yet to leave.

In the early 1990s, civil unrest, failed coups, and a crackdown by the army controlled by President General Gnassingbé Eyadema resulted in an overall discrediting of Togo on the international stage. Following in the World Bank's footsteps, international loans and development aid was cut off from Togo. The country continued to decline over the following fifteen years. In February 2005, Gnassingbé Eyadema, Africa's longest serving dictator at the time, died following 38 years in power. His death resulted in a coup d'état, an event that ultimately led to Eyadema's son, Faure Gnassingbé, being elected as the new head of state. Villages home to Kabiyes (Eyadema's ethnic group) in southern Togo were burned, reports of military attacks on opposition leaders and members surfaced, and the United Nations High Commissioner for Refugees was called in to assist. Forty thousand people fled the country in light of the ensuing violence and are still in the process of returning home. Far removed from the violence and beneficially situated in Gnassingbé's home region, Dankpen was not directly affected by these events. In March 2010, Togo's citizens elected Faure Gnassingbé for his next five year term. Violence was markedly down compared to the 2005 election, though protests throughout the country continue to raise questions about this election's validity, despite being declared free and fair by international observers.

Food and Health

A country's health may be influenced by the level of development of its infrastructure. Togo provides an excellent example of what happens to a country when there is a lack of investment in basic health and sanitation services. Key features of Togo and Dankpen, discussed below, illustrate this point.

Togo's volatile governance structure and its lack of international aid and investment resulted in ranking 152 of 177 countries according to the 2008 United Nations' Human Development Report (HDR) (CERF 2009). This ranking was considered to be "Medium Human Development." The HDR uses a multidimensional approach to measure the impacts of poverty around the world. Indicators including adult literacy rate, life expectancy, gross national product per capita, and educational attainment rate are analyzed to develop a detailed understanding of how one country's development compares to another's. In 2009, the HDR ranked Togo 159 of 182, which moved Togo to "Low Human Development" (UNDP 2009). These rankings indicate that Togo is moving in wrong direction and unable to respond to its citizens' needs.

Dankpen is the poorest prefecture in the Kara region of Togo and one of the three most impoverished in the country. Extremely isolated from the rest of the country, there are no paved roads, an under-supplied and under-staffed hospital, endemic diseases (such as malaria and dengue fever), and a severe lack of potable water. Clean water, as in most developing countries, remains high, but as yet largely unattained, priority in Dankpen, due primarily to limited supply and investment by the Togolese government and NGOs. Notable water-borne diseases found in West Africa include malaria, schistosomiasis (bilharzias), trypanosomiasis (sleeping sickness), onchoceriasis (river blindness), and dracontiasis (guinea worm) (Windmeijer and Andriesse 1993). Girls and women throughout the most rural parts of the prefecture walk long distances to obtain good drinking water which is done several times a day.

Dankpen faces other health challenges as well. A 2009 United Nations Central Emergency Response Fund (CERF) report indicated that for every 100,000 people in

Togo, there were only four doctors and per capita health spending equaled just $4 (CERF 2009). There is one doctor, one midwife, and one physician assistant in the Dankpen prefecture. Though they visit outlying clinics on occasion, most of their time is confined to Guérin-Kouka. Limited, expensive, and inaccessible health care in Dankpen only further complicate a difficult situation for most of Dankpen's citizens.

Togo, like many other developing countries, continues to fight diseases not seen in developed countries. In December 2006, the Dankpen prefecture reported Togo's first case of yellow fever in 20 years, prompting a mass vaccination campaign (WHO 2007). On a positive note, this year Togo's government has submitted the required documentation to the World Health Organization to be certified as a Guinea-worm free country. Only six other countries where Guinea-worm was historically endemic have reached this status (Carter Center 2010). Togo joins seven other countries that have not had a documented case of Guinea-worm since 2007, with most of the eradication effort directed along the Oti River, on the border of Dankpen.

Malnutrition aggravates and often contributes to many of the potential health problems in Dankpen. Until recently, malnutrition was largely ignored in the literature, which instead placed the blame of childhood deaths on disease-specific causes (Schroeder 2008). A 2006 UNICEF study stated that malnutrition accounts for 51% of child deaths in Togo (IRIN 2007). Malnutrition countrywide is estimated at 14.3% among children, twice that of its neighboring countries, Ghana and Benin, and more in line with Sahel countries like Niger and Mali (IRIN 2007). There are interrelationships between malnutrition and disease-specific deaths in that a child suffering from malnutrition may be unable to overcome an infection that they would be able to overcome with a better

immune system. According to the African Development Bank Group (AfDB 2009), "over 61% of Togo's population lives below the poverty line. The incidence of poverty is very high in rural areas where three out of every four households are poor. The situation is exacerbated by the population's undernourishment; with some 64% of the poor being undernourished."

Global food prices, discussed earlier, have a dramatic human cost in Dankpen. "An increase in food prices in the order of 30 to 40 percent can rapidly force poor populations to make difficult, or nearly impossible, reductions in their spending on food, and in the education and access to health services for their children" (Bibi et al. 2009:1). In addition to being a rural area, Dankpen is also remote and difficult to access. This drives the price of food up even more. For example, for 100 CFA (Togolese currency: 500 CFA = $1), one can buy about 10 bananas in the southern part of the country. In Kara, that same 100 CFA will purchase 5 bananas. But in Dankpen, 100 CFA will get 2 bananas. Though perhaps a simplistic look at how food prices change depending on accessibility, this example illustrates the fact that people in living in Dankpen are paying more for their food than some counterparts elsewhere in the country, even those that live in rural areas.

Social Customs and Education

Togolese family structure is multi-generational and multi-parental with several definitions of who is a child in a given family. It is not uncommon to find many generations within the same household. Married women typically move to their in-laws' house and village. (This also explains the Konkomba belief about educating girls as an investment in someone else's family.) My research struggled with the use of the word

family. Given my biases, I envisioned an American nuclear family. However there was no consistent interpretation of how a family is defined by the Konkomba. Some parents counted only children living at home; others did not include married daughters. This follows what other researchers have found. "In West Africa the household is a porous, dynamic institution comprised of individuals who share a common interest in its integrity, and who participate in the function of production, reproduction, and consumption" (Adams et al. 2000:275).

Women play an important role in Togolese families, but are often treated as second class citizens. They are responsible for childcare, household management, water supplies, firewood acquisition, food preparation, and farming among other roles. As Karl and Alorda (2009:12) state in regards to food security:

> Women play important roles in food security as food producers, keepers of traditional knowledge and preservers of biodiversity, food processers and preparers and food providers for their families. … In some countries of sub-Saharan Africa, women provide between 60 and 80 percent of the food for household consumption, mainly as unpaid labourers on family plots.

The role and status of women among the Konkomba can be better understood through the discussion of a social issue found in abundance in only two prefectures in Togo: early and forced marriage. Recent Togolese law has banned this traditional practice of the Konkomba. Forced marriage was originally used to strengthen families, clans, and villages. Though some academics have critiqued the use of the term "forced" in describing a traditional practice, it is the same term (*le mariage forcé*) used by my Togolese colleagues. Though strides have been made to curb the practice over the last five years, it persists in the villages of Dankpen. Data collected by Peace Corps and Cor Afrique colleagues in November 2006, following three years of an intensive anti-forced

marriage campaign, estimate that approximately 75% to 80% of girls in Dankpen between the ages of 12 and 17 will be directly affected by forced marriage.

Recent calls to end forced marriage began with a Konkomba man, Ouadja Kiting, who wrote his thesis on why the practice led to low levels of school enrollment. He illustrates the historic Konkomba attitude towards women and girls through the use of a single word in the Konkomba language, "upé." Kiting (2001) states that this word can mean "woman" or "sheep," but the correct translation is "things destined to be traded."

As of 2001, only one in five elementary-aged children was enrolled in formal education (Kiting 2001). Apprenticeships and other informal types of education were only present in Guérin-Kouka itself and were typically catering to teenage mothers unable to return to school. According to a 2007 news release from the Integrated Regional Information Networks, "The Kara and Savannes regions have the lowest levels of primary school attendance at 64 percent and 48 percent respectively." The Kara region is where Dankpen is; however, only 20 percent of their eligible children are enrolled in elementary school in this prefecture. In the past year, however, primary school fees have been eliminated in Togo, which may result in increased attendance by all children. School is still expensive, though, because parents are required to provide uniforms and supplies.

Due to a lack of enrollment, retention, and success in elementary and middle schools, the Dankpen prefecture has the lowest percentage of high school students in the Kara region. The only high school opened in 1996 and serves about 450 students. Given that the fertility rate in Togo is estimated at 4.79 children per woman, the costs of providing for many school-aged children can be prohibitive (CIA 2009). These attitudes

and practices, though changing, can have great impacts on the health and well-being of an entire society. As Stephane Quinton, who leads the humanitarian aid division of the European Commission, said:

> A large component of the problem [malnutrition] has been created by the fact that these regions have high levels of early marriage and of illiteracy among girls…. A lot of the malnourished babies we see are the children of young girls – 15 to 17 years of age who do not know enough about child health care" (IRIN 2007).

UNICEF has called early and forced marriage a "likely cause" of malnutrition (IRIN 2007). The under-education of generations of women not only impacts the potential earnings of women and their families but also the health of their households.

Climate and Agriculture

"Due to the length [north-south extent] of the country, Togo has a unique distinction of crossing six distinct geographical regions and the climate varies from tropical to savanna" (CIA 2009). Dankpen is in the Sudano-Guinean climate zone, which is characterized by one rainy season and extremely variable rainfall. Estimates of average annual rainfall vary from 60 mm (2.36 inches) to as much as 1000 mm (40 inches) (The Africa Guide 2009; Kiting 2009). The rainy season lasts from May to October. The dry season covers November to April. Beginning in December, but especially strong in January, an annual wind called the Harmattan blows in from the Saharan Desert. The dust accompanying this annual occurrence is so thick that it cools the temperature. Dankpen is only ten degrees north of the equator, creating approximately 12 hours of daylight year-round.

In 2007, 2008, and 2009, precipitation varied in intensity and amount leading to massive flooding. The floods resulted in seven bridges along the country's only north-

south transportation route becoming impassable or completely ruined, leading to shortages of food, gas, and other goods. This not only impacted the Togolese living north of Lomé, but also the citizens of Burkina Faso, whose typical seaport access is Lomé. Prefectures around Dankpen were named as those hardest hit. An Emergency Appeal issued by the International Federation of Red Cross and Red Crescent Societies stated, "According to UNICEF, women and children [were] most affected. There [were] reportedly food shortages that may lead the area's workforce to migrate, abandoning the elderly, women, and children" (IFRC 2007:2).

In response to the flooding of 2008, the United Nations' CERF spent just over $2 million to address emergency food concerns in Togo with participation from the World Food Program, Food and Agriculture Organization, and UNICEF (CERF 2009). The goal was to increase food security to the most vulnerable populations, especially those in the hardest-hit northern part of the country.

Approximately 44% of Togo is arable land (CIA 2009). Interspersed in the fields of corn, millet and yams, there are large Baobob and Kapok trees. This landscape has faced significant challenges over the last two decades. Togo's deforestation rates, due to wood exports, firewood gathering, and bush fires, are among the worst in the world with 44% of its forests lost since 1990 (Toulmin 2009). This loss of trees, shrubs, and savanna grass has negatively impacted the Dankpen community. Women must search longer and farther from home for cooking firewood. Erosion has become a problem in fields, next to roadways, and along streams and rivers that have flooded in the last few years. Hunting, despite having historic significance for the Konkomba, has waned over the last decade because of the lack of habitat for animals traditionally killed for bush meat.

As in much of the developing world, subsistence and commodity agriculture are found side-by-side in Dankpen. Togo's agricultural system relies on back-breaking labor with simple farming tools. Animals used for tilling or other agricultural preparation are rarely seen or used in the Kara region. Subsistence farmers cultivate several crops in Dankpen, including yams, corn, millet, rice, groundnuts, soybeans, and cotton. An absence of irrigation technology leads to unreliable harvests in the Dankpen prefecture. Estimates place the number of irrigated acres for the entire country at seventy square kilometers (CIA 2009). As of 1997, there were estimated to be eighty tractors in the country (EarthTrends 2003).

Cotton, northern Togo's only exportable cash-crop, has been grown in Dankpen since the early twentieth century. Established in 1972 by the Togolese government, the Togolese Cotton Society (SOTOCO) was "created to counter peasant dissatisfaction with facilities previously offered by the state" (Decalo 1996:268). SOTOCO is the major buyer of Dankpen cotton. Cotton recently replaced phosphates as the largest single exported product from Togo, encompassing about 31% of the export market (Huq et al. 2003). It was a frequent tale of corruption when neighbors and friends in Dankpen would talk about the Togolese Cotton Society, SOTOCO. Some friends shared that as many as four or five years have gone by without payment. However, when elections or other political pressures come into play, the payments suddenly appeared.

This chapter has explored Togo's key attributes relating to food security, including descriptions of the people, social customs, educational attainment, and livelihoods pertaining to Dankpen. In the following chapter, I describe my research

methods, conceptual frameworks, and research planning and implementation as well as the limitations to my work and the analysis of my data.

CHAPTER 4: RESEARCH METHODS AND ANALYSIS

Qualitative research is designed to draw out people's experiences and worldviews to create meanings from the participants themselves. Hesse-Biber and Leavy (2006:5) describe the process of qualitative research as "reflexive and process-driven, ultimately producing culturally situated and theory-enmeshed knowledge through an ongoing interplay between theory and methods, researcher and researched." Qualitative research allows for the research and methods to be adapted to the situation on the ground, which, as the following pages illustrate, was a very necessary trait.

I met with key informants and held group interviews to look at the food security among the households within five villages. Interview questions (see Appendix C: Interview Guide) broadly addressed family characteristics, access to health care, crops and other food sources, cotton, land tenure systems, resilience and adaptation, and environmental factors. I also asked about actions or ideas interviewees believed would make a constructive difference in their ability to be food secure. I specifically asked about the role of cotton for these families and whether they were planting the same amount from previous years. These questions were used to gather data relating to my research questions, including whether food secure families existed in the Dankpen prefecture and what, if any, behaviors distinguished them from their less food secure neighbors.

Conceptual Frameworks

As stated in the introduction, this research draws from the literature on positive deviance and household coping. Although I initially used the positive deviance approach in designing and carrying out my research, I encountered difficulties in utilizing the

positive deviance approach, which I describe below. As a result, I found it useful to employ the concept of household coping after gathering the data in Dankpen. Positive deviance focused on behavioral distinctions (deviations) from the standard practice; whereas, household coping concentrated on successful strategies employed by a majority of families during a time of crisis. I fully discuss household coping in the analysis section of this chapter. In the following paragraphs, I describe positive deviance.

The positive deviance approach encourages the use of local knowledge through grassroots efforts in order to facilitate change. The positive deviance approach was first developed in studies of nutritional success of families living in food insecure situations. It now has many other applications including implementation by Fortune 500 companies to improve productivity. In 1967, Mark Hegstad offered the earliest reference to positive deviance stating, "We should pay more attention to the reasons for nutritional success than for nutritional failure" (Walzer 2002). In 1972, Dr. Joe D. Wray followed that line of thinking and asked, "Can we learn from successful mothers?" This was in reference to the fact that in nutritional surveys, researchers often came across well-nourished children in poverty-stricken areas. Wray believed that "in order to teach useful child-care and feeding practices to poor mothers, we need to learn what local, successful, poor mothers are practicing" (Berggren and Wray 2002:7).

Using the positive deviance approach, researchers are, in some cases, able to identify distinguishing behaviors that "are likely to be affordable, acceptable, and sustainable by the wider community because their peers are already practicing them" (Marsh and Schroeder 2002:3). Essentially positive deviance supports the development of a culturally-viable and locally-adapted system in which the community builds upon

existing behaviors in order to find a better solution than ones transplanted by an outsider's recommendation or philosophy.

Positive deviance was originally used in Vietnam in a study of malnutrition (Berggren and Wray 2002). Researchers there used anthropometric measurements in a health clinic to determine which children were best nourished in a village where malnutrition was overwhelming the population. They then followed the mothers of the best nourished children home to learn what they were doing differently that had such profound impact on the health of their offspring. The researchers discovered that the mothers were collecting shrimp and small crustaceans from the rice paddies and feeding these to their young children. Others in the village believed that this was an unhealthy practice, which helped explain why the behavior had not been widely accepted. The researchers then encouraged the mothers (so-called "positive deviants" because of their positive deviation from the norm) to share their experiences with others in the community. This new feeding practice, once accepted, contributed to the ultimate decline of malnutrition and was replicated in several Vietnamese villages (Berggren and Wray 2002).

In previous positive deviance research, it was the researchers who identified the examples rather than the people themselves. For example, in the Vietnam study, researchers followed "successful mothers" home and observed how the mothers were finding other food sources. Though some positive deviance research (see, for example, Marsh and Schroeder 2002) suggests that local people quickly adapted the applicable behavior, it is unclear whether these strategies would remain used and relevant once the researchers departed.

Research Planning and Preparation

Prior to leaving for field research in Togo, I developed a research proposal. I prepared my proposal by drawing on literature relating to positive deviance and food security as well as my personal experiences in the Dankpen prefecture. My proposal and interview protocol was approved by a four-member faculty committee and The University of Montana's Institutional Review Board (IRB) in Missoula. The research proposal was approved on December 1, 2009 with a revision to the interview guide approved on December 16, 2009 (see Appendix C: Interview Guide). Togo does not have an IRB to oversee research conducted within the country, unlike Uganda, for example, so Togolese approval for this research was not sought.

However, I emailed and called former supervisors and colleagues to inform them of my research and ask that they inform local government authorities, in keeping with social protocol. These colleagues became key informants for this research. A key informant provides first-hand knowledge and context for social science research. Jeanne Tagone became my primary key informant. (In the Field Research section below, I describe other key informants.) Jeanne is the associate director of Cor Afrique (a local non-governmental organization). I chose Jeanne as my primary contact and key informant because I had worked closely with her while living in Togo and because Jeanne is well-known throughout the prefecture. Thus, she was the most instrumental in establishing contact and credibility with the five villages where interviews were held. She also contacted the prefect (governor) to inform him of this research project, which assured that this research would be conducted without interruption and that I could enter the villages. The prefect is responsible for overseeing all activity that takes place in the prefecture.

Because I was conducting a large project, it was important to let him know what my research entailed and why I was in Dankpen to follow cultural and political protocol.

I developed the idea of meeting with families in order to examine food security on a household level as well as be able to compare and contrast different families from objective criteria. I created a matrix through which I could assess socio-economic status, food resources (especially livestock), and physical manifestations of malnutrition. As noted in the Limitations section below, ultimately this matrix was not used.

My interview protocol was designed to assess different aspects of food security as well as background of the families that I met with. The protocol included questions about the demographics, educational attainment, and use of health care (traditional and Western). These questions were included to determine whether these villages were generally comparable. The next set of questions asked about the crops participants cultivate. I specifically asked about cotton because it is the only commodity crop and my proposal had cited cotton cultivation as a possible cause of food insecurity. I also included questions about other food sources, particularly relating to foraging for leaves or other non-cultivated food and the role of hunting for game. This was used to determine whether the farmers were relying solely on their crops for food.

The protocol also included questions on land tenure and access, and specifically asking about how the participants decided who would cultivate which land, including the quantity and type of crops. I also specifically asked about whether women had access to land and whether they cultivated the "big crops" including corn, yams, and cotton. I also asked about family eating habits, whether or not meals were shared and if children eat the same meal that their parents do. Both of these topics (land tenure and family eating) were

included to determine whether access to land or preferential eating played a role in childhood malnutrition and food security of a family.

I also included questions to explore possible worries and resilience of families facing food insecurity. One question asked whether there were times during the year when participants' families did not have enough to eat and then discussed how that felt and what they did to address this concern. I also wanted to understand if environmental factors could account for a portion of food insecurity in Dankpen. Thus, I asked participants about their experiences with recent flooding and whether they had experienced a drought. Because I had learned of food aid being delivered to families in northern Togo during the droughts, I also asked whether participants themselves or people from their respective villages had received any food assistance during or after the floods. I also wanted to determine if there had been noticeable changes in the climate over a lifetime.

Finally, the last of my interview questions concerned comparisons between participants and their neighbors or people living in other villages. In order to gain an understanding of whether participants considered themselves to be food secure, I included questions that asked if the participants were able to feed their families better than others they knew. My interview protocol also included a question that asked if there was a practice they felt helped them have a more reliable supply of food than others.

Field Research

From December 19, 2009 to January 16, 2010, I conducted research in Togo. I traveled to Guérin-Kouka and met with key informants over the first week. Having lived full-time in Guérin-Kouka from 2004-2006, I was in a relatively rare position of knowing

about the culture, customs, protocols, and hierarchy necessary to gain entry into the communities where this study took place. The analysis for this study is based on: 10 informal focus groups conducted in five villages in the Guérin-Kouka canton (county) of the Dankpen prefecture; conversations held with key informants and agriculture experts; and participant observation. Ninety percent of the rural population is illiterate (Kiting 2009); therefore, oral informed consent was gained in each of the 10 village interviews held. All interviews held in village meetings were recorded with permission from the participants.

Once I arrived in Guérin-Kouka, I was able to meet with Jeanne Tagone in person. Other key informants, who I met through Jeanne or my previous work experience, offered history, opinions on food security, data, and maps. Oudja Kiting, who has conducted extensive research in the area and runs a local non-governmental organization, offered his notes and descriptions of Dankpen. François Gbandey, a retired school teacher and former colleague, provided historical context, village history, and cultural insight. Tabana Poneyi, a hospital worker in charge of well-baby checks and vaccinations, provided general health information as well as an opportunity to observe a well-baby check with 50 mothers and their children. Workers of the local Institut de Conseil et d'Appui Technique (ICAT) – similar to an extension agency – provided crop production information, prices of seeds, and challenges they face in Dankpen agriculture.

Through Jeanne I learned that roads that were in fairly decent condition when I left in 2006 had deteriorated so much that access to villages farther from Guérin-Kouka was severely restricted. Because of this and time constraints, she suggested that I limit my research to the Guérin-Kouka canton. Together we decided to reach out to three

families in each of the following five villages: Koukoupoun, Kpatchalbou, Massapoun, Takpapimbou, and Wagam. The idea was to get a sense of the village through as many contacts as possible, but also to conduct my interviews with families. As is normal in any research, this did not always meet the expectations I had envisioned.

These villages were chosen with several ideas in mind. First, they were all within the Guérin-Kouka canton, which were similar distances to their primary market, hospital, secondary education schools, and had similar access to transportation outside Dankpen. Second, they were all roughly the same size. Exact village populations were not determined; however, each village described themselves as slightly smaller or larger than the other villages, in a range of approximately 400 to 800 people. Third, all the villages were Konkomba with limited or no other ethnic groups living in the villages. Fourth, they were easy to get to. As stated above, road conditions were awful and in order to get to each village in a timely manner, they needed to be accessible by motorcycle. Fifth, Jeanne knew many people in each village, and therefore we selected these five based in part on her perception of the openness and willingness of the villagers to speak with me.

During my first week of field research, Jeanne sent letters to the chief of each village to introduce me and ask that the village chief choose three families that I could meet with. A limitation, but necessary cultural protocol, of this research is the selection of families by the village chief. The letters contained a date and time for my interview and allowed extra time to observe village activities, answer people's questions, and generally spend time in the villages.

I conducted interviews in five villages. A total of 108 people were interviewed and included men and women (see Table 1). I conducted a different number of interviews

in some villages because of the way each village chief interpreted “three families” in the letters Jeanne sent to them. Some chiefs arranged for three families to be represented in one interview; yet others set up three different interviews in three different parts of their respective villages. Children were present at each interview, but are not listed in Table 1 below. There were between 10 and 30 children at each interview.

TABLE 1: NUMBER OF INTERVIEWS AND PARTICIPANTS BY VILLAGE AND GENDER

Village	Distance from Guérin-Kouka	Number of Interviews	Total Men Present	Total Women Present
Koukouboun	7 km	2	7	3
Kpatchalbou	10 km	3	19	25
Massapoun	5 km	1	7	5
Takpapimbou	6 km	1	5	1
Wagam	5 km	3	23	13
AVERAGE	6.6 km	2	12.2	9.4
TOTAL	n/a	10	61	47

Though the original research proposal called for 15 individual semi-structured interviews with parents, preferably conducted separately for equitable representation, the novelty of my existence in the villages necessitated large informal group interviews. It is customary for people living in villages to gather at the chief’s house or other meeting place when a guest is present. Though these visitors typically do not participate in the business at hand, I welcomed them and encouraged their opinions. People gathered as they would at any village meeting. Women sat off to one side on small benches they brought with them to the meeting. Men sat, as custom dictates, in chairs or on benches, often from a nearby compound.

At each interview, the village chief, or his assistant, welcomed and thanked me for coming to their village. I then introduced myself and the research and made sure that all IRB ethical compliance issues were well understood before recording my discussions.

Each interview elicited slight variances on topics that came up in the course of conversation. For example, we only talked about forced marriage in one interview. I used follow-up questions and probes, both prepared and spur-of-the-moment to encourage more conversation and greater depth. In order to assure consensus within a given group, I watched for non-verbal cues (head nods, etc.) and asked several follow-up questions directed to those who had not given the original response. I asked whether participants agreed with a statement, which built consensus and offered opportunities for them to share other opinions as well. Additionally, each day I conducted interviews I took detailed field notes, which recorded my observations and impressions of the villages I had visited or of life in Dankpen generally.

In each interview, I asked the same questions (see Appendix C: Interview Guide) with similar follow-up questions based on participants' responses. I followed my interview guide as closely as possible to maintain consistency. Recordings for each of my interviews lasted between one and two hours. Because I am not fluent in Konkomba, it was necessary to have an interpreter for this research. The interview questions were all similarly asked and answered. Collected responses did not vary in significant ways among the different interviews.

Wagam was the first village I went to. Located five kilometers from Guérin-Kouka, my interpreter and I traveled on a very sandy path to get there. We met first at the chief's house. The chief was about 75 and had fathered at least 61 children with his numerous wives. The second interview was a kilometer away in another neighborhood of Wagam, The third interview was yet another kilometer through the bush where we met under mango and baobob trees.

The second village I visited was Takpapimbou. The dry season was in full effect as we traversed steep, dry creek beds to get there on a narrow, well-trodden footpath. The only shade near the chief's house was a rather pitiful looking mango tree. Takpapimbou was the poorest of the villages I visited as I observed only one person (the chief) wearing flip-flops, tattered and worn clothing, houses in poor condition, and heard stories of how far they walked for water. These observations stood out to me because I did not see them repeated in the other villages.

Massapoun was the third village visited. The nearest elementary school is two kilometers away, but most of the older children attend school in Guérin-Kouka. They walk 20 kilometers a day if they come home for lunch.

From there we headed to Koukouboun, the fourth village. Right off the main road into Dankpen, Koukouboun is the historic location where the Konkomba first decided to settle in the area. A nearby river supplied water and Koukouboun had the best water resources of the villages I visited.

For the fifth and final village, we traveled north to Kpatchalbou. This road is the best we had been on so far. My interpreter explained that a Chinese-owned poultry farm paid to have the road graded to have better access to it during the rainy season.

Analysis of Interviews

Upon my return to the United States, I analyzed the interviews and my field notes by listening to the recordings. I translated and transcribed the French-speaking portions of the interviews and double-checked questionable translations with another fluent French speaker to verify the accuracy of my translation. Obviously, my research would

be greatly enriched by understanding Konkomba, but that was beyond the scope of this project.

I coded my transcriptions and field notes for both topics and themes I thought would be significant while in Togo and those that emerged following my repeated listening of my interviews and reading my transcriptions. It was challenging to code group interviews, but I believe that the consistency among responses across the five villages justified the use of coding for analysis. Among the participants in those five villages, there was very little variation in their answers. This suggests the validity of their responses was not impeded by the selection of families. The absence of significant outlier responses in my research does not suggest that I had reached saturation in my interviews, but rather that I had encountered a phenomenon called cognitive sharing. This refers primarily to the development of social norms (Singh 2010). As I describe in the paragraphs below, many household coping strategies were employed in each village, suggesting that this is a social normative behavior. Unfortunately, many follow-up questions came about after my return, but this does provide opportunities for further research.

After examining all of the data I had collected, I realized I would need an additional, complementary concept to interpret the data. For the analysis, I introduced the concept of household coping as another useful framework for understanding successful strategies for dealing with and adapting to challenging circumstances. In their article, "Towards a Conceptual Framework of Household Coping: Reflections from Rural West Africa," Adams, Cekan, and Sauerborn (2000) argue that to better prepare for times of crises, it is imperative to better understand the ways in which the people impacted by a

disaster or difficult time manage and cope. For their purpose and mine, coping is defined as "an array of short-term strategies adopted in response to crisis" (Adams et al. 2000:264). This framework complements the positive deviance approach and has been included in response to what was learned from interview participants throughout the research process. As stated earlier, qualitative research must be reflexive and respond to the data to properly analyze the data.

The household coping framework was developed through field work conducted in West Africa which identified that "considerable differentiation exists between households in their ability to balance competing demands and objectives" (Adams et al. 2000:264). In keeping with finding distinctions between the successful and less successful households, researchers who have used the coping framework have examined both exogenous and endogenous factors. Respectively, those are distinguished as factors that affect an entire population such climate change or political conditions and those tied directly to the household level such as socioeconomic status and intra-household inequities. This was in keeping with my interview questions, which examined both family and household level concepts (i.e. family eating habits and access to land) as well as the impacts of regional occurrences (i.e. flooding).

The concept of household coping can be applied to understanding a wide range of food security strategies and related aspects of local culture and tradition, including the preservation of livelihoods and long-term goals (discussed below). Much of the literature on coping in relation to food security is directed at a specific stressor, usually a drought (Hampshire et al 2009; Mortimore 2010; Reardon, Matlon, and Delgado 1988; Roncoli, Ingram, and Kirshen 2001). However, emerging research, including mine, suggests that

coping strategies are developed and utilized for far less dramatic situations and on a much more regular basis. The shift from long-term to short-term goals presents the balancing act that families must achieve in order to maintain their food security (or livelihood, etc.).

There are important applications beyond the household level for research regarding household coping. Adams and others (2000:279) suggest:

> Coping strategies have tremendous potential as tools for development. … Monitoring and understanding local coping strategies can assist in identifying ways of protecting and reinforcing system success and adaptation before collapse. Understanding the rationale behind coping behaviour may lead to effective targeting of those at greatest risk of crisis by helping discern where development assistance may foster dependence and where it may prevent calamity.

As illustrated later in this paper, concepts repeated in this research may have a wide use to ensure, or improve, food security within the Dankpen prefecture. The cultural specificity of coping strategies remains of utmost importance in implementing these strategies and therefore may limit their usefulness in other settings.

The topics that emerged from both my interviews and field notes provide the basis for the rest of this paper. The responses garnered through the methods discussed above offer glimpses into household coping strategies, but also indicate ways in which research and the resultant action are hampered by the environment in which the Konkomba live.

Limitations

One limitation of my research was the need for an interpreter. Silas Labanme, a Konkomba man who holds a law degree, agreed to interpret questions and responses for me at each interview. (He was also an excellent motorcycle driver and took me to each of the five villages.) Though I conducted the interviews in French, a language in which I am fluent, everything was translated to and from Konkomba. Although Silas certainly put in

his best effort to translate everything that was said, discussions often took place that may not have been accurately or adequately translated. I lost the nuance of language that is often so vital to qualitative research because of this limitation.

Upon learning that my planned family interviews had changed into informal group interviews, I realized that the matrix to identify differences in socio-economic status and malnutrition symptoms would not work because I could not compare families, nor correctly associate a child with a given family, nor correctly assign a family to a nearby family compound because we met in a communal area. Equally, I did not conduct any anthropometric measurements to determine whether a family was better nourished than another, as had been done in previous positive deviance research relating to malnutrition. Also, without having the expertise necessary to analyze the soil or water quality, I am unable to offer a complementary piece of the food security puzzle in the Dankpen prefecture.

Additionally, I did not fully explore a significant topic related to food security: the role of purchasing food. Though I did ask whether food was bought, I was unable to determine a proportion of purchased food in relation to stored, personally-grown food. The idea of subsistence farmers as net food purchasers (Reardon et al. 1988) appears to be yet another indicator of possible food insecurity and also fits into the food access prong of the WHO definition of food security (see page 2).

Though this research set out to identify positive deviants and understand the specific behaviors that led them to increased food security, key informants and interview participants alike were hesitant or unwilling to name people they thought were more food secure. Responses to the request to distinguish them included: “They [Food-secure

families] exist, but it's because they do not know how to share" and "How would we know how other people are eating if we do not live with them?" Though unknown originally, asking the Togolese in a large group to point out someone doing better not only put the identifiers on the spot, but also those identified may have been reluctant to be recognized for their differences. Equally, given my time limitation and my lack of an established presence or history in any of the villages included in this study, in retrospect there was too little time to get to know people well enough to distinguish the levels of food security within any given family. All of this led me to find the household coping framework described above.

Finally, though I was interested in understanding food security at a household level, my interviews took place in large incongruous groups which could not be distinguished as households or even related family members. This poses a problem in my analysis of household food security given that I did not interview specific households. In the next chapter, I provide more details on the villages themselves as well as important concepts learned in this project.

CHAPTER 5: RESEARCH RESULTS

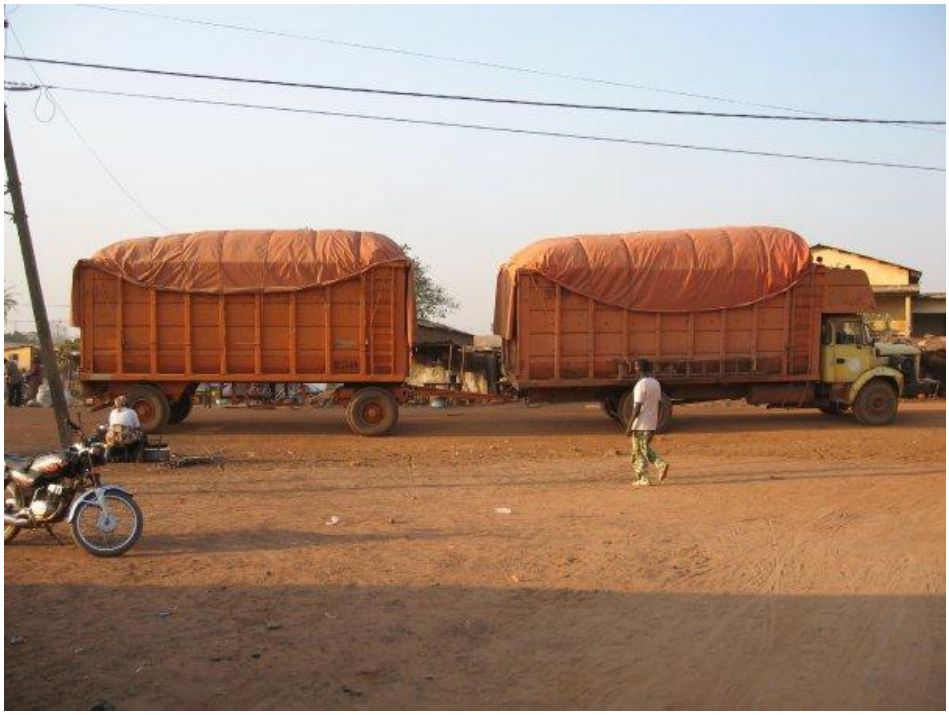
In this chapter, I present the results of my data collection. I have included sections on "The Season of Famine" and the role of cotton, household coping strategies related to reducing meal intake, and descriptions of crops and other food sources. Also, I present findings on education, health care, and land tenure. Finally, I include a section on agricultural improvements discussed by my research participants.

"The Season of Famine" and Cotton as a Safety Net

Participants reported various coping routines, including trying to find extra work, reducing the amount or frequency of meals, gathering food in the bush, and eliminating other household expenses, like medical treatment. François Gbandey, a retired school teacher and key informant for this research, emphasized the plight of the rural poor when he explained that he saves his crops for as long as he can, so that he can sell them at the highest price: "Some farmers, they just harvest and sell their crops right away, but I save mine so that when the demand is high, my price is better." But even François, despite his better socioeconomic standing (due to government retirement benefits) than interview participants in the villages only made $20 USD on his corn crop this year.

The most significant finding of this research was the importance of seasonality in relation to food security. My research was conducted during a part of the year characterized by festivals and celebrations. Ample food is available following the harvest that took place in October and November and portions are generous. In asking about whether participants had enough to eat, they responded "yes." I then prompted them to consider other times of the year and the response was "Yes, except during the 'season of famine.'" In every interview, participants spoke about the season of famine. This annual

occurrence typically included June and July, although some mentioned the season of famine lasting as long as May through August. Participants shared that this coincides with the time when crops have been planted but are not yet mature enough to harvest and when villagers have depleted their stores from the previous year's harvest. Some participants told their stories of a sick family member or other unexpected expense, which then prolonged their family's season of famine. The season of famine ends with the first harvest of the year.



Cotton truck in Guérin-Kouka.

Participants in each village reported that in the last few years, the "season of famine" has started earlier. In all five villages visited, participants stated that in 2004, the Togolese government through SOTOCO failed to pay them for their cotton. This matches the timeline when global cotton prices plummeted. Villagers stated that this continued for a couple years, but eventually all back payments were received. However, in the

following years many cotton farmers in Dankpen cut back the amount of cotton planted. In Takpapimbou, for example, they explained that before 2004 they would harvest enough cotton to fill two trailers on more than six semi-trucks. Interviewees from Takpapimbou told me that they did not fill one truck in 2009. Though this was the most extreme example, all villages reported similar sharp declines.

Cotton, as discussed earlier, is the only commodity crop in northern Togo. Villagers reported that they are now in a "wait and see" mode to determine if it is worth continuing to cultivate this crop. In the meantime, they indicated that their ability to feed their families dwindles. "With cotton, we could put off the season of famine for a little while longer, but now we see it approaching faster every year," stated a father in Massapoun. Cotton provided the necessary safety net for families struggling with food insecurity. Significant income can be derived from cotton, which allows cotton-producing families to cover expenses, urgent or not, with that income. The global cotton market has had real implications for poor farmers in West Africa. Stephen Yafa (2005:306) in his book *Big Cotton: How a Humble Fiber Created Fortunes, Wrecked Civilizations, and Put America on the Map* describes the problems:

> [A cotton farmer in Mali] gets no Malian government support to cover his expenses or keep him afloat during hard times. The $2,000 he might net at best for his 2002 crop has to support two dozen family members for a year, and as cotton prices continue to fall, due in part to dumping by Americans, he fears that he is on the brink of financial collapse. He will no longer be able to replenish his cattle stock or support his brother's high school education.

While this depiction is accurate, it does not take into account the implications for families who do not grow or continue to grow cotton. Interview participants pointed out that cotton, during times of high production, offered a safety net to families. This allowed

them to have more money and food stocks to get their families through the season of famine. Without a larger cotton harvest, families are forced to sell food crops and animals to pay for health care, school fees or supplies, transportation, or any other expense. This increases the likelihood that food stores will not last until the following harvest.

Cotton farmers are paid based on the quality (grade) of their cotton. Despite improved frequency of payments received, farmers are receiving less than they once did for their cotton. One man in Kpatchalbou stated, "They (SOTOCO) used to pay us in the fields, so that we got paid for the cotton at that point. Now they pay us later and we do not know why the grade was lowered." Another man from Takpapimbou explained, "When the cotton is in our fields it is premium grade, but when they load it on to the trucks and take it to Kabou or Kara, its quality is reduced. Sometimes the trucks tip over and the cotton gets dirty."

Participants revealed how they dealt with the season of famine. The universal explanation was "on se débrouille" – "we manage." A mother from Wagam said, "I stay up at night thinking about not being able to feed my children. During the day, I look for work to make a little extra so I can buy some corn. But it does not suffice." A woman from Kpatchalbou stated, "[The worry] is worse than an illness. When you are sick you can get something, but when you are hungry and there is nothing that can help. We drink water."

Meal Intake

When there is ample food, families eat three times a day, but during the "season of famine" they eat less, sometimes only once a day. Adults reduce the amount they eat; some reported eating only once a day or once every other day. The available food is

given to the children. One father in Wagam stated, "They [The children] eat all the time." Children are often given more food, but it is less than their parents would like. There were slight variations among the villages regarding how many meals are consumed each day. Wagam, Koukouboun, Kpatchalbou, and Massapoun all reported eating three times a day. However, in Takpapimbou, which is likely the poorest of the villages, they routinely eat twice a day – once at lunch and once at dinner.

Everyone interviewed described that among the Konkomba, the men eat together as a group as do women and children. One woman in Wagam explained that when there is a group of two or three, they will share a plate. When I asked if that group could be a couple women and a man, the entire interview group laughed and shook their heads at my ignorance. "No," the woman went on, "Each group shares a common plate, but children eat together, men eat together, and women eat together." (To clarify, this typically means that there are three common plates for each meal.)

Reductions in meal intake were commonly described in the interviews. This suggests that this household coping strategy is commonly practiced and accepted. These results are very much in keeping with current literature on household coping strategies. Robert Paarlberg (2008: 155) examines this in a context of drought, but it certainly has relevance for the season of famine:

> When food crops fail in a drought, the rural poor who can no longer provision for their families from what they produce are obliged to purchase food in the marketplace with cash at a time when food prices (even with food aid deliveries) will be higher than usual. The poor will not have funds on hand to make these food purchases because their cash crops (for example, cotton) will have failed in the drought. At this point they will have to fall back on various short-term coping strategies: borrowing money (at a high rate of interest since many others are trying to borrow), selling off household assets (at a low price because others are selling), cutting

> back on nonfood expenses such as school fees for the children (disinvesting in the future of their family), shifting labor into risky nonfarm activities (such as crafts, or panning for gold), or eating fewer meals a day (reducing their own capacity for productive work). Foraging for wild foods in the bush is sometimes also an option. Employing these diverse strategies rural households can survive several years of below-average rainfall, especially if they have access to some food aid. … Yet they will emerge from the experience with fewer household assets, with more debt, in poorer physical condition, and with children who have fallen behind in school.

Crops, Foraging, Land Tenure, and Food Storage

The major food crops grown in Dankpen are cocoyams, corn, millet, sorghum, soybeans, groundnuts (peanuts), and peppers. Interview participants explained the traditional division of labor with men responsible for the "big crops" – cotton, cocoyams, corn, millet – and women farmed the others – peppers, soybeans, groundnuts. Often women would cultivate their crops in between the rows of the men's crops. When asked if a woman could grow the "big crops," interviewees explained that that sometimes happened, but usually because she did not have a husband. Time constraints also play a role in how much land a woman can cultivate. Due to other chores occupying her time, a woman typically does not have time to do a lot of labor intensive farming.

When asked to explain how someone gained access to land to grow food, the participants explained that the traditional way was that children, both sons and daughters, farmed their parents' land. The size of plots varied, but most participants mentioned between one and five hectares per family. "A young man, he can work five hectares, but me I can really only do two," explained a man from Kpatchalbou who looked to be about 40. When asked about neighbors helping on each others' land, interviewees said that they only hired people to work on their land if they could afford it. A father in Massapoun

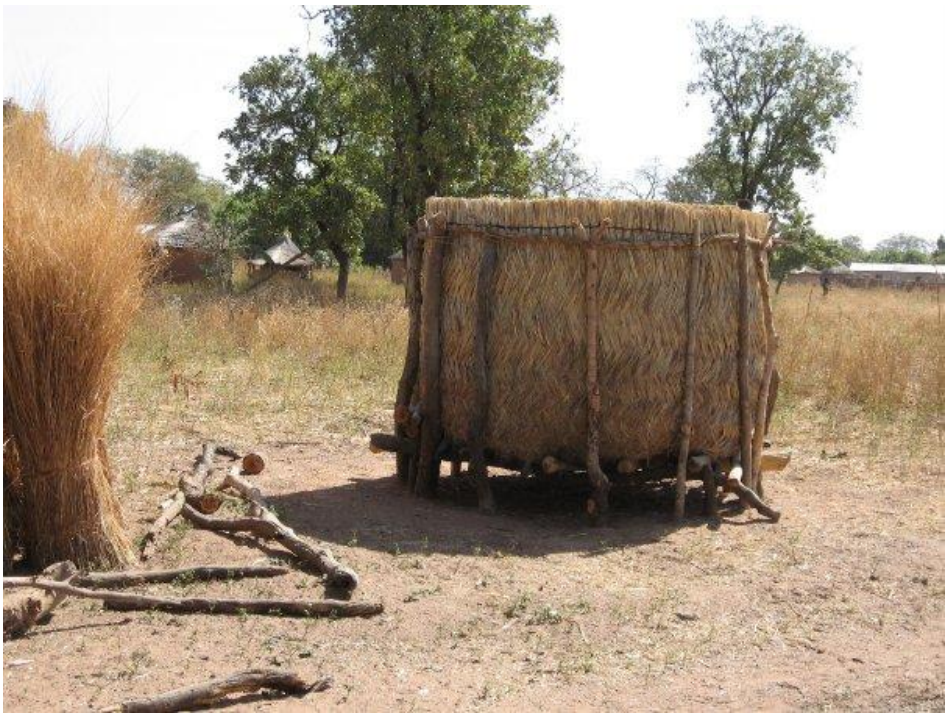
said, “Sometimes, when we see that someone in the village doesn’t have enough for their family, we offer them some work.”

Cocoyams for sale at the Guérin-Kouka weekly market

During the interviews, we also discussed other food sources. When asked about food sources besides crops grown, the interviewees of Koukouboun explained the way they organize increasingly infrequent hunting trips. They shared that they do not hunt very much anymore and that it is usually a large group that goes. “We get together as a group. We travel that way,” said a father, indicating an easterly direction. “Sometimes there are fires that bring the animals to us, other times we just make a circle.” Another participant stated that there are not very many large animals anymore. He stated, “Mostly we hunt mice.” Koukouboun was the only village to report any frequency of hunting.

Foraging, however, was an essential activity in each village visited around Guérin-Kouka. Leaves, seed pods, and sometimes bark from baobob and kapok trees

were given as important food sources for the participants. In Kpatchalbou, they had several other sources collected from trees, but those present were unaware of the names of any of them. Fruit, including mangoes, bananas, and papayas, are gathered as well. Often these trees are found in the villages and no one "owns" the tree itself, which provides access to whoever would like it.



Traditional Konkomba granary used to store dried corn or millet.

The Konkomba participants reported that they have two principal ways of storing food. The first is a granary made of local grasses woven together. It sits about a foot off the ground and has a thatch roof. According to interviewees, this keeps most of the food from weather and creatures alike. In separate granaries, families (or groups of families) store corn and millet. In a square shed-like structure made of the same local grasses, tubers like cocoyams are stored on the ground. They are sorted into various stacks and some are consumed and some are saved for next year's crop. Additionally, peppers,

soybeans, groundnuts, and other small crops are dried and stored in bags and stacked in a storage room within the family's compound.

One of the many practices discussed during the interviews in relation to food storage was preserving fruit. As François explained, "There are more mangoes than anyone could consume for two months of the year; the rest of the year, there is nothing. There is no way to keep those mangoes." Though a couple women knew other women who went to food preservation trainings, they themselves had not had that opportunity. The women in Kpatchalbou were particularly interested in canning tomatoes and making tomato paste. The interest in food preservation suggests a possible initiative that could be implemented in these villages.

Climate and Food Aid

Interviewees did not confirm the occurrence of droughts. This result may be misleading because droughts in West Africa, including northern Togo, have been explored in the literature (Paarlberg 2008). Nonetheless, interviewees reported that "sometimes the rain comes later." When asked to explain what that meant, interviewees in each village echoed the sentiments of a man in Takpapimbou, who said, "There is no way to predict when the rains would come. Sometimes you plant too early and the rains come late. Other times you plant too late and the crops are not ready to harvest."

In contrast, when we spoke about flooding that occurred over the last two years emotions were still very raw. As participants in Massapoun described, "When the rains came, it took everything out of the fields. All the seeds and plants were gone. What are we supposed to do?" As Silas and I had entered Massapoun that morning, we had crossed a large dry tributary that interviewees told me flooded and took out entire fields of

recently planted seeds. The rickety bridge – a plank made from teak – washed away and left the people of Massapoun unable to get to Guérin-Kouka for supplies or for children to attend school.

In 2007, the United Nations stated that food aid would be delivered to the affected regions (IRIN 2007). In 2008, as stated in Chapter 1, $2 million of emergency aid was sent to Togo. It was not clear from my research how that money was spent in its entirety, but a portion did go to the Dankpen prefecture. Interviewees reported that food aid did come to Guérin-Kouka, but to access it families had to pay 1000CFA (about $2USD) to the government's social affairs office. If they did not, or could not afford it, they were excluded from the benefit. Those that did receive assistance lived in Guérin-Kouka (not a single interview participant in any of the villages reported receiving any benefits) and were given approximately three kilograms of rice and three kilograms of beans. One woman in Massapoun stated, "That would not feed us for a day."

Elderly participants were asked about changes they have seen in the landscape (environmental change) observed in their lifetimes. In each village, these participants stated something similar to what a man from Wagam said: "Before, there were bushes and trees everywhere. You could not see your neighbors. There were a lot of animals. Now, you can see your neighbors. There are people everywhere." Indeed, the population explosion has hit rural Togo. Others reported that villages used to have four or five families. Now there are hundreds of people and not enough water or land for everyone. "It used to be that we could use different land when ours was tired. Now we have to work the same land year after year because there is nowhere else to go," stated one participant from Takpapimbou.

In each interview, participants voiced their concerns about access to water. Women in every village stated that they would like to have a garden, but there was no water for basic household needs. A Peace Corps project that repaired wells and pumps in the Dankpen prefecture in 2006 was referenced in Takpapimbou and Massapoun, but participants alluded to the absence of upkeep for these pumps and lack of repairs for others. Families in Takpapimbou informed me that they had to go all the way to a large pond on the other side of Guérin-Kouka, seven kilometers away.

Access to Health Care and Education

Interviewees reported good access to health care but poor service. They referred to the Dankpen hospital as "their" hospital, though it is only a single story and rather dilapidated building. Said one woman in Kpatchalbou, "That is where we go." But this was invariably followed by, as one village chief stated, "They are not nice there. And they never have anything [medicine, supplies]. Then we have to go to Kara. When we get there no one speaks Konkomba, so we have to take someone with us to translate. This is very expensive." The hospital in Kara is comparably well-supplied and staffed, but it is also 3.5 hours away by public transportation from Guérin-Kouka. It costs about $4 USD one way. The cost associated with visiting any hospital in Togo may be prohibitive in many cases. Nothing is provided free of charge, including meals and bed linens which must be provided by the patient or their family. Families reported having to sell their livestock or stored food in order to pay for a hospital visit. In an emergency that required transportation to Kara where the regional hospital is located, the costs were exponentially more impactful on the family.

All participants reported a dual and often simultaneous use of traditional and Western medicine. The role of traditional medicine was seen as different but equal among the interviewees. One mother from Koukouboun stated, "Sometimes I take my son to the hospital, but sometimes I take him to [the traditional healer]. If one fails, I try the other." When asked about the order, she said that sometimes it is less expensive to go to [the traditional healer]." It seems that both traditional and Western medicine have a place in the lives of those interviewed. No one stated that they used exclusively one or the other.

Despite the relatively close distance of these villages to the Dankpen hospital and the apparent recognition and association of the hospital as being "for" the interviewees, there were strong tensions between patients and health workers. Men and women alike reported not being respected or understood when they visited the hospital. In my own observations, Konkomba-speaking women at the hospital for well-baby check-ups were berated for not speaking in French, for not bringing their children to the hospital on time, and for not handing the correctly-colored document to the health worker. They were mocked for their lack of education. This was underlined by the fact that in my conversations with those health workers, parents were referred to as "ignorant" and "peasants."

Educational attainment for participants was low in all interviews. The resultant class division between salaried health workers and subsistence farmers may serve as one reason for general dislike of the hospital. None of the adults in the focus groups had attended school. In some cases, school was in session but I would be told that all the children were in school, despite the school-aged children gathered around me at the time of the interview. This was often explained by the absence of a teacher or that a child was

sick. In a few instances, I would be told that there was no money for school. When I asked about the recent change which made elementary school free in Togo, one man from Kpatchalbou patiently described the associated costs. He said, "Yes, we know that school is free, but uniforms and supplies are not. We want our children to get an education, but we are poor."

Agricultural Improvements

In an effort to find local solutions to food insecurity, I asked the interview participants what they believed would help them most. The first answer in every village was "fertilizers." The subsistence farmers who participated in these interviews understood that there was no way for their land to be in better condition in one year without the use of fertilizers. Though some might criticize this response, the participants believed that there is nothing else available that can improve the soil quickly (in time for the next growing season, or during the current growing season) and enough to make a difference in a family's food security. Other than fertilizers, the topics of easy access to clean water and access to information about farming techniques were the most frequently mentioned subjects.

Interview participants were eager for new information on how to better meet their families' food needs, asking at the end of each interview what they could do better or differently. I asked them about local expertise and referenced the Institut de Conseil et d'Appui Technique (ICAT - the local agriculture extension-like agency). Participants in every village, even Massapoun and Wagam which are closer to ICAT's headquarters, reported similar issues to those relating to access to health care. They did not find ICAT agents to be helpful or willing to come to their villages.

To see if there was miscommunication between ICAT and these villages, I interviewed four (ICAT) employees, they discussed trainings they offered. Though the villages included in this study had never had an extension agent work with them to improve their crops, ICAT members stated that their purpose was to educate groups about improved agricultural techniques, gardening, seed varieties, and fertilizers. On further exploration, ICAT agents would be willing to conduct trainings in gardening, compost, and crop varieties, but only to organized and recognized groups, such as an established women's farm group with elected officers. The villages, according to ICAT, were simply not prepared to follow the process. Though ICAT has a reputation in the villages for their unwillingness to help, they are the only supplier of seeds and fertilizers in the prefecture. Farmers take out loans to afford them and repay the debt after the harvest.

In the last year, a bank branch has opened up in Guérin-Kouka. This offers an opportunity for farmers to learn about finances and to borrow from an organization besides ICAT. Financial education could also lead to groups of farmers combining their savings, without having to rely on a single person to track and manage their money.

The villagers in the Guérin-Kouka canton included in this study were actively interested in improving their food security. This indicates the willingness of these farmers to make a difference in their own villages, if only given the right resources and support. In my conclusions, I offer further insights into this research, solutions that could be implemented on a local level, and recommendations for further research.

CHAPTER 6: DISCUSSION AND CONCLUSIONS

This research shows that many subsistence farmers of Dankpen experience seasonal food insecurity. This phenomenon was explicitly described by all the interview participants. Parents mentioned how their worry over whether their children would have enough to eat was "worse than an illness." There are strategies being employed at a household level (such as reducing meal intake) to cope with food insecurity, but there have been no strides to address it at a village or prefectural level. To address food security on a larger scale, more analysis of crop cultivation and food preservation techniques could create a more comprehensive understanding of the challenges of food security.

Household coping strategies shared in this research provided great insight into household management and the sacrifice of parents for their children. Though these techniques did not ward off hunger year round, they quite possibly improved a dire situation and made it bearable. Parents I interviewed were single-mindedly focused on the well-being of their families. They were enthusiastic and eager for new information that could help them cope during the season of famine.

This research demonstrated that the positive deviance approach may not work in all areas or at all times. I do, however, believe that given more time to spend in one specific village, community, or even prefecture, positive deviants exist, but are extremely difficult to locate in short amounts of time. I am also not sure that a single researcher could identify these behaviors through qualitative research alone. Additional information to justify the existence of positive deviance in Vietnam, for example, was determined through anthropometric measures. Information garnered through activity like baby-

weighing, measuring crop yields, and monitoring soil fertility would offer further insight into the story of food security in the Dankpen prefecture.

Dankpen, like thousands of other rural places in developing nations around the world, faces an uphill battle in sustaining household food security. Poor infrastructure, political corruption, ethnic hostilities, and reliance on rain-fed agriculture combine to make a volatile situation not only in regards to a family's ability to make a living, but for entire populations to move out of poverty. Additionally, rapid population growth and climate change will add to the pressure of sustaining a family in the coming decades. The role of a commodity crop for subsistence farmers, though hard on the soil and perhaps displacing food crops, cannot be taken for granted. For the farmers of Dankpen, they believe cotton, improved soil (through the use of fertilizers), and better seeds would help them make positive strides in improving their food security.

Summary of Key Findings

Seasonal hunger has been presented as the main finding of this research. This concept provides a new way in which food security should be examined. Researchers should not base their findings on one snapshot of family's food security, but rather as a continually adjusting process over time.

Development agencies and governments must be able to look at food security over a continuum of time that includes the season of famine. ACF International, a hunger-focused NGO, recently published a book entitled *Seasons of Hunger: Fighting Cycles of Quiet Starvation among the World's Rural Poor*. Devereaux, Vaitla, and Hauenstein Swan (2008:xvii) identify reasons that seasonal hunger has been overlooked by development professionals:

> We development professionals are season-proofed – insulated and protected by our housing, air conditioning, fans and heaters, clothing, urban facilities, incomes, food supplies, protection from infection, and access to health services. Often we gain impressions most from rural elites. … We are also season-blind – we travel least at the bad times during the rains and before the harvest, and when we do [travel, we] stick more than ever to tarmac and places close to town. Except in full-blown famines, we rarely encounter or perceive the regular seasonal hardship, hunger and starvation of remoter people. Cyclical seasonal hunger is quiet and hidden. When the rains are over, the harvest is in, and people are through the worst, urban-based professionals travel again and further afield. Their impressions are then formed at the best times, missing the worst.

The reprioritizing of solutions for seasonal hunger should be moved up on development agencies' and governments' agendas. Despite the fact that my research did not identify a behavior that could dramatically improve household food security in northern rural Togo, it brought forth ideas that could alter the way in which professionals could work with local communities to improve the nutritional status of households year round.

As these organizations aim to address MDG 1, the elimination of extreme hunger, seasonal hunger could be a key component of improving food security and reducing malnutrition in developing countries. Because food insecurity over a relatively short period of time, for example, during the season of famine, can have lasting effects on an individual, family, and community, decreasing the impact of seasonal hunger would result in improved nutritional status and increased productivity for a community.

Community-based adaptation techniques, including engaging key local stakeholders, adding local concepts and ideas, and addressing local problems, will be an important component of addressing seasonal hunger and food insecurity generally. Community involvement will not only increase the likelihood of success of a project or

program, but will also provide examples to other communities to employ strategies to deal with issues relating to food security, as well as water and land access. The problems encountered in one area will not necessarily be the focal points in another area. Therefore, community-based adaptation can provide valuable stepping stones to find solutions. Involvement from development organizations will help in guiding the process, but should not be used to find solutions. The answers should start with the people themselves.

Household food security is a subject I care very deeply about. My Togolese friends and neighbors, and especially the participants in this research, deserve to worry less about food security and invest more in their families' futures. Through education and improved farming techniques, I believe that there are concrete ways development agencies can improve household food security in northern rural Togo. In the next section, I offer these locally appropriate ideas.

Recommendations

The innovations to address food insecurity in the Dankpen prefecture suggested below are drawn from the interviews in Wagam, Takpapimbou, Massapoun, Koukouboun, and Kpatchalbou. They incorporate both low-tech and high-tech characteristics and would be achievable by either the villagers themselves or with assistance from development organizations.

The first two solutions require the investment by organizations beyond the scope of the Dankpen prefecture. The second two solutions could be implemented through trainings based and organized in Dankpen communities. The combination of these

solutions presents opportunities for development agencies and local groups to find constructive ways to address household food insecurity.

The first solution is reliable and accessible weather information. Geographic Information Systems (GIS) could be used to track and identify foreseeable risks, such as unusual amounts of rain that may result in flooding, as well as to improve the ability of farmers to plant and harvest to increase the production of their food and commodity crops through weather forecasting. This would also assist with community-based adaptation strategies. Donations to NGOs working in Togo could be made to implement this project. I am unaware of any international development organization or Togolese organizations currently working on weather forecasting, but believe that this could be included in programs addressing food security, like those implemented by UNICEF. Localized offices (called "knowledge centers" in some research) could offer guidance and information about geological features which could be used to identify potential water sources, for example (APF and NEPAD Secretariat 2007; Rabley and DeRoy 2009).

The second solution is the introduction of low-technology and low-cost irrigation methods. This would provide farmers with some reliability in their water supply and usage. Similar projects have been introduced in rural areas of sub-Saharan Africa, but I am not aware of any in semi-arid areas. This precedent would reduce the trial and error period necessary for this innovation's success. In Uganda, for example, irrigation using existing water pumps is being developed at a community farm designed to teach local people how to build and maintain this technology (Taggart 2010). Equally important, maintenance of existing wells and repairs of broken ones could be a vital step in assuring village access to water. (Projects like this were successfully carried out by Rotary

International in coordination with the United States Peace Corps in 2006 and 2007.) The WHO is now promoting solar water disinfection, which could be implemented in Togo through village-level trainings, a format already used as standard practice by many organizations. This method uses sunlight in combination with polyethylene terephthalate (PET) bottles to disinfect water over a period of six hours to two days (depending on weather conditions) (Wikipedia 2010). This does raise environmental and health concerns related to discarding and repeated use of the bottles; however, these may be less significant than the diseases caused by inadequate or contaminated water.

The third solution is increased agriculture expertise and access to that information. Despite good intentions, ICAT has failed in Dankpen to address the questions farmers have about seed varieties, improving soil quality, and agricultural methods, such as multi-cropping. Through organization on a village level, groups could be formed that would fit into ICAT's need of a formal group to train. Access to research – with translators or translations – similarly could provide new ideas and concepts to a historically isolated population. Additionally, improved animal husbandry opportunities, such as bee-keeping, could not only improve a family's food security, but also opportunities for income generation. This has had some success in other regions of Togo, specifically in the Bassar prefecture to the south of Dankpen.

The fourth solution is trainings on canning and preservation. Tomato paste, for example, a widely popular ingredient in traditional Konkomba (and Togolese) meals, can easily be homemade given the right knowledge and supplies. The ability to eat fruit that has been preserved offers much needed Vitamin A. These sorts of activities also offer an opportunity for income-generating activities. Currently, the Togolese dry their food on

any surface – roofs, concrete patios, laid out in the center of their compounds – and this successfully preserves a number of food including peppers, groundnuts, corn, millet, and sorghum.

Further Research Opportunities

It would be beneficial to conduct similar research during the "season of famine." This would provide a comparison and greater insight to the level of food insecurity in the Dankpen prefecture year round. I also suggest interviewing agricultural organizations and groups, especially those founded and run by women. Though I am unfamiliar with their existence in the Dankpen prefecture, I believe that ICAT may be aware of possibilities. Alternatively, this research could be complemented by research conducted in other prefectures of northern Togo that have well-established women's agricultural groups. I felt that there was much more to learn from the women in my interviews, but that the group structure reduced their willingness to discuss more details of their families' food security. The UNDP is currently implementing programs that specifically examine the role and vulnerability of women in light of climate change and food and water security (UNDP 2010); therefore, research exploring these relationships may have a significant place in improving programs addressing women and food security.

Equally important, the exploration of water catchment could be useful. Many houses in the Dankpen prefecture have a small cistern collecting water from a metal roof. Usually the gutter is placed over a door, so it does not collect from the entire roof. Rainwater could be used for household washing and perhaps even a small garden. Drinking water and having enough water for the dry season would remain a problem, but rainwater could narrow the gap between the need and availability of water generally.

Barry and others (2008) in their research on rainwater collection technologies in West Africa discovered that there are often problems relating to rainwater harvesting on a large (perhaps, village-wide) scale. Storage ponds or even large holding tanks were problematic in their research because of issues relating to land tenure and access to labor (or the funds to pay laborers). Barry and co-authors described the challenge facing farmers for rainwater collection:

> Although, many case studies of water harvesting have shown positive results; rainwater harvesting technologies are yet to be widely adopted by farmers. One reason is that most farmers in arid or semiarid areas of West Africa do not have the resources to move large quantities of earth or stones necessary for larger water harvesting systems. … Successful projects … used a participatory approach, capacity building of the beneficiaries (farmers), and farmer-to-farmer extension approach to get farmers fully involved in developing, testing and evaluating technologies (Barry et al. 2008:25).

Therefore, improving access to agricultural information could include water conservation and rainwater collection techniques. Also, rainwater harvesting at the household level should be investigated in addition to, or perhaps in place of, large multi-family or multi-village projects.

During the final minutes of my last interview, villagers in Kpatchalbou reported that they have seen recent changes in the quality of seeds. A farmer from Kpatchalbou told me that he has to plant three times as many seeds as he used to. This could provide such a unique opportunity to work on international development issues relating both to food and health. Access to seeds has become a global campaign for some development organizations and could be used to address rural food insecurity in developing countries.

It would balance this research to have technical analysis of water and soil quality as well as the ability to test the granaries in which families in the Dankpen prefecture are

storing their year's food supply. These analyses could possibly provide insight into the effectiveness of their food storage strategies as well as which techniques would be most helpful to improve water and soil quality. Additional objective criteria could be found in conducting clinical health analysis of children or adults. This would help establish an accurate and verifiable rate of malnutrition across a population.

As presented in the Limitations section of Chapter 4, purchased food (as opposed to personally-grown food) could have a significant impact on the food security of families in the Dankpen prefecture. Household coping strategies should be explored to find whether families are selling off animals or household good in order to purchase food, in addition to paying for unexpected expenses such as hospital visits.

Finally, I think the most interesting possibility of further research is a comparative study between the Konkomba of Togo and the Konkomba of Ghana. These two groups, joined by culture and language, have a divergent history. Togo's Konkomba were colonized by the German and then the French, while Ghana's were colonized by the German and then English. This colonial difference could introduce concepts regarding structural inequality not found in a study of a single area. Additionally, Togo's Konkomba have been historically isolated, living in one of the least developed (one high school, no paved roads) prefectures of the country. They are politically uninvolved. However, Ghana's Konkomba are a politically active group that has demonstrated involvement (and sometimes violence) in responding to issues they see as unfair.

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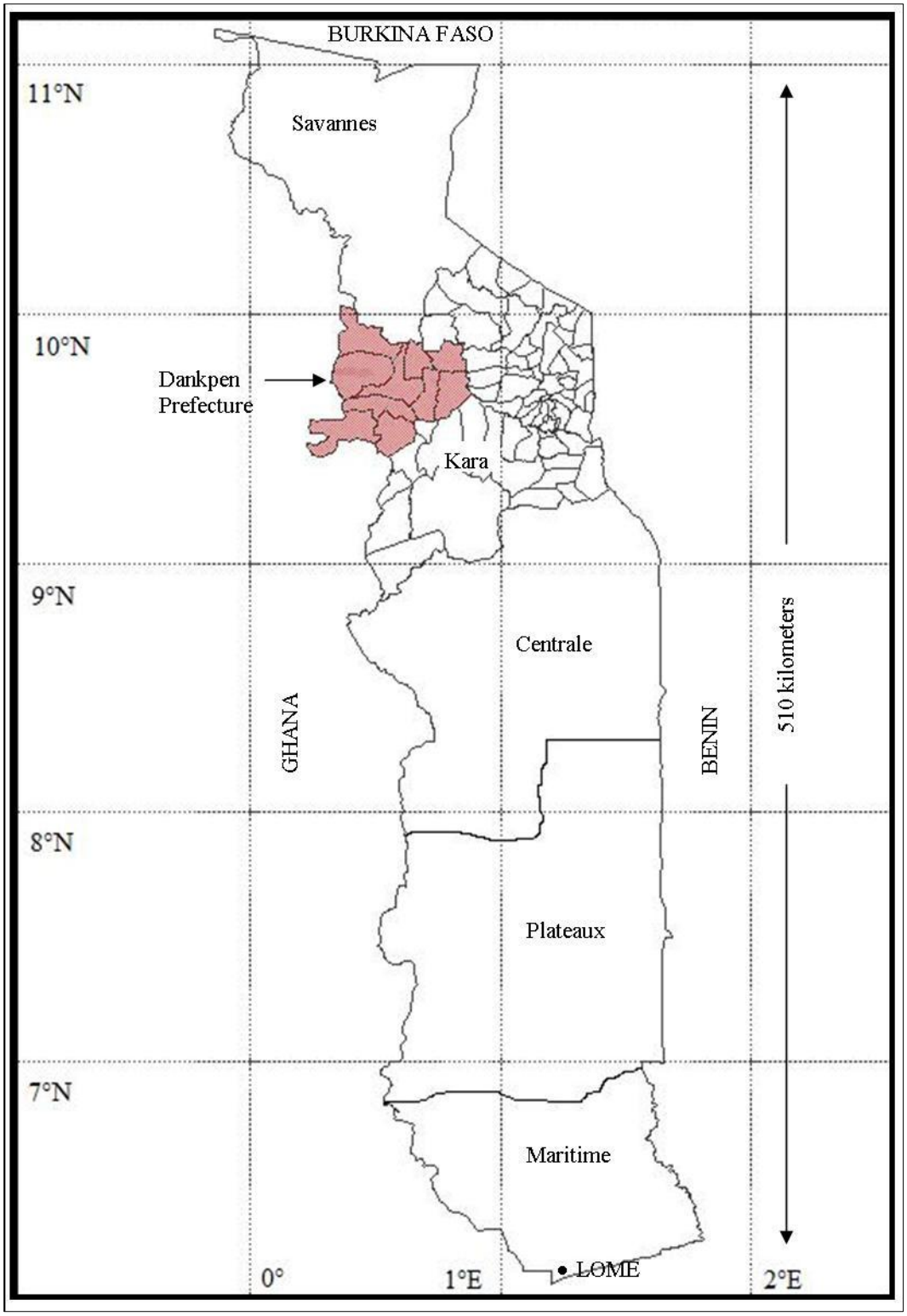
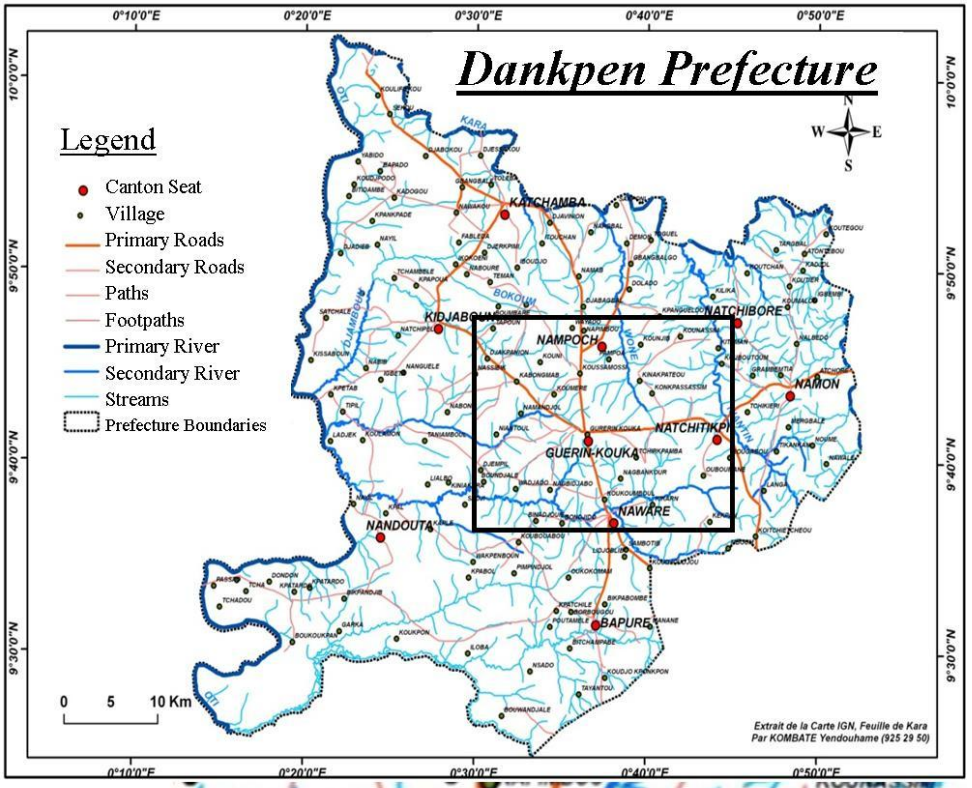
APPENDIX A: MAP OF TOGO



APPENDIX B: MAP OF STUDY AREA – DANKPEN PREFECTURE



Detailed area shows the five villages where interviews took place. Kilometers in parentheses cite the distance from Guerin-Kouka.

Maps courtesy of Ouadja Kiting.

APPENDIX C: INTERVIEW GUIDE

INTERVIEW GUIDE (FINAL DRAFT)
(Translated into French and Konkomba for interviews)

My name is Jenny Gorsegner and I am the project director for research I am doing as part of my graduate degree at The University of Montana in Missoula, Montana in the United States. In an effort to understand why some families are well-nourished and others experience malnutrition, you have been recommended by community member _____. I would like to spend some time getting to know you and understanding how you feed your family.

The procedure for this interview is to spend two hours talking with you and observing your family where you live. If you have more time, I would like to see your fields and other projects relating to your family's food security. I do not anticipate that you will experience any risks or discomforts. The benefits of this research may not extend to you personally, but could help address food insecurity and malnutrition in Dankpen. It may be used by local, national, or international health and environmental organizations that work in Togo.

Before we begin, I would like to assure you that anything you say will not be told to others. I will not include your name in the paper I am writing or in any presentations. If you feel uncomfortable or do not want to answer a question, please tell me that. We can stop this interview at any point. If you have any questions for me after the interview is over, I will be at the Auberge in Guerin-Kouka until January 15. Does this all make sense? Do you have any questions before we begin? Do you want to proceed with the interview?

Would it be okay if I recorded this interview on this recorder? It helps me keep your words accurate so that I don't write them down wrong. Also, I will be able to verify what you said after the interview is over. Is this okay?

Please tell me about yourself and your family.

FAMILY

1) How many **children** live with you here?
    a. How many are yours?
    b. How old are they?
2) How many **adults** live in your complex?
    a. What do they do (i.e. business, street food, farmer)?
3) Have you attended **school**?
    a. If yes, what was the last year you completed?
4) Do you feel that you have access to the **hospital/dispensary** in this canton?
    a. Do you or your children use **traditional medicine**?

CROPS

5) Tell me about **crops** you grow, the crops that you are responsible for.
    a. What crops are in your fields now?
        i. Anything else?
    b. What other crops do you grow?
        i. Are there others?
        ii. What about during the rainy season? Are there other crops grown in that season?
        iii. When do you grow _____? (millet, corn, yams, peppers, peanuts, beans, etc.)
    c. Do you grow **cotton**?
        i. Have you in the past? OR Do you plan to in the future?
        ii. How do you decide how much cotton to grow?
    d. How do you decide which crops to grow?
        i. How do you decide the amount of each crop that you grow?
            1. How much of your land goes to food crops that your family will eat?
    e. How do you **store** those crops?
        i. Is that a common way to store _____? (millet, corn, yams, rice, peanuts, etc.)
    f. What, if any, crops do you **sell**?
        i. Where do you sell them?
    g. Do you raise all of your food yourself?
        i. What food do you **buy**?

OTHER FOOD SOURCES

6) What animals do you raise?
    a. Are these eaten by your family?
    b. Do you sell them?
        i. If not, why not?
        ii. How long do you keep your animals before you sell them?
7) Are there any other sources of food for your family?
    a. Do you hunt for bush meat?
        i. What specifically do you hunt?
        ii. How?
    b. Do you eat anything that is grown in the bush (la brousse)?

i. (Such as baobob leaves?)

c. Is there any other source of food for your family?

d. Anything else?

LAND TENURE

8) Do you **own** the land where you grow your crops?

a. If yes, how long have you owned your land?

b. If not, how do you get **access** to that land?

c. Is it the **same** land every year?

i. Same amount?

1. How do you measure the land you use?
2. Who is responsible for this?
3. Do you (or that person) keep records of who uses which land?

ii. Same every season?

FAMILY EATING HABITS

9) Please explain how your family eats a meal.

a. What do you eat?

i. Anything else?

b. Do you eat together (at the same time)?

i. If yes, is that different from other families in Dankpen?

ii. If no, who eats first? Second?

c. How many meals do you eat per day?

i. Is this normal for you?

ii. What about during the rainy season?

FOOD INSECURITY AND RESILIENCE

10) Do you worry about being able to feed your family?

a. How does that affect you?

b. What do you do to overcome that feeling?

c. What about other family members? Do they help?

d. Is there a way that you can assure that your crops do well each season?

i. Are there other ways?

ii. Do festivals (i.e. Fête des Ignames – Yam Festival) take place only if there is a good harvest?

11) Are there times during the year that you have **difficulty** feeding your family?

a. How do you **overcome** that?

b. What about during the rainy season?

12) How do you meet your family's food needs during that time? Do you think that your family is **better nourished** than some others in Dankpen?
    a. Why or why not?
    b. Do other families notice that?

ENVIRONMENTAL FACTORS

13) Last year, during the **floods**, how did you deal with that?
    a. Did your family have **enough** to eat?
    b. If yes, how did you make sure of that?
    c. Did you receive food from international organizations or the Togolese government during that time?
    d. If not, what could have helped with that?
    e. Do floods happen often in Dankpen?
14) Does Dankpen have droughts, or long times without enough rain?
    a. How is that different from the hot season?
    b. How do you meet your family's food needs during that time?
15) Have there been changes in the climate (la clime) that impact your ability to meet your family's food needs?
    a. Has the length of the rainy season changed?
    b. Has the amount of rain changed?
    c. What about the hot season? Is it any different from when you were a child?
        i. How so?

MOST IMPORTANT ACTION TO MEET FOOD NEEDS

16) What do you think is the most important thing that you are doing to **meet the food needs** for your family?
    a. How do you do this?
    b. How did you learn to do this?
    c. What about during the rainy season? Is it any different?
17) What do you think your **neighbors** could learn from your methods of meeting your family's food needs?
    a. Anything else?
18) Is there someone who has been **influential** in your life who may have impacted your ability to meet the food needs of your family?
    a. Anyone else?
19) Do you know of anyone else who may have **similar experiences** as you who might be interested in speaking with me about the way they meet their family's food needs?

Thank you so much for all of your time and willingness to talk to me. I have learned so much. Do you have any **questions** for me? Remember I am at the Auberge in Guérin-Kouka until January 15 if you have any questions at all. Thank you again for everything you have shared. It has been truly a wonderful experience to learn more about you and your family.