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Food Insecurity in the Agrarian Household: An Analysis of Gendered Identity, Conjugal Dynamics, and Coping in Northwestern Benin

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A thesis submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree in Geography

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Abstract

Food insecurity represents an enduring challenge for subsistence farmers in sub-Saharan Africa (SSA). While gender has been identified as an important determinant of food insecurity in other SSA contexts, this has not been a focus of research in Benin. This dissertation examines how gender shapes food insecurity within the agrarian household by examining the household as a place where the broader structural forces that influence food insecurity and gender play out at a micro-level. I take a mixed-methods approach, drawing on community-level focus groups (n=12), semi-structured interviews (n=40), and a quantitative survey (n=600).

The findings reveal that while food insecurity in the region is widespread, its effects are felt differently by men and women. Gendered sociocultural norms that place men as household breadwinners mean that men tend to be 'blamed' for food insecurity, while women feel frustrated with their husband's perceived failure to fulfill their responsibilities. Sociocultural norms dictate what is considered men's and women's work, which results in a growing burden of labour for women in the form of survival-driven income generating activities. As livelihoods are reshaped, women are contesting societal norms that dictate the agreed upon division of labour, but in so doing threaten men's masculinity and reinforce their shame with respect to food provisioning.

In order to manage the stress and hunger which accompany food insecurity, gendered drinking patterns have emerged, wherein men's alcohol misuse has become a problem. This has further undermined food security by interfering with farm work and diverting household resources. Conjugal tensions and arguments arise as a result and are exacerbated by drunkenness, often devolving into violence. Concomitantly, this results in intimate partner violence (IPV) as a gendered consequence of food insecurity,

findings that are confirmed in the quantitative analysis of the regional survey data. Taken together, this research illustrates how gender shapes men's and women's experiences of food insecurity within the household, playing into the division of household responsibilities and challenging existing gender norms. Food insecurity is revealed as an important site for the renegotiation of gender roles within the agrarian household, but one that has particularly devastating consequences for women.

Keywords: food (in)security, gender, labour dynamics, rural livelihoods, agrarian, intrahousehold, subsistence farming, intimate partner violence (IPV), gender-based violence, alcohol, drinking behaviours, coping, sub-Saharan Africa (SSA), Benin

Summary for Lay Audience

Access to food is a basic human right, however many people around the world continue to experience hunger and food scarcity, which is referred to as food insecurity. People in sub-Saharan Africa (SSA), especially poorer farmers are particularly affected, despite their role as food producers. Research also shows that women in many SSA countries are more likely to experience food insecurity, yet gender has not been a focus of food security research in Benin. Women's experiences have been underrepresented, and when gender considered, it tends to be added into analyses in a shallow manner. Therefore, while we know that women are more likely to be food insecure than men, how food insecurity affects day-to-day interactions between men and women is not fully understood, especially within the household. To understand how food insecurity plays out within the household, the aim of this study is to examine how scarcity affects husbands' and wives' individual experiences and their relationships to one another.

This research reveals that men and women farmers' experiences and interactions are affected by food insecurity because of how men and women see themselves, and what they are responsible for doing within the family. Men tend to be seen as responsible for providing food to their families, and so when there is not enough food due to factors like soil infertility and drought, men are often blamed for food insecurity. While men feel ashamed, women tend to feel frustrated with their husband's perceived failures. This shows that food insecurity is experienced differently by men and women because of gender norms and expectations. Women are also frustrated with their large workload, and the already uneven share of work between husbands and wives is exacerbated by food insecurity. This is a source of tension that leads to arguments and often violence. The findings show that violence

between married couples, particularly perpetrated by men against women, is a widespread problem that is associated with food insecurity. Overall, the study findings illustrate how and why gender is an important determinant of food insecurity in subsistence farming contexts.

Co-Authorship Statement

This dissertation comprises three manuscripts, Chapters 4 through 6, which have either been published, are currently under peer review, or have been submitted for publication. All of the papers are co-authored with my doctoral supervisor Dr. Isaac Luginaah, and two are also co-authored by our collaborator at the University of Abomey-Calavi in Benin, Dr. Waliou Amoussa Hounkpatin. I was primarily responsible for conceptualizing and conducting the research, data collection, data analysis, as well as drafting and writing the manuscripts. Dr. Luginaah was responsible for conceptualizing the research, funding acquisition, supervision, as well as reviewing and editing the manuscripts. Dr. Hounkpatin was involved in obtaining local ethics clearance, providing feedback with respect to the data collection tools and process in situ, as well as reviewing and editing the manuscripts. The manuscripts are as follows:

Chapter 4: Ragetlie, R. & Luginaah, I. (submitted Mar. 2021). Undermining masculinity and contesting the conjugal contract: Food insecurity and the gendered division of labour in northwestern Benin. *Gender & Society.*

Chapter 5: Ragetlie, R., Hounkpatin, W. A., & Luginaah, I. (2021). Community perceptions of gendered alcohol misuse in a food insecure context: The case northwestern Benin. *Social Science & Medicine*, 114016.

Chapter 6: Ragetlie, R., Hounkpatin, W. A. & Luginaah, I. (under review). Food insecurity and intimate partner violence in northwestern Benin. *The Journal of Development Studies.*

Acknowledgments

First and foremost, I would like to sincerely thank my supervisor Dr. Isaac Luginaah, under whose tutelage and mentorship I have learned so much. Your frank and "strategic" advice, alongside the lessons, stories and experiences you have shared with me over the past years have deeply shaped my Ph.D. from its conception to its completion. Thank you to my wonderful committee, Dr. Carol Hunsberger, Dr. Chantelle Richmond, and Dr. Bipasha Baruah, whose encouragement and feedback regarding my research has been invaluable. Special thanks to Bipasha, whose continual support, advice and mentorship has been truly invaluable in shaping my research and career aspirations.

My Ph.D. work was financially supported by the Doctoral Research Award from the International Development Research Centre, Canada; the Joseph-Armand Bombardier Canada Graduate Scholarship and Ontario Graduate Scholarship from the Social Science Research Council of Canada; the Samuel Clark Research Grant from Western University; and, the Graduate Research Scholarship from Western University. Thank you for providing the financial means to complete my Ph.D.

Without my research team in Benin, this Ph.D. would not have been possible. Special thanks to Dr. Waliou Amoussa Hounkpatin, whose support with ethics and advice regarding field work was invaluable. A deep thank you to my research team, and especially my field assistant José, who sacrificed his time and comfort to move across the country for my research. A deep thank you to Sébastian, my translator, field assistant, community liaison, and all-round research lynchpin, without whose tireless work and friendship I would have been unable to complete my fieldwork. Our many early mornings together and late lunches after a day in the field will be fondly remembered.

I extend the most significant acknowledgement and gratitude to each of my study participants, who took the time to welcome me into their communities and homes, and candidly share their lives with me and my research team. Without each of you, my Ph.D. would not have been possible, merci, nā mutɔ̃mmů, nā yérikā, naagbɛɛ. This dissertation is dedicated to the people of Atacora and more broadly of Benin, whose resilience and hospitality is deeply humbling.

A warm thank you to my friends and colleagues at Western University both within and outside of our lab. I am so grateful to have had Yuji as a colleague and collaborator, whose guidance on publishing and statistical analysis was essential to the completion of my Ph.D. Thank you to Siera for your mentorship, support, and collaboration, learning from your work and experiences deeply shaped my own. A heartfelt thank you to all my other friends and fellow graduate students, especially Alex, Becky, Brittany, Emily and Elana for the many zoom writing sessions, coffees, teas, beers, and occasionally tears, that were shared between us. Your friendship and kindness has made this Ph.D. possible.

Finally, I would like to thank my family, whose love and unwavering support grounded me throughout this process. Special thanks to you, Mum, for nurturing my curiosity, encouraging my adventurous spirit, and introducing me to feminism - may we continue to learn and grow together. Your continual belief in me and encouragement to persevere has been central to my success. Thank you to my husband Amadou, whose work ethic and passion are my source of inspiration and motivation. Thank you for encouraging me to take on the Ph.D., for putting up with all that it entails, and for always reminding me that I can accomplish anything I put my mind to.

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CHAPTER 1

1. INTRODUCTION

1.1. Research problem

Food insecurity remains a persistent issue throughout the world, characterized by uneven progress despite decades of policy attention (FAO et al., 2017). World hunger has been rising over the last several years with the most severe effects felt in sub-Saharan Africa (SSA) (FAO et al., 2020), which has prompted the FAO et al. (2017, 2020) to call for the use of context-specific approaches that go beyond nutritional assessments. The expanding breadth of what constitutes food security has been reflected in its changing definition (Ibnouf, 2011), though broadly food security can be said to exist when all people have consistent access to sufficient, safe, nutritious, and culturally-appropriate food in a manner that maintains human dignity and sustainability (FAO, 2019a; FAO et al., 2020). Global food insecurity is an urgent issue because of the widely documented social and health consequences (Cole & Tembo, 2011; Hadley & Crooks, 2012; Hamelin et al., 1999), and also because it represents a distinct and enduring failure with respect to ensuring human dignity, equity, and human rights (Ayala & Meier, 2017; UN OHCHR, 1974).

The rural poor and, in particular, smallholder farmers in SSA are among the most vulnerable to food insecurity (FAO et al., 2020; WFP, 2018). This is evident in Benin, where agricultural regions such as the northwest experience persistently high levels of poverty and food insecurity (WFP, 2018). The Atacora region is particularly affected, where 24% of the population are experiencing food insecurity, a rate which is more than double the national average of 9.6% (WFP, 2018). An additional 42.9% of the population have “limited food security”, meaning they may currently have adequate food intake but are at risk of experiencing food insecurity in the event of

severe shocks (WFP, 2018 p.2). These figures highlight the extent of food insecurity in Benin and provide evidence of significant regional variation. This regional variation is consistent with research demonstrating that the determinants of food insecurity are spatially dependent , including income, food prices, access to physical resources (e.g., land, labour supply), trading contacts; access to credit, access to information and extension services, environmental factors (e.g., rainfall, soil fertility), road access and transportation, as well as social capital and family networks (Kassie et al., 2015; Zakari et al., 2014). Place-specific understandings of gendered resource access and control also include issues of land ownership, labour divisions, family structure, and require contextualization within political, economic, and environmental contexts that also differ geographically (Thomas-Slayter et al., 1996). Given the spatial nature of its determinants and the unevenness in experiences of food insecurity, the need for locally specific approaches has been recognized widely (FAO et al., 2017, 2020). Such approaches are evidently necessary for food security research within Benin in particular.

Within contexts of severe food insecurity, gender has long been recognized as a contributing factor (Njuki, Parkins, et al., 2016). Both globally and within SSA, evidence reveals that women are more likely to experience food insecurity, and unfortunately this gender gap is increasing (Broussard, 2019; FAO et al., 2020). Women's food insecurity is exacerbated by gender inequalities as a result of many factors, including unequal power over decision-making and the division of labour (Hyder et al., 2005). Women in many SSA countries disproportionately bear the responsibility of food securing activities, yet have much less decision-making power relating to food at both the household and community level (Hyder et al., 2005; Ibnouf, 2011; Kiewisch, 2015; Njuki, Parkins, et al., 2016; O'Brien et al., 2016).

Additional factors that explain the gender gap in food insecurity include women's poorer access to productive assets such as land, as well as disadvantage in food allocation within the household (Njuki, Parkins, et al., 2016).

While women's disadvantage with respect to food insecurity is an undeniable concern, existing research has sufficiently documented how improving access to resources for women can improve their food security (Njuki, Parkins, et al., 2016). Researchers, practitioners and policymakers must now look towards challenging and changing the social norms and institutional structures that are at the root of gender inequalities (Njuki, Parkins, et al., 2016 p.6). In order to do so, we must move beyond the ever-persistent, yet superficial approaches to gender that simply 'add' women into analyses, policies, and development programs (Collins, 2018; Harding, 1995). The additive nature of gender is reflected in food security research insofar as its narrow focus on quantifying women's disadvantage (Lewis, 2015), an approach which conflates *gender* with *women*. Simply adding women into food security research is also unlikely to be effective (Collins, 2018) and, as Riley and Dodson (2016) identify, the ways in which gender is researched and operationalized in development practice has actually contributed to misunderstandings of gender among the very groups they seek to target. Instead, we must consider how gender is constructed and embedded in social systems (Harding, 1995).

In order to understand how food insecurity plays out within the household, I apply Harding's (1995) concept of gender as embedded and relational, questioning how gendered identity and social norms are constructed and performed in context, and how gender is embedded in all aspects of the household, community, society and food systems. As Collins (2018) explains, feminist food research provides the tools to answer such questions by enabling researchers to elucidate how everyday

relationships with food are gendered, and by allowing us to contextualize locally specific understandings within broader global processes. Feminist approaches also present an opportunity for the discipline of gender and food security research to overcome important ideological and methodological gaps, including the bias towards positivist, productivist, and neoliberal approaches (Collins, 2018; Jarosz, 2014; Lewis, 2015). Njuki, Parkins et al. (2016) recommend a mix of qualitative and quantitative research that foregrounds place, accounts for complexity and nuance, and moves beyond women only approaches to include men and masculinities. While some researchers have taken up these calls in other SSA contexts, to the best of my knowledge researchers have yet to take a nuanced gendered approach to issues of food insecurity in Benin.

1.2. Research objectives

The aim of my Ph.D. research is to enhance understandings of the gendered experiences of food insecurity in rural Benin by addressing the following research question: how does gender shape women's and men's experiences of food insecurity within the agrarian household in northwestern Benin? In order to answer this question, I frame my research around three specific objectives:

(1) To understand how the construction of gender identity and intrahousehold gender dynamics shape and are shaped by food insecurity within the agrarian household;

(2) To describe the gendered strategies that men and women farmers employ to manage food insecurity; and,

(3) To examine the effects of persistent food insecurity on agrarian household dynamics.

The intent guiding these objectives is not to quantify disadvantage by simply measuring whether the severity of food insecurity differs between women and men living in the same households. Rather, the aim is to contribute to a better understanding of “women's real-life experiences” in contemporary food systems (Collins, 2018 p.21) by considering gender as a relational and embedded social construct (Harding, 1995) that shapes all aspects of agrarian household organization, including food and farming.

1.3. Dissertation outline

This dissertation is organized into seven chapters, including this introductory chapter. Each of the subsequent chapters are described below.

Chapter 2 presents the research context and is organized into four main subsections which move the discussion from the specific towards the broad. I begin with the identification of the study site and provide historical grounding for the current state of food security in the study region. I then move into a broader synthesis of the literature on gender and food, and the agrarian household in SSA. I conclude this chapter by presenting the theoretical frameworks that have guided my dissertation.

Chapter 3 engages in a broad discussion of the methods I used in my Ph.D. research, including the mixing of methods, the data collection process, and the process of data analysis. This chapter also includes reflections on challenges in data collection, as well as my positionality within the research process.

Chapters 4 through 6 each comprise a research article, all of which have been accepted, submitted or are under peer-review with relevant academic journals. Drawing upon qualitative data, Chapter 4 examines how the construction of gendered

identity and rigid gender norms around the division of labour and household organization are impacted by food insecurity. My co-author and I present evidence that masculinity in this context is deeply tied to notions of farming and food production, placing men as household breadwinners. Men's sense of identity and their role in food provisioning however, has been undermined by worsening food insecurity. Concurrently, women are frustrated with the division of household labour, as strict gender norms dictate which forms of work are 'appropriate' for men and women. Men's feelings of shame and inadequacy around food insecurity are reinforced through contempt from their wives, which has also contributed to increased marital tension and violence in the household. These findings suggest that food insecurity in subsistence farming contexts is an important site for the renegotiation of gender norms.

Chapter 5 focuses on alcohol misuse as a gendered coping mechanism, a theme which emerged in the analysis of my qualitative data. My co-authors and I discuss how and why farmers are misusing alcohol as a maladaptive response to food insecurity, specifically the hunger and the distress they are experiencing. These drinking behaviours are gendered and shaped by the rigid division of roles and responsibilities within the household, meaning primarily men are misusing alcohol. The misuse of alcohol subsequently undermines farm labour and diverts household resources, further worsening food insecurity and contributing to intimate partner violence (IPV). This chapter focuses on the intersection of alcohol misuse and IPV as an important gendered consequence of food insecurity.

Chapter 6 presents quantitative evidence of the association between food insecurity and IPV in the study region. With this paper, my co-authors and I contribute to a growing body of evidence that food insecurity is positively associated

with women's likelihood of experiencing IPV, and identify that the rate of IPV is concerningly high in Atacora when compared to national figures, and rates of IPV within SSA more broadly. We discuss the potential pathways that explain this relationship, including food insecurity as a source of increased stress and as a factor which threatens agrarian masculinity.

In Chapter 7, I present the key findings and discuss the theoretical, methodological and policy contributions of my dissertation research. This chapter brings together the findings from each research article to explore the complexity in and nuances of how gender shapes and is shaped by food security within the context of the agrarian household. I conclude this chapter with a discussion of study limitations and corresponding future directions for research.

CHAPTER 2

2. RESEARCH CONTEXT

2.1. Introduction

The following chapter aims to provide the reader with a deeper understanding of the research context relevant to gender, food security and farming in Benin, which together represent the focus of this dissertation. I begin this chapter by introducing the study region, with particular attention to the state of food insecurity among peasant farmers, and then contextualize the study location within the broader socioeconomic and political processes that have shaped food and farming within SSA. Having discussed the reasons why food insecurity continues to impact farmers in the study region, I then engage with the salient literature on gender and food security and the organization of the agrarian household in SSA. This fourth section includes a detailed discussion of gender identity in agrarian SSA, the origins of the nuclear family, the gendered division of farm and non-farm labour, the gender dynamics of decision-making, gendered violence, and alcohol misuse within the household. I conclude this chapter by discussing the major theoretical frameworks guiding this dissertation.

2.2. The study region

With respect to situating the study region within the broader literature on gender, food and household organization, I find it prudent to begin by introducing the study site. I choose to do so firstly because such a place-based approach is well-suited to link the micro or household level context to broader structures and processes (Bryant, 1998; Thomas-Slayter et al., 1996). Secondly, it is fitting because my time spent living and working in Benin prior to my graduate studies served as inspiration for this research. Specifically, my experiences sparked my intellectual curiosity with respect to the

enduring problem of food insecurity, despite decades of policy attention and the evident political conviction, motivation and actions of the Beninese people towards addressing the issue. The intent of the following section therefore, is to introduce the study region as the place around which my Ph.D. program was built.

2.2.1. Geographic location and environment

My Ph.D. research took place in northwestern Benin, in the south-central part of the Atacora region, close to the border with Togo to the west (Figure 1). The study region comprises three of the nine municipalities in the region: Boukoumbe, Toucountouna and Natitingou, which are nestled in the valleys and plateaus of the Atacora Mountains (Moutouama et al., 2019). The study region is part of the Sudano-Guinean agro-ecological zone, which is characterized by a single rainy season from approximately April to October, followed by a dry season from approximately November to March (Aleza et al., 2018; Saïdou et al., 2004). The mountains create a microclimate that results in cooler temperatures and more frequent rainstorms than surrounding areas, though rainfall variability has become an increasing problem (WFP, 2018). The vegetation in this area is typical of open savannah, with shrub vegetation growing in rocky and ferruginous soils that are prone to erosion and have inherently low fertility (Aleza et al., 2018; Saïdou et al., 2004). Soil infertility and soil degradation have become an increasing challenge and have been identified as the most pressing issue faced by farmers in the Atacora region (Saïdou et al., 2004; WFP, 2018).

Climate variability in the Atacora region is resulting in increasing temperatures, drought, and rainfall variability, which have contributed to the worsening levels of food insecurity reported in the region (Amouzou et al., 2019; Beerlandt et al., 2014;

Ezin et al., 2018; Fogny & Trentmann, 2016; Saïdou et al., 2004). Climate variability presents such a challenge to farmers due to their vulnerability, poverty and deprivation (WFP, 2018). Similarly, increased vulnerability to climate change must be contextualized within the broader process of peasant displacement (Atuoye et al., 2021; Davis, 2001). As Davis (2001) explains, peasants in the Global South have been pushed onto marginal lands that were resource-poor or drought-prone, thereby decreasing production and increasing vulnerability to environmental change. As will be discussed further below, the root cause of food insecurity and poverty is not only "unfavourable climatic or economic conditions" but also includes deliberate decision-making in favour of those who imposed imperialist and later neoliberal policies on African countries (Shilomboleni, 2017 p.4).

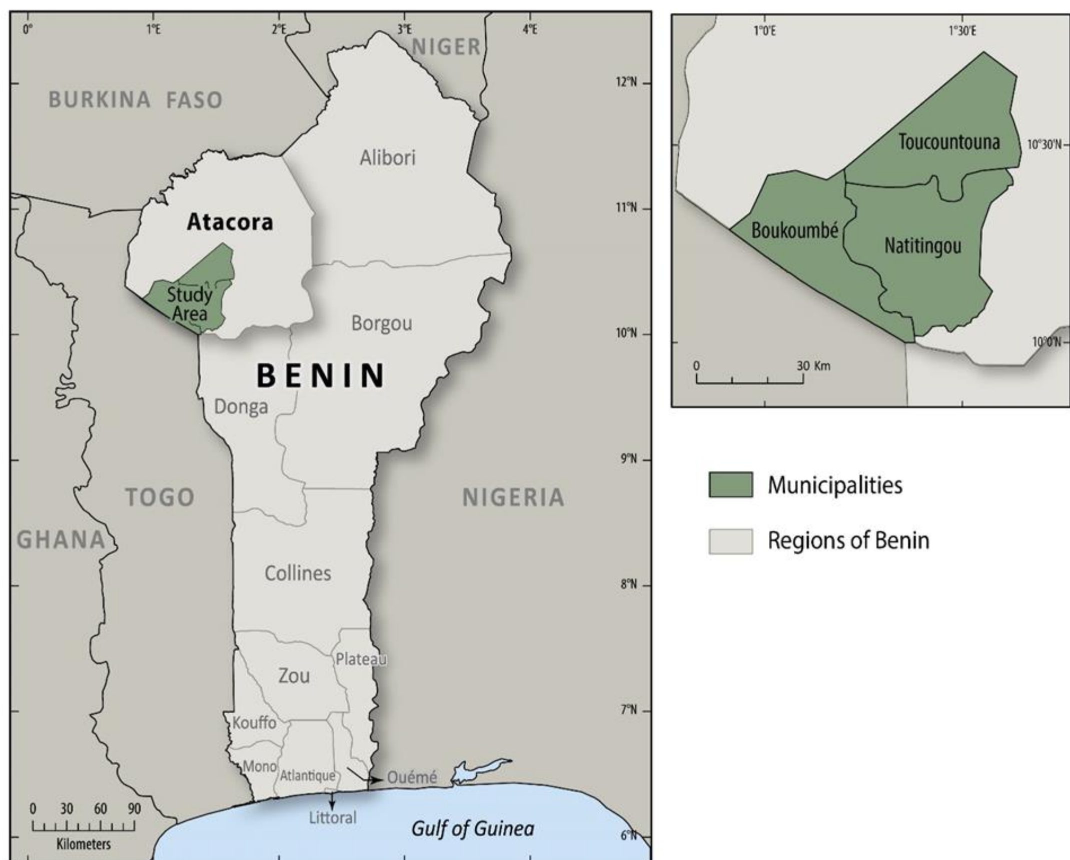

Figure 1 Study location: municipalities of Toucountouna, Boukoumbe and Natitingou in the Atacora region of Benin

2.2.2. Farming and food insecurity

The area is primarily rural and livelihoods are largely based on farming and natural resource exploitation (Moutouama et al., 2019; Saïdou et al., 2004). The population is composed predominantly of subsistence farmers; in Boukoumbe for example, over 85% of people are engaged in agriculture but only 5% of crops are cash crops (County of Boukoumbe, 2017). Millet, sorghum, maize and rice are the most commonly grown crops in Atacora, as well as fonio, which is a grain of particular dietary and cultural importance in Boukoumbe (Kombienou et al., 2020; WFP, 2018). Food insecurity remains severe in rural areas in Benin, and in particular within Atacora, which is one of the poorest most food insecure regions of Benin (WFP, 2014, 2018). Subsistence farmers in particular tend to spend higher proportions of their income on food, which is indicative of their vulnerability to food insecurity (WFP, 2018). This vulnerability is significant given that agriculture is the primary economic sector in Benin and rural areas are dominated by small-scale rain-fed agriculture (Beerlandt et al., 2014; WFP, 2014, 2018). Households in Atacora spend the highest proportions of their income on food (49%), which is also indicative of vulnerability (WFP, 2018). Within Atacora, the municipalities of Boukoumbe, Toucountouna, and Natitingou have the highest levels of food insecurity: 46.3%, 29.8%, and 27.8% severe and moderate food insecurity, respectively (WFP, 2018). While a detailed gendered analysis is lacking, evidence has shown that female headed households (FHH) in the region are more likely to be food insecure than male headed households (WFP, 2018). It has long been recognized however, that the narrative of FHH being uniformly disadvantaged reflects falsely universalized development narratives and obfuscate the importance of sociocultural contexts, as well as the complexity of household structure (Baruah, 2009; Buvinić & Gupta, 1997; Rogan, 2016; Stewart-Withers, 2011).

Despite the challenges outlined above, the people of Benin continue to work diligently towards improving economic and social outcomes, which have been accompanied by notable achievements in strengthening democratic governance, improving health, and furthering educational attainment (Government of Canada, 2017). While still classified among countries with low human development, these changes are reflected in Benin's progress with respect to the Human Development Index (HDI), whose global rank has improved from 167th when I began my research in 2016 to 158th in 2020 (UNDP, 2016; 2020). This progress notwithstanding, it is evident that some groups, particularly women and the rural poor, may be disproportionately disadvantaged.

2.2.3. Land ownership and family structure

In the contemporary agrarian context in Benin, land grabbing is increasingly becoming an issue, however thus far it has been largely concentrated in the southern parts of the country (Hilhorst et al., 2011; Nonfodji, 2017). As will be discussed further below, land dispossession during colonialism was not widespread in this region, which has means that many farmers have access to and control over their land. In Benin, land ownership is primarily based on usufruct rights where plots are passed down through patrilineal family inheritance (Saïdou et al., 2007). This has resulted in Beninese women having poorer access to land due to gender discrimination, both in tenure law and inheritance rights (Dijoux, 2002; Kinkingninhoun-Mêdagbé et al., 2010; Sohinto, 2001). In practice, this means that women in Benin are unable to inherit land and therefore commonly cultivate on land borrowed from their husbands or other family members (Kinkingninhoun-Mêdagbé et al., 2010; Saïdou et al., 2007). Whereas a widow may be able to claim usufruct rights until her sons take ownership at an older age, in the case of divorce land will typically be returned to the husband's

family (Saïdou et al., 2007). For many farming women therefore, food production is dependent on marriage. As will be discussed further below, this means that women have less power and control over their lives and livelihoods (Agarwal, 1997; Carr, 2008; Deere & Doss, 2006).

The patrilineal nature of land tenure in Benin is reflective of the patriarchal household more broadly. Traditional extended family structures (polygamous or non-polygamous) have largely shifted towards single generation families, and more specifically towards the nuclear family structure (Dadjo, 2014). This nuclear family structure is evident among the Ottammari people, who constitute the largest ethnic group in the study region (Pleitinx, 2020). Within such households, the patriarchal family unit is comprised of a father, a wife or wives, and their children (Pleitinx, 2020). While family structure has changed, this has generally not been accompanied by improvements to women's position or gendered power dynamics within the household (Dadjo, 2014). In rural Benin, the notion of family is still constructed around the concept of men's social dominance and their role as household breadwinner (Falade, 2016). Women's status and role within the household tends to be seen as of secondary importance to that of men, despite evidence showing women actually shoulder more labour and make important contributions to farming and social reproduction (Falade, 2016). While women remain unrecognized for their contributions to the household, social norms reinforce the idea that the success of the Beninese family rests upon gendered hierarchies of power and women's subjugated roles within the household (Falade, 2016). The origins of the nuclear family model and the invisibility of women's work in the African context is discussed further below.

2.2.4. Demography

The issue of food insecurity is compounded by lack of arable land and low soil fertility that, when coupled with the pressure of relatively high population density, has contributed to the migration of young men out of the region, resulting in a shortage of agricultural labour for their families who remain (Beerlandt et al., 2014; County of Boukoumbe, 2017; Saïdou et al., 2004). A trend of family outmigration further underscores the precarity of farming in the region, as migrants report fleeing food insecurity and poor farming conditions to settle in other farming communities in the centre of the country (Doevenspeck, 2011). This reflects similar trends in other SSA countries such as Ghana (Baada et al., 2020). The Otammari ethnic group comprise the majority (particularly in Boukoumbe), alongside other ethnic groups including the Waama (in the central zone) and Dendi, among others (Saïdou et al., 2004). Similar to the above discussion with respect to climate, Malthusian demographic theory and the narrative of overpopulation has been used to explain poverty and food insecurity in the Global South (Bandarage, 1999; Hartmann, 1995; Hartmann & Barajas-Roman, 2009). I emphasize however, that while population density has increased (Saïdou et al., 2004), the issue is systemic and born of colonial processes and the capitalist economic system, which has led to growing inequality in societies that fail to provide adequate social support and protection (Hartmann, 1995; Hartmann & Barajas-Roman, 2009).

2.3. Historical perspectives on food and farming in SSA

In order to understand how and why food insecurity and poverty persist in SSA contexts, a historical perspective is necessary, particularly for research on gender and food security, wherein history and power dimensions have often been ignored (Bezner Kerr, 2005). This approach also effective in connecting micro-level struggles within

the household, which are the focus of my research, to the broader socioeconomic and political structures and processes that have shaped them (Bryant, 1998; Thomas-Slayter et al., 1996). The following section provides the historical grounding for persistent poverty and food insecurity in Benin, beginning with the colonial era. After a historical policy analysis, I conclude this section with a brief characterization of contemporary food regimes and how these have further reinforced disadvantage within SSA food systems.

2.3.1. The colonial era

It is widely recognized that imperialist colonial expansion deeply and irrevocably changed the African landscape, and food systems and farming were no exception. Initially driven by the British crisis of feudalism, the 'scramble' for Africa saw European countries colonize Africa in order to exploit raw materials and labour, and expand into captive overseas markets as Europe's became increasingly competitive (Bernstein, 2010). Colonial empires depended upon exploiting cheap labour to generate profits, which included slavery in addition to controlling peasant labour by breaking previous forms of peasant subsistence (Bernstein, 2010). The exploitation of plantation and slave labour produced cheap food in the colonies that was used to feed Europe's working class as a political tactic to prevent a civil uprising of the poor workers during the Industrial Revolution (Patel, 2007). This exploitation of labour in the Global South drove peasant and labourers into poverty that continues today, through the development of the global capitalist food system (Patel, 2007). In sub-Saharan West Africa, the exploitation of labour was intimately tied to the slave trade, but also took the form of a shift towards export-oriented production by peasant farmers, who were forced into commodifying production through taxes or obligations to cultivate certain desired crops for export (Bernstein, 2010). The shift towards

capitalist agriculture meant that the process of food production, the resources required, and the labour force were commodified (Van der Ploeg, 2014), a change that began during the colonial period. Unlike East, Central and Southern Africa, there was not widespread land expropriation or dispossession in West Africa, but rather the clearing of forest areas to grow export crops including cotton, groundnuts, cocoa, and oil palm (Bernstein, 2010). While in southern and central Benin colonizers focused on the production of palm oil, in northern Benin there was a push for cotton production rather than food production (Stavenhagen, 1974). This meant that the process of food production, the resources required, and the rural labour force were commodified to suit the needs and interests of colonial powers, destroying traditional farming economies by dramatically reorganizing them (Stavenhagen, 1974; Van der Ploeg, 2014). Such changes eroded traditional famine response and social support systems that ensured solidarity and reciprocity, and were replaced with monetary interactions fueled by market relations, resulting in more isolated and economically weaker households (Watts, 2013). Cotton farming in Benin today remains heavily commoditized and export-oriented, and its production in the north is encouraged through state subsidies of fertilizer (Togbé et al., 2014). Overall, for African agriculture, colonialism meant "sometimes massive, and often brutal, remakings of the organization of labour, land and farming" that aimed to, but have not completely succeeded in, transitioning the continent to a capitalist economy (Bernstein, 2010 p.57).

Parallel to the re-shaping of rural livelihoods, land reforms were implemented in order to redistribute property rights. This political process was driven by economic motivations, resulting in adverse social consequences (Bernstein, 2010) that contributed to an unevenness of poverty in SSA. As discussed by Bryant (1998), the

social and economic marginalization of farmers can be traced back to the forced settlement, land distribution, and elimination of 'commons' resources during colonization. Colonists asserted that with land ownership, farmers would have increased motivation for productivity, thus privatization was an attempt to ensure that farmers would be competitive producers in the free market (Bernstein, 2010). This led to the further emergence of multiple classes, the poor who received less or no land, and the wealthier farmers who received more land and became "embryonic capitalist farmers" (Bernstein, 2010 p.99). This legacy continued to widen the gap between the poor and wealthy, as economic and political elites profited off those lands (Bryant, 1998), particularly upon their integration into a globalized neo-capitalist food system.

Importantly, land reforms were gendered, and often women in Africa were marginalized or excluded from owning land, thereby excluding women from access to resources that were often previously available to them through customary law (Rocheleau et al., 1996; Wangari et al., 1996). Land distribution was akin to the distribution of power itself (Agarwal, 1994), and similar to the case in Asia and Latin America, land reform programs in SSA were modeled on a unitary household model, with land granted primarily to men (Agarwal, 1994; Fletschner & Kenney, 2014; Lastarria-Cornhiel et al., 2014). Throughout the world, data shows that men control most agricultural land, even in areas such as SSA where women are integral to agricultural production (Lastarria-Cornhiel et al., 2014). Though this began during the land reforms of the colonial era, this pattern of exclusion has been continued. Throughout Africa and more broadly in the developing world, Deere and Doss (2006) conclude that there is a significant gap between men and women in wealth and assets, as well as the control and ownership of land. Formal laws and state interventions, such as agrarian reforms and inheritance laws have been instrumental in creating this

asset gap , but these also interplay with the influence of societal norms, which are of particular importance in places where customary marital and inheritance systems continue to be legally recognized (Deere & Doss, 2006). In many African countries, formal laws protecting women's property rights are loosely regulated or combined with customary law, leading to conflicting and often "fluid" interpretations of the law that tend to disadvantage women (Deere & Doss, 2006 p.22; Fletschner & Kenney, 2014). This bias in ownership and control over resources has meant that women experience dual exclusion, both in accessing agricultural resources and in non-farm employment opportunities (Djurfeldt et al., 2018). Yet, despite the lengthy process by which women have become disadvantaged with respect to ownership and control, researchers tend to take an ahistorical approach to studying the issue of gendered divisions in land and other assets (O'Laughlin, 2007).

2.3.2. The debt-crisis and the impact of neoliberal policy

The post-colonial era was accompanied by changes to the global food system post-WWII, which began with North-South food transfers. Specifically, the U.S. funneled food 'aid' to the Global South, which increased consumer dependence on cheap grain and undercut local producers (Patel, 2007). As "fortunate" wealthy countries funneled food surpluses to poorer "chronic deficit" countries, self-sufficiency was eroded, and farmers produced less as their prices were undercut (Jarosz, 2014 p.171). This dynamic contributed to the ever present belief that farmers in OECD countries in the EU and North America "feed the world" (Jarosz, 2014 p.171). Despite the legacy of colonial policies and the effects of North-South food transfers, many post-colonial African countries in the 1960s were largely self-sufficient net food-exporters, as newly independent governments invested in peasant agriculture (Bello, 2009). At this time, agriculture was regulated by national

governments through marketing boards and parastatals, and rural development projects led by the World Bank financed agricultural development (Bello, 2009). In post-independence in Benin, oil palm an cotton continued to be the priority crops for foreign exchange post-independence, however the Marxist-Leninist regime in the 1970s was committed to food self-sufficiency, which led to a renewed focus on food crops (Honfoga, 2019). Subsequently, dumping of cheap imported foods has worsened access to food in the country despite increased local food production (Honfoga, 2019).

The 1970s marked a significant shift in the global food system, as rising oil prices led to the end of food aid and agricultural modernization projects (Patel, 2007; Schanbacher, 2010). At this time, the World Bank made a significant and sudden policy shift, turning towards a neoliberal economic approach to development that advocated for currency devaluation, controls on government spending, the liberalization of markets, removal of trade barriers, and privatization (Bello, 2009). This shift also marked the beginning of the globalization of the capitalist world economy, characterized by the broader deregulation of markets and trade, rise of transnational agribusiness, and advances in information technology and mass communication that made organizing economic activity possible on a global scale (Bernstein, 2010). This process was neither natural nor automatic, but a political and ideological project that was undertaken by “the global governance triad”, comprised of the World Bank, the International Monetary Fund (IMF), and the World Trade Organization (WTO), who sought to spread the ‘truth’ of the capitalist economy and eliminate poverty in countries in the Global South (Bernstein, 2010; Schanbacher, 2010 p.17). This meant forcibly opening these countries’ markets to foreign investment and liberalizing trade through various structural controls.

The imposition of this ideological position was made possible through the global debt crisis, as government borrowing increased due to cheap interest rates that suddenly rose with the global recession at the end of the 1970s (Patel, 2007). Countries throughout the Global South borrowed more to repay loans, turning to international financial institutions, namely the IMF, whose conditions for loans were structural adjustment policies (SAPs). The SAPs imposed cuts to government spending, devalued currency, cut tariffs, liberalized trade, and dismantled any domestic supports for farmers, such as regulatory marketing boards and parastatals (Patel, 2007). In this new era of imperialism, indebted nations' development decisions were shaped by creditors rather than domestic governments, and the northern countries replaced "the old colonial instruments of command and control with newer, and cheaper, mechanisms of 'self-imposed' market discipline" (Patel, 2007 p.96). Thus, under the guise of 'freedom' and 'justice', a "new agricultural order" enforced by the global governance triad ensured that cheap food in the North was supplied by the Global South (Patel, 2007 p.96).

In African countries, SAPs had particularly devastating effects. Fiscal austerity measures led to a contraction of the economy, which, alongside infrastructure and technological barriers, discouraged private investment while simultaneously cutting social support systems (Bello, 2009). Though the liberalization of markets meant an initial rise in production for export, production fell alongside commodity prices due to the increased supply on the global market (Bello, 2009). The state could not interfere to stimulate investment due to the restrictions on government spending, which led to a cycle of low investment, unemployment, reduced spending, stagnation, and decline (Bello, 2009). In the agricultural sector in particular, private investment did not

adequately replace the state's absence, and when it did it was often on much poorer terms for farmers (Bello, 2009).

In response to Benin's 1989 political and economic crisis, the Benin government was forced to accept loan conditionalities in order to avoid bankruptcy (Bierschenk, 2009). In order to align with SAPs, cuts included wage levies on government employees and a reduction of the size of the public service, accompanied by the privatization of the banking system, the withdrawal of the state from the state from the commercial sector, and the lifting of import licenses to liberalize trade (Bierschenk, 2009). Benin thus moved towards a market-driven economy and liberalized agricultural sector, which aimed to 'solve' the problem of expensive and supposedly 'misdirected' government supported agriculture with privatization (Labintan & Ding, 2012). Agricultural productivity, however, decreased (Labintan & Ding, 2012). In the cotton sector for example, Benin's move towards liberalization and privatization in the 1990s actually led a poorer quality and quantity yields (Gray et al., 2018; Tschirley et al., 2009). One of the more significant criticisms of agricultural reforms has been their impact on the cost of fertilizer, which have risen as a result of subsidy withdrawal and liberalized importation policies (Minot et al., 2000). In addition to its use in cotton farming, fertilizer is used on maize crops in Benin (Minot et al., 2000), which is another sector that has seen little improvement despite being subject to neoliberal policy changes since 1991 (Lutz et al., 2007). Moreover, the 1994 devaluation of the West African franc CFA led to significant economic upheaval and widespread turmoil in Benin and other francophone West African countries (Noble, 1994), exemplifying the continual neocolonial role France has played in Benin post-independence. From 1994 onwards, local food prices have risen steadily, and the market has been saturated with "cheap" imported foods, such as rice (Honfoga, 2019).

The trend of reduced government spending and low investment continued over the next several decades, as the prices of products from the Global South continued to fall while commodities from the North appreciated in value (Davis, 2001). Currently, extreme poverty in Africa is rising and many countries have become net food importers rather than exporters, a dynamic that Bello (2009) attributes to the devastating effects of SAPs. The lowering of trade barriers in the South was accepted to delay bankruptcy, rather than address poverty or encourage agricultural development, as was advanced by the World Bank (Patel, 2007). Even if one accepts the World Bank's reasoning that SAPs aimed to alleviate poverty, neoliberal capitalism enabled through austerity measures was evidently an inappropriate way to do so. Given that capitalism is a profit-driven system which does little to address questions of justice and equity, it seems unsurprising that free trade and liberalization led to suicides, poverty and displacement for many poor farmers, while the promised 'freedom' actually went to transnational agricultural corporations (TNCs) (Patel, 2007).

2.3.3. Contemporary food regimes

Agriculture in Africa was further weakened by the purposeful dumping of subsidized Western grain and meat products. According to Weis (2007), the uneven development of the global food economy is characterized by dynamics of surplus and dumping, which can be traced back to the unequal allowance of subsidies by the WTO. The WTO governs global trade through tariffs, barriers, subsidy-allowances, and trade penalties, has unfairly allowed subsidies for certain wealthy countries, including the U.S., while disallowing similar subsidies for countries in the Global South (Bello, 2009; Weis, 2007). This created a system wherein wealthy countries supported by subsidies were able to outcompete and undercut food prices in countries in the Global South whose farmers were not supported by similar mechanisms (Weis, 2007). This

uneven system of global trade also has particularly devastating consequences for poor farmers, who are more reliant on subsidy programs. While the World Bank has finally admitted the failures of their approach in Africa, they have replaced this with a new strategy to rapidly promote corporate and contract farming, a process that will displace millions of African peasants (Bello, 2009).

The "uneven playing field" (Weis, 2007 p.28) created through selective subsidy allowances enforced by the WTO is compounded by the growing power of profit-led TNCs. Patel (2007) notes that TNCs control 40% of the world food trade, and power is becoming increasingly consolidated among few companies. As governments become increasingly less involved in decision-making, the WTO pursues market-oriented strategies under the guise of fairness, which actually expand the rights of corporations (Weis, 2007). The result of this system is that consumer prices are rising, while farm prices are falling, and the profits are collected by the shareholders of these corporations (Patel, 2007). This corporatization and consolidation is occurring in agri-food business from production to transport and marketing, including in the agri-input business (Bernstein, 2010; 2014). The prominence and power of TNCs has become one of the defining elements of today's global industrial food system alongside the power of financiers (Clapp, 2015), prompting scholars to identify an emerging third global food regime characterized by multi-lateral corporate trade and financialization (Bernstein, 2010; Friedmann, 2009). The same neoliberal economic policies that saw the implementation of SAPs in 1980s and 1990s, have resulted in this concentration of power (Bernstein, 2014; Clapp, 2015). The agricultural sector therefore, has become another investment opportunity, and the financialization of the food market results in market speculation and therefore more volatile prices (Bernstein, 2010, 2014; Clapp, 2015). These volatile prices further

contribute to the uneven poverty seen in African countries today, as they affect more vulnerable populations who spend more of their income on food.

2.4. Gender and food: looking within the household

Having discussed the reasons why food security continues to be a major problem for many peasant farmers in SSA, I will now turn my attention more specifically to gender and food security within the household. While I touch upon the gender and development literature broadly throughout this section, the focus is on gendered food security research and the gendered organization of the agrarian household. The latter includes a detailed discussion of gender identity and the nuclear family, the gendered division of farm and non-farm labour, and the gender dynamics of decision-making within the household. I conclude this section with a discussion of gendered violence and alcohol misuse in food insecure households.

2.4.1. Gender and food security

A wide body of literature has established the relevance of gendered analyses of food insecurity in the context of the Global South (Njuki, Parkins, et al., 2016). International organizations including the Food and Agriculture Organization of the United Nations (FAO) have recognized that better understandings of gender in agriculture and food security will be a crucial step towards eradicating hunger (Garcia & Wanner, 2017). Much of the research on gender and food insecurity has however, overwhelmingly focused on quantifying gendered differences in food insecurity between male and female headed households (for example Dzanku, 2019; Kassie et al., 2014, 2015; Lutomia et al., 2019; Negesse et al., 2020; Nwaka & Akadiri, 2020; Ruiters & Wildschutt, 2010; Tibesigwa & Visser, 2016). As scholars including Broussard (2019) and Quisumbing (2013) assert, few studies go beyond household

measures of food insecurity to collect individual-level data within the household. The failings of this methodological approach is discussed further in depth in Chapter 3. Those studies that do go beyond household level analyses tend to focus on quantifying gendered differences in the prevalence and severity of food insecurity (Broussard, 2019; Hadley et al., 2008). Similarly, gendered approaches in agriculture and food security policy remain largely focused on addressing gender disparities and women's disadvantage (Garcia & Wanner, 2017). Feminist food research however, must go beyond disaggregation to interrogate the political and ideological underpinnings of this literature (Lewis, 2015).

The emphasis on counting and measuring in food insecurity research likely reflects the positivistic roots of the discipline. As Jarosz (2014) explains, the very concept of food security is tied to dominant neoliberal development discourses, which assume that food insecurity can be identified, quantified, and 'solved', with targeted policy that improves farm productivity and yields (Burchi & De Muro, 2016; Sen, 1981). Therefore, research that utilizes the concept of food security is often either explicitly or implicitly shaped around certain assumptions about or visions for the global food system. Because food security as a concept is part of the global capitalist agenda, the term itself is not neutral; instead, it takes the form of a paradigm in research that "actively constitutes our understanding of [human] experiences" (Lewis, 2015 p.417). As such, using the concept of food security may shape the research question, intent, and interpretation of results (Lewis, 2015). As Lewis (2015) explains, the narrow, productivity-focused, a-historical and short-term, solution-oriented aspects of food security research are reflected in academic training, as well as in policy and practice. The result is that the root causes of food insecurity, such as histories of inequality and marginalization (Bernstein, 2010; Patel, 2007;

Schanbacher, 2010), as well as the legal, social, economic and political structures that govern the distribution of food (Sen, 1981), have been largely ignored. Despite its failings, the positivistic approach is often justified in appeals to the need for practical, urgent problem-solving (Lewis, 2015).

Simply ‘adding’ gender into the deeply flawed discipline of food security research therefore, is not sufficient. In this regard, the failures of food security research in many ways reflect those of mainstream gender approaches that are positivistic and instrumentalist, overly focused on “quantifiable outputs” (Lewis, 2015 p.416). Lewis (2015) astutely points to neoliberalism as the common thread. However, as decades of feminist scholarship have revealed, a sole focus on quantifying disadvantage is a shallow approach to gendered analyses of food insecurity. Such approaches risk reproducing the limited women in development (WID) and women and development (WAD) type approaches to gender and development that were prevalent in the 1970s (Rathgeber, 1990). WID, and subsequently WAD, focused on integrating women into existing systems, failed to adequately challenge dominant development approaches, and remained focused on superficial interventions in the productive sector (i.e. focused on income generation) instead of accounting for women’s reproductive roles and advocating for societal shifts in gender relations (Rathgeber, 1990). These approaches reflect the enduring focus on women as a response to the male bias in research and development policy that began with the UN’s United Nations Decade for Women (1975-1985) (Chant & Gutmann, 2002; Rathgeber, 1990). Similar to the failures of WID and WAD, research limited to measuring gendered disparities in food security may fail to challenge the conditions that have led to women’s disproportionate vulnerability, instead leading to superficial interventions in the productive sector that are targeted towards women

(Rathgeber, 1990). Such women-only approaches, more akin to positive action, are outdated and are not comparable to engaging with *gender* in its entirety, as they fail to adequately consider how gender is constructed and embedded in social systems (Daly, 2005; Harding, 1995).

Moreover, as Connell concisely explains, in attempting to answer questions of "why women have been exploited and oppressed, the answer does not lie in women's experience alone" (Connell, 2014b p.5). Rather, answers can be found only when we consider the relations between women and men at the individual and societal level (Connell, 2014b). Therefore, gendered research must account for the dynamic and relational nature of gender and involve those in positions of power – men (Connell, 2014b). The failure to do otherwise results in an incomplete understanding of gendered hierarchies, power dynamics, and even women's experiences, whose subordination is shaped by hegemonic masculinities, a term that refers to the common patterns of masculinity that are central to and most privileged in a given society (Connell, 2014b; Connell & Messerschmidt, 2005). Moreover, the omission of men and masculinities obfuscates how intersectionality shapes the experiences of different groups of men (Chant & Gutmann, 2002; Connell, 2014a). Much as adding women has been ineffective, simply adding men and masculinities to women's studies is not sufficient, nor does it ensure a critical feminist approach. Instead, women's studies must integrate the study of men and masculinities to widen the scope of the discipline to include the entirety of "gender practices and gender relations" (Connell, 2014b p.6).

With the development of men and masculinities studies, scholars and practitioners alike have recognized that men must also play a central role in dismantling patriarchal social structures (Chant & Gutmann, 2002; Cornwall, 2003;

Rathgeber, 1990). In addition to undermining the potential breadth and relevance of gendered approaches, focusing on women contributes to the assumption that women are solely responsible for issues such as gender violence, childcare, or family planning, thereby burdening only women with the responsibility for dismantling the patriarchy (Chant & Gutmann, 2002; Harding, 1995). Hegemonic masculinities also contribute to supporting violence, for example by allowing impunity and establishing institutional environments conducive to violence (Connell, 2014b). The example of violence illustrates how the study of hegemonic masculinities are central to gender work, particularly insofar as dismantling systems of oppression. Additionally, excluding men from gender work has practical implications insofar as slowing progress and placing women at in positions of further disadvantage. For example, in various contexts including East Africa, it has been shown that "men are more likely to listen to men" with respect to discussing and addressing gender issues (Chant & Gutmann, 2002 p.277). Moreover, women-only programming can result in conflict around control over household resources like land and labour, which can lead to backlash against women participating in development programs (Vercillo, 2020).

These failings in gender and food security research therefore reflect broader tends in gender and development work. This has prompted scholars such as Baruah (2009) to call for research "probing the intrahousehold arena, not just for further validation of female disadvantage […] but also for contradictory findings that shed light upon the complexity and dynamism of households and gender relations" (Baruah, 2009 p.177). In order to move away from positivistic food security research that seeks to quantify gender disadvantage, we must consider how gender is constructed and embedded in all aspects of household organization, including how gender *relations* shape experiences of food insecurity. This requires challenging the dominant ideologies,

methodologies, and practical implications of mainstream food security research, which precisely identifies the role of and need for feminist food researchers (Lewis, 2015). Building upon the example of Riley and Dodson's (2016) work in Malawi, feminist food security research requires the nuanced analysis of the construction of gender in context, exploring how gendered roles and responsibilities intersect with food insecurity and shape coping mechanisms, as well as exploring how men and women position their experiences and interactions around food, hunger and scarcity in relation to gender.

2.4.2. The gendered organization of the agrarian household

In order to understand the gendered processes and dynamics that shape food insecurity within the agrarian household, we must understand the organization of the household. In SSA, household structure is deeply tied to the construction of gendered identity and the gendered division of labour, which affects women's and men's positions in farming and food provisioning. In order to situate my study within the broader body of research on the agrarian household in SSA, I begin by tracing the origins of the nuclear family model, which has shaped constructions of masculinity and femininity. I explain how the nuclear family model, exported to SSA, has shaped social norms and expectations around what constitutes men's and women's roles and responsibilities within the agrarian household. Having established how gendered divisions of labour have come to be pervasive in SSA, I discuss the literature with respect to gendered patterns in farm and non-farm labour. I then touch upon gender and household decision-making, which is a fundamental aspect of household organization and functioning. I conclude this sub-section by discussing gendered violence and alcohol misuse with respect to food insecurity in the agrarian household.

2.4.2.1. Gender identity, the nuclear family, and the division of labour

The exploitation of women's labour in SSA is part of the larger system of capitalist labour that feeds uneven North-South relations, including the global food system. As Mies (2014) explains, the unequal and exploitative relations between men and women came to be through historical conditions and social relations. Through violent means of control, and then through marriage and land ownership, men were able to dominate and control women, their reproduction, and their labour, meaning they were also able to accumulate wealth (Mies, 2014). This process continued with the transition towards capitalism, which saw the "housewifization" of European women and suppression of their sexual and economic autonomy, followed by the larger-scale violence of colonial plunder and slave trade which further subjugated black women (Mies, 2014). This was the beginning of the nuclear family model, which was developed by the European bourgeoisie and then forced onto the working-class, further differentiating between the role of the woman as housewife and the man as the household head and breadwinner (Mies, 2014).

The nuclear family was exported to the Global South as a deliberate capitalist strategy to cheapen labour (Mies, 2014), which resulted in African women's repositioning as homemakers (Brain, 1978). In the African context, the nuclear family model was, and still is, a colonial concept rooted in empiricism that reifies heteropatriarchal power structures and reinforces male authority oven women (McEwen, 2017). This housewifization process and the exclusion of women from the productive or waged sector of the capitalist economy has meant that women's work is largely invisible, as it was identified as lower status and secondary importance with respect to that of men's work (Bandarage, 1999; Mies, 2014). This ensures men's

bargaining power and maintenance of control over decision-making within the household and reinforces men's position of dominance (Mies, 2014). The process by which labour became gendered however, was not uniform. As Guyer et al. (1988) explain, geography, and in particular cultural, political and regional histories have shaped gendered labour in agriculture differently from place to place. This means linking locally-specific sociocultural, political, ecological and economic factors (e.g. sociocultural value of crops, diversion of male labour during colonization, changing land inheritance systems, tax, trade, and markets) that have shaped labour patterns, to broader historical and contemporary "processes of occupational specialization and stratification" (Guyer et al., 1988 p.253). This process created pervasive and enduring social norms around gendered work, reinforcing a rigid gendered division of labour in SSA that encourages men and women not to step outside of their respective spheres of responsibility.

These social norms around gendered work have meant that women's work is largely seen as domestic, with women disproportionately shouldering the work of household reproduction (Bezner Kerr, 2005; Durairaj et al., 2019; Njuki, Parkins, et al., 2016; O'Brien et al., 2016). This care work is under or unpaid, undervalued, and includes child care and care for the sick and elderly, fetching water and firewood, bathing (heating bath water and bathing dependents), washing clothing, as well as food transformation and preparation, among other tasks (Durairaj et al., 2019; Hyder et al., 2005; Njuki, Parkins, et al., 2016). However, women's responsibilities are not limited to the domestic sphere. As will be further discussed below, women make significant contributions to agriculture and contribute to household income through various supplementary activities. This burden of labour has meant that women in SSA often express discontent with the disproportionate burden of labour they must carry as

compared to that of their husbands (Durairaj et al., 2019). As research from across SSA demonstrates, women shoulder dual responsibilities leaving them with much less leisure time than men (Bezner Kerr, 2005; Durairaj et al., 2019; Hyder et al., 2005). This inequality has even prompted women to characterize their husbands as lazy (Durairaj et al., 2019). Beyond fostering discontent, Bezner Kerr (2005) shows that the burden of domestic tasks can also interfere with women's ability to engage in farm work, thus contributing to poorer harvests and food insecurity.

Despite women's contributions, their labour has remained largely "invisible" (Hyder et al., 2005 p.328), while men's position of power and responsibility has solidified their place at the head of the household. The male breadwinner refers to the conception of men as economic providers, which, as discussed above, is linked to the nuclear household model. It also stems from hegemonic masculinity, or the normative prescription of what constitute the 'ideal' man (Connell, 1987, 1995; Connell & Messerschmidt, 2005). In agrarian contexts, masculinity is deeply linked to notions of land, productivity and food provisioning (Adinkrah 2012; Perry 2005; Badstue et al., 2020). In SSA, gendered social norms and expectations around food and farming are further entrenched because of men's visibility and women's invisibility in farming (Henn, 1983; Jacobs, 2010; Rai, 1997) as a result of decades of inequality in policy and politics that have allowed for men's domination in farming (Lastarria-Cornhiel et al., 2014; Perry, 2005). The result of these social norms with respect to the division of labour and household organization, are the "social definition of task as either 'men's work' or women's work'" (Carrigan et al., 1985 p.594). A consequence of this rigid division of labour is that men find contributing to domestic work for example, too shameful or embarrassing (Hyder et al., 2005), which further reifies gendered inequalities. Moreover, women's relegation to the domestic sphere and the

conceptualization of farming as men's work, has constrained women's opportunities by limiting access to assets and resources such as agricultural extension services and new technologies (O'Brien et al., 2016). Due to conceptualizations of gendered work, women are contributing much of the farming work but are not able to equally benefit from it, which has direct implications with respect to household food expenditure and therefore food security (O'Brien et al., 2016). What this example illustrates, is how gendered social norms both reflect and reinforce inequalities between men and women and impact food insecurity.

2.4.2.2. Farm labour: the gendered division of labour and cropping patterns

Among rural households in SSA, there are often clear divisions of labour along gendered lines. Women's contribution to peasant farming has long been recognized in the context of SSA, though it has also been subject to misrepresentation (Boserup, 1970; Carr, 2008; Doss, 2014; Quisumbing et al., 2014). While Doss (2014) has dispelled the myth that women produce 60-80% of the world's food, women in different contexts make varying contributions to farming, the nuances of which require place-specific analysis (Quisumbing et al., 2014). Broadly within the SSA context, women have many roles and are often involved in farm labour, food transformation, storage, marketing and preparation activities, as well as additional reproductive roles within the home (Hyder et al., 2005). With respect to specific tasks, research broadly has shown that men tend to be responsible for plowing and cultivating the soil, whereas as sowing, weeding and harvesting are either the responsibility of women, or a joint responsibility (Apusigah, 2009; Ezumah & Di Domenico, 1995; Hyder et al., 2005; Vercillo, 2020). There is also evidence to suggest that women are largely responsible for post-harvest processing (Vercillo,

2020). However, as Guyer et al. (1988) reveal through their analysis of gendered agricultural labour in southern Cameroon, the division of labour is highly complex and context-specific.

With respect to the gendered aspects of household-oriented production versus production for sale, research has shown that women in SSA tend to be responsible for household-oriented production while men's roles tend to be related to commercial or cash-crop farming, or to paid work outside the home (Boserup, 1970; Hyder et al., 2005). As Bryceson (2019) explains, colonial and later post-colonial policies reinforced the gender division between men's commercial-oriented farming and women's subsistence farming. Subsequently, agricultural livelihoods in SSA were undermined by SAPs, and men increasingly abandoned agrarian pursuits while women shouldered a diversity of on- and off-farm work (Bryceson, 2019). Recent evidence from other SSA countries, including Benin, confirms that women remain primarily focused on subsistence food production (Bryceson, 2019). When women grow food for the household as their first priority while men prioritize production for market, this means that men are able to continue to dominate the household through economic means (Carr, 2008). Moreover, this affects women's bargaining position within the household, and thus their decision-making power. Indeed, evidence in the context of SSA has shown that women in many countries disproportionately bear the responsibility of food securing activities, yet have much less decision-making power relating to food that impacts their quality of life (Bryant, 1998; Hyder et al., 2005; Ibnouf, 2011; Kiewisch, 2015; O'Brien et al., 2016; Rahman, 2008). Decision-making power is further discussed with respect to asset ownership below.

It is important to note here, that despite a robust body of evidence that broadly characterizes divisions of gendered labour in agriculture within SSA, labour dynamics

are changeable and subject to negotiation. As Bryceson (2019) suggests, labour patterns in SSA exhibit broad similarities but remain place-specific, “responsive and malleable” (p.68). In this vein, other researchers have challenged the assumption that women produce food largely for consumption, whereas men focus on cash-cropping (Doss, 2002; Vercillo, 2020). In Ghana, Vercillo (2020) reports that men are producing food largely for consumption, whereas women report producing food for sale. This occurs as a result of the “traditional provisioning responsibilities” in this context, wherein women are responsible for sauce ingredients including salt, oil and spices (Apusigah, 2009 p.54; Vercillo, 2020). When women’s on-farm production cannot meet these needs, they must engage in non-farm activities in order to generate income to purchase these items (Apusigah, 2009; Vercillo, 2020), meaning that while food production may not be for subsistence *per se*, that income is ultimately spent on food for the household. This conflicting evidence is indicative of some methodological discrepancies in how we classify and define agricultural work. Firstly, these findings indicate that binary divisions between subsistence and cash cropping may be obfuscating nuance and complexity. Secondly, women’s agricultural and domestic work is consistently overlooked and often not considered work at all, but rather duty (Bryceson, 2019). As Bryceson (2019) explains, this means that much of women’s work, both domestic and on-farm, is not counted, both in data collection and in “the minds of women informants themselves” (p.64). This ‘missing’ data further blurs the line between rigid gendered classifications of agriculture work, pointing to the need for qualitative work which fully explores and accounts for differing types and conceptions of work.

Similarly, there has been an assumption among researchers and development actors that clear gender distinctions in cropping patterns can be made, which would

simplify agricultural development policy (Carr, 2008; Doss, 2002). This approach to studying, or rather classifying, gender in agriculture stems from feminist empiricist approaches that seek to rigidly categorize women into one homogenous group that can then be leveraged to improve development outcomes (Carr, 2008). However, it is in practicing gender at the micro-level, for example within the household, that gender disparities are reproduced, meaning there is great heterogeneity within the broad categories of 'men' and 'women' (Carr, 2008). Doss' (2002) findings from Ghana demonstrate that there are few crops grown exclusively by men and no crops grown primarily by women, be they the head of household or a plot holder within a male-headed household. That we can, and should, classify crops as either men's or women's is a notion which Doss (2002) and Carr (2008) have thus dispelled. Additional evidence from Ghana confirms that, whereas men tend to be seen as responsible for staple crops such as maize and millet, women also grow staples crops both for sale and as a way to supplement shortfalls with respect to household production (Vercillo, 2020). This complication of the narrative builds on longstanding evidence from other SSA countries such as Nigeria, where Ezumah and Di Domenico (1995) revealed that the traditional roles in farming were changing, meaning the identification of yam as a 'man's crop' was no longer accurate because men grew 'women's crops' and women grew yam. Despite such evidence, discourse around yam as a man's crop persists in Nigeria, in part due to its labour intensive cultivation (Obidiegwu & Akpabio, 2017). This may be indicative of the persistence of patriarchal ideology around what labour 'can' be undertaken by women, but also of the prevailing influence of feminist empiricist approaches in research and practice that continually reinforce the idea of distinctly gendered crops.

As a whole, this body of literature suggests that divisions of agriculture labour and cropping patterns cannot be easily categorized by gender, nor should this be the ultimate or only goal. Rather, more nuanced approaches can contribute to better, more complex understandings of how gender and family structure shape farming in different places, among different groups, and in different households within SSA. In particular, gendered analyses that consider the construction of masculinity, femininity, and the family, will be important in broadening understandings of the gendered division of labour beyond feminist empiricist approaches that aim to categorize or 'count' gendered contributions to farming.

2.4.2.3. Non-farm labour: livelihood diversification in SSA

Alongside a focus on rural women's contributions to agricultural production, the complementary topic of livelihood diversification has received much research and policy attention, largely due its potential as a poverty-reduction strategy (Loison, 2015). This area of research is increasingly of interest to researchers and policy makers given projections for population growth in rural Africa, which alongside the lack of industrialization, leaves smallholder farming as the primary choice for SSA's young labour force (Loison, 2015). Broadly there are two competing views with respect to the study of livelihood diversification (Loison, 2015). On one hand, evidence suggests that livelihood diversification is an important risk reduction strategy, way to manage income variability, and means to improve household food security, and it has therefore been lauded as a "pathway for poverty reduction" in SSA (Babatunde & Qaim, 2010; Gladwin et al., 2001; Loison, 2015 p.1125; Senadza, 2012). The competing view is that diversification has occurred as a result of deagrarianization, as a necessity and "reorientation of livelihoods in distress" (Bryceson, 2002; Loison, 2015 p.1125). The latter position is supported by evidence

that livelihood diversification often takes the form of "low-return and survivalist" activities, which actually deepen poverty (Razavi, 2009 p.215). The focus on survival-led diversification is driven by the necessity to ensure survival or cope with vulnerability, and is consistent with livelihood approaches that place emphasis on the processes, structures, and power dynamics that shape farmers' capabilities to secure their livelihoods (Loison, 2015; Yaro, 2006). This behaviour is also gendered, with women's participation in non-farm activities motivated by household scarcity, particularly when men's incomes are lacking (Abdulai & Delgado, 1999; Farid et al., 2009). Therefore, I focus on survival-led diversification within my dissertation, as it is most applicable to the study region, and centers the structural causes of this disadvantage rather than downloading the responsibility of addressing poverty and food insecurity onto poor farmers, especially women.

Non-farm income accounts for an estimated 35% of rural household income in SSA and is of particular importance to rural women (Haggblade et al., 2010), and therefore I differentiate between farm and non-farm activities (Barrett et al., 2001). Non-farm activities in SSA often include bartering, petty commerce (e.g. brewing and/or retailing local alcohols, processing and/or resale of crops, selling prepared food, retailing manufactured products, livestock trade), handicrafts (e.g. clay pots), and the gathering and transformation of natural resources (e.g. collecting firewood, fruit, shea, sand mining, brick making, burning charcoal) (Akram-Lodhi & Kay, 2010; Bezner Kerr, 2005; Gladwin et al., 2001; Heubach et al., 2011; Loison, 2015; Segnon & Achigan-Dako, 2014; Yaro, 2006). These non-farm activities typically have low requirements for skill, education, and capital (Loison, 2015). Petty commerce is a particularly important livelihood activity for vulnerable households, though evidence from Malawi shows that it often takes the form of low-paying

seasonal activities that contribute little to household income overall (Orr & Mwale, 2001). For example, women in East Africa explain that the small sum they earn by collecting and selling firewood is not nearly sufficient to outweigh the "hardship of the work" (Hyder et al., 2005 p.331). Likely for this reason, selling firewood in Malawi has been flagged as "a sign of extreme food insecurity" (Bezner Kerr, 2005 p.64). These examples underscore the survivalist nature of much supplementary work undertaken by women in SSA, which is the most relevant type of non-farm work in my research given the precarious nature of agricultural livelihoods in the study region.

Diversification strategies are also marked by unequal gendered divisions of labour, as a result of gendered social norms that shape livelihood activities (Onzere et al., 2020). Much of the burden of the diversification activities listed above tends to fall to women (Yaro, 2006), yet this work is less profitable than men's (Bryceson, 2002). While women's involvement in non-farm activities reflects the legacy of women's longstanding economic autonomy in West African societies (Heilbrunn, 1997; Lindsay, 2007; Watts, 2013), their disproportionate participation in survivalist or low-return activities is also reflective of the constraints women experience with respect to opportunities in formal labour markets and potentially higher-return activities (Fuje, 2017). Constraints on women's opportunities mean that when women's gendered spending responsibilities require cash purchases, they turn to non-farm activities in order to generate income to purchase these items (Apusigah, 2009 p.54; Vercillo, 2020). Moreover, evidence suggests that women's involvement in supplementary income generating activities may be motivated by financial distrust, particularly the concern that their husband's income will not be spent on household needs such as food, and instead on extramarital affairs or alcohol (Durairaj et al.,

2019). Such findings underscore the relevance of context-specific gendered analyses of household and labour organization with respect to food security.

2.4.2.4. Household decision-making

As are the division of roles, responsibilities, and resources, household decision-making is deeply gendered (Agarwal, 1997). Whereas previously the household was seen as one cooperative unit (Doss, 2013; Posel, 2001), it is now widely accepted that household members have varying interests, assets, and capabilities, which shape and are shaped by gender asymmetries in power and control within the household (Agarwal, 1997). While the cooperative, or black-box model of the household, informed decades of policy intervention that funnelled resources to the head of household, it is now understood that decision are made as a result of bargaining or negotiation between multiple members of the household. Within this bargaining process, power and control is dependent on the position of marginalized people within the family structure and their ability to fall back onto alternative options if cooperation in bargaining is unsuccessful (Agarwal, 1997; Doss, 2013). Fall-back positions are improved by access to both material and non-material assets, which increase bargaining power and alter household decision-making by improving women's ability to negotiate, for such improvements as a more equitable workload, the right to work, and to control their income (Deere & Doss, 2006; Doss, 2013). Individuals' bargaining positions, and therefore decision-making power within the household is also shaped by their ownership of land, other assets, access to employment or other income, access to communal resources, access to social and state support systems, and social norms and perceptions, for example regarding how deserving a family member is judged to be (Agarwal, 1997). These indicators are

therefore used as proxies for measuring bargaining power during data collection (Doss, 2013).

In the context of SSA, the significant and longstanding gender-asset gap that exists between men and women (Deere & Doss, 2006; Djurfeldt, 2018; Lastarria-Cornhiel et al., 2014; Meinzen-Dick et al., 2014), has deeply affected women's bargaining power and control over household decision-making. The process is also cyclical, whereby the existing asset gap allows men to maintain control land, labour, finances, inputs, and access to credit, thereby exercising power over food production for both subsistence and sale. This further leads to the accrual of wealth and other assets, which solidifies their control over household, community and political decision-making. Moreover, bargaining power determines divisions of labour, including domestic and agricultural work (Doss, 2013), meaning that gendered inequalities in bargaining power may translate to inequalities in the division of labour. Bargaining power also affects agricultural production decisions in "myriad ways" affecting inputs, labour, yields, and use of farm products, which underscores its relevance to question of gender, food and farming in agrarian contexts within SSA (Doss, 2013).

Social norms affect bargaining in terms of how the bargaining process is undertaken and by limiting what can be bargained about, given that certain norms or traditions may be seen as non-negotiable. For example, social norms may mean that certain traditions or practices are seen as uncontestable, or dictate who can be assertive and how that assertiveness is expressed (Agarwal, 1997). Whitehead's (1981) concept of the "conjugal contract" is particularly useful for understanding household decision-making, as well as negotiation and resistance within the constraints of the marriage (p.88). The conjugal contract refers to the (often

implicitly) agreed upon terms that dictate the functioning of the household, including the division of labour and household members' control over the products of that labour (Whitehead, 1981). The contract outlines the expectations within the marriage and the household more broadly, often reflecting social norms (Jackson, 2012). The contract however, is flexible and subject to subversion and negotiation (Jackson, 2012; Perry, 2005). Though some women in SSA and elsewhere may not be able to overtly resist patriarchal norms, they may do so covertly, for example by refusing to accept unequal gendered division of labor as legitimate (Agarwal, 1997). Therefore, what is often interpreted as compliance is actually a survival strategy (Agarwal, 1997). If we consider the interplay of assets and social norms within the household decision-making process, we can conclude, as Agarwal (1997) suggests, that bargaining power is not a simple product of inequalities. Rather, it is a product of the complex interaction of social perceptions, norms, and inequalities in access to and ability to utilize various types of resources, which play out within the household and within the broader community, market and state (Agarwal, 1997).

Women's poorer bargaining positions are of concern insofar as it is an issue of women's rights to equitable opportunity, position, and self-determination, and because it has consequences for women's health and well-being. Specifically, improved bargaining power may reduce women's risk of experiencing gender-based violence (Doss, 2013). Beyond individual benefits for women, evidence suggests that greater equity in household decision-making may also improve the material conditions of the household and its other members. For example, research has found that more equal asset ownership and bargaining power between men and women may affect decisions regarding household spending, with respect to improved nutrition and education of children, particularly girls (Doss, 2013; Meinzen-Dick et al., 2014). In

Zimbabwe for example, research has shown that women are more concerned with food security than men, and they use their bargaining power to ensure their own food security and that of their children (Adeyemi, 2010). While the gendered differences in priorities and household spending bear mentioning, we must be careful not to characterize women as universally or naturally benevolent (Jackson, 2002). It is true that women may be socialized into acting in a more altruistic ways than men, yet behaviours which prioritize others are highly contextually variable (Agarwal, 1997). In fact, a woman may feel that helping the family is in her self-interest in the longer term, perhaps because she is more reliant on the family unit for social and economic support (Agarwal, 1997). Most likely, varying combinations of self-interest and altruism are at play, with motivations stemming from individual interests and broader concerns for family welfare. Of course, this is also not limited to women, as Agarwal (1997) explains, men may be socialized to financially look after their families even at the cost of their own well-being.

Drawing on this more complex approach to understanding how power and control shape household decision making, I apply a mixed household model in my research. A mixed model approach refutes the idea that, if income is pooled, family members will benevolently act in the interests of all (Agarwal, 1997). I therefore recognise that individuals act semi-autonomously, and that there can be spheres of both cooperation (bargaining re: shared responsibilities) and non-cooperation (distinct income streams, separate roles and divisions of labour) within the household (Agarwal, 1997). This model is most applicable to households in West Africa, where husbands and wives tend to manage largely separate incomes, and traditional gendered provisioning responsibilities reflect this dynamic (Apusigah, 2009; Vercillo, 2020). As Kiewisch (2015) explains, women are often able to retain control of their own, separate

livelihood activities, engaging in some secrecy between spouses in order to protect their assets. Some income is separate, while other income may be jointly managed or earmarked for household spending (Kiewisch, 2015). With respect to household decisions around spending therefore, women exert some control while also having spending obligations towards the household, and experiencing unequal power relations in the favour of men (Kiewisch, 2015). This latter aspect of unequal power relations is an important consideration within the household bargaining dynamic in SSA, where the broader structural context of inequality continues to place men at an advantage (Bezner Kerr, 2005). It is upon the basis of this literature that I conceptualize household bargaining and decision-making within my research.

2.4.3. Gendered violence within the household

Household bargaining can be source of household tension, as arguments reflect disagreements around household organization and the conjugal contract, as well as the gendered hierarchies that shape them (Perry, 2005). Arguments may devolve into violence, particularly in sociocultural contexts where violence is used to punish transgression, reinforce gender hierarchies, and assert men's position of power (McCloskey et al., 2016; Morrell et al., 2012; Uthman et al., 2010). Intimate partner violence (IPV), which refers to violence occurring within the couple, encompasses various forms of physical, sexual and emotional abuse (Capaldi et al., 2012). While there are numerous drivers of IPV, evidence suggests that men often perpetrate violence when their masculine identity is threatened and they are unable to meet social expectations for manhood (Jewkes, 2002; Perry, 2005). This is particularly relevant in food insecure contexts, where marital conflict is driven by the fear, hopelessness, and frustration experienced by men who are unable to fulfill their role

as household breadwinner, a role which is deeply tied to their masculinity (Andarge & Shiferaw, 2018; Regassa, 2011).

Indeed, a growing body of evidence has demonstrated that food insecurity is associated with increased risk of IPV in various SSA contexts (Andarge & Shiferaw, 2018; Bloom et al., 2020; Fong et al., 2016; Gibbs et al., 2018; Hatcher et al., 2019, 2020; Regassa, 2011). In Benin, rates of IPV are concerningly high, and violence against women is widely accepted (Kpozehouen et al., 2018; Uthman et al., 2009). At the national level, an estimated 42% of women experience IPV in their lifetime (DHS, 2019), and women living in poorer and more rural areas are at disproportionately affected (Kpozehouen et al., 2018). This dynamic is reflected in the rates of IPV within the Atacora region, where a staggering 51% of women are reported to have experienced IPV (DHS, 2019). Rates of IPV in Benin reflect broader trends within SSA, where IPV remains widely prevalent (Cools & Kotsadam, 2017; Muluneh et al., 2020), particularly within food insecure contexts (Bezner Kerr, 2005).

2.4.4. Alcohol misuse within the household

Alongside food insecurity, alcohol misuse has been recognized as a factor that drives IPV (Abramsky et al., 2011). In many SSA countries, alcohol consumption, as well as more serious alcohol abuse, has been strongly associated with an increased risk of IPV (Ekpenyong et al., 2018; Guli & Geda, 2021). There are several pathways identified in the literature that explain this relationship. Firstly, some scholars explain that masculinity is tied to drinking behaviours, and being “feared and respected” by one’s wife is also a source of masculine pride (Ekpenyong et al., 2018 p.19). Heteropatriarchal constructions of masculinity have therefore been identified as a driver of alcohol use and IPV. Secondly, alcohol misuse exacerbates tension within couples and may lead to the use of violence in what would otherwise have been a

non-violent disagreement (Sommer et al., 2013). This occurs because alcohol reduces cognitive function, self-control, and negatively impacts individuals' ability to weigh consequences appropriately and thus resolve conflict (Guli & Geda, 2021; Zawacki et al., 2005). Moreover, alcohol has been shown to increase aggression and hostility broadly, and escalate conflict, arguments and disputes in interpersonal relationships (Klostermann & Fals-Stewart, 2006). In Tanzania for example, researchers identified that disagreements around men's alcohol drinking behaviours reflect underlying inequalities in power and control over decision-making, which contribute to IPV (Sommer et al., 2013). Therefore, disagreements around alcohol misuse and decisions regarding household spending can also incite violence.

In addition to driving IPV, evidence demonstrates that alcohol misuse has undermined food insecurity in various SSA contexts (Bezner Kerr, 2005; Eaton et al., 2014; Regassa & Stoecker, 2012; Sirotin et al., 2012). The pathways through which this occurs in the agrarian context are twofold, through the diversion of household spending away from food and through interference with farm work (Regassa & Stoecker, 2012; Sirotin et al., 2012; Luginaah, 2008). While similar research has yet to be undertaken in Benin, alcohol misuse has emerged as an issue of concern in rural areas, where the link between persistent poverty, increasing alcohol dependency, and increasing food insecurity has been identified among farmers, but not sufficiently explored (Somassè et al., 2016; Tognide et al., 2014). This reflects broader trends of alcohol misuse, rates of which are rising in low income countries around the world, particularly among poorer populations (WHO, 2018). Similar to many parts of SSA, alcohol consumption is also gendered, with men often drinking more and more often than women (Obot, 2006; WHO, 2018). This body of evidence underscores the

importance of undertaking a gender-based analysis of food insecurity, IPV, and alcohol misuse among farmers in Benin.

2.5. Theoretical framework

In the following section I discuss the theoretical frameworks that are central to my dissertation in order to position my research with respect to the fundamental questions of what knowledge there is to learn, and how this knowledge is sought, produced, and represented (Cope, 2002; Philip, 1998). The theoretical framing of my research has shaped my Ph.D. research from the research question I ask, to the methods of data collection and analysis that I use to answer it. The following section is organized into four sub-sections on the entitlements and capabilities framework, feminist political ecology, feminist theory, and stress and coping theory.

2.5.1. Entitlements and capabilities

The first theoretical framework that I draw upon in my research is Amartya Sen's (1981) entitlements and capabilities approaches to examine place-specific understandings of gendered food insecurity, with particular focus on issues of access to food, rather than availability (Devereux, 2001). As Sen (1981) illuminated, the issue is not whether there is enough food, but whether some people have enough food to eat (Burchi & De Muro, 2016). Sen (1981) defined entitlements as the means by which people acquire food as part of a bundle of other commodities, or the "ability of people to command food through the legal means available in the society" (p. 45). Famine results therefore, not when there is a lack of food, but when *some* people experience a lack of food (Sen, 1981). For example, peasant farmers may experience hunger or starvation when their direct entitlements, or crops for home consumption, fail, even when there is food available on the market (Sen, 1981). This approach had a significant impact in food security work, highlighting the importance of access to

food, rather than a Malthusian focus on availability (Burchi & De Muro, 2016). This frames food security such that the burden or blame of being hungry is not placed on the individual. Rather, it is the result of the failure of a system to provide people with adequate food to meet their needs. Thus, the "fixation" is no longer on food supplies, but on the inability of certain groups to access food (Devereux, 2001 p.246).

The capabilities framework was developed by Dreze and Sen (1989) to account for the myriad of factors that enable people to achieve a holistic state of well-being (Burchi & De Muro, 2016). Dreze and Sen (1989) thus introduced the idea that in order to have the capability to be free from hunger, the *utilisation* of food is important in addition to access. In addition to the initial identification of health care, medicine, disease-free environments, clean water, sanitation and education (Burchi & De Muro, 2016), Nussbaum (1995, 2003) and Thompson (2015) have elaborated on the scope of human capabilities to include the ability to have: (1) a normal human life expectancy; (2) good health, including nourishment, shelter, reproductive rights and sexual satisfaction; (3) bodily integrity, be secure against violence and avoid unnecessary pain, and have freedom of mobility; (4) an education and have legal rights to free speech and religious freedoms; (5) emotional attachments (e.g. love, grief); (6) self-determination over one's own life, including choices regarding participation in politics, employment, marriage, childbearing, sexual expression, free speech, and to live in one's own surroundings; (7) affiliation, compassion, friendship and justice; (8) a life within and respect the natural world; (9) laugh, play, and enjoy recreation; (10) control over one's political and material environment (i.e. property and belongings); and, (11) access to land and property rights.

Sen also emphasizes that the ability to access food depends on society's "legal, economic, political and social characteristics" (Sen, 1981 p.164), meaning that the

ability of people to have these capabilities is dependent on the protection or creation of equitable institutions, as well as social and political systems (Nussbaum, 1995). Using this theoretical approach has practical implications, as the goal of policy then becomes providing people the capabilities to live well and as a result be food secure, rather than simply aiming for mere subsistence (Nussbaum, 1995). This approach also foregrounds individual agency, positioning people not as the passive objects of development or recipients of aid, but actors who are capable of and supported in ensuring that they are well-fed (Nussbaum, 1995). In my research therefore, I draw on the entitlements and capabilities approach to highlight the importance of equity and agency through an analysis of individual-level factors while still considering how these are shaped by broader structures and systems (Burchi & De Muro, 2016). More broadly, I use Sen's approach to conceptualize food security beyond availability, to consider how food security is shaped by human capabilities, both of which are deeply shaped by gender in the study context.

2.5.2. Feminist political ecology

Political ecology (PE) has emerged out of a diverse set of theoretical contributions from different fields, including political economy, cultural geography, peasant studies, and Marxism, drawing on a social constructivist perspective wherein there is no objective reality and 'truth' is subjective (Blaikie, 1999; Bryant, 1998; Watts, 2000). Given the multiplicity of influences in its development, it follows that there are also a "plurality of approaches" within PE, all of which share the position that politics and environment are inextricably linked (Bryant, 1998 p.82). Specifically, political ecologists see the environment as being politicized through the involvement of cultural, social, and economic interests, and political strategies (Blaikie, 1999). One of the core assumptions of PE is that "ideas are never innocent but either reinforce or

challenge existing social and economic arrangements" that stem from inequalities, for example in the power and control over resources (Bryant, 1998 p.87).

After the 1980s, the discipline of PE expanded the range of theories and scholarship upon which it drew, to include ecofeminism, gender and development, along with which came a focus on the study of power relations and the control of resources, labour and capital (Bryant, 1998; Elmhirst, 2015). Thus, Feminist Political Ecology (FPE) emerged as a sub field of PE, combining its approach focused on the relationship between environment, politics and power at different scales with a specific focus on gendered power relationships (Elmhirst, 2015). FPE brings a feminist perspective which centres gender within PE approaches that link micro-level struggles to national and global processes, with an added focus on the oppression and resistance of women (Bryant, 1998; Rocheleau et al., 1996). Gendered inequality, norms, and dynamics are inherently issues of politics and power, and in my research I draw upon FPE to examine the sociocultural, historical and political contexts that have shaped gender within the study region. I consider the ecological aspect of FPE in my dissertation by drawing on Rocheleau et al.'s (1996) definition of the ecological as constituting "the struggles of men and women to sustain ecologically viable livelihoods" (p.4). My focus is on how agrarian livelihoods are shaped by gender norms, identity, and issues of power and control, with particular attention paid to women's supplementary income generation in the face of food insecurity. FPE provides a particularly useful framework for the study of gendered control over and use of resources because of men and women's differing interests, positions of power, and "distinctive roles, responsibilities and knowledge within household/family divisions of labour" (Elmhirst, 2015 p.522; Rocheleau et al., 1996). Therefore, FPE is well-suited to the study of gender relations around food and farming within the

agrarian household, wherein issues of power, labour and resource control are central factors.

A FPE approach also fits nicely with Sen's theory of entitlements and capabilities, as both aim to balance the influence of structural forces with individual agency. Sen's work considered women and children in their own right, rather than as an agglomeration of the household unit (Fukuda-Parr, 2003; Robeyns, 2008). Similarly, FPE challenges assumptions regarding homogeneity within groups, for example, the assumption that there are shared interests within local communities or within the household (Elmhirst, 2015; Rocheleau, 2008). This principle underpins my dissertation work, in its aim to elucidate intrahousehold dynamics that shape food insecurity, and go beyond household level approaches that subsume the experiences of women. Rocheleau et al. (1996) eloquently describe FPE as placing "gender as a critical variable in shaping resources access and control, interacting with class, caste, race, culture and ethnicity to shape […] the struggles of men and women to sustain ecologically viable livelihoods" (p.4). This focus on how livelihoods are shaped by gender, identity, power, and control is particularly relevant to my study context, where farming is intimately tied to household organization and control in decision-making. Additionally, sub-disciplines of political ecology include food, farming and development, which aim to develop more critical food and development scholarship and thus are also relevant to my research (Blaikie, 1999; Hall, 2015).

Similar to the way in which the capabilities approach foregrounds the importance of broader contextual factors, FPE encourages multiscale analyses based on empirical observations. FPE uses a gendered lens to focus on the oppression and resistance of women, emphasizing complexity and linking micro-level struggles to the broader web of national and global processes in politics, economics, ecology, and development

(Bryant, 1998; Thomas-Slayter et al., 1996). Much FPE work has considered the smaller scales in which politics play out, and the household is one of such level where FPE scholars have focused on how family structure and intrahousehold power dynamics shape gendered divisions of labour and differential access to and control over resources (Elmhirst, 2015; Thomas-Slayter et al., 1996). In my research I draw on FPE to examine the household as a micro-level site where gendered household structure and power relations shape experiences of food insecurity, and connect these local experiences to global processes.

2.5.3. Feminist theory

I draw broadly on critical feminist theory in my Ph.D. research in order to conceptualize gender as more than simply a unit of analysis. I define gender within this dissertation as a socially constructed, relational concept that is dynamic, place-specific, and embedded in our practices and institutions (Harding, 1995; Hudson, 2005). It is my position that such an approach challenges mainstream gender and food security research, filling many of the gaps identified earlier in this chapter. The conceptualization of gender as a social construct is one of three major theoretical frameworks applied by feminist geographers, which also include gender as a social relation and gender as difference (Dixon & PaulJones III, 2006). Gender as a social construct focuses on how gender is instilled with meaning, be it positive or negative, to shape individuals' identities and interactions (Dixon & PaulJones III, 2006). This conceptualization is particularly useful for feminist geographers considering how men's and women's identities are "brought into play at specific times and in specific places" in order to study inequality and inclusion/exclusion (Dixon & PaulJones III, 2006 p.49). This framework relies on social constructivism insofar as considering

how social practices are produced and imbued with meanings that vary from place to place (Dixon & PaulJones III, 2006).

When gender is considered as relational, gendered identity and roles are defined not in isolation but in relation to one another and through social interactions, which means that "statements about femininity are necessarily also claims about masculinity", and therefore improving our understandings of one necessarily transforms the other (Hudson, 2005 p.156). The relational conceptualization of gender corresponds to the thread of research in feminist geography that emphasizes gender as a social relation, focusing on gender as a complex set of social relations between men and women (Dixon & PaulJones III, 2006). Defining gender as a relational concept in food security research provides an opportunity to move beyond women-only approaches, including men and masculinities and centering relationship dynamics as a site where gender shapes food security. In my research, I also draw upon the third major conceptualization of gender in feminist geography, which considers gender as a form of difference with respect to the experiences of men and women (Dixon & PaulJones III, 2006). This conceptualization of gender can illuminate the processes that contribute to women's marginalization, and is particularly useful when engaging in place-specific research that examines how the cultural, economic, political, and environmental context of a particular place influence's women's and men's lives (Dixon & PaulJones III, 2006).

Considering gender as 'embedded' in food security research encourages historically grounded research at multiple scales, centering individual experiences with the broader structures and process that have produced and reinforce gender inequality. Similarly, a critical feminist perspective emphasizes the recognition of overlapping intersections of identity can facilitate the connection of the individual to

broader structures and process, and help to propel food security research beyond the women-only approaches that lump together all women and seek to quantify their disadvantage (Hudson, 2005; Lewis, 2015). Finally, Lewis (2015) adds that feminist food research can address the problem of disciplinary silos, expanding the interdisciplinarity of food security research and in so doing improving conceptual frameworks, linking thematic knowledge at multiple scales, thereby complicating understandings of gender, land, labour, livelihoods and food. These are precisely the gaps that my Ph.D. research aims to fill.

I also draw upon Moser's (1989) concept of practical versus strategic needs to frame my research. Researchers have noted that focusing on women's marginalization often translates into recommendations which assist women in increasing food production and access, but do not fundamentally change power relations or recognize peoples' rights to determine their own food systems (Lewis, 2015). This shortcoming reflects the tension between researchers and practitioners who advocate for fundamental change versus those who take a more incremental or pragmatic approach. This tension is evident, for example, in the ongoing debate between food security versus food sovereignty advocates, which is rooted in an epistemic disagreement as to whether current food systems ought to be fundamentally altered to ensure more just and equitable outcomes, or whether approaches ought to work within the constraints of the current neo-liberal system (Jarosz, 2014). This debate parallels a similar friction within gender and development research wherein approaches which prioritize immediate, or practical needs are seen to compete with approaches which aim to fundamentally alter patriarchal social, political and economic systems. In my work I will aim to overcome these disciplinary divides by considering the following: (1) the longer-term strategic needs of women (e.g.

women's empowerment, autonomy and equitable access to resources), which are specific to their cultural and socio-political contexts (Moser, 1989), and (2) their more immediate practical needs which result from their engendered societal positions (e.g. safety, improved livelihoods, equal divisions of labour). Moser's (1989) differentiation between women's practical needs versus strategic needs highlights that the two aims of (1) challenging prevailing systems while also (2) improving daily living conditions are not mutually exclusive. I see this approach as one that parallels feminist research, insofar as feminism "refers to the area where theory and practice meet with regards to transforming the unequal power relationships between women and men" (Hudson, 2005 p.156).

2.5.4. Stress and coping theory

In order to better understand the mechanisms behind alcohol misuse and violence as responses to food insecurity, I draw broadly on the literature of stress and coping theory. This body of research aims to explain both individual and family behaviours in response to stressors, or hardships, which range from daily hassles to major changes or crises (Lazarus & Folkman, 1984; McCubbin et al., 1980). Within the family, these stressors may include death and bereavement, interpersonal conflict, violence, psychological hardship or illness, as well as changes to household finances and the gendered allocation of labour (McCubbin et al., 1980). Stress and coping theory draws on the literature and theory of psychological coping to examine how individuals alleviate distress, either by attempting to address the stressor (problem-focused coping) or address their negative emotional state (emotion-focused coping) (Lazarus & Folkman, 1984; McCubbin et al., 1980). Given that individual responses to similar stressors vary, coping research aims to examine the properties of the individual, family and external factors that mediate stress and shape coping responses,

which includes vulnerability and adequate social support, (Lazarus & Folkman, 1984; McCubbin et al., 1980). Breakdown within the family is more likely to occur when family members cannot make sense of a stressor event or are unable to problem solve to overcome that hardship, particularly if the stressors are outside of their control (McCubbin et al., 1980). It is important to note that coping efforts exist independently regardless of whether or not the coping strategies are effective in terms of improving an adaptation outcome, such as improving morale or social functioning (Lazarus, 2013). Therefore, maladaptive coping behaviours that are ineffective or harmful in the long term, are still considered coping behaviours.

One such behaviour is alcohol misuse, which has been identified as an insufficient coping response to stressful circumstances at the individual level, but may have a serious impacts within the family, often contributing to interpersonal conflict (Cooper et al., 1988; McCubbin et al., 1980). When no alternative strategies are available, alcohol may be used to manage negative emotions and reduce tension (Cooper et al., 1988; 1992). In contexts of vulnerability or deprivation, this type of avoidance coping may result in greater alcohol consumption, particularly for men (Luginaah & Dakubo, 2003).

Stress and coping theory also lends insight into the relationship between food insecurity and IPV, given that food insecurity is a household stressor (Diamond-Smith et al., 2019). Firstly, food insecurity represents a source of tension and strain within the household in much the same way that poverty does, by contributing to an "overburdened family system" within which the likelihood of IPV increases (Lucero et al., 2016 p.396). While perpetrating violence is not a coping response *per se*, stress caused by hunger and scarcity may trigger violence and also worsen mental health, which is a further risk factor for IPV (Diamond-Smith et al., 2019). Secondly, men

may experience additional stress when they fail to adhere to gender norms, which increases their risk of perpetrating IPV (Berke et al., 2019). This occurs because food insecurity poses a threat to masculinity insofar as undermining men's role as household breadwinner, thereby causing stress and increasing IPV (Andarge & Shiferaw, 2018; Regassa, 2011). These two pathways illustrate how stress, born of food insecurity, exacerbates conflict within the couple and contributes to IPV. It is important to clarify that violence is not the only response to stress stimuli (Farrington, 1986), however it becomes a more likely response when families have inadequate coping resources, such as social connections and ability to manage crises (Lucero et al., 2016). This type of response is also more likely in contexts where social norms legitimize violence (Farrington, 1986), as is the case in contexts throughout SSA, including Benin (Kpozehouen et al., 2018; Rani et al., 2004; Uthman et al., 2009).

CHAPTER 3

3. METHODS

3.1. Introduction

While Chapters 4, 5 and 6 each explain my use of methods in brief, it is important to discuss the broader methodological approach that was taken in designing and undertaking my dissertation research. My choice of research methods flow from the discussion in Chapters 1 & 2 regarding: (1) the theoretical frameworks that guide my research; (2) the research questions that I pose; and, (3) existing gaps in gender and food security research. In this Chapter, I identify and discuss the specific methodological approaches that I chose as a result of each of the above considerations, and explore some of the practical considerations therein. I go on to explain, in detail, the process of data collection and analysis, which is further explored in each manuscript. In the final part of this chapter, I engage with the limitations of my methods and discuss the challenges I faced and the considerations I weighed while conducting my research.

3.2. Study Design

3.2.1. Intrahousehold approach

While calls for more intrahousehold research have been taken up in more critical feminist work, other researchers, alongside development actors and governments, have long undertaken data collection at the household level (Baruah, 2009). The persistence of household-level approaches to data collection may be due, in part, to practical reasons such as lack of time and money for more thorough data collection (Posel, 2001). It is also easier to obtain and classify data at the household-level, that can then be used as a proxy measure to infer information about the intra-household distribution of resources and decision-making power (Posel, 2001). Beyond practical

concerns, the persistence of this approach is rooted in the idea that the needs of women can be subsumed under those of men, meaning that heads of household (HOH) are assumed to have the same interests as their family members (Baruah, 2009; Posel, 2001). It is widely recognized that this approach fails to consider gender asymmetries in power, control and ownership within the household (Agarwal, 1997; Doss et al., 2014).

With particular respect to food insecurity, Coates et al. (2010) have demonstrated that women and men interpret food insecurity differently, due to their distinct gendered roles and responsibilities, as well as the imbalance of power within the household. Their findings illustrate how men and women living the same households interpret and report household food insecurity differently, which further underscore the weakness of household-level analysis. In addition to an important loss of nuance and clarity, using a unitary household model has significant policy implications, as programs and funding has often been funneled to predominantly male HOHs, assuming that there would be equal distribution of resources (Agarwal, 1997). For example, inequalities in the distribution of resources such as agricultural land may impact who controls farm decision-making, meaning important consequences in food security and climate change adaptation (Doss et al., 2014). Such approaches thus lead to the further marginalization of women in the development process.

Data collection at the household level has also led to a focus on studying the differences between female and male HOH as homogenous groups, rather than examining the similarities and differences within those groups, and within households (Posel, 2001). The use of household level data obfuscates the experience of vulnerable women and children within the household, who may experience greater disadvantage in a higher-earning male headed household than in a poorer female

headed household (Baruah, 2009; Posel, 2001). Individual level-data has the potential to further understandings beyond group-level generalizations, confirming but also contradicting commonly held beliefs regarding women's experiences. For example, research in Uttar Pradesh has demonstrated that women are not universally or consistently more vulnerable to poorer nutrition throughout their lives; while women have poorer nutrition in youth, that pattern is reversed during childbearing years, when men are socially expected to engage in heavy labour as the breadwinner (Baruah, 2009). Kiewisch (2015) also uses evidence from cocoa-growing communities in Ivory Coast to demonstrate that understandings of gendered financial decision-making are much more complex and place-specific than previously understood.

Despite its clear failings, household level approaches persist. As explored above, current reports of food insecurity in Benin rely largely on information collected at the household level, and most heads of household (HOHs) are men, particularly in northern regions (FAO et al., 2017; WFP, 2014). As established in Chapter 2, this reflects a broader trend within gender and food insecurity research in SSA, which remains focused on quantifying gender disparities between men and women HOHs. While food security remains a chronic issue in Benin, little is known about how intra-household gender dynamics shape food insecurity. To move beyond these limitations, I draw upon a bargaining model of household decision-making that recognizes the unique and varying interests of different household members (Agarwal, 1997). As established in Chapter 2, women are often disadvantaged with respect to bargaining power, as it depends on having financial resources, ownership and control of property, employment opportunities, family support, laws around marriage and divorce, and ability to participate in and influence decision-making

(Agarwal, 1997). Therefore, bargaining power is not a simple product of economic inequalities, but rather a product of the complex interaction of social perceptions, norms, and inequalities in access to and ability to utilize various types of resources, which play out within the household and within the broader community and state. I apply the conceptual framework of household bargaining to my methods insofar as collecting individual level data that can illuminate issues of power and control with respect to decision-making and the division of labour within the household.

3.2.2. Mixed methods

Mixing methods commonly refers to the integration of qualitative and quantitative approaches (Symonds & Gorard, 2010). The use of mixed methods has often been critiqued, as methods are seen to flow from distinct ontological and epistemological positions that are often conflicting (Cope, 2002; Philip, 1998). Qualitative methods take a nonnumeric approach to data collection and analysis, using techniques which celebrate subjectivity and multiple truths, complexity, depth and ambiguity (Philip, 1998). These methods are often seen as flowing from post-positivist more critical theoretical positions, which assume that 'reality' is subjective/interpretive, meaning that there are multiple realities and truths which are context specific and individually variable depending on a person's experiences (Baxter & Eyles, 1997). Conversely, quantitative methods are broadly seen as flowing from positivism and empiricism, which asserts that research can, and indeed should be value-free, neutral and objective, yielding results which are then generalizable and universally applicable (Kwan, 2002; Philip, 1998).

Qualitative and quantitative methods have long been juxtaposed against one another, and the swinging pendulum of philosophical and methodological positions has resulted in the increasing division between these methodological approaches in

geography (Winchester & Rofe, 2000). In this research, I take the position that the gulf between qualitative and quantitative methods is not incommensurable (Symonds & Gorard, 2010). In rejecting positivism and recognizing that all research as value-laden and influenced by researcher biases and politics, the epistemological gulf between the two types of methods is already narrowed (Philip, 1998; Winchester & Rofe, 2000). This theoretical position that allows researchers to expand the range of questions, interpretations and voices considered in scientific inquiry (Cope, 2002). My dissertation research has been designed premised on the position that no one method is uniquely tied to a particular epistemological or ontological position, rather methods can be used effectively with varying intent.

This philosophical position can be further explained if we look to practical examples. While quantitative research is often considered be deductive in nature (theory informing research) and qualitative research more inductive (theory-generating), in practice research is a more iterative and dynamic process. In reality, most researchers begin by reviewing theory before moving on to data collection and analysis, followed by the development, rejection or confirmation of more ideas and theory (Philip, 1998). Furthermore, scholars such as Rocheleau (1995) and Kwan (2002) demonstrate that quantitative research can be done using a critical philosophical positions. Indeed, many feminist geographers work in a "boundary zone" between positivist and more critical philosophical positions, and between quantitative and qualitative methods (Rocheleau, 1995 p.458). This is possible because the same methods can be used in different ways depending on what research questions the researcher asks (Elliott, 1999), and their intentions with respect to replicating or challenge conventional understandings, or by giving or taking voice away from marginalized people (Winchester & Rofe, 2000). The influential example

of Sen's 'missing women' (Klasen & Wink, 2003) demonstrate how quantitative methods can be a powerful tool in critical research, as "social change requires evidence for the pervasiveness and distribution of the problem" (Rocheleau, 1995 p.461), evidence which can be provided using quantitative methods. Therefore, methods are not completely tied to epistemologies, but rather are flexible to the position of the researcher and the questions they seek to answer.

Beyond the compatibility of mixed methods, they have also proven a useful tool to address questions regarding the human experience. The first advantage of a mixed methods approach is that it allows researchers to balance scale and complexity in their work. Mixed methods provides a diverse set of tools for human geographers to examine place-specific phenomenon, while still recognizing the broader regional, national or global influences on the experience of people in a particular place (Winchester & Rofe, 2000). Place-based, or case study approaches are particularly well suited to the use of mixed methods, as the approach will generate a deep and nuanced of understanding of this particular issue in this place, and allow for transferable findings which can be applied to other similar cases (Baxter, 2015). In other words, using mixed methods to examine context-specific phenomena with qualitative methods, such as the complexities of gender and power, while also using quantitative methods such as surveys to illustrate these patterns on a larger scale, allowing for comparison between regions and through time (Behrman et al., 2014). Mixing qualitative and quantitative methods can provide a depth and richness of contextual data and broad generalizable findings respectively, enabling a researcher to assess both the macro-level socio-cultural, economic and political structures and illuminate spatial distribution of phenomena, while centering micro-level dynamics and individual voices (Baruah, 2009). McLafferty (1995) elegantly describes how, by

“coupling the power of the general with the insight and nuance of the particular, such research illuminates people’s lives and the larger contexts in which they are embedded” (p.440). This is precisely the intent with my dissertation research. Mixed methods are well-suited to use in feminist geography and political ecology research such as my own, wherein researchers aim to answer questions regarding the complexity of human experiences at both individual and structural levels (Blaikie, 1999; Kwan, 2002; Rocheleau, 1995; Winchester & Rofe, 2000).

Secondly, mixing methods can also be a research strategy which compensates for the weakness of each type of methodology, allowing the researcher to draw on the strengths from both, and improve the integrity of the study (Bryman, 2006; Symonds & Gorard, 2010). For example, qualitative methods are better suited to gathering information on gender relations, as household-level surveys often fail to capture context-specific information such as cultural dynamics (Behrman et al., 2014). Mixed methods can also improve the integrity of the study by allowing for the triangulation of findings and cross-checking using multiple sources of evidence to reduce the likelihood of erroneous findings (Baruah, 2009; Bryman, 2006; Philip, 1998; Symonds & Gorard, 2010; Winchester & Rofe, 2000). Triangulation can be used to confirm and corroborate findings, but also to identify inconsistencies in research, which may reveal new insights (Bryman, 2006; Symonds & Gorard, 2010). This is particularly relevant in feminist research that aims to change the status-quo. Moreover, one method can also be used in order to help develop and inform the other method (Bryman, 2006; Philip, 1998). When mixed methods are being used with the intent of developing or explaining results from another method, then sequential ordering is most effective (Creswell, 1999). This is particularly useful in exploratory

research such as my own, wherein qualitative methods can be used to inform the development of survey questions.

Finally, mixed methods studies also have the potential to improve policy and decision-making. Often the focus of policy development, quantitative research can be a powerful indicator of shared experience, and has the potential to be more useful in policy development because of its regional or national-level relevance (Baruah, 2009; Kwan, 2002; Philip, 1998). Effective policy however, also requires an understanding of why a phenomenon is occurring in order to identify potential solutions. A qualitative approach seeks to answer these 'why' questions, and can also provide compelling humanized stories which illustrate the complexity of human experiences. As Baruah (2009) notes, contextual data has a place in policy making as well, and case studies in particular are needed to support the plethora of survey and census information, in order to counteract development actors' "obsession" with universal solutions (p.183). Therefore, a rigorous mixed methods case study may generate results that are more policy relevant by identifying common patterns, explaining why and how a phenomenon is occurring, and illustrating the complexity and depth of human experience.

For all of these reasons, mixed methods were chosen for my dissertation research. I chose to use a combination of interview, focus group, and survey data, each of which taken alone would be less effective in exploring the subtleties in intrahousehold dynamics. Qualitative methods were selected to answer research objectives 1 and 2, exploring the 'why' questions and providing a depth and richness of contextual data with explanatory power (Philip, 1998). Qualitative approaches are also well-suited to smaller-scale or case study approaches as they provide the tools to undertake intensive research in a particular place or with a particular group (Philip,

1998). I chose to use oral approaches, specifically interviews and focus groups, as they are important for the development of joint-knowledge between the researchers and participant(s), which is an important aspect of critical and reflexive cross-cultural work (Lewis, 2015). Focus groups can also lead to a depth and complexity of data, encouraging discussion and negotiation of topics through a "synergistic effect" (p.204) whereby one comment triggers multiple responses (Cameron, 2015). Cameron (2015) describes this method as "highly effective" for examining the "nuances and complexities associated with people-place relationships" (p.208). Using qualitative methods is also an intentional methodological choice given its importance in accurately portraying the experiences of marginalized people, and situating those experiences within the wider systems which allow "hunger and powerlessness" to persist (Lewis, 2015 p.246). As Lewis (2015) explains, our understandings of gender and food have been distorted by the over reliance on top-down scientific research methods. Oral methods in particular, have the potential to counteract this bias, addressing a breadth of questions that explore the human experience either through understanding social structures or individual experiences, or both, because "people's own words do tell us a great deal about their experiences and attitudes, but they may also reveal key underlying social structures" (Winchester & Rofe, 2000 p.17). This fills an important gap in the field of gender and food studies (Lewis, 2015), and allows for the balance of individual agency with the exploration of the structure and processes that shape people's lives. In sum, I chose these methods to provide richness and depth to my understanding of the human experience.

In complement to the explanatory power of qualitative methods, I chose to use quantitative survey methods as an approach to understanding human behaviour and social interaction at a larger scale (McLafferty, 2016). Unlike qualitative methods,

survey methods allow for the identification and description of patterns, generating generalizable, externally valid findings which identify broader phenomenon (Bryman, 2006; Kwan, 2002). As such, findings highlight shared experiences across space, and are powerful indicators which are often more useful and convincing in policy development (Kwan, 2002). This was not only a strategic choice to maximize the utility of my research outcome, but also because it will expand the breadth and generalizability of the study. Moreover, survey methods are best suited to address my third research objective, which is to examine the effects of persistent food insecurity on agrarian household dynamics. Together, "qualitative methods attempt to gather, verify, interpret and understand the general principles and structures that quantitative methods measure and record" (Winchester & Rofe, 2000 p.26).

3.3. Data collection and sampling

Data were collected over the course of two distinct field seasons in May-July of 2017 and July-October of 2019. In 2017, the study area was limited to Boukoumbe, where in-depth interviews were conducted with male and female couples in 20 households (n=40), and six community-level focus groups were held. Both interviews and focus groups were led by a male-female research team using a semi-structured question guide. Interview participants were recruited via existing community networks using a combination of snowball and purposeful sampling, to select participants proportionally by gender in each different village (Baxter & Eyles, 1997). During interviews, couples were interviewed separately using the same semi-structured guide, in order to differentiate between male and female experiences and explore household power dynamics. The separate interviews aimed to provide participants, especially women, the freedom to express their individual views and reduce the influence household power dynamics (e.g. silencing of a partner) (Valentine, 1999). The semi-

structured interview guide allowed for a focused discussion with the flexibility for the participant and I to explore new themes raised during the interview process. Eligibility criteria included men and women over 18 years of age who were still actively farming and currently married or coupled, inclusive of polygamist families. The interviewee characteristics are presented in Table 1.

Table 1 Interviewee characteristics (2017)

Village, municipality	Participant ID	Age	Education level	Religion	Ethnicity	Years in village
Koutagou, Boukoumbe	01 Husband	36	Some primary	Animism	Otammari	36
	01 Wife	27	Some primary	Animism	Otammari	27
	02 Husband	49	Some primary	Animism	Otammari	49
	02 Wife	30	None	Animism	Otammari	16
	03 Husband	46	None	Animism	Otammari	46
	03 Wife	31	None	Animism	Otammari	31
	04 Husband	56	None	Animism	Otammari	56
	04 Wife	27	None	Animism	Otammari	16
Koutchatanongou, Boukoumbe	05 Husband	62	None	Animism	Otammari	62
	05 Wife	45	None	Animism	Otammari	45
	06 Husband	49	None	Animism	Otammari	20
	06 Wife	41	None	Animism	Otammari	37
	07 Husband	44	Some secondary	Christian	Otammari	1
	07 Wife	24	Some secondary	Christian	Otammari	24
	08 Husband	49	None	Animism	Otammari	49
	08 Wife	41	None	Animism	Otammari	37
Koutchata, Boukoumbe	09 Husband	47	None	Animism	Otammari	47
	09 Wife	33	None	Animism	Otammari	13
	10 Husband	39	Some primary	Animism	Otammari	39
	10 Wife	30	None	Animism	Otammari	30
	11 Husband	56	None	Animism	Otammari	56
	11 Wife	36	None	Animism	Otammari	19
	12 Husband	49	None	Animism	Otammari	49
	12 Wife	33	None	Christian	Otammari	33
Koubergou, Boukoumbe	13 Husband	59	Some secondary	Christian	Otammari	59
	13 Wife	41	None	Animism	Otammari	26
	14 Husband	51	None	Animism	Otammari	51
	14 Wife	37	None	Animism	Otammari	37
	15 Husband	26	None	Animism	Otammari	26
	15 Wife	21	None	Animism	Otammari	8

	16 Husband	28	Some primary	Animism	Otammari	28
	16 Wife	18	None	Animism	Otammari	18
Koupargou, Boukoumbe	17 Husband	69	None	Animism	Otammari	69
	17 Wife	51	None	Animism	Otammari	51
	18 Husband	51	None	Animism	Otammari	51
	18 Wife	39	None	Animism	Otammari	39
	19 Husband	48	None	Animism	Otammari	48
	19 Wife	37	None	Animism	Otammari	37
	20 Husband	44	None	Animism	Otammari	44
	20 Wife	26	None	Animism	Otammari	26

The focus groups were held with 8 participants at a time, each averaging approximately 1 hour in length. I chose to undertake the focus groups after the interviews to further discuss inter-household gender issues and topics of interest that emerged during interviews. This method was selected in order to serve as a place for knowledge exchange, and allow participants the opportunity to explore different points of view and reconsider or negotiate certain ideas or understandings as a group (Hay, 2005). Recruitment for focus groups also locally appropriate methods, and organized collaboratively through community gatekeepers, which included community leaders and village chiefs. No incentives were provided; however, focus group participants were thanked according to local customs through the presentation of a small gift (bar of laundry soap, several kilos of rice). Community organizers were provided with a small one-time stipend for phone credit or other communication expenses.

Subsequent to the 2017 field season, I upgraded to the Ph.D. program and the scope of the project was widened. During a second field season in July-October 2019 the study area was expanded to include the municipalities of Toucountouna and Natitingou, in order to allow for regional comparisons. The three municipalities of Boukoumbe, Toucountouna and Natitingou were selected for this study, as they have

been identified as the most food insecure municipalities in the region. During the second field season, six additional focus groups were held with men and women in three villages, one in each of the selected municipality. In addition to the eligibility criteria discussed above, community focus group participants included those who may be single, though they were a small minority. The focus group characteristics are presented in Table 2. Focus groups were held with 6-9 participants at a time. Inclusive of both field seasons, a total of 94 people participated in the focus groups, in which men (n=47) and women (n=47) were separated given the cultural context. This approach aimed to allow women and men to speak more openly about their experiences.

Table 2 Focus group characteristics (2019)

Village, municipality	Gender	Participant ID	Age	Years in village	Marital status	No. of children
Dikokore, Toucountouna	Men	1	45	45	Married, monogamous	10
		2	31	31	Married, monogamous	4
		3	36	36	Married, polygamous	6
		4	50	50	Married, monogamous	8
		5	51	51	Married, monogamous	17
		6	96	96	Widowed	6
		7	37	37	Married, polygamous	7
		8	51	51	Married, polygamous	7
		9	68	68	Married, polygamous	16
Dikokore, Toucountouna	Women	1	22	22	Married, monogamous	0
		2	40	40	Married, monogamous	7
		3	23	23	Married, monogamous	1
		4	53	53	Married, monogamous	6
		5	53	53	Married, monogamous	0
		6	25	25	Married, polygamous	3
		7	43	43	Married, polygamous	6
		8	34	34	Married, monogamous	6
Kota, Natitingou	Men	1	48	48	Married, monogamous	6
		2	20	20	Single	0
		3	27	1	Married, monogamous	2
		4	22	22	Married, monogamous	1
		5	60	60	Married, polygamous	12

		6	29	29	Married, monogamous	2
Kota, Natitingou	Women	1	40	40	Married, monogamous	6
		2	22	22	Married, polygamous	1
		3	35	20	Married, monogamous	5
		4	32	14	Married, monogamous	5
		5	35	35	Married, monogamous	5
		6	30	30	Married, monogamous	4
		7	37	37	Married, monogamous	6
Kounadogou, Boukoumbe	Men	1	44	35	Married, monogamous	2
		2	27	20	Married, monogamous	1
		3	45	45	Married, monogamous	4
		4	37	37	Married, monogamous	7
		5	20	20	Single	0
		6	27	27	Married, monogamous	2
		7	22	12	Single	0
		8	27	22	Married, monogamous	2
Kounadogou, Boukoumbe	Women	1	58	58	Married, monogamous	5
		2	40	40	Married, monogamous	5
		3	40	40	Married, monogamous	8
		4	55	55	Married, polygamous	8
		5	60	60	Married, monogamous	5
		6	55	50	Married, polygamous	8
		7	26	10	Married, monogamous	3
		8	53	53	Married, polygamous	5

Concurrently, cross-sectional survey data was collected from 300 currently partnered male-female couples (n=600) in the Atacora region. Within each municipality, villages were randomly selected in number proportionally to population size in each municipality. After random selection, three villages were replaced due to inaccessibility. In total, 30 villages were selected including 5 villages in Toucountouna, 14 villages in Natitingou, and 11 villages in Boukoumbe. In each of the villages, 10 households were selected randomly, and within each household, partners were interviewed individually. The questionnaire was administered in person due to literacy barriers and the logistical context of the study area. In accordance with local customs, the first wives were interviewed in polygamist households. Six university graduates experienced with survey data collection were chosen as

enumerators, as they were familiar with the geography and cultural context of the region and fluent in French as well as the local languages of Waama, Ditammari, and Dendi. Enumerators worked in male-female pairs, and men and women were interviewed separately by same-sex enumerators. Again, this approach aimed to provide participants the freedom to express their individual views and reduce the influence household power dynamics (Valentine, 1999). Prior to data collection, enumerators were trained on the survey instrument, including pre-tests in the field. Debriefings were held several times a week in order to ensure that the surveys were administered consistently.

The survey instrument was designed drawing largely upon previously tested and widely applied tools, such as the Household Food insecurity Access Scale (HFIAS) (USAID, 2007), the Alcohol Use Disorders Identification Test (AUDIT) (WHO, 2001), and the Intimate Partner Violence (IPV) module from the Demographic and Health Survey (DHS) (DHS, 2019). Several questions were also developed drawing upon the findings from the first field season. Among others, this included questions on farm level variables (e.g. crops, farm size, use of fertilizer and other inputs), food production, food insecurity adaptation strategies, climate change, access to health care, and household structure (e.g. decision-making, roles and responsibilities, division of labour) (Appendix F). The survey, comprised of a total of 142 items, was developed in English, translated to French, and finally translated orally to Waama, Ditammari, and Dendi during the interviews.

3.4. Data analysis

The audio recordings of the interviews and focus groups were transcribed in French, and translated for publication. I coded the data thematically drawing from key themes identified in the literature. Using QSR NVivo, I coded in an iterative and deductive

manner. Specifically, I used a "bucket coding" approach, which involved coding data into broad themes on the first pass, which were subsequently broken down into more discrete sub-codes during later passes (Jackson & Bazeley, 2019 p.69). I adopted an analytical strategy focused on: (1) establishing broad areas of consensus and difference between men and women, and within those groups; and (2) highlighting areas of similarity and difference between men's and women's experiences, perceptions, behaviours, and coping strategies.

Survey data were entered in SPSS by an experienced member of the research team, at which time households were de-identified and unique identifying numbers were used. Data entry proceeded concurrently to data collection, and any missing data or survey administration errors were subject to immediate follow up by the enumerators. The survey data was cleaned and subsequently analyzed in Stata using logistic regression and sequential modelling. Data analysis and measures are discussed in more depth in the relevant manuscript.

3.5. Challenges and limitations

The following section of this chapter outlines the methodological limitations of my work, and speaks to several of the challenges I faced throughout the research process. Specifically, I touch on several limitations of cross-cultural and cross-language research before discussing my positionality and use of reflexivity in my research. I then discuss several methodological limitations, before ending with a reflection on the tension between of formal ethics processes versus community approaches to ethical research.

3.5.1. Cross-language and cross-cultural research

Though I have an advanced level of competency in French, language is one of the central limitations of my research. Language represents a challenge because the data collected in this study have undergone translation twice; first from the local languages of Waama, Ditammari and Dendi to French during data collection, and then translated a second time to English. The data presented here therefore reflects both mine and my translator's interpretations, which may mean a loss of nuance or meaning. In order to mitigate this issue, member checking was undertaken throughout data collection. Moreover, interview and focus group data were transcribed and analyzed in French, and only translated to English for publication. This approach aimed to maintain more linguistic continuity, limiting any potential loss of meaning or nuance before the data were analyzed. Only direct quotes were translated to English for publication, at which time translations were not done verbatim, but rather by focusing on conveying accurate meaning, for example when translating expressions or words for which there is no vocabulary equivalent (Sechrest et al., 1972). In order to further mitigate misinterpretations of the data, I engaged my field assistant and colleagues in Benin in comparing portions of the audio recordings to my English translations, particularly in the case of colloquialisms or expressions where verbatim translations could not adequately convey meaning. With regards to survey data collection specifically, enumerator training, pre-tests, and regular debriefings also aimed to ensure that the surveys were administered consistently.

In regards to the qualitative data collection, in-depth interviewing was a challenge in this study. While there was no shortage of willing participants, it became clear that the pressure of individual-level discussions lent itself to somewhat rigid discussions and guarded answers from participants. This was especially evident

among women, many of whom had never been interviewed, and expressed feeling shy or unsure of the value of their contribution to my project (see Scheyvens & Leslie, 2000). Conversely, participants generally and women in particular, were much more candid in focus groups, particularly with regards to sensitive or stigmatizing topics. While it is well-recognized that focus groups encourage discussion and negotiation of topics (Cameron, 2015), I did not initially expect the inverse dynamic during interviews. My field experience however, is consistent with Cameron's (2015) assertion that while confidentiality is not ensured in focus group situations, participants may be able to actually share more candid information because they are able to discuss fictional scenarios, or comment on broader community or family issues without disclosing their personal situation. For example, while men admitted to problematic drinking behaviours in focus groups, they often denied such behaviours during in-depth interviews and survey questionnaires. Similarly, while women discussed intimate partner violence openly and animatedly during focus groups, few discussed the issue as openly in one-on-one interviews. It is likely that part of this challenge is attributable to my relative inexperience in interviewing during the 2017 field season, which when combined with language and cultural barriers, may have meant less effective probes and prompts that encouraged more complex responses. The conviviality and rapport that participants built between one another during focus groups, was also more difficult to build in one-on-one settings. It is possible that this challenge was a result of the location of the interviews, which were within and/or around the home. Despite measures taken to ensure confidentiality, there may have been concern that their partner would overhear their conversation. However, my experience suggests this was not the main issue, as the focus groups were undertaken in even less private, shared community spaces. It is more likely that the rigidity of

interviews reflected cross-cultural researcher-participant power dynamics, and my position as an outsider in the community (Howitt & Stevens, 2005). These dynamics were evidently tempered during focus groups, which suggests the strength of this method for use in cross-cultural research. In order to minimize the impact of these challenges, the second stage of data collection included additional focus groups, rather than interviews.

3.5.2. Positionality and reflexivity

As a cross-cultural researcher engaging in critical feminist work, I have questioned my positionality and the power dynamics at play during data collection as a white, Canadian woman doing research in rural Benin. Engaging in reflexivity is to reflect on one's identity, position and interests throughout the research process, which is central to a feminist methodological approach (Lewis, 2015; Pillow, 2003). The following discussion is not undertaken to validate or legitimize my research, or to unburden myself from my privilege (Pillow, 2003). Rather, I aim to acknowledge the value-laden nature of knowledge production, and outline how my research has been shaped by my ways of knowing.

Throughout my research, I have relied heavily on my supervisor and committee members, who continually advised and directed my research based on their experience and varied intersections of identity. In the field, I was particularly reliant on my field assistant, an Otammari man from Boukoumbe, who acted as a "translator, cultural broker, and mediator and gatekeeper" in my research, which was both cross-language and cross-cultural (Caretta, 2014 p.491). As a team, we were both insider and outsider, co-constructing knowledge over our nearly 5-year collaboration, both in the field and during data analysis. This involved continual checking of translation, conveyed meaning, and discussion of sociocultural phenomena. I encouraged us to

engage in self-reflexivity as a team throughout the research process, continually re-positioning and exploring the tensions between our different ways of knowing. In doing so, the impact of our joint positionality and how this shaped participant-researcher dynamics has been considered throughout the research process.

Importantly, while my outsider position has undoubtedly shaped this research, my positionality is more complex than is allowed for using the ‘outsider/insider’ binary. For example, my field assistant’s involvement in prominent development projects and local government made participants reticent to discuss illegal or socially unacceptable behaviours (e.g. sale of unlicensed medications or excessive drinking). This example illustrates how important it is to consider the joint positionality of the research team, and how the ‘insider’ position is not necessarily advantageous. Indeed, my position as *l’étrangère* allowed me to ask sensitive or even ‘silly’ questions. This advantage was also linked to my whiteness, and as *la blanche*, I was afforded privilege in being seen as trustworthy, as an expert, and notably as an object of curiosity, which, similarly to Faria and Mollet (2016), facilitated my research. Moreover, though I am visibly an outsider, my family ties in Benin mean my position is somewhat fluid. This became clear when my field assistant began to leverage different aspects of my identity at different times. With local officials and government actors my field assistant often leveraged my connection to Western University, and as *la chercheuse*, and *la Canadienne*, my position of power as an ‘expert’ facilitated logistical aspects of the research, such as paperwork and ensuring timely access to communities. When introducing me to participants, especially women, he highlighted my familial ties to Benin, identifying me as *une sœur*, a sister. This example also illustrates how my race and gender intersect (see Faria & Mollett, 2016), and while my gender minimized my authority to some degree my whiteness had the opposite

effect. Sometimes my position as a foreign white woman afforded me additional help or accommodations (e.g. the only chair in the room), which undoubtedly played into the inherent power dynamics within the research process.

While I, like other researchers, am tempted to suggest that reflexivity is methodological tool which can be used to address these issues, engaging in reflexivity cannot mask unequal power relationships wherein the choice to give 'voice' to the participant remains subject to the will of the researcher. Inherently, my training and position as a Canadian researcher means my research will always be shaped by the West's quest to identify and define 'the other' (Pillow, 2003). I find it is nonetheless important to acknowledge the thought I have put into the portrayals of my participants' experiences, and my commitment to foregrounding the voices of women and men in my research. My focus has been to highlight complexity and nuance in order to avoid reinforcing patterns of colonization and marginalization, though I recognize these are inherent to the type of work I have undertaken. I therefore acknowledge the "uncomfortable reality" of doing qualitative research, particularly development work that has been marked by a victim/savior dynamic, in a context like Benin where (neo)colonial legacies persist (Faria & Mollett, 2016; Pillow, 2003 p.193).

3.5.3. Methodological limitations

As explained previously, several measures were taken in order to ensure rigorous survey data collection, including enumerator training, pre-tests, and regular debriefings also aimed to ensure that the surveys were administered consistently. Nonetheless, the data collected using the Household Food insecurity Access Scale (HFIAS) (USAID, 2007) provided inverse findings than what was to be expected based on previous research. Women were found to be more food secure than their

male counterparts, who reported greater levels of food insecurity. This conflicts with evidence from similar contexts that use the HFIAS (Jung et al., 2017; Omuemu et al., 2012) and other food insecurity measures (Broussard, 2019; Kassie et al., 2015; Zakari et al., 2014). Given these discrepancies, it is possible that there was a methodological issue in the collection of this survey item, and that despite trainings and pre-tests that the female same-sex enumerators asked questions differently than the male enumerators. Alternatively, it is likely that women and men respondents interpreted the questions differently. As one of the leaders in the development of the HFIAS, Coates et al. (2010) explains, gendered experiences with and perceptions of food insecurity, particularly in context where these is a rigid gendered division of responsibility, may result in men, as household providers and breadwinners, perceiving their situation with respect to food insecurity more negatively than women. This explanation likely accounts for the inverse findings. It is also possible that adapting the household-level HFIAS to be used individually affected the validity of the scale. In future research, an individual measure of food insecurity such as the Food Insecurity Experience Scale (FIES) survey module (FAO, 2020) or a combination of several measures, would be more appropriate. Given the complexity of food security and the challenges this poses to accurate measurements, this discrepancy may also indicate that in the gendered context of rural Benin, survey data does not adequately represent the nuances of food insecurity in the region.

Throughout this research, it also became clear that parsing out the dynamics of power, control and agency within the household is not a simple task. Even using both in-depth interview techniques and focus groups, I found the methods and questions unable to fully grasp and reflect the complex subtleties of intrahousehold dynamics. This is likely because concepts of power, agency, choice, empowerment and self-

worth are complex and subjective, and therefore difficult to ascertain, let alone simplify and quantify (Baruah, 2009). I found that despite evident generalized female disadvantage (e.g. with regards to land ownership and decision-making), there was much more variation and intricacy to household dynamics than my questions were able to capture. For example, while women often reported little sway in decision-making, control of household finances varied largely from couple to couple, which runs contrary to assumptions of women as uniformly disadvantaged. It became clear that, despite operating under structures of constraint, women expressed agency in a myriad of ways which were difficult to categorize, given that each woman I spoke with seemed to navigate her circumstances differently (Baruah, 2009). In order to address this issue, in future research in this area draw more heavily upon narrative approaches, with a focus on utilizing more complex intrahousehold approaches to studying power and control. This would allow for a more complex exploration of contradictory findings (Baruah, 2009).

Beyond household power dynamics, a similar tension shaped qualitative data collection insofar as I routinely experience “methodological hesitation”, as described by Guyer et al. (1988 p.250). The authors explain that grappling with complexity in our research often leads to “hesitation about whether to forge ahead with increased precision on concepts already identified […] or to use these concepts as guidelines and develop new or different” concepts and theories (Guyer et al., 1988 p.250). While this is undeniably an inherent aspect of all qualitative research, I find this concept helpful in reflecting upon the research process itself, insofar as locating the questions I asked and themes I pursued during data collection within existing bodies of literature on gender, food and farming. It was my intent to undertake balanced research, undertaking theoretically grounded research while also leaving room for

new, or perhaps contradictory themes to emerge. This is particularly relevant in my research, given the rich body of literature on gender, food and farming in other SSA contexts outside of Benin.

3.5.4. Ethics

With respect to formal ethic processes, ethics clearance was obtained from both the Western Office of Human Research Ethics and National Ethics Committee for Health Research in Benin (Comité National d'Ethique pour la Recherche en Santé). While this process led to delays in the timing of my second phase of field work, this process was also challenging in another, more unexpected way. I found that there was tension between the national committee's recommendations, and the more 'informal' ethical best practices in the study area. For example, the national committee recommended providing monetary compensation for both survey interviews and focus groups, while in situ community collaborators recommended against this practice because it would create community discord. During our research, we followed local customs and met with community leaders and local chiefs before engaging in research. These contacts were also involved, alongside members of the research team, in gathering participants together for focus groups. I was advised that by providing monetary compensation for focus groups, participants who were not approached to participate may experience anger and frustration, which would be directed towards both participants and community leaders. Similarly, local members of the research team noted that the type of random sampling employed during survey administration does not lend itself well to fairness in compensation. Therefore, following ethics recommendations in both situations may have sown discontent in the community, which is antithetical to objective of undertaking fair and ethical research. I therefore chose to follow community, rather than national guidelines. I suggest that this experience

demonstrates that, while what 'local' ethics approval may help improve cross-cultural research, it is clear that national-level ethics approval does not necessarily translate to ethical community-level approaches. In future research therefore, I recommend taking a more locally-based approach to ethics, considering community accountability, trust, and collaboration.

CHAPTER 4

Undermining masculinity and contesting the conjugal contract: Food insecurity and the gendered division of labour in northwestern Benin

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A version of the chapter has been submitted to *Gender & Society*

4. UNDERMINING MASCULINITY AND CONTESTING THE CONJUGAL CONTRACT: FOOD INSECURITY AND THE GENDERED DIVISION OF LABOUR IN NORTHWESTERN BENIN

Abstract

While food security research broadly has engaged with questions of gender, there remains a bias towards women-only approaches, which has meant a dearth of studies focused on men and masculinities. The construction of masculine identity is particularly relevant in agrarian settings in sub-Saharan Africa (SSA), where notions of hegemonic masculinity remain entrenched and rigid gender norms dictate the division of labour and household organization. With this study, we aim to respond to the calls for more empirical research in rural settings in SSA that explores the construction of masculinities and its consequences for food insecurity. Drawing on focus group and interview data collected in the Atacora region of Benin, we find that masculinity in this context is deeply tied to notions of farming and food production. Men's identities as household breadwinners however, have been undermined by worsening food insecurity. Concurrently, women are frustrated with the division of household labour, as strict gender norms dictate which forms of work are 'appropriate' for men and women. Men's feelings of shame and inadequacy around food insecurity are reinforced through contempt from their wives, which has also contributed to increased marital tension and violence in the household. These findings suggest that food insecurity in subsistence farming contexts is an important site for the renegotiation of gender norms.

Keywords: gender, masculinities, food insecurity, agrarian, Benin, sub-Saharan Africa (SSA)

4.1. Introduction

Despite decades of policy attention, food insecurity in SSA remains persistent and is characterized by uneven progress (FAO et al., 2017). Increasingly, there has been recognition of the importance of gender in shaping food security, prompting calls for more nuanced research that draws upon more complex intrahousehold methodologies (El-Rhomri & Domínguez-Serrano, 2019; FAO, 2017). Yet, much of the existing work on food insecurity and gender has been neo-liberal and positivistic, promoting "quick-fix" solutions that fail to foreground the "voices of the hungry" (Lewis, 2015 p.427). Often, researchers have focused on agricultural productivity and nutritional outcomes, which reflects the root of the discipline in neo-liberal development discourse (Bonatti et al., 2019; Jarosz, 2014). Food security research has also reflected a bias towards women-only approaches (Bonatti et al., 2019) that fail to consider gender as a relational concept that is constructed and embedded in social systems (Harding, 1995). Such approaches tend to ignore men and masculinity and many do not adequately engage with intersectionalities and diversity (Zalewski, 2010). Bonatti et al. (2019) suggest that women-only approaches have meant a dearth of empirical studies that consider the social construction of gender, and explore how femininities and masculinities shape and are shaped by food insecurity.

The lack of attention paid to men and masculinities is reflected broadly in work on gender in Africa, despite the explicit claim that African feminism "rejects the exclusion of men" (Morrell & Ouzgane, 2005 p.6). Other scholars also point to notable gaps in the literature with regards to francophone African and rural African masculinities (Badstue et al., 2021; Broqua & Doquet, 2013). Masculinities and food security research is particularly relevant in much of SSA, where food insecurity is a notable issue in agrarian settings and rigid gender norms and constructions of

hegemonic masculinity remain entrenched. In order to address food insecurity in this context, it is important to improve understandings of the ways in which masculinities play out within the household and the community. With this paper, we aim to respond to the calls for more empirical research in food insecure and rural settings in SSA that explores the construction of gendered identity, with specific attention paid to masculinities and its consequences for men, women, and the family.

4.2. Theoretical framework

We draw upon Connell's (1987, 1995) conceptualization of hegemonic masculinity, which has since been widely taken up in gender studies through the more explicit inclusion of men. Hegemonic masculinity refers to the "pattern of practice (i.e., things done, not just a set of role expectations or an identity) that allowed men's dominance over women to continue" (Connell & Messerschmidt, 2005 p.833). While all, or even most men may not engage in it, hegemonic masculinity is normative insofar as it prescribes the 'ideal' man as a standard to which all men should be held (Connell & Messerschmidt, 2005). As underscored by Connell (1995), hegemonic masculinity can be dynamic, as it embodies only the *current,* dominant gender practices that legitimatize the patriarchy at a given time (p.77). Hegemonic masculinity is also relational, and is constructed on the basis of the subordination of women and marginalized masculinities, which refers to men that do not conform to the hegemonic ideal (Carrigan et al., 1985; Connell, 1987, 1995). This emphasizes the fact that in different contexts, men have different amounts and types of power (Morrell & Ouzgane, 2005). It is important to understand that while few men may actually conform to the ideal hegemonic masculinity, many more men may be complicit in perpetuating the model (Carrigan et al., 1985; Connell, 1995). This is primarily because most men benefit from women's subordination (Carrigan et al., 1985).

Therefore, while masculinities are diverse, most men can access and leverage the "patriarchal dividend" to exercise power and control over women (Connell, 1995 p.41).

Since the 1980s, the concept of hegemonic masculinity has been expanded, critiqued and revised to recognize the plurality of *masculinities*. As opposed to one universally applicable hegemonic masculinity, it is now widely recognized that masculinities are varied, dynamic and context-specific (Connell, 2014b; Connell & Messerschmidt, 2005; Porter, 2013). While critics have suggested that hegemonic masculinity essentializes men's character and views masculinity as immutable and monolithic, the application of Connell's conceptualization has led to a breadth of empirical research that demonstrates the multiplicity and complexity of masculinities in varying contexts (Connell & Messerschmidt, 2005). Hegemonic masculinity rightly recognizes the need to understand local (at the household and community level) and regional (at the state or cultural level) hegemonic masculinities, and how these are embedded within global processes (at the transnational level) (Connell & Messerschmidt, 2005). Though masculinities take a multitude of forms, particularly at the local level, they are shaped by broader structures and processes (Porter, 2013). For example, day-to-day interactions within a household or community can be understood by looking to regional norms around masculinity (Connell & Messerschmidt, 2005).

4.3. Masculinities in context

Broadly, the social construction of manhood in Africa has been influenced by Western norms through colonization, as well as the spread of Christianity and Islam (Barker & Ricardo, 2005). The process of colonization "wove together gender relations and racial hierarchy", resulting in black masculinity being marked by alienation and dislocation from identity (Connell, 2014a p.220). The construction of

African masculinities has been shaped by this racialization, alongside the othering, dehumanizing, and emasculation of African men during the colonial period (Morrell & Ouzgane, 2005). This has contributed to "models of masculinity that exist in formerly colonized societies [that] are particularly normative", and generally reflect "rigid and unachievable" gender norms that value hyper-masculinity and encourage behaviours such as violence (Porter, 2013 p.489-490). The legacy of colonialism and impacts of globalization may also mean that men in African contexts feel the need to reinforce their masculinity as part of their identity. In Morocco for example, men attempt to control women as a means of maintaining family honour in a context where the capitalist economy has challenged the belief that men ought to support women economically (Connell, 2014a). The fulfillment of the breadwinner household model, however, is difficult, if not impossible, in many colonial and post-colonial economies in SSA (Connell, 2014a). Importantly, Connell (2014a) reminds us that the "colonial gender order" was also shaped by the culture of those who were colonized, and was therefore not simply a replication of European patriarchy (p.220). This highlights the importance of context when studying masculinities in SSA.

Though often difficult to meet, requirements for 'achieving' manhood in Africa commonly include financial independence, employment, marriage, and family (Barker & Ricardo, 2005). Often, masculinity is policed and tested by one's peers and social groups, though local 'requirements' for manhood may vary (Porter, 2013). The idea that manhood is something to perform and to achieve, has meant social pressure for men to continually strive to 'pass or fail', and has had emotional and psychological consequences for men across varying contexts (Porter, 2013). Hegemonic masculinities provide standards or norms that, while influenced by culture and context, tend to describe conventional ideas about what is means to be a "real

man", or someone who successfully achieves masculinity in that particular place (Morrell et al., 2012 p.24). This is congruent with Butler's (1988) conceptualization of gender as performative, and therefore subject to policing and punishment when gender is done 'wrong'.

In agrarian contexts specifically, manhood and masculinity is intimately tied to the notions of land, productivity, and food provisioning, such that men are expected to provide for their spouse(s) and children, and failure to do so leads to stigmatization and emasculation (Adinkrah, 2012; Perry, 2005). Specifically, men may lose face, or experience lesser stature within their family and communities if their wives become the primary economic provider or if they are required to seek loans in order to provide for their families (Adinkrah, 2012). Similarly, in rural Tanzania, men's role as economic provider and household decision-maker was found to be deeply rooted, a position that tends to be challenged by women's economic success (Badstue et al., 2021). Yet, "men's power and privileges" are not "uniform, fixed and universal", and masculinity brings privilege in varying amounts to different groups of men (Chant & Gutmann, 2002 p.271).

4.4. Women and the nuclear family in context

The concept of the male breadwinner is intimately tied to the development of the nuclear family. The nuclear family model was developed by the European bourgeoisie and subsequently forced upon the working-class, and then upon the countries of the Global South as a capitalist strategy to women's cheapen labour (Mies, 2014). As Mies (2014) explains, when women are viewed as housewives and not workers, the value of their labour is diminished and thus their labour can be bought at a lesser cost than that of men. In the African context, the nuclear family model was, and still is, a colonial concept rooted in empiricism and narratives of civility and modernization as

a justification for European conquest (McEwen, 2017). By design, the nuclear family protected heteropatriarchal power structures that reinforce male authority oven women (McEwen, 2017). The spread of this household model accompanied broader transformations of African kinship relations that occurred as a result of land expropriation, waged labour, and integration into the capitalist economy (McEwen, 2017). For example, Western ideas around inferiority of women were reinforced through customary law by male elders and colonial officers (Jackson, 2012). Despite no historical or current evidence that shows it has been the 'norm', the nuclear family has been "falsely universalized" in the African context (McEwen, 2017 p.739). In Africa, its adoption is also linked to the hegemony of religious and conservative 'pro-family' heteropatriarchal values that espouse a singular notion of what constitutes the family (McEwen, 2017). Decolonial scholars have pointed to the nuclear family model as a way to "reinforce Western authority while also protecting systems of domination" through presentation of gendered social hierarchies as natural, inevitable, and universal (McEwen, 2017 p.742).

During the colonial period, the adoption of the nuclear family was accompanied with the transition of African women to homemakers (Brain, 1978). This was part of a broader "housewifization" of women, and a shift towards a family model that juxtaposes women's domestic responsibilities to that of the man as the household head and breadwinner (Mies, 2014 p.100). This model allowed for women's work to be devalued , as it was viewed as lower status and of secondary importance to that of her husbands', despite the role of domestic labour in subsidizing capital accumulation (Bandarage, 1999; Mies, 2014). The invisibility of women's work means that only men have the ability to sell their labour, thereby ensuring bargaining power and control of decision-making within the household (Mies, 2014).

4.5. The conjugal contract and the gendered division of labour

To understand the nuclear family model in the African context, it is important to also recognize the division of labour within the household. The institution of marriage is one of the most important places where gender is constructed, produced and reproduced (Silberschmidt, 2001). Marriage is also complex, as it reinforces male superiority while also acknowledging men's dependence on their wives, the balance of which is critical to determining power relations (Jackson, 2012). Insofar as the household is representative of societal hierarchies broadly (McDowell, 1999), marriage and household dynamics are inextricably linked to context-specific gendered norms. With respect to masculinities specifically, Connell (1995) emphasizes that researchers must focus on the "processes and relationships through which men and women conduct gendered lives" (p.71). Understanding household behaviour therefore, is an important aspect of understanding gender. Moreover, as Jackson (2012) explains, the conjugal unit is the basis for economist's analyses of household decision-making. Thus, understanding the family structure is central to understanding the division of labour and how this shapes and is shaped by the constructions of gender identity within the family.

As Carrigan et al. (1985) explain, hegemony is closely tied to the division of labour, the "social definition of task as either 'men's work' or women's work', and the definition of some kinds of work as more masculine than others" (p. 594). Gendered labour roles are an important aspect in the construction of masculinities, and among rural households in sub-Saharan African countries there are often clear divisions of labour along gendered lines. As elsewhere in SSA, women in the study region have many roles and are often involved in farm labour, food transformation, storing, and preparation activities, as well as additional reproductive roles within the

home, while men's roles tend to be related to farming or paid work outside the home (Hyder et al., 2005). As subsistence farmers, men in the study context focus on growing starchy staples such as corn, millet and fonio, and are responsible for 'heavy' labour-intensive tasks such as soil cultivation and hoeing. Women often work on their husband's crops and are involved in sowing, weeding, harvesting, and processing (e.g. hulling) as well as growing their own separate crops including rice, beans, and bambara groundnuts. In the Atacora region, these crops are typically thought of as women's crops, and are important sources of food, particularly insofar as dietary diversity and protein, yet tend to be grown in smaller quantities. They tend to be seen as peripheral rather than staple crops, though they are an essential part of local diets. This gendered division of labour in farming reflects a long history of women's contributions to labour power in farming in the region, and a gendered division of labour that, at one time, may have been complementary and cooperative (Watts, 2013). Despite women's involvement in farming, men tend to be seen as responsible for food production, as they grow larger crops of starchy staples, often described as 'real foods'. The invisibility of women's work (Rai, 1997), especially in agriculture in the African context (Henn, 1983; Jacobs, 2010; Najjar et al., 2018) reflects decades of inequality. Men experienced advantages in farming (access to land, labour, inputs and extension services) that were not equally available to women, allowing them to dominate farming and household production (Perry, 2005). Men's labour roles have remained largely static despite the erosion of state support for agriculture in the West African context due to SAPs, which saw the accompanying erosion of men's identities and the construction of agrarian masculinity (Perry, 2005).

In addition to farm work, women are responsible for domestic tasks and the purchase of 'condiments' such as oil and salt. In order to fulfill these responsibilities,

women often take on additional income generation activities, such as brewing and selling sorghum beer, and foraging tree products (shea nuts, baobab seeds and leaves), sand, and firewood to sell. This reflects the legacy of women's longstanding economic autonomy in West African societies (Heilbrunn, 1997; Lindsay, 2007; Watts, 2013). More recently, women's domestic work, farm work, and petty commerce has become increasingly important for the survival of the household in the face of food insecurity, poverty, and climate change, which has undermined the viability of peasant farming livelihoods. Despite the historical precedent for women's autonomous work, we see a "feminization of responsibility" (Chant & Sweetman, 2012 p.521) wherein women are increasingly responsible for supporting their families. Agreed upon divisions of labour as per the conjugal contract have remained static, yet the expansion of women's roles has meant the burden of labour is no longer equal. Moreover, women's responsibilities remain largely invisible in terms of policy and development (Henn, 1983; Jacobs, 2010; Najjar et al., 2018). This invisibility is a product of the nuclear household model and it also reinforces men's position as head of household and the primary breadwinner (Rai, 1997).

Within the nuclear family in rural SSA, characterized by the aforementioned rigid division of gendered labour roles and responsibilities, Whitehead's (1981) model of household behaviour is particularly relevant. Whitehead (1981) suggests that there two separate spheres of gendered decision-making linked by a "conjugal contract", which defines the terms through which household members exchange goods, income and services (p.88). While the conjugal contract is negotiated within the household, it is also shaped by broader economic and social structures. Though dynamic, the contract is a necessity both for the marriage and for the reproduction of the household (Whitehead, 1981). The contract is particularly useful in understanding household

gender relations and issues of power and control (1981). Specifically in rural contexts where the household is a "productive enterprise", the focus of the contract is on the division of labour and distribution of the products of that labour (Whitehead, 1981 p.92). This conceptualization is particularly fitting in the agrarian context of this study, wherein gendered roles and responsibilities are distinct and household finances are often separate, despite men's unilateral power, control, and decision-making over land and assets. In this way, the conjugal contract is inextricably linked to place-specific gendered norms that shape and are shaped by the structures and processes of production. It is important to note that, while the conjugal contract that outlines the norms governing the expectations of both parties, intrahousehold power relations may be flexible and provide room for women subvert, or use gender norms to their advantage in contradictory and creative ways (Jackson, 2012). Therefore, the conjugal contract is also seen as the arena within which conflict and gendered negotiations can occur (Perry, 2005).

While the conjugal contract reflects the agreed upon division of labour in agrarian households, roles and responsibilities are shifting in the face of worsening food insecurity and changing socioeconomic and environmental conditions in the study context. Concurrently, the construction of the male breadwinner remains deeply entrenched, and agrarian masculinities remain tied to notions of land, productivity, and food provisioning. Within this context, we aim to explore how the construction of gendered identity, and specifically masculinities, shapes experiences of food insecurity for men, women, and the family.

4.6. Methods

In order to contribute to a better contextual understanding of how the construction of gender and the division of roles and responsibilities within the household shape

experiences of food security, we chose to use qualitative methods to elucidate nuanced and place-specific findings (Bryant, 1998). Data collection for this work took place in May-July of 2017 and July-October of 2019. In 2017, in depth interviews were conducted with male and female couples in 20 households (n=40), and six community-level focus groups in Boukoumbe, each averaging approximately 1 hour in length. During a second field season in 2019, the study area was expanded to include the municipalities of Toucountouna and Natitingou, at which time six additional focus groups were held with men and women in three communities, one in each municipality. Focus groups were held with 6-9 participants at a time. In total, 94 people participated in the focus groups, in which men (n=47) and women (n=47) were separated given the cultural context. This approach aimed to allow women and men to speak more openly about their experiences. Figure 1 provides a map of the study area.

The interviews and focus groups were led by a male-female research team using a semi-structured question guide. For both interviews and focus groups, participants were recruited via existing community networks using a combination of snowball and purposeful sampling, to select participants proportionally by gender in each different village (Baxter & Eyles, 1997). Eligibility criteria included men and women over 18 years of age who were still actively farming and currently married or coupled, inclusive of polygamist families. Community focus group participants included those who may be single, though they were a small minority. In polygamist households, the first wives were interviewed in accordance with local customs.

The audio recordings of the interviews and focus groups were transcribed in French and analyzed using thematic coding in accordance with established qualitative methodologies (Creswell, 2003) using NVivo software and drawing from key themes identified in the literature. We adopted an analytical strategy focused on establishing

broad areas of consensus and difference between men and women's experience of food insecurity. Ethics clearance for the study was obtained from the Western Office of Human Research Ethics and the National Ethics Committee for Health Research in Benin (CNERS) (CR N°25 on 10/07/2019).

4.7. Results

We have organized the findings from this study under four broad themes that emerged from our analysis. We begin by outlining how masculinities are constructed in the study context, followed by a discussion of men's feelings of shame and distress in the face of food insecurity and their inability to fulfill their roles as household breadwinners. We then look to women's experiences, focusing on the changing division of labour and the intensification of marital tension and violence in the household. Quotations from the transcripts of the focus group discussion (FGDs) and interviews (IDIs) illustrate the themes and serve to contextualize the participants' responses. At the end of each quotation, participants' gender (M=male, F=female), modus of participation (FGD/IDI), village, and municipality of residence are provided.

4.7.1. Unfulfilled expectations: 'measuring up' to the ideal man

The conjugal contract in this context is shaped by household breadwinner model and expectations around what it means to 'be a man'. In response to questions about their identity as men, participants consistently described their roles in food and farming, highlighting the importance of *agrarian* masculinity in this context. Consistently, men said they "always" are, and "always have been" responsible for bringing food into the home:

> "A man's role is farming […] to feed the family. To take care of the family means food first, by working in the fields" (M, FGD, Koutchatanongou,

Boukoumbe).

This comment reflects how men's identities in this context are inseparable from their roles as farmers and food providers. Many men felt the division of labour reflected their physical abilities, and they often appealed to their relative strength, as compared to women. For example, one participant explained:

> "Women, when they are working in the fields – they already go home at noon to rest. But we men continue until evening. We're stronger, you see" (M, FGD, Kota, Natitingou).

Rather than acknowledging women's numerous other responsibilities, this participant positions his identity as a man and as a farmer in relation to women's relative weakness. Other men expressed similar ideas of what it means to be a man in their community:

> "I bring food into the home, and when the harvests don't suffice, I know what to do […] I also bring the money. As a woman, my wife can - from time to time - do little things to help me" (M, IDI, Koutchata, Boukoumbe).

These responses reveal how deeply enmeshed men's identities are to their roles as the household breadwinner. Moreover, in understating women's contributions, these participants reveal how the male breadwinner household model and the construction of masculinity in this context relies on devaluing of women's work. In addition, such comments demonstrate how gender, and specifically masculinity, is relational and constructed in juxtaposition to femininity.

The construction of men's identities as food providers, however, has meant that food insecurity and poor harvests are a challenge to their masculinity. Men expressed that they "feel food insecurity the most" due to their responsibility as household heads to "provide a good life" for their wives and families (M, FGD, Koutchata, Boukoumbe). As another participant explains:

> "Men are the ones who have brought their wives into their homes. And now there is nothing to eat. And when men see all that is happening we are stressed, because our wife's parents will say – you took our daughter and you

> don't do anything […] people will think we're incompetent" (M, FGD, Koupagou, Boukoumbe).

This comment reveals how men's failure to fulfill the masculine role of household breadwinner contributes to fears of being seen as lazy and incompetent. For one participant, the pressure to fulfill his role as a provider has meant often going without food:

> "A man has to provide food for his wife. When you bring your wife home you have to be the one to feed her. When there is nothing [no food], you have to give the food to your wife and keep fasting, control your hunger - hold out - because in the lean season when there is nothing…it's women first. You brought her here, so you have to feed her" (M, IDI, Koutchata, Boukoumbe)

While both men and women reported making similar choices to 'buffer' their children and spouses from hunger, this comment reveals that for men the choice may be driven by a sense of masculine responsibility. Other men in the same community also appealed to similar norms around "holding out and withstanding" the hunger, due to their comparative "strength" (M, IDI, Koutchata, Boukoumbe). As a whole, these comments illustrate how masculinity in this context shapes men's conceptualization of their position within the household, and how they respond when food in the household is lacking.

4.7.2. Shame and distress: navigating food insecurity as the household breadwinner

Within the context of persistent food insecurity, men's identities as food providers are being challenged. When men were unable to fulfil their socially ascribed gender roles as the household breadwinner, shame was repeatedly discussed. One man reported being "too ashamed to even speak" (M, IDI, Koubergou, Boukoumbe). Another participant worried about being openly mocked:

> "If a stranger were to come by and hear the children crying: 'dad I'm hungry, dad I'm hungry', he would hide his face and laugh. We'd be ashamed, unable to look them in the eye […] And you get thin because you're worrying too

> much and you don't know what to do […] you're not present, you're sitting there but you are so, so pensive, and you're ashamed" (M, FGD, Dikokore, Toucountouna).

This participant explains that if strangers or community outsiders were to pass by it would be particularly shameful, which was a sentiment reiterated by many others:

> "If you're sitting there starving, it's shameful…so you have to have enough [food] to at least cover up the shame" (M, FGD, Kota, Natitingou).

Similarly, another participant described the shame he feels when his wife, "someone's daughter, gets thinner, because people will know she's not eating" (M, IDI, Koutagou, Boukoumbe). Such comments speak to how men's fears of not fulfilling expectations as household breadwinner are reinforced at the community level. For others, the judgement of their family members is the source of their shame:

> "I am often anxious, and I am even ashamed in front of my wife because I brought her to my home and I can't even provide for her to eat" (M, IDI, Koutagou, Boukoumbe).

The root of these feelings stems from gendered expectations around providing food for the family, an integral part of the conjugal contract in this context. Men agreed that they often are subject to anger and frustration from their wives because of their ability to fulfill their role as a provider for the household. As one participant explains, this often takes the form of insults: "she'll scold you […] belittle you, tell you you're lazy and worthless" (M, FGD, Koupagou, Boukoumbe). This type of scolding shows how women appeal to the conjugal contract and masculinity, to reinforce men's feelings of shame and embarrassment around food provisioning. As other participants confirmed, this contributes to arguments that result in violence:

> "I feel ashamed because my wife has to go ask for food from her parents, or her friends, and it's embarrassing. Even when my wife brings home food and prepares it, and serves it to me and I eat… it's like I don't gain weight, like it isn't helping me because she's the one that brought the food and all the while is scolding me…she says: 'you just sit there and don't do anything, it's me who's out begging for food, figuring out who to ask to bring you food. You're not even ashamed, just sitting there'. So, I eat despite myself" (M, FGD,

> Koupagou, Boukoumbe).

This participant's comments how his wife reinforces his shame, which impacts his ability to enjoy the food his wife has secured. Unfortunately, the stress and anxiety that men feel when they cannot fulfil the roles expected of them, also has serious health implications, including psychological distress:

> "The hardship is psychological. I think a lot, I'm stressed when it's like this [the lean season] because when the food stores are starting to finish I begin to worry – how will my children get through it, how will they eat?" (M, IDI, Koutchata, Boukoumbe)

Some men spoke about wanting to leave behind their responsibilities and families:

> "I don't run away, I don't give up, but I often want to. But if I give up, what will I leave for my family? I'm obligated to stay" (M, FGD, Kounadogou, Boukoumbe).

However for other men, more drastic measures may be taken:

> "Men are committing suicide… I don't consider committing suicide myself, but those who do…it makes sense. When you're at home and your children go to school but you can't help them [financially], and there is often a shortage of food. […] You see all of this yet you're powerless. They're right to kill themselves […] when they see the suffering of their children and wives and parents and they're incapable of providing anything" (M, IDI, Koupagou, Boukoumbe).

This participant commiserates with the feeling of desperation and powerlessness that drive men's suicide in his community. Taken together, these comments reveal that food insecurity in these communities have a devastating psychological impact on men.

4.7.3. Food insecurity: women's changing roles within the household

When asked about their experiences during the lean season when there is pervasive food insecurity, women consistently juxtaposed their experiences in relation to that of their husbands. They often expressed anger and frustration with the unbalanced gendered divisions of labour. For example, one participant said:

> "Women feel it [food insecurity] more. You see a few moments ago, this woman [another focus group participant] was breastfeeding her baby and the other child was crying. Did you see her husband? Our husbands go out and wander about, they don't experience the suffering of their children, the suffering of their wives" (F, FGD, Koutchata, Boukoumbe).

Framed by her experiences as a mother, this comment highlights her frustration with her husband. She, as did many women, expressed that the burden of taking care of hungry children falls to women, while men are out 'wandering'. Men suggest that they wander to look for day labour, though women associate the activity with drinking and socializing, viewing it as irresponsible or lazy behaviour. As another woman explains:

> "When it's the lean season and there isn't any food, it's hard in my house because I'm sitting at home, I'm taking care of the children. When I'm at home and the children are crying that they're hungry, I'm suffering. My husband on the other hand leaves in the morning, goes out and wanders about, he doesn't endure the suffering of the household" (F, IDI, Koutchata, Boukoumbe).

Her comment reveals a common sentiment among women, which is that their position as mothers means that they experience the brunt of household suffering. This responsibility falls to them because of the gendered division of labour:

> "If your children haven't eaten, no child will go to their father… stuck to his side, crying. Children always cry to their mothers, even though it's their father who was supposed to work to feed them, who was supposed to provide food for the household" (F, FGD, Toucountouna, Dikokore)

Evidently, women are frustrated because they see their husbands as primary breadwinners who have been unable to provide enough food for their families. These frustrations are intensified as women take on additional labour both off and on farm to secure food for the family, while men do not. For example, one participant explained that:

> "I'm the one who suffers the consequences when there isn't any food and my husband hasn't been able to find a loan or buy food – I have to run around, know where to ask for food and bring it home to give to my children" (F, IDI, Koubergou, Boukoumbe).

Asking for food from family and friends when food stores are exhausted was one of the most commonly used strategies to compensate for poor harvests, and is a responsibility that falls exclusively to women. Men were described as not having the "courage to go asking for food" (F, IDI, Koutchatanongou, Boukoumbe), as it would challenge their masculinity and disrupt the gendered division of labour. Women also tend to be responsible for a variety of supplementary income generating activities, which families rely on in the lean season:

> "Women endure the most hardship! When I prepare food for the children and there isn't enough when I portion it out, the children will cry and I have to go ask for food from my parents, my mother…I do all my little jobs, making alcohol [sorghum beer], running around and borrowing from my brother to feed my children" (F, IDI, Koubergou, Boukoumbe).

This comment builds on the recurring theme of women's 'suffering', or hardship, which is indicative their discontent with the division of labour within the conjugal contract. This participant also highlights her many responsibilities, as did other women who reported burdensome workloads:

> "Men disappear to go wandering. I am there with the crying children, I am the one who has to manage, to find firewood to sell to feed the kids" (F, IDI, Koutchatanongou, Boukoumbe).

While there is long tradition of women's commerce in rural SSA, our findings suggest that this burden seems to fall to women because of strict gender norms:

> "We [women] make sorghum beer to sell and buy corn flour - but it's never enough. We go see our neighbors to help them with their work - a neighbour who is harvesting or a neighbour who is pounding her fonio. We help them and they'll give us some food in return, which we'll bring to our children at home. Meanwhile, a man would be ashamed. He would be so ashamed he could not go [do this work]" (F, FGD, Koutchatanongou, Boukoumbe).

In this context, men are ashamed to transgress norms of masculinity, and so foraging activities, brewing alcohol, and other 'small' or menial work, tends to be taken on by women. These conversations with women highlight their frustration with men's inability to fulfill their 'duty' as household breadwinner.

4.7.4. Contesting the conjugal contract: tension within the household

As women feel overburdened with work, they have begun to challenge the conjugal contract and the 'agreed upon' division of labour within the household. Unfortunately, this leads to additional tensions, arguments, and violence between partners. One participant explains how food insecurity is often 'blamed' on men, which causes tension in the household that ultimately results in violence:

> "During the lean season, there is always fighting in the household, because it's the man who brought you here [into his house, on his land] and he doesn't feed you, so if he starts mouthing off and you talk back, it's a fight – he hits you and you hit him back" (F, FGD, Dikokore, Toucountouna).

Other women expressed similar sentiments, highlighting men's inability to provide their wives and children with food, and thus their failure to fulfill their responsibilities under the conjugal contract. Another participants described a similar dynamic in her own household:

> "We [women] spend the whole day with our children who haven't eaten, it's difficult, the children are crying over this and that, and your husband is out. When he comes home in the evening, you're so tired of enduring the screaming and crying, so drained, that as soon as your husband speaks you're angry. You speak to him however you want to [insultingly] and he too gets angry, he hits you, and it's a fight. If there weren't all these difficulties we wouldn't be angry and speak badly to our husbands" (F, FGD, Boukoumbe, Koutchata)

This comment clearly illustrates how the anger women experience as a result of food insecurity incites arguments and violence within the household. Commonly, women appealed to their roles as mothers to explain their anger towards their partners:

> "When I go to sleep at night and haven't eaten, and I see that the children are hungry, and then we get up the morning and my husband starts talking, I will speak badly to him [insult him]. And he'll hit me and start a fight. This is because I didn't eat, the children didn't eat, and when I see that my children are hungry I get angry with him" (F, FGD, Toucountouna, Dikokore).

These comments illustrate how women in our study tend to characterize men as irresponsible, 'blaming' them during times of scarcity because of their inability to

fulfill their roles as breadwinners, as husbands and fathers. Unfortunately, challenges to their husband's authority and the 'agreed upon' division of labour within the household, often lead to violence.

4.8. Discussion

From our discussions with men and women, it became clear that experiences with food insecurity in Atacora are shaped by patriarchal norms around masculinity and gendered roles that have placed men as providers or breadwinners (Clowes et al., 2013; Lindsay, 2007). The conception of the ideal man and norms around what is required to 'achieve' masculinity remain pervasive, despite the erosion of men's identities and agrarian masculinity since the 1980s, resulting from the retreat of state support for agriculture due to structural adjustment programs (Perry, 2005). In contemporary Atacora, men are increasingly unable to achieve ideals of masculinity, as poor agricultural productivity and food insecurity undermines their ability to provide for their family. Much as Silberschmidt (2001) described in the context of socioeconomic change in East Africa, food insecurity in Atacora has meant that men have been left "with a patriarchal ideology bereft of its legitimizing activities" (p.657). Our findings exemplify how masculinity in agrarian contexts is deeply rooted in farming, food production and men's roles as economic providers (Badstue et al., 2021). Appeals to men's role in bringing their wives into their households illustrate how their identity as men is intimately tied to their roles as food producers and breadwinners. With reference to food insecurity, men in our study also appealed to ideals of masculinity, citing the strength they must exhibit to farm and provide food, and in order to withstand hunger during the lean season. This is consistent with the Ghanaian context, wherein men are expected to display courage, strength, and emotional reserve by being both physically and mentally resilient in the face of pain

and suffering (Adinkrah, 2012). While not focused on food security, Perry's (2005) study finds that men's status and identity are undermined when men are unable fulfill their role as the breadwinner. We find that similar to other contexts in SSA, when faced with the inability to meet the socially accepted 'standard' for manhood, men feel shame, humiliation, loss of dignity, feelings of inadequacy and emasculation (Adinkrah, 2012; Porter, 2013). This results in stigmatization, which is reinforced within the household and at the community level. As many of our participants described, they felt concerned by the idea that family members, neighbours and strangers would judge or mock them.

Our findings reveal that this shame and humiliation, rooted in locally specific constructions of masculinity, has a concerning impact on men's mental health in the Atacora region. In our study, men expressed wanting to give up and run away, with one participant going as far as to justify the suicide of other men in the community. In various contexts, shame among farmers has been identified as a result of poverty, economic hardship, and failure, which can lead to suicide (Adinkrah, 2012; Bryant & Garnham, 2015; Mathew, 2010). As explained by Bryant and Garnham (2015), farmers experience shame and thoughts of suicide when their identities, which are constructed around agrarian discourses of masculinity and pride, are undermined. In Ghana for example, suicidal behavior has been documented as a response to feelings of shame and dishonor among farmers who experienced crop failure (Adinkrah, 2012). In our study, men's candid discussion of their feelings of distress and shame is an important aspect of this research, insofar as discussing these stigmatizing issues openly among other community members is, in and of itself, subversive. In similar contexts, men are expected to display emotional reserve in the face of adversity (Adinkrah, 2012). We find it important to highlight therefore, how men in this context

are challenging and redefining masculinities by freely discussing issues of shame, fear, mental health and failure to provide for their families. Their behaviour reveals that which may be hidden behind the pressure to 'do gender right' and maintain a façade that fits with conventional gender norms (Badstue et al., 2021). As poor rural farmers, their class may also allow them to challenge ideals of masculinity from within their position of subordinate masculinities (Broqua & Doquet, 2013). Highlighting men's resistance and agency is an important part of countering the narrative of "bad men" in research on hegemonic masculinities, which stigmatizes certain types of male behaviour, particularly among African men (Connell & Messerschmidt, 2005; Morrell et al., 2012 p.25).

Within the household, women are also complicit in the reification of problematic ideals of masculinity, as they scold, shame, belittle, and insult their husbands with respect to their failure as food providers. It is important to emphasize that this behaviour does not serve as a justification for violence, though men in Benin and other SSA countries often defend IPV perpetration in this way (Darteh et al., 2020). In reality, women are voicing their dissatisfaction at the unequal burden of labour, and pushing back against the conjugal contract. Similar to Dinani's (2019) findings in Tanzania, women's critical depictions of their husbands as shirking responsibility mirror colonial discourse depicting African men as 'lazy' and irresponsible, a narrative that is still pervasive in development and gender research in rural Africa (Whitehead, 1999, 2000). This narrative is also reinforced when women juxtapose their experiences of hardship and suffering against that of their husbands. For example, women described a sense of moral obligation and indignation around their children's suffering – an experience that they felt was not shared by fathers. Some researchers have suggested that the construction of working women as

‘suffering’ serves to dissuade women from taking over the role of the household breadwinner (Badstue et al., 2021). In our study however, women juxtaposed their experience of suffering to that of men’s ‘indifference’ in order to express their dissatisfaction with the division of labour. This is consistent with Dinani’s (2019) findings that women in late colonial and post-independence Tanzania leveraged negative masculine tropes in order to “negotiate autonomy” and question the inequitable division of labour within the marriage. Our findings reveal how this type of shaming and blaming may be a way for women to contest the conjugal contract.

Paradoxically, while women in our study context are pushing back against socially ascribed gender norms, they are also reinforcing hegemonic ideals of agrarian masculinity. Women are challenging “patriarchal conjugal relations” (Dinani, 2019 p.579), while also wanting their husbands to uphold their half of the patriarchal bargain and fulfill their responsibilities as a breadwinner (Kandiyoti, 1988). A dynamic is created wherein men’s feelings of shame inadequacy around food insecurity are reinforced through contempt from women, which is exacerbated as women are faced with increasing burdens of labour (Silberschmidt, 2001). Similar to research in Senegal that suggests women are renegotiating the conjugal contract (Perry, 2005), we find that women are pushing back against unfair divisions of labour. While men’s responsibilities are limited by norms around what constitutes men’s work, food insecurity has seen women’s roles and responsibilities expanding. To compensate for poor harvests and an absence of paid work opportunities (on and off farm), women increasingly support their households through alternative livelihood strategies in addition to their roles in farming and childrearing. This means that men are now relying on their dependants to ensure the survival of the family, “in a paradoxical twist of the patriarchal meta-narrative” (Perry, 2005 p.14). In other

words, men are now reliant on the wives for whom they feel responsible. This challenges their masculinity, despite a strong tradition of independent work among rural women in subsistence farming contexts in SSA (Benería, 1979). While this may be a source of greater autonomy for women in some contexts (Perry, 2005), women in Atacora are unhappy with their growing workload. Unlike cases in urban Mozambique where socioeconomic circumstances have seen men taking more traditionally women's jobs (Agadjanian, 2002), men in rural Atacora seem to not be taking on alternative responsibilities. Our findings are more similar to Silberschmidt's (2001), who found that women in East Africa are burdened with additional labour to ensure the survival of the household. Women in our study reported that many of their additional income generation activities, such as brewing sorghum beer and helping a neighbour with hulling crops (tasks traditionally ascribed to women), would be too shameful for men to do. Moreover, other compensatory responsibilities such as 'begging' for food from family and friends during lean times is also something that is not undertaken by men. This is similar to findings from the Ghanaian context, where researchers found that men's masculinity, defined by independence, is undermined if they need to seek loans to care for their family (Adinkrah, 2012). Moreover, women's involvement in petty trade as a matter of necessity in food insecure contexts diminishes male authority, which may be an additional is a source of tension within the household (Perry, 2005) that further challenges men's self-esteem and identities (Silberschmidt, 2001). This may intensify arguments around the new, unequal, division of labour, and push men to 'defend' their masculinity.

Our research confirms that some men perpetrate physical violence when their identity as a man is challenged (Perry, 2005), for instance, when their wives scold and shame them. These findings are consistent with the widely theorized frustration-

aggression hypothesis, wherein humiliation leads to increased aggression and violence (Porter, 2013). While Silberschmidt (2001) finds that men in East Africa respond with aggressive and/or extramarital sexual behaviour, in the context of Atacora the challenge to men's masculinity appears to be driving intimate partner violence. Perpetrating violence may also be a way of reasserting manhood in the face of inadequacy and shame in contexts such as Atacora, where violence itself is perceived as an indicator of manhood (Porter, 2013). Moreover, we find that tension over household organization and the gendered division of labour lead to arguments (Perry, 2005). Specifically, we find that men's inability to fulfill their responsibilities under the conjugal contract is a site of tension, causing arguments that may devolve into violence. As Perry (2005) describes, these arguments reflect the "reworking [of] the 'macro' construct of patriarchy" in a "never ending series of 'micro' arguments that erupt over most aspects of household organization" (p.208). Perry (2005) suggests this process of constant renegotiation and contestation of the conjugal contract is the reason for the success of the African family. Conversely, our findings suggest that this bargaining is hard won, and places families and women in particular, at risk of violence. Dinani (2019) also finds that Tanzanian women's criticism of their husbands is often focused on their irresponsibility and failure to fulfill marital expectations, which sometimes led to physical and emotional violence. While violence in the study context has been normalized as a result of socialization that shapes men and boys to conform to rigid gender norms, it is important to note that it is a learned behaviour and is often a result of men having experienced violence themselves in their homes and communities (Porter, 2013). While shame around men's inability to meet such standards may not be sufficient to cause violence, our findings show that it is a contributing factor in this context.

4.9. Conclusions

The nuclear 'breadwinner' household model is reductionist, harmful to men and women, and increasingly unsustainable in the face of socioeconomic, political and environmental change (Clowes et al., 2013; Lindsay, 2007). Our findings provide empirical evidence of how food insecurity in subsistence farming contexts is an important site for the renegotiation of gender norms. Importantly, the negative consequences of rigid adherence to hegemonic masculinities, and in particular the 'breadwinner' nuclear household model, is likely to worsen as food insecurity deepens and agricultural conditions deteriorate in agrarian contexts due to worsening climate change effects. This will increase feelings of shame and inadequacy among men, driving intimate partner violence and negatively impacting men's mental health. Dissatisfied with the conjugal contract and their uneven share of labour for women, women may continue to 'blame' their husbands for food insecurity and reinforce the narrative of 'irresponsible' and 'lazy' men.

Our findings suggest that food security interventions would do well to take a gender transformative approach, and consider how the place-specific sociocultural construction of gender, and in particular masculinity, shapes experiences of food insecurity. Moreover, food security interventions that seek to alter household power structures must be cognizant that intimate partner violence is tied to constructions of masculinity and societal expectations around manhood and marriage. This will require a departure from persistent women-only approaches through a re-centering of gender in food security work as a structural and systemic issue. More qualitative work that seeks to understand how men are already rejecting and subverting masculine ideals, such as that undertaken by Sideris (2004) in South Africa, would be of value in this regard. Importantly, further work on gender and food security is needed, written from

a diversity of perspectives outside of Western feminism, shaped and led by African feminist scholars.

CHAPTER 5

Community perceptions of gendered alcohol misuse in a food insecure context: The case of northwestern Benin

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A version of the chapter has been published in *Social Science & Medicine*

5. COMMUNITY PERCEPTIONS OF GENDERED ALCOHOL MISUSE IN A FOOD INSECURE CONTEXT: THE CASE OF NORTHWESTERN BENIN

Abstract

In many sub-Saharan African countries there have been concerns about the varied effects of increasing rate of alcohol consumption and misuse. These concerns have led to the need for research on the relationship between alcohol misuse and food insecurity in agrarian contexts where alcohol consumption is rising. We present the findings of a qualitative study involving in-depth interviews and focus groups with men and women, which explores the connection between alcohol misuse and food insecurity in the Atacora region of Benin. Our findings show that farmers are misusing alcohol as a response to hunger and distress resulting from persistent food insecurity. These drinking behaviours are gendered and shaped by the rigid division of labour roles, wherein primarily men are misusing alcohol. The misuse of alcohol subsequently undermines farm labour and diverts household resources, further worsening food insecurity. Importantly, women reported that alcohol misuse as a coping response to food insecurity contributes to intimate partner violence. Given this complex cyclical relationship, food relief policy-makers in Benin must consider the intersection of alcohol misuse and intimate partner violence when implementing policy and programs intended to improve food security.

Keywords: Benin, sub-Saharan Africa, food (in)security, alcohol, gender, women

5.1. Introduction

In most of Sub-Saharan Africa (SSA), the production and consumption of various forms of alcoholic beverages are a part of people's everyday lives (Akyeampong, 1996; Luginaah, 2008). While beer and other imported alcoholic drinks are expensive and scarce, locally produced alcoholic beverages such as those made from distilled palm wine, fermented sorghum and sugar cane are common and relatively cheaper across the sub-continent (Heap, 2008; Lobnibe, 2016; Luginaah, 2008; Somassè et al., 2016). These alcoholic drinks tend to be prepared and shared in different traditional and cultural spaces (Mkandawire et al., 2011).

In rural Benin, two main types of traditional alcohols *tchoukoutou* and *sodabi,* are produced and consumed. *Tchoukoutou* is an opaque sorghum beer mostly produced by women, similar to *pito* in Ghana, and has some nutritional value and a low alcohol content of approximately 2% to 5% (Djameh et al., 2015; Ebbah et al., 2015; Kayodé et al., 2005; Lobnibe, 2016; Nout, 2009). *Tchoukoutou* is commonly exchanged in labour sharing arrangements and is served at ceremonies. *Sodabi* is made from distilled palm wine and its alcohol content is estimated as ranging from 40% to 50% (Fourgeau & Maula, 1998; Somassè et al., 2016; Tagba et al., 2018). *Sodabi* and other similar traditional alcoholic drinks have been reputed to contain toxic substances such as methanol, lead, and microorganisms as a result of crude distillation processes and illicit, uncontrolled production, which may result in adverse health and social consequences (Rehm et al., 2010; Zakpaa et al., 2010). Contrary to *tchoukoutou*, s*odabi* is produced and sold by both men and women, and it is similar to other locally distilled liquors in SSA such as *akpeteshie* in Ghana (Akyeampong, 1996), *ogogoro* in Nigeria (Heap, 2008), and *kachasu* in Malawi (Mkandawire et al.,

2011). Across these countries, the common feature of this drink is its potent alcohol content.

In rural areas of Benin, the increasing rate of *sodabi* consumption has emerged as a major issue of concern in the past few decades (Somassè et al., 2016). This may be, in part, due to large scale socio-economic changes, which have loosened government controls, undermined traditional structures of authority, brought economic hardship and increasing alcohol consumption (Bryceson, 2002; Luginaah, 2008). Alcohol misuse has been on the rise globally and the WHO (2018) estimates that alcohol consumption contributes to over 3 million deaths each year globally and the poor health of millions more. Furthermore, the harmful use of alcohol is responsible for 5.1% of the global burden of disease, and is raising intense public health concern in both high and low income countries of the world, including Benin (WHO, 2018).

According to estimates from the WHO, alcohol consumption in Benin has increased steadily since the 1960s and current estimates tend not to include consumption of locally brewed alcohols, which are frequently underreported due to the informal nature of their production and consumption (Obot, 2006). Similar to many parts of SSA, alcohol consumption is also gendered, with men often engaging in more heavy episodic drinking than women (Obot, 2006). For instance in Benin in 2016, total alcohol consumption was twice as high among men than women, and the prevalence of heavy drinking was over seven times higher (WHO, 2018). This reflects a broader trend in gendered alcohol consumption globally, and is accentuated in poorer populations (WHO, 2018). Worryingly, a recent study in Benin reported that increasing alcohol dependency in the context of persistent poverty may be increasing food insecurity amongst farmers (Tognide et al., 2014).

Over the last several years, food insecurity and hunger has also been rising in parts of the world with the most severe effects felt in SSA, prompting the FAO (2017) to call for more context-specific research. Concurrently, research has examined the increasing rates of alcohol misuse in SSA and its potential relationship to food insecurity. For instance, studies from South Africa found that alcohol use was significantly associated with food insecurity among women (Abrahams et al., 2018; Sirotin et al., 2012). In Rwanda, Sirotin et al. (2012) found that alcohol was not a 'luxury purchase', and that its consumption may be diverting household income away from spending on food, even in lower income households. In Ethiopia, Regassa and Stoecker (2012) found alcohol use to be a significant predictor of food insecurity in a sample of male head of households (HOH). Working in South Africa, Eaton et al. (2014) found that heavy drinking was higher among food insecure women, but not men. They suggest it could be that alcohol is more easily accessible than food to women with limited resources (Eaton et al., 2014). In Tanzania however, Parcesepe et al., (2019) found that among both men and women living with HIV, food insufficiency was more common among those with problematic drinking behaviours. These varying findings in SSA context have led to the assertion that the relationship between food insecurity and alcohol use is inconsistent and understudied (Eaton et al., 2014; Patts et al., 2017; Regassa & Stoecker, 2012). Inconsistencies point to the importance of place-specific factors such as sociocultural and economic conditions, as well as gendered power dynamics that may play a role in determining the strength and directionality of the relationship between food insecurity and substance use (Pellowski et al., 2018). In particular, there remains a paucity of research that explores how food insecurity and its associated stressors influence gendered alcohol misuse in rural agrarian communities (Atuoye & Luginaah, 2017; Patts et al., 2017; Regassa &

Stoecker, 2012). The need for research is pertinent in Benin where to the best of our knowledge, there has been no work done on the relationship between alcohol misuse and food insecurity.

5.2. Theoretical background

In many contexts, drinking behaviours have been associated with individual coping responses and broader sociocultural and structural influences. Moreover, the 'hunger hypothesis' advances that physiological responses to hunger affect behavioural traits such as impulsivity, irritability, anxiety and propensity to use narcotics and alcohol (Nettle, 2017). Social learning theory suggests that abusive drinking behaviour is linked to insufficient coping responses to stressful circumstances in an individual's everyday life (Cooper et al., 1988). When no alternative coping strategy is available, drinking as a coping mechanism arises from the expectation that alcohol can ameliorate experiences, and the subsequent attempt to manage negative emotions and reduce tension can lead to heavier drinking indicative of alcohol misuse (Cooper et al., 1988, 1992). In the context of deprivation, reliance on avoidance coping tends to predict greater alcohol consumption, particularly for men (Luginaah & Dakubo, 2003). Moreover, according to Cooper et al. (1992) there is a gendered aspect to the use of alcohol for stress-related coping, wherein men are more vulnerable than women to problematic drinking behaviours.

This study also draws upon theoretical constructs from political ecology of health (PEH) in order to examine how social, environmental, and political factors influence the relationship between alcohol misuse and food insecurity in Benin. Patterns of health and individual health behaviours or "opportunities for healthy decision-making" (King, 2010 p. 45) are complex and influenced by broader social, environmental, economic and political structures (Mkandawire et al., 2013). Within

this framework, the health and well-being of populations are shaped by structural forces, which play out at different scales (local, regional, national) (Mkandawire et al., 2013). For example, literature on drinking culture in Africa identifies economic, political and cultural marginalization as drivers of heavy drinking behaviour (Bryceson, 2002). Social and cultural norms shape the way people react and respond, and consequently, beyond individual differences there are also cultural and regional differences in the way alcohol is used and misused (Luginaah & Dakubo, 2003). As such, understanding alcohol consumption in a specific place requires contextualization beyond the individual level (King, 2010). Specifically, we focus on the ways in which patriarchal gender norms shape household structure, the division of labour, and household decision making around finances, thus shaping patterns of alcohol consumption for men and women.

5.3. The study context

With one of the highest population growth rates on the continent, 45% of Benin's population of 9.9 million people live in rural agricultural communities, which are most greatly affected by food insecurity (WFP, 2017; Beerlandt et al., 2014). Atacora is one of the poorest and most food insecure regions of Benin, and while the majority of households engage in agriculture they also spend the highest proportions of their income on food (WFP, 2018). Within Atacora, the municipalities of Boukoumbe, Toucountouna, and Natitingou have the highest levels of food insecurity: 46.3%, 29.8%, and 27.8% severe and moderate food insecurity, respectively (WFP, 2018). As such, these areas were the focus of this study. Alongside outmigration and a distinct lack of state support, climate variability is resulting in increasing temperatures, droughts, and irregular precipitation, which have contributed to the worsening levels of food insecurity reported in the region (Amouzou et al., 2019; Beerlandt et al.,

2014; Ezin et al., 2018; Fogny & Trentmann, 2016). As such, rural livelihoods have become increasingly difficult to maintain. These factors are likely driving alcohol consumption among farmers.

5.4. Methods

Given the complex set of contributing factors that may influence both alcohol misuse and food insecurity, we chose to use qualitative methods to elucidate deeper and more contextual meaning that captures place-specific nuances (Bryant, 1998). Data collection for this work took place in the summers of 2017 and 2019. In 2017, we conducted in depth interviews with male and female couples in 20 households (n=40), and six community-level focus groups in Boukoumbe, each averaging approximately 1 hour in length. During a second field season in 2019, the study area was expanded to include the municipalities of Toucountouna and Natitingou, at which time six additional focus groups were held with men and women in three communities, one in each municipality. Focus groups were held with 6-9 participants at a time. In total, 94 people participated in the focus groups, wherein men (n=47) and women (n=47) were separated given the cultural context, which aimed to allow women and men to speak more openly about their experiences. Figure 1 provides a map of the study area.

The interviews and focus groups were led by a male-female research team using a semi-structured question guide. During focus groups, men and women were asked similar questions, however, discussions evolved in breadth and scope based on the engagement of participants. For example, in discussions of drinking, women candidly discussed the link between intimate partner violence and alcohol use. While men were reticent to immediately admit to drinking, they candidly discussed mental health challenges. This is consistent with Kitzinger's (1995) argument that stigmatizing topics are better discussed during focus groups, because less inhibited

participants initiate conversation, opening the way for more inhibited participants to share their thoughts and experiences.

For both interviews and focus groups, participants were recruited via existing community networks using a combination of snowball and purposeful sampling, to select participants proportionally by gender in each different village (Baxter & Eyles, 1997). Eligibility criteria included men and women over 18 years of age who were still actively working and currently married or coupled, inclusive of polygamist families. In polygamist households, the first wives were interviewed in accordance with local customs. Community focus group participants included those who may be single, though they were a minority.

The audio recordings of the interviews and focus groups were transcribed in French and analyzed using thematic coding in accordance with established qualitative methodologies (Creswell, 2003) using NVivo software and drawing from key themes identified in the literature. We adopted an analytical strategy focused on: (1) establishing broad areas of consensus and difference amongst focus group respondents; and (2) highlighting areas of difference between men's and women's experiences, perceptions, behaviours, and coping strategies. The approach aimed to go beyond current reports on food insecurity in Benin that have frequently relied on an identified HOH, the majority of whom are male (WFP, 2018). Differences that emerge would point to the need for intervention and preventive policy. Ethics clearance for the study was obtained from the Western Office of Human Research Ethics and the National Ethics Committee for Health Research in Benin (CNERS) (CR N°25 on 10/07/2019).

5.5. Results

The results are organized around the main objective of the study and main themes related to: alcohol consumption and misuse in context, the gendered landscapes of alcohol misuse, alcohol misuse and farming, diversion of household resources, and intimate partner violence. Quotations from the transcripts of the focus group discussion (FGDs) and interviews (IDIs) illustrate these themes and serve to contextualize the participants' responses. At the end of each quotation, participants' gender (M=male, F=female), modus of participation (FGD/IDI), village, and municipality of residence are provided.

5.5.1. Alcohol consumption and misuse in context

In the study context, many participants agreed that drinking is a wide spread activity that originates from the traditional use of alcohol during celebrations. Yet the expensive nature of imported beer and other alcoholic drinks encourages the consumption of the relatively cheaper locally brewed *sodabi* and *tchoukoutou*. During the discussions, participants emphasized the toxic nature of *sodabi* in particular, noting that it is "dangerous – it kills" (F, FGD, Kota, Natitingou). Yet, it remains largely unregulated and freely produced. Participants noted that people in their community drink *sodabi* "all the time, more so than *tchoukoutou*" (F, FGD, Kota, Natitingou), as a way to escape harsh daily realities by "falling asleep" (F, IDI, Koubergou, Boukoumbe). Another participant pointed out that *sodabi* is the drink of choice because its high alcohol content gets them drunk, allowing them "forget [their] worries for a while" (F, FGD, Koupagou, Boukoumbe). Although female participants agreed that women are increasingly drinking these local alcohols, there was a general agreement that it is the men who drink most often and most heavily.

Participants identified *sodabi* as the drink of choice especially during the lean season when most families are running out of food, as a way of coping with both

hunger and distress. Both men and women agreed alcohol misuse tend to be a response to daily stressors and feelings of sadness and frustration. The men frequently talked about the embarrassment and shame that result from persistent challenges they face in their households. For example, one male participant explains the dual effect that food insecurity has on drinking behaviours:

> “We know that drinking isn’t good, but some people drink because of hunger. When they don’t find anything to eat in the morning, they turn to alcohol, they get drunk to forget the hunger. Then there are those who drink because of their worries” (M, IDI, Koubergou, Boukoumbe).

While *tchoukoutou* is described as ‘filling’ and is referenced as the drink of choice for addressing hunger, the more alcoholic *sodabi* was often referenced in terms of relieving stress. During a focus group, one man commented that:

> “We all drink […] when there are problems in the household, drinking can alleviate our distress… We are aware that adulterated alcohol [*sodabi*] is killing us, but it helps us quickly soothe our anxieties” (M, FGD, Koutchatanongou, Boukoumbe).

While discussing the notion that people drink to cope with their distress, the participants also drew strong links between hunger and drinking. A female participant noted that:

> “When we drink it’s because we are hungry and when we get drunk we fall asleep. When we don’t drink we think too much and ruminate over our troubles” (F, IDI, Koubergou, Boukoumbe).

Another participant reiterated that despite a recognition that alcohol misuse has negative consequences, drinking is a behavioural response that has developed into a habit:

> “We know that drinking is not good, but we can’t give it up, it’s a habit. Sometimes we have nothing to eat, and when we come across alcohol we drink to suppress the hunger” (F, FGD, Koupagou, Boukoumbe).

These comments illustrates how drinking behaviours have developed into a habitual coping strategy. Another participant highlights how drinking is also used to cope with poor quality and a lack of variety in foods:

> "We drink because of hunger - when I cook corn paste, but the sauce is not good or there is no sauce, no meat, no nothing, I don't feel like eating. So I might eat a bit - or not at all - and simply cook and let the children eat. I get up and go drinking instead, and if I am offered alcohol I prefer to drink that [than to eat]… we don't have a choice, we cook and leave the food to go drinking – it's better" (F, FGD, Koupagou, Boukoumbe).

Her comment highlights that the quality of food is an important aspect of food security, which has been overlooked until recently (FAO, 2019). She also discusses how drinking may be used as a form of protective buffering, allowing parents to leave scarce food resources for children by masking their own hunger through drinking. This type of buffering was a common theme among parents, both men and women. A male participant explained how drinking as a response to hunger in such a way, allows them to prioritize children during mealtimes: "[When] I drink, I am able to leave the rest [of the food] so that the children can eat" (M, IDI, Koubergou, Boukoumbe). Similarly, another man noted that some men employ roaming and drinking as a strategy to leave what little food is at home for their wife and children:

> "When the meal [at home] is small, I leave it to my wife and children, get up, and go roaming to drink alcohol. I go roaming to occupy myself, because I have nothing to do, there is no food […] and when I find alcohol I will drink. For my wife, it's that I left, but she doesn't know that in fact, in leaving, in roaming about, it's a way for me to leave them the food so it's enough [for the family]" (M, FGD, Koutchatanongou, Boukoumbe).

These comments provide insight into how drinking is used to cope with the stresses of everyday life in this context, and points to the emerging gendered nature of alcohol consumption and misuse.

5.5.2. The gendered landscapes of alcohol misuse

Given the increasing reliance on alcohol consumption as a coping strategy, it is unsurprising that more and more women are consuming these local alcoholic beverages, although this has remained a male dominated activity. Participants frequently commented that men are frequently 'roaming' or wandering in the

community when they are not engaged in farm work. Consequently, men are more likely to 'come across' alcohol while visiting neighbours or socializing with their friends. Conversely, women and in particular those with young families are unlikely to 'roam' due to the gendered nature of household and child rearing responsibilities, and the sociocultural expectation that women are supposed to be home fulfilling those responsibilities. As one woman notes:

> "Men drink more. A woman cannot, otherwise she risks forgetting about her family, her children, her housework and all that – she might forget. So you drink a little. You might go to the market and drink a just a little bit and then come home to take care of your family. But men go out and drink – they don't care. They know they don't need to take care of the children" (F, FGD, Koutchatanongou, Boukoumbe).

This comment reveal how gender roles within the patriarchal family structure shape drinking behaviours. Women also reported feeling a sense of moral responsibility towards their children, and this is reinforced by the social construction of women's identity in this context as mothers and caregivers. When asked about the discrepancy between mothers' and fathers' priorities around childrearing, a woman pointed to the children sleeping in their mother's laps and sitting at their feet:

> "When you were meeting with the men here, did you see these children with the men? Why are they [the children] here now? It's because children are always stuck to their mothers. Because of that, mothers never forget about their children" (F, FGD, Kota, Natitingou).

Men also agreed that gender roles within the household make it easier for them for them to go drinking:

> "When we finish in our fields our neighbours invite us to drink because there is nothing keeping us at home. And the second reason that we drink, especially now when there isn't enough food - we drink to forget our troubles" (M, FGD, Kounadogou, Boukoumbe).

Yet, socializing and roaming may also be an important way in which men access opportunities to engage in farm work, in return for a meal or much needed additional income.

As a whole, these quotes provide insight into the ways in which the patriarchal family model reinforces pervasive gender norms, specifically with regards to expectations around caregiving and how this shapes 'freedoms' for mothers and fathers differently.

5.5.3. Alcohol misuse and farming

An important emergent theme from this study was the perceived impacts of alcohol misuse on food production within subsistence farming households. Most participants agreed that alcohol consumption was influencing farming within their local communities. The general view was that "when men drink too much they can't work in the fields" (F, FGD, Dikokore, Toucountouna). In comment below, a male participant commented:

> "[Drinking] doesn't fit with farm work, because when you are drunk you can't work […] when we drink too much there are always negative consequences (M, FGD, Kounadogou, Boukoumbe).

In discussing the impact of alcohol consumption and ability to do farm work, other participants differentiated between *tchoukoutou* and *sodabi* in terms of their effects on work. A participant indicated that:

> "When you drink *sodabi* you are tired and can't work, you have problems with your bones, aches. But with *tchoukoutou*, you can drink and still work, it doesn't bother you […] it's like you've had something to eat" (M, FGD, Kota, Natitingou).

Importantly, as men 'roam' in their communities, they sometimes engage in farm labour on other people's farms in exchange for food and/or alcohol. Yet, this behaviour of working on other people's farms may also keep them away from their own. Participants generally agreed that alcohol consumption not only inhibits farm work, but it also contributes to the diversion and depletion of scarce household resources.

5.5.4. Diversion of household resources

Many participants, especially women, lamented that alcohol consumption diverts household income that could otherwise be spent on food and other household needs. A participant described how her husband tends to spend money on drinking:

> "He takes some of his money to eat out or drink. If he sees his friends, he pays for them to drink as well. And so he spends his money little by little, and by the time he is home there is hardly anything left" (F, FGD, Kota, Natitingou).

This diversion of household resources was described as a 'widespread problem', redirecting resources away from family spending towards drinking. This is concerning given that men in this context tend to control household resources, which increases tension:

> "When my husband goes out and drinks and comes back, he doesn't give a damn […]. The children are there, they are crying in front of me […] it makes me angry […] I will begin to scold or insult him, and it starts a fight. If I've done some small commerce […] and give [him] the money to save - he takes that money and goes drinking. When there is no more food, I ask for that money and my husband says there is no money, which will start a fight […] so, he gets up and leaves, goes drinking, and when he comes back again it's another fight. It causes a lot of fighting in the household when there isn't any food" (F, FGD, Koupagou, Boukoumbe).

Another female participant also explained that in her household, her husband "liquidates everything to pay for alcohol" (F, FGD, Kounadogou, Boukoumbe). The diversion of household resources has obligated women to undertake additional income generating activities:

> "When he isn't bringing money home to help, you - the woman - have to work more, you have to run around and work hard to find a way to provide food for the children […] it causes fighting" (F, FGD, Kota, Natitingou).

This illustrates another pathway by which alcohol misuse in local communities and households places additional burdens of labour on women. Women in several communities reported that the absence of men's labour has meant an increased burden of agricultural production on women:

> "Men no longer work hard […]. Before, at least […] they worked in the fields, now men no longer work in the fields. Because when you get married to a man here, […] he buys two hoes […] and you go together to the fields. You have to work just like him. […] There are even some men that no longer work in the fields, it's the women that work in the field […] he goes roaming [drinking], you know" (F, FGD, Koupagou).

Alcohol misuse compounds what many women already feel is a disproportionate burden of labour, as women take on more domestic labour and off-farm income generation. These findings reveal that gendered alcohol misuse is a product of the patriarchal family structure and its rigid gender roles, while also simultaneously contributing to that structure through the unfair distribution of labour.

5.5.5. Intimate partner violence

These changing roles also contribute to arguments between partners, particularly in a food insecure context where tensions are already running high. As one woman explained, hunger during the lean season means "fighting in the household and outside of it" (F, FGD, Dikokore, Toucountouna). Another focus group participant explained that:

> "During the lean season, there is always fighting in the household, because it's the man who brought you here [into his house, on his land] and he doesn't feed you, so if he starts mouthing off and you talk back, it's a fight – he hits you and you hit him back" (F, FGD, Dikokore, Toucountouna).

Women explained that seeing their children hungry makes them angry, sparking arguments that typically result in physical violence. Among men, this dynamic plays out insofar as they link their distress in the lean season to the shame and embarrassment resulting from their inability to prove for their families. A male participant describes how his wife's scolding leads to anger and violence:

> "Your wife, she'll scold you […]. She's been out asking her brother or friends for food to bring home, and as she's cooking she'll scold you: 'you don't do anything, you just sit there and I'm the one feeding you' […] You hear her belittling you, telling you you're lazy and worthless, and you know it's not your fault because there wasn't enough fertilizer, or there weren't any rains,

> and you didn't harvest enough. And you get angry and hit her" (M, FGD, Koupagou, Boukoumbe).

This explanation reveals the interplay between domestic violence and food insecurity as a result of the shame that men feel around their inability to fulfill their roles as breadwinners. Importantly, this participant recognizes the role of broader structural and environmental factors in farming, such as the inability to purchase fertilizer and lack of rains, which contribute to food insecurity. Some see working harder as a solution:

> "When there is hardship, no money, there is always fighting in the household, it's never peaceful […] as long as there is no food a family can never be at peace. Even when there is peace one day, tomorrow it will be war [fighting]. So you have to work hard in the fields, bring food home so that the peace can return" (M, FGD, Koupagou, Boukoumbe).

These arguments are exacerbated by alcohol misuse. Another participant asserted that drinking contributes to violence in the household: "hey! Men here drink to the point of drunkenness! And when they get drunk they come home to find no food to eat and they will hit their wife" (F, FGD, Kota, Natitingou). In particular, drinking on an empty stomach is an important contributor to intimate partner violence. A participant explains that:

> "When men eat before going out to drink they can't drink as much and they come home in better shape. But when there is nothing to eat and they go out drinking in order to help them to get through the day, quiet the hunger. But when they come home, it's true they might not be hungry, but it's a fight. What I mean is - he is acting foolishly, creating chaos in the home - which leads to fighting" (F, FGD, Koutchatanongou, Boukoumbe).

In this sense, hunger exacerbates the effects of alcohol, fueling tensions between couples. Another participant also explained that it is not only men's drinking that can lead to intimate partner violence. It is less socially acceptable for women to drink in this context, and a woman's drinking may also be cause for her husband to beat her. Intimate partner violence was reported to be a common occurrence that many

participants linked directly to the stress and tension caused by the persistent lack of food during the lean season.

5.6. Discussion

Overall, our results show that alcohol misuse is significantly influencing the functioning of farms, households, and relationships in Atacora. This relationship is presented in Figure 2. Our findings are consistent with Patts et al. (2017) theory, suggesting a bidirectional relationship between alcohol misuse use and household food insecurity. On one hand, farmers experiencing persistent food insecurity turn to alcohol to manage their hunger, anxiety and distress. On the other hand, alcohol when misused may undermine their ability to produce sufficient food, and may result in the diversion income away from spending on food. Each of these outcomes further deepens food insecurity, which has serious implications in a region with such high levels of rural poverty.

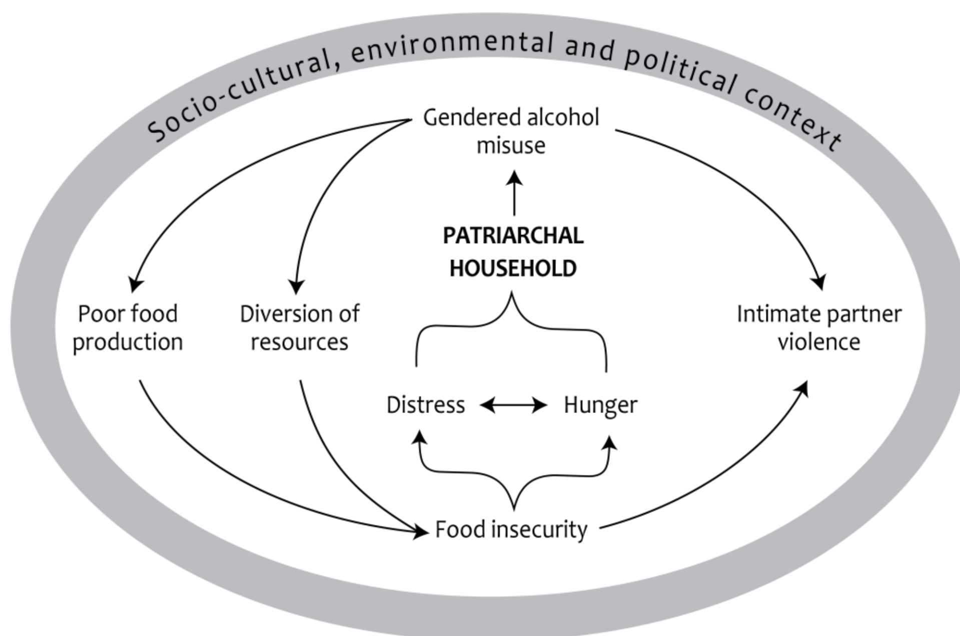

Figure 2 The relationship between alcohol misuse and food insecurity in Atacora, Benin

Our findings suggest that alcohol is misused in an attempt to manage two distinct effects of food insecurity, namely feelings of hunger as well as mental distress and anxiety. This is consistent with Chilton and Booth's (2007) differentiation between the dual experiences of food insecurity, which are "hunger of the body" or sensation of hunger, and "hunger of the mind", which refers to the feeling of distress and hopelessness that accompanies food insecurity. Our participants reported drinking to dampen the effects of hunger, particularly in situations where they reduce their own food intake to buffer other members of the household. It also became clear that alcohol, and in particular *sodabi*, is used in an attempt to overcome the elevated mental distress they experience as a result of food insecurity. These findings are also consistent with other SSA studies that suggest that household food insecurity leads to feelings of shame, desperation, anxiety, and distress (Abrahams et al., 2018; Atuoye & Luginaah, 2017; Cole & Tembo, 2011; Hadley & Patil, 2008), which in turn tends to reinforce alcohol misuse as a coping strategy (Luginaah & Dakubo, 2003; Mkandawire et al., 2011; Patts et al., 2017).

With regards to the deleterious outcomes of alcohol misuse in the study context, we suggest that both *tchoukoutou* and *sodabi* play a part. Because *tchoukoutou* has a lower alcohol content, a lower cost, and is easily brewed at home, participants frequently cited its consumption as a strategy to suppress and manage hunger during the lean season. While *tchoukoutou* has a relatively low alcohol content and is described as “filling”, it is important to highlight that it reportedly still “gets people drunk” if consumed in excess, and is used to this end. While the toxic effects of *sodabi* are evident, it was consistently identified as the ‘drink of choice’ to suppress anxiety and distress. We suggest that both types of alcohol may divert household spending, given that the social nature of drinking in this context means that

men purchase drinks for friends and neighbours. In this context therefore, cultural generosity may be putting pressure on individuals to deplete meagre household resources that could otherwise be used for purchasing food. Consistent with the literature from other parts of SSA, the liquidation of household resources will only deepen food insecurity through the diversion of household spending away from food (Regassa & Stoecker, 2012; Sirotin et al., 2012). Moreover, our findings show that the diversion of household resources increases arguments and tension between spouses that can lead to violence when women speak out against men's drinking behaviour; this dynamic will be further discussed below.

In addition to diverting household resources, alcohol misuse has undermined household labour arrangements. Overall, our findings point to the fact that men, who have traditionally been responsible for a larger share of agricultural labour, may be working less, or less effectively as a result of gendered alcohol misuse. Increasing alcohol misuse among men is occurring alongside a shift in social norms that have delineated gendered responsibilities in agrarian communities, wherein women are increasingly pushed into agricultural labour. Consistent with Luginaah (2008), the need for alcohol also means that some men are frequently negotiating for farm work that is remunerated with alcohol or in some cases food. In this study context, *sodabi* is provided in exchange for farm work, to the extent to which it is now expected by labourers. Invariably, the alcohol for farm work arrangement places the burden of labour on women, thereby further undermining food security (Luginaah, 2008). In addition to taking on more agricultural labour, women also reported taking on additional income generating activities as men divert household resources towards alcohol consumption. While there is a rich tradition of women's entrepreneurship and independence in SSA and Benin in particular (Heilbrunn, 1997; Lindsay, 2007), our

findings show that women are overwhelmed by the additional labour they have been taking on. This is consistent with the "feminization of responsibility" (Chant & Sweetman, 2012 p.521) seen throughout the Global South, wherein women are increasingly responsible for supporting their families. Moreover, this may impact children's health and nutrition, as unequal divisions of labour have been tied to early weaning in the study region (Somassè et al., 2016).

In exploring the relationship between alcohol misuse, household food insecurity, and changing labour roles, it becomes clear that the structure of the household itself shapes the gendered nature of drinking patterns in Atacora. This stems largely from the rigid division of responsibilities between men and women within the patriarchal family unit. While the breadwinner model in SSA was born out of colonialism and the introduction of wage labour (Lindsay, 2007), in agrarian settings this has taken shape insofar as men in SSA countries tend to be responsible for larger-scale agriculture (Carr, 2008). Hegemonic patriarchal norms have meant that men tend to be perceived as food providers or 'breadwinners', and women as caregivers (Clowes et al., 2013; Lindsay, 2007). This has important implications for who is 'blamed' for food insecurity in the household. Women in our study reported feeling disappointment in their husbands' ability to provide for them and their children, sometimes shaming or scolding them. We suggest that the construction of men as breadwinners in the study context may explain why alcohol misuse is used as a strategy to cope with distress among men, specifically the feelings of powerlessness, helplessness, inadequacy, and the associated stigma that men experience as a result of not fulfilling their masculine roles as the provider (Luginaah, 2008).

Adding complexity to this narrative, we find that some men reported drinking as strategy to ensure scarce food resources are eaten by their wives and children. This

finding challenges assumptions about motivations for drinking and reveals the complexity of how alcohol is used as a coping mechanism for food insecurity. Moreover, men's comments regarding constraints on their ability to fulfill their gendered obligations (e.g. lack of rains and effective government supports) illustrates the harmful nature of colonial discourse regarding African men's 'laziness' and 'irresponsibility' in agriculture, which is echoed in women's criticisms of their husbands with respect to alcohol misuse and household food insecurity (Dinani, 2019; Whitehead, 2000). This underscores how the rigid conceptualization of the patriarchal household is reductionist, harmful to men and women, and increasingly unsustainable in the face of social, economic, political and environmental change (Clowes et al., 2013).

Importantly, our findings support previous research that has demonstrated a link between food insecurity, alcohol use, and intimate partner violence. As explained by Lentz (2018), in food insecure contexts, tensions around food often drive disagreements within the household, and disputes about food provide an opportunity for a spouse looking to "engage in violence" (p.276). The World Food Program (2005) has also provided evidence that ration reductions in refugee camps in Tanzania resulted in increased intimate partner violence due to tensions around the distribution of scarce food resources. These findings are also consistent with the research that links hunger and food insecurity to increased anxiety, distress, impulsivity, aggression, dysfunctional relationships, and violence (Abrahams et al., 2018; Nettle, 2017). Further compounding this issue is the involvement of alcohol, as drunkenness and alcohol misuse has been shown to increase intimate partner violence (Abramsky et al., 2011). While recognizing that alcohol is neither necessary nor sufficient to cause violence (Leonard, 2005), for women in the Atacora region, the interaction

between alcohol misuse and intimate partner violence in food insecure situations is a serious concern.

This study had a number of limitations that must be considered when interpreting the study findings. Data was collected during the lean season in order to accurately capture experiences of scarcity, however, it may not be representative of other seasonal experiences of food security. Given social norms around alcohol consumption, both women and men may also have underreported their alcohol use, with men being particularly reticent to discuss their personal drinking behaviors. To mitigate this issue, participants were often asked about their knowledge of others' drinking behaviours, and focus groups were expressly chosen, as participants could keep one another accountable. Despite these limitations, this study presents important findings for policy consideration.

5.7. Conclusions

Taken together, these findings suggest a complex, cyclical and mutually reinforcing pattern wherein alcohol misuse drives food insecurity and other negative consequences (Figure 2). This case study in northwestern Benin may provide insight into the broader problem of alcohol misuse and food insecurity in the context of rural agricultural communities across SSA, given the many similarities in terms of social, cultural and economic contexts. It is our hope that the exploratory issues identified herein may serve as the basis upon which future research on the topic can be tested, verified, and advanced within and beyond the context of rural agricultural communities in SSA.

These findings also indicate that alcohol misuse provides an opportunity for intervention to help improve food insecurity, though without recognizing the mutually

reinforcing relationship between food insecurity and alcohol use, policy intervention in either area may be ineffective. In this context, municipality-level educational strategies that explain the risks of *sodabi* consumption, in particular, have not been entirely effective, given the powerful structural conditions that shape drinking behaviours. Therefore, there is a need to address the underlying systems and structural inequalities that influence alcohol misuse and food security. Programs and policies should focus on prevention by altering the conditions under which alcohol misuse has become problematic and enhancing rural communities' ability to meet their nutritional needs. For example, this could be accomplished through re-establishing agricultural subsidies and support programs, strengthening social protection mechanisms to reduce vulnerability (e.g. food banks, universal basic income, subsidized healthcare and other social services) and enhancing capacity to better manage social and economic risks. More broadly, there is a need to create better economic opportunities for both men and women outside of agriculture. Implementing these policies and programs may require a re-responsibilization of the state and a deeper collaboration between the municipal and regional governments, and development actors.

CHAPTER 6

Food insecurity and intimate partner violence in northwestern Benin

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A version of the chapter is under review in the *Journal of Development Studies*

6. FOOD INSECURITY AND INTIMATE PARTNER VIOLENCE IN NORTHWESTERN BENIN

Abstract

Alongside the social, physical and mental health consequences of food insecurity, a growing body of evidence suggests that food insecurity contributes to intimate partner violence (IPV). In Benin, the Atacora region is particularly affected by persistently high levels of IPV and food insecurity, which has led to concerns about food insecurity as a potential driver of IPV. Using cross-sectional data collected from 300 women in the Atacora region of Benin, we perform logistic regression and sequential modelling to examine the relationship between household food production and IPV. Our findings show that rates of IPV are concerningly high in Atacora when compared to national figures, and rates of IPV within SSA more broadly. After controlling for individual, household and community level factors, we find that food insecurity is positively associated with women's likelihood of experiencing physical or sexual violence (OR=2.09, $p<0.05$) and emotional violence (OR=2.65, $p<0.05$). We discuss our findings with respect to the potential pathways through which food insecurity is driving IPV, including food insecurity as a source of increased stress and as a factor which threatens agrarian masculinity in contexts such as Atacora. Additionally, we find that women's autonomy is an important sociocultural determinant of IPV in our study context, which represents an important opportunity for intervention. This study points to the need for food security and gender equity interventions as a way to reduce IPV in this context.

Keywords: Intimate partner violence (IPV), food (in)security, agrarian, farmers, Benin

6.1. Introduction

Global progress towards improving food security has been uneven, and levels of food insecurity remain much higher on the African continent than any other region of the world (FAO et al., 2020). Sub-Saharan Africa (SSA) in particular has seen rising levels of food insecurity over the past few years, a trend which is projected to continue, particularly with the anticipated effects of COVID-19 (FAO et al., 2020). Food security is said to exist when all people at all times have consistent access to sufficient, safe, nutritious, culturally-appropriate food in a manner that maintains human dignity and sustainability (FAO, 2019a; FAO et al., 2020). This definition is based on the concept that food security is temporal, culturally relevant, is a human right, and relies on four pillars, namely the availability, access, utilization and stability of food (FAO, 2019b, 2019a). The United Nations' Sustainable Development Goals (SDGs) reflect the need to address these concerning trends, calling for ending hunger, achieving food security and improved nutrition, and promoting sustainable agriculture globally (FAO, 2015).

The rural poor and, in particular, smallholder farmers in SSA are vulnerable to food insecurity (FAO et al., 2020). Successful subsistence farming can be a strategy to reduce food insecurity by improving the availability of and access to food in rural farming households, and by allowing farmers to hedge against market fluctuations, which reduces vulnerability to food insecurity (Adjimoti & Kwadzo, 2018; Baiphethi & Jacobs, 2009). The reality is however, that costly transportation, poor infrastructure, and the remote nature of many communities has meant that many rural households have no choice but to rely wholly or partially on their own production in order to meet their food needs (Adjimoti & Kwadzo, 2018). Contemporary socioeconomic and demographic trends, political challenges, and biophysical and

climatic changes including have contributed to worsening food insecurity in SSA (Apanovich & Mazur, 2018). Moreover, the legacy of colonialism and structural adjustments have greatly contributed to food insecurity through the removals of state supports for agriculture, alongside uneven global trade and corporatization of the food system (Bello, 2009; Weis, 2007). As a result, Benin like many SSA countries, is experiencing an "agrarian crisis" that is felt most keenly by subsistence farmers (Moseley et al., 2010 p.5778). Rural livelihoods have become increasingly difficult to maintain, and food insecurity remains persistent. Food insecurity thus represents an issue of social justice and remains a problem that represents significant societal, environmental, and health burdens (Pérez-Escamilla, 2017).

Alongside the social, physical and mental health consequences of food insecurity (Atuoye & Luginaah, 2017; Cole & Tembo, 2011; Hadley & Crooks, 2012; Hamelin et al., 1999), a modest but growing body of evidence has demonstrated that food insecurity is associated with increased risk of intimate partner violence (IPV) (Breiding et al., 2017; Buller et al., 2016; Coates et al., 2010; Diamond-Smith et al., 2019; Haque et al., 2020; Ricks et al., 2016). In SSA specifically, evidence from Eswatini, Ethiopia, Ivory Coast, Kenya and South Africa documents an association between food insecurity and increased risk of IPV (Andarge & Shiferaw, 2018; Bloom et al., 2020; Fong et al., 2016; Gibbs et al., 2018; Hatcher et al., 2019, 2020; Regassa, 2011). In Kenya for example, researchers found that food insecurity was associated with a higher risk of violence victimization among women and a greater risk of men perpetrating IPV (Hatcher et al., 2020). Each change in food insecurity category (mild, moderate, severe) was associated with a 41% increased risk of IPV (Hatcher et al., 2020).

IPV encompasses physical and sexual as well as emotional abuse, ranging from forceful physical contact to coercive behaviour and psychological aggression (Capaldi et al., 2012). While we recognize that IPV occurs between non-married intimate partners, this study specifically focused on domestic violence between married partners. In SSA, both IPV and food insecurity are issues that are widely prevalent; 56.8% of the SSA population experience severe or moderate food insecurity, and an estimated pooled prevalence from 14 SSA countries indicates that 44.4% percent of women have experienced IPV (FAO et al., 2020; Muluneh et al., 2020). The relationship between IPV and food security is concerning given that both of these issues have the largest impact on the most vulnerable populations (Capaldi et al., 2012; Ricks et al., 2016). Broadly, this reflects cultural norms in this context, where violence is used as a way of punishing transgression and reinforcing gender hierarchies and men's position of power (McCloskey et al., 2016; Morrell et al., 2012; Uthman et al., 2010). Importantly, these attitudes reflect the legacy of conflict and violence of colonialism, in addition to contemporary economic and political change that has undermined men's positions (McCloskey et al., 2016). In addition to being an issue of human rights, IPV in the SSA context has important implications for women's psychological and reproductive health (McCloskey et al., 2016).

With this study, we aim to contribute to the growing body of literature on food insecurity and IPV in SSA and in particular Benin. Both IPV and food insecurity represent urgent problems in need of effective policy intervention, particularly among subsistence farmers in Atacora who remain vulnerable to food insecurity and IPV (DHS, 2019; WFP, 2018). This will require better place-specific understandings of relationship between the food insecurity and IPV, which is the aim of this study. Moreover, to the best of our knowledge farm-level variables have not been a focus of

studies on IPV and food insecurity. This is an important gap given the importance of farming to food security in subsistence farming contexts, and thus we include number of crops and farm size in our models.

6.2. Theoretical framework

We draw upon a social ecological model applied to IPV to shape our analysis in a way that considers interacting factors operating at the individual, familial, community and societal levels. At the core of the social ecological model is the idea that no single factor can explain why some women are at greater risk of experiencing IPV (Tekkas Kerman & Betrus, 2020). Rather, IPV outcomes reflect an interplay between multiple factors operating at various different levels (Heise, 1998; Terry, 2014). For example, the sociocultural and political environment (societal level factors) in a given place may shape gender relations insofar as they normalize women's inferiority and institutionalize sexism. These unequal gendered power dynamics may be replicated within the household, with men exercising domestic authority and controlling decision-making (e.g. around finances), which places women at greater risk of IVP (Heise, 1998). However, a woman's risk of experiencing IPV may also be shaped by other factors such as her level of education (individual level), the level of conflict within her marriage (familial level), or her experience of poverty (community level), all of which are factors that have also been shown to increase risk of IPV (Heise, 1998; Tekkas Kerman & Betrus, 2020). This framework takes a comprehensive approach to understanding a multiplicity of IPV risk factors, which lends itself well to the development of more effective prevention measures and interventions (Terry, 2014).

6.3. The study context

The goal of improving food security is far from being met in Benin, where chronic seasonal food insecurity persists due to high levels of poverty and the rising price of dietary staples (WFP, 2014). Agriculture is the primary economic sector in Benin, and nearly half (45%) of Benin's population of 9.9 million people live in rural agricultural communities, which are most greatly affected by food insecurity (Beerlandt et al., 2014; WFP, 2017). Despite decades of policy attention, food insecurity in Benin results in a seasonal struggle for survival for many subsistence-oriented smallholder farmers who rely on rain-fed agriculture (Beerlandt et al., 2014; WFP, 2017, 2018). With respect to food insecurity in Benin, the Atacora region in the northwest is one of the poorest regions and most food insecure regions of Benin, and while the majority of households engage in agriculture (86%) they also spend the highest proportions of their income on food (WFP, 2014, 2018). Subsistence farmers are among those most severely impacted by food insecurity in Benin, with 62% reporting some level of food insecurity (WFP, 2017). Within Atacora, the municipalities of Boukoumbe, Toucountouna, and Natitingou have the highest levels of food insecurity: 46.3%, 29.8%, and 27.8% severe and moderate food insecurity, respectively (WFP, 2018). Among other factors discussed above, outmigration and environmental change has contributed to to the worsening levels of food insecurity reported in the region (Beerlandt et al., 2014; Fogny & Trentmann, 2016).

Women farmers in Benin, and particularly those in our study area, constitute a vulnerable population both due to worsening poverty and food insecurity, and because of widespread violence against women in the country. While there is a legislative and regulatory framework in Benin that aims to protect the rights of vulnerable people such as women, violence against women remains prevalent and widely accepted, particularly among women (Kpozehouen et al., 2018; Uthman et al., 2009). Data from

Benin suggests that 42% of women aged 14-49 have experienced physical, emotional, and/or sexual IPV in their lifetime (DHS, 2019), and women living in poorer and more rural areas are at disproportionately affected (Kpozehouen et al., 2018). The Atacora region of Benin has one of the highest rates of IPV in country, with 51% of women having experienced physical, emotional, and/or sexual IPV in their lifetime (DHS, 2019). The Atacora region is therefore well-suited for the study of food insecurity and IPV, given the high prevalence of both issues.

6.4. Methods

6.4.1. Data and sampling

We used cross-sectional data collected from a diverse sample of 300 women in the Atacora region of Benin, as part of a larger study that interviewed male-female married couples to explore intrahousehold gender dynamics and foreground women's experiences of food insecurity (Cole & Tembo, 2011; Posel, 2001; Ragetlie et al., 2021). Data collection occurred from July through September 2019, which coincided with the end of the lean season and the beginning of harvest season in the region. As discussed above, the municipalities of Boukoumbe, Toucountouna and Natitingou were selected for inclusion in the study given their high levels of food insecurity (WFP, 2018). Within each municipality, villages were randomly selected in number proportionally to population size in each municipality. In total, 30 villages were selected including 5 villages in Toucountouna, 14 villages in Natitingou, and 11 villages in Boukoumbe. In each the municipalities, 10 households were selected randomly to participate in the survey.

In each household, women were interviewed separately by same-sex enumerators. Given the cultural context, this approach aimed to provide participants

the freedom to express their individual views and reduce the influence household power dynamics (e.g. silencing of a partner) (Valentine, 1999). In accordance with local customs, first wives were interviewed in polygamist households. Data collection was undertaken by six university graduates experienced with survey data collection, given their familiarity with the geography, culture, and languages spoken in the region (French, Waama, Ditammari, and Dendi). Prior to data collection, enumerators were trained on the survey instrument, including pre-tests in the field. Debriefings were held several times a week in order to ensure that the surveys were administered consistently. Ethics clearance for the study was obtained from the Western Office of Human Research Ethics and the National Ethics Committee for Health Research in Benin (CNERS) (CR N°25 on 10/07/2019).

6.4.1.1. Dependent variables

Intimate partner violence (IPV) is grouped into two categories: physical or sexual IPV and emotional IPV. Following Conroy et al. (2019) we have included sexual violence as part of physical violence, as distinguishing between physical and sexual violence in this sociocultural context can blurred by the inherently deep-seated beliefs about socially desirable responses. These variables were constructed from 12-item tool adapted from the Demographic Health Survey. For physical violence, women were asked whether they have ever experienced the following: 1) slapping; 2) twisting their arm or pulling their hair; 3) pushing, shaking, or having something thrown at them; 4) punching; 5) kicking, dragging, or beating; 6) choking or burning; and/or, 7) threatening or attacking them with a weapon. For sexual violence, women were asked whether their partners: 1) physically forced them to have sexual intercourse; and/or, 2) forced them to engage in any other sexual acts when they did not want to. Emotional violence was measured using three questions, which asked women whether their

partners ever: 1) humiliated them in front of others; 2) threatened them or loved ones; and/or, 3) insulted or demeaned them. Guided by previous research (Conroy et al., 2019), a dichotomous variable was created for physical or sexual and emotional IPV. Respondents were coded as 'ever experienced intimate partner violence' if they had any affirmative response to the questions (0=not ever experienced violence; 1=ever experienced violence).

6.4.1.2. Independent variable

To measure food insecurity, we adapted the Household Food insecurity Access Scale (HFIAS), which is a previously tested and widely applied tool for measuring food insecurity within SSA and rural settings (Atuoye et al., 2019; Becquey et al., 2010; Coates et al., 2007; Gebreyesus et al., 2015; Knueppel et al., 2010). This in an 18-item tool composed of nine 'occurrence' questions and nine 'frequency-of-occurrence' (rarely, sometimes, or often) follow up questions that aim to capture different aspects of food insecurity, including uncertainty regarding food supply, insufficient quantity and quality of food, as well as the consequences of being food insecure (Coates et al., 2007). While the HFIAS was developed to measure food insecurity at the household level, we adapted the questions in order to capture individual food insecurity, asking respondents to report their personal experience rather than the experiences of all members in the household. For example, respondents in our study were asked "in the past four weeks, were you unable to eat the kinds of foods you preferred because of a lack of resources", rather than: "in the past four weeks, were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources". This reflected our intent to move beyond the essentialist black box model of household-level data collection, which fails to adequately account for intrahousehold variation and often obfuscates women's

experiences (Baruah, 2009; Posel, 2001). This is particularly relevant in Benin, where current reports on food insecurity in rely largely on information collected from male household heads (WFP, 2018).

We calculated the Household Food Insecurity Access categories according to Coates et al.'s (2007) recommendations, whereby households are classified according to their most severe response. The following cut-offs were used to assign each respondent to one of the following categories: 1=food secure, 2=mildly food insecure, 3=moderately food insecure, and 4=severely food insecure. In our sample there was a low frequency of respondents categorized in the mild category. Given their conceptual similarity as mid-level categories within the index, we followed the method of Atuoye et al. (2019) and combined the categories of mildly and moderately food insecure, recoding into one category of 'moderately food insecure'.

6.4.1.3. Control variables

To account for potential confounding factors, we include two blocks of control variables informed by the social ecological model for violence against women (Tekkas Kerman & Betrus, 2020). In our first block, we include 'individual and household-level' factors such as education (0=no education; 1=primary education; 2=secondary education or higher), age (0=15-24; 1=25-54; 2=55 or older), number of dependants (continuous scale), farm size (0=less than 3 hectares; 1=3 hectares or more), and number of crop varieties grown (continuous scale). In our second block, we also control for 'community- and society-level' factors such as women's autonomy (continuous scale), region of residence (0=Boukoumbe; 1=Natitingou; 2=Toucountouna), ethnicity (0=Waama; 1=Ditammari; 2=other), religion (0=Animism/Vodoun; 1=Christian; 2=other), and household wealth (0=rich; 1=middle; 2=poor). We compiled household level wealth using an asset index adapted from the Demographic and Health Survey

(DHS), and computed the variable using principle component analysis. The variable for women's autonomy was compiled as a scale variable using 10 binary items adapted from the DHS; if any question was answered as 'no', women were coded as having less autonomy. Questions included themes of land and property ownership, decision-making autonomy, and extent of freedom of movement autonomy.

6.4.2. Statistical analysis

There are two different analyses in this study. First, we employed univariate analysis to understand the characteristics of analytical sample. Second, we used regression technique to understand the relationship between the dependent and independent variables. For regression analysis, we chose logistic regression technique because the dependent variables are all dichotomous in nature. We built two models sequentially for physical or sexual IPV and for emotional IPV. Within Model 1, we explore the bivariate relationship between the dependent and independent variables, while 'individual- and household-level' factors and 'community- and society-level' factors are further added in Models 2 and 3 respectively. For meaningful interpretations, we report findings with odds ratios (ORs). ORs larger than 1 indicate that women were more likely to experience physical, sexual and emotional IPV, while those smaller than 1 imply lower odds of experiencing IPV.

6.5. Results

Table 3 shows the findings from univariate analysis. We find that 80% of women in our sample have experienced any form of IPV, with 62% of women reporting physical or sexual violence and 75% reporting emotional violence. Only 22% of our respondents were food secure, with 38% reporting moderate food security, and 40% reporting severe food insecurity. The majority of women in this sample (74%) reported having no formal education, and living in households with an average of 5.2 dependants. On average,

respondents reported growing 6.7 different crops, with almost half (48%) of respondents cultivating less than 3 acres of land. Most respondents resided in Natitingou (47%) and Boukoumbe (37%), with only 16% residing in Toucountouna. Most of the respondents were of the Ditammari (61%) and Waama (29%) ethnicities, and most (54%) practiced animism (vodoun), followed by Christianity (33%).

Table 3 Univariate analysis of the dependent and independent variables

	Percentage
Physical or sexual violence	
No	38
Yes	62
Emotional violence	
No	25
Yes	75
Food insecurity status	
Food secure	22
Moderately food insecure	38
Severely food insecure	40
Education	
No education	74
Primary education	21
Secondary education+	5
Age	
15-24	36
25-54	50
55+	14
Number of crops[†]	6.74
Number of dependents[†]	5.23
Farm size	
Less than 3 hectares	48
3 hectares or more	52
Women's autonomy[†]	15.50
Household wealth	
Wealthiest	34
Middle	33
Poorest	33
Region of residence	
Boukoumbe	37
Natitingou	47
Toucountouna	16
Ethnicity	
Waama	29
Ditammari	61
Other	10
Religion	
Animism/Vodoun	54
Christian	33
Other	13

In Table 4, the results of the logistic regression analysis predicting physical or sexual IPV, and emotional IPV are presented. With respect to women's experience of physical or sexual violence, Model 1 indicates that at the bivariate level, severely food insecure women are more likely to experience physical violence (OR=2.29, $p<0.01$) than their food secure counterparts. This relationship remained statistically significant after accounting for 'individual- and household-level' factors as well as 'community- and society-level' factors in Models 2 (OR=2.23, $p<0.05$) and 3 respectively (OR=2.09, $p<0.05$). In addition to food insecurity, there are several control variables that are significantly associated with physical or sexual violence. We find that number of crops that women cultivate is predictive of physical or sexual violence, with a greater number of crops indicating a greater likelihood of experiencing IPV (OR=1.18, $p<0.05$). In Model 2, women with larger land holdings were also less likely to experience physical or emotional violence, however this relationship is no longer significant with the addition of community and society level-factors in Model 3, specifically women's autonomy. In Model 3 we find that women's autonomy is negatively associated with likelihood of experiencing physical or emotional IPV (OR=0.91, $p<0.1$). Finally, Model 3 indicates that Christian women are less likely to experience physical or emotional violence when compared to their counterparts with more traditional religions (OR=0.57, $p<0.1$).

With respect to emotional violence, the bivariate results in Model 1 (Table 4), indicate that women who are severely food insecure are more likely to experience emotional violence than food secure women (OR=3.06, $p<0.01$), as are women who are moderately food insecure (OR=1.98, $p<0.05$). With the addition of individual, household, community, and societal level factors, we find that the relationship remains

significant among severely food insecure women in Model 2 (OR=2.18, $p<0.05$) and Model 3 (OR=2.65, $p<0.05$). With the addition of control variables however, there is no longer a significant difference in risk of emotional violence between moderately food insecure women and food secure women. In Model 2, we find that women with secondary education were less likely to experience emotional violence than their counterparts with no education (OR=0.25, $p<0.05$), however in Model 3, when we accounted for community and societal level factors, this relationship was completely attenuated. Similarly, the positive association between number of dependants and emotional violence (OR=1.10, $p<0.05$) was completely attenuated by the inclusion of community and societal level factors in Model 3. Age was also significantly associated with risk of IPV in both Models 2 (OR=2.07, $p<0.05$) and 3 (OR=4.83, $p<0.01$), insofar as women in the middle age category are more likely to experience emotional IPV than their younger counterparts. With respect to farm-level factors, we find no evidence that farm size is associated with likelihood of experiencing emotional IPV. We find evidence that cultivating a greater numbers of crops is associated with women's likelihood of experiencing emotional IPV; with the addition of community and societal level factors into Model 3, we find the relationship between number of crops and emotional violence changed direction, from negative (OR=0.89, $p<0.05$) to a positive (OR=1.17, $p<0.05$) relationship. This can be attributed to the addition of the wealth variable in Model 3. Women in the middle wealth category are less likely to experience emotional IPV than the wealthiest women (OR=0.43, $p<0.1$). We also find that women with greater autonomy are less likely to experience emotional IPV (OR=0.78, $p<0.01$), as seen in Model 3. Finally, we find evidence of some regional variation, as women living in Toucountouna were more likely to experience emotional violence than women living in Boukoumbe (OR=3.26, $p<0.1$).

Table 4 Logistic regression analysis predicting IPV among women in Benin (n=300)

	Physical or sexual			Emotional		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
	OR (SE)	OR (SE)	OR (SE)	OR (SE)	OR (SE)	OR (SE)
Food insecurity status						
Food secure	1.00	1.00	1.00	1.00	1.00	1.00
Moderately food insecure	1.53 (0.47)	1.65 (0.57)	1.29 (0.47)	1.98 (0.64)**	1.36 (0.51)	1.25 (0.50)
Severely food insecure	2.29 (0.72)***	2.23 (0.75)**	2.09 (0.74)**	3.06 (1.05)***	2.18 (0.81)**	2.65 (1.06)**
Education						
No education		1.00	1.00		1.00	1.00
Primary education		0.64 (0.20)	0.72 (0.24)		1.48 (0.55)	1.95 (0.89)
Secondary education+		0.44 (0.26)	0.51 (0.31)		0.25 (0.18)**	0.46 (0.38)
Age						
15-24		1.00	1.00		1.00	1.00
25-54		1.18 (0.35)	1.27 (0.41)		2.07 (0.75)**	4.83 (2.08)***
55+		1.52 (1.01)	1.75 (1.17)		0.56 (0.34)	1.23 (0.76)
Number of crops		1.07 (0.06)	1.18 (0.08)**		0.89 (0.05)**	1.17 (0.09)**
Number of dependents		1.07 (0.05)	1.04 (0.05)		1.10 (0.06)*	1.03 (0.05)
Farm size						
< 3 hectares		1.00	1.00		1.00	1.00
≥ 3 hectares		0.61 (0.18)*	0.67 (0.21)		0.83 (0.29)	1.42 (0.51)
Women's autonomy			0.91 (0.05)*			0.78 (0.05)***
Household wealth						
Wealthiest			1.00			1.00
Middle			1.12 (0.43)			0.43 (0.20)*
Poorest			0.58 (0.23)			0.48 (0.24)
Region of residence						
Boukoumbe			1.00			1.00
Natitingou			1.27 (0.43)			1.22 (0.49)
Toucountouna			1.04 (0.52)			3.26 (2.02)*
Ethnicity						
Otammari			1.00			1.00
Waama			1.16 (0.46)			1.67 (0.79)

Other	1.34 (0.58)	1.31 (0.75)
Religion		
Animism/vodoun	1.00	1.00
Christian	0.57 (0.19)*	2.02 (0.87)
Other	1.21 (0.55)	2.12 (1.09)

*p<0.1, **p<0.05, ***p<0.01

6.6. Discussion

The rates of physical/sexual and emotional IPV reported in our study are consistent with previous research in Atacora where rates of IPV remain concerningly high comparatively with national figures. Recently, the Benin DHS (2019) reported that 42% of married women at the national level, and 51% of married women in Atacora have experienced at least one form of IPV, which represents the second highest regional prevalence of IPV in the country. This reflects broader regional trends within SSA, where on average, researchers have found that between 36% and 46% women have experienced one form of IPV within their lifetime (McClintock et al., 2019; McCloskey et al., 2016). In our study however, 80% of women reported experiencing at least one from of IPV, signalling the urgency of this crisis among smallholder farmers in the study region. In particular, the rate of emotional violence is very high among women in our study, which reflects similar to findings from the neighbouring countries of Nigeria and Togo, where emotional violence is the most common form of IPV (Muluneh et al., 2020; Okenwa et al., 2009; Ragetlie et al., 2020; Titilayo et al., 2017).

Our findings are consistent with evidence from SSA that shows that food insecurity is associated with increased risk of IPV (Andarge & Shiferaw, 2018; Bloom et al., 2020; Fong et al., 2016; Gibbs et al., 2018; Hatcher et al., 2019, 2020; Regassa, 2011). Based on our findings and that of previous research, there are some likely explanations as to why food insecurity increases women's likelihood of experiencing IPV in Benin. Broadly, stress has been found to contribute to IPV (Capaldi et al., 2012), and researchers have suggested that stress, tension and marital conflict is an important pathway through which food insecurity specifically, contributes to IPV (Andarge & Shiferaw, 2018; Buller et al., 2016; Haque et al.,

2020). For example, research in Ethiopia suggests the association between food insecurity and increased IPV can be explained by increased marital conflict, driven by the fear, hopelessness, and frustration experienced by men who are unable to fulfill their role as household breadwinner (Andarge & Shiferaw, 2018; Regassa, 2011). In addition, men often perpetrate violence when their masculine identity is threatened and they are unable to fulfill societal expectations for manhood (Jewkes, 2002). In agrarian contexts, masculinity is linked to the notions of land, productivity, and food provisioning, and failure to fulfill this role as household breadwinner results in stigmatization and emasculation (Adinkrah, 2012; Perry, 2005). This may be another important pathway through which food insecurity drives IPV in farming households, where men's sense of identity and position of power within the household have been undermined. Within this paradigm, women may also blame their partners for not fulfilling their gendered responsibilities, thereby provoking conflict that results in violence (Andarge & Shiferaw, 2018). Additionally, food insecure women may also be more likely to stay in abusive relationships in order to ensure access to food (Diamond-Smith et al., 2019). Taken together, these pathways may explain why food insecurity is a driver of IPV in food insecure agrarian contexts. To the best of our knowledge, no previous studies have included farm-level variables in analyses of food security and IPV in SSA, despite the importance of farming in determining food insecurity in subsistence farming contexts (Adjimoti & Kwadzo, 2018; FAO et al., 2020; Mango et al., 2014). For subsistence farmers, both availability of and access to food are determined, in large part, through food production (FAO et al., 2020). Given that IPV may result from increased stress as well as challenges to agrarian masculinity, and given the importance of farming in determining food security, the exclusion of farm-level factors in studies on food security and IPV in rural SSA

represent an important gap in the literature. Our findings show that, after controlling for confounding factors, women who grow a greater variety of crops are more likely to experience physical or sexual, and emotional IPV. Increasing crop diversity is a well-known strategy to manage risk and increase resiliency for smallholder farmers (Bellon et al., 2020), a strategy that may be prevalent among more vulnerable women, who are also at greater risk of IPV. Interestingly, we also find that the addition of women's autonomy into our analysis fully explains the association between farm size and physical or sexual IPV.

With respect to both physical/sexual and emotional IPV, our results indicate that greater autonomy among women is negatively associated with experiencing violence. While there is mixed evidence that women's autonomy reduces the likelihood of experiencing IPV (Eswaran & Malhotra, 2011; Zegenhagen et al., 2019), our findings are consistent with the body of evidence demonstrating that greater autonomy is protective against IPV (Andarge & Shiferaw, 2018; Benebo et al., 2018; Lawoko et al., 2007; Rahman et al., 2013; Yilmaz, 2018). As Rahman et al. (2013) explains, high levels of autonomy over finances, decision-making and mobility are indicative of women's ability to exercise control and choice, meaning they may be more likely to challenge the acceptability of IPV and expect better treatment from their partner. This is consistent with feminist theory, which supports the idea that autonomy over finances and assets improves women's bargaining power and provides them with the option to leave the marriage, resulting in less vulnerability to violence (Goode, 1971; Schuler & Nazneen, 2018). Our findings highlight women's autonomy as important sociocultural determinant of IPV in our study context, which represents an important opportunity for intervention.

Although not the central focus of this study, several other control variables were associated with women's likelihood of experiencing IPV in this context. While age is a known protective factor for IPV (Capaldi et al., 2012), we find that age is significantly associated only with risk of emotional IPV in this context. Specifically, women aged 25-54 are more likely to experience emotional IPV than younger women. As explained by Ahinkorah, Dickson, & Seidu (2018), this is likely because by virtue of age, younger women have had a shorter duration of exposure to IPV which translates to lower risk. Moreover, few women in our sample were aged 55 years or older, which may explain why this group was not found to be significantly more likely to experience IPV than the youngest women. We also find that women of moderate wealth are less likely to experience emotional IPV than the richest women. While this may contradict widely held assumptions that wealthier women are less vulnerable, our findings are consistent with feminist research that indicates the opposite. As explained by Baruah (2009), poverty cannot be equated with vulnerability when it comes to gender equity, and researchers have shown that women in wealthier households may have improved material conditions, but experience increased vulnerability and subordination (Jackson, 1996; Razavi, 1997). This is consistent with our finding that poorer women, who may exercise greater autonomy as a matter of necessity, are less vulnerable to IPV than their wealthier counterparts.

We acknowledge several limitations to this study. It is possible given the use of the HFIAS, that our findings report higher prevalence estimates of food insecurity than other measurement tools, both as a result of the classification method and because the HFIAS is wider in range, capturing both severe and less severe aspects of food insecurity, such as food preferences and uncertainty and anxiety around food supply (Maxwell et al., 2014). Inconsistency between measurement tools must

therefore be considered when comparing our findings to data collected using other measures of food insecurity. Additionally, the interpretation of our findings are limited to statistical associations, as it is difficult to infer causality between the dependent and independent variables due to the cross-sectional nature of the data. Specifically, the HFIAS as a measure of food insecurity within the four weeks preceding the time of data collection, whereas we measure whether women have ever experienced of IPV with their partner; therefore, time-order cannot be established. Considering these limitations, we recommend future research take a longitudinal approach, complemented by in-depth qualitative research to explore the complexities of food security and IPV in agrarian contexts in SSA.

6.7. Conclusions

Importantly, our findings highlight IPV as a widespread issue in the Atacora region of Benin, which underscores the urgency of implementing more effective strategies to reduce its incidence. Food insecurity, as a source of vulnerability, increased stress, and an indicator of threatened masculinity, may increase the likelihood that women experience IPV in farming contexts such as Atacora. It is necessary here to emphasize that IPV is a structural issue, and occurs in both food secure and food insecure contexts. Violence against women is embedded in the structure of our societies insofar as it constitutes a means of enforcing the patriarchy, which shapes gender inequality and sociocultural norms around violence (Kelly, 2011). While our findings indicate that food insecure women represent a particularly vulnerable group, simply addressing food insecurity in isolation will not resolve IPV. The paucity of research on interventions that specifically target food insecurity as a means of reducing IPV (Diamond-Smith et al., 2019) is likely reflective of this.

Indeed, the explanatory pathways discussed herein suggest that interventions must account for community and societal level factors, and thus must be multipronged. What these findings highlight is that food insecurity constitutes an important part of the social ecological model of IPV in agrarian SSA. While interventions that improve economic stability and household and food security are important, those that combine the former with gender equity components will likely be more effective (Gupta et al., 2013). Specifically, addressing the sociocultural environment within which violence has been normalized will be essential. An important consideration will be ensuring that interventions do not further contribute to IPV as a result of husbands' backlash, as evidence shows that women often face backlash to interventions as partners feel threatened and use violence in efforts to maintain control and assert their dominance (Angelucci & Heath, 2020; Eswaran & Malhotra, 2011; Rahman et al., 2013). Therefore, involving men in the efforts to reduce IPV is also of the utmost importance, working towards shifting attitudes around IPV by engaging in conversations around gender, identity, responsibility, and the social expectations of manhood within this context.

CHAPTER 7

7. SUMMARY AND CONCLUSIONS

7.1. Introduction

Shaped by my experiences in Benin, my Ph.D. research was motivated by the need to understand how gender shapes food insecurity for farmers in contemporary agrarian SSA. Researchers have documented women's disadvantage with respect to food security and explored why this disparity persists, and this has frequently pointed to the need to improve gender equality (Broussard, 2019; Njuki, Parkins, et al., 2016). In this research, I have engaged with and challenged the gender norms and institutions that reify enduring inequalities. Specifically, I have focused on the agrarian household as a site wherein gender identity and social norms shape experiences of food insecurity, together with contextualizing the micro-level dynamics within the broader context of post-colonial Benin. The conceptual framework representing this relationship is depicted in Figure 3.

This final chapter identifies the major empirical contributions of my dissertation with respect to each of the three central objectives herein. I also outline the theoretical and methodological contributions of the dissertation, followed by a discussion of the important policy implications the research. To conclude, I discuss several limitations of this study and suggest corresponding directions for future research.

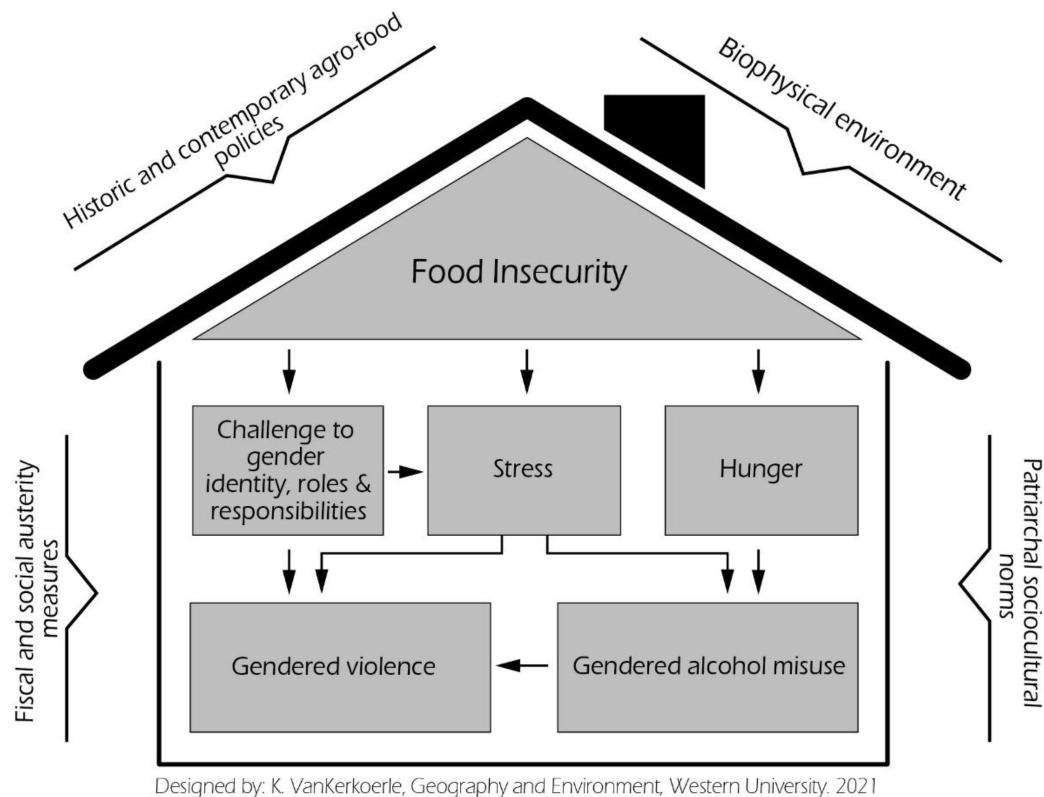

Figure 3 Conceptual framework illustrating how food insecurity plays out within the agrarian household

7.2. Empirical contributions

Each of the three objectives around which I have framed this research correspond to one of the three manuscripts presented in Chapters 4, 5 and 6. In the following section I will identify how each manuscript fulfills the research objectives presented in Chapter 1 and summarize the key empirical contributions of each manuscript.

7.2.1. Research objective 1

My first research objective was to examine how the construction of gender identity and intrahousehold gender dynamics shape and are shaped by food insecurity within the agrarian household. The manuscript presented in Chapter 4 entitled *Undermining masculinity and contesting the conjugal contract: Food insecurity and the gendered*

division of labour in northwestern Benin responds directly to this objective by examining how gendered identity and gender norms play out within food insecure households.

There are several key empirical contributions that are made in this manuscript. Firstly, I contribute to the growing literature on men and masculinities within gender studies, which is a strategic yet underdeveloped areas of feminist research that is essential in order to understand why women have been marginalized and to correct those disadvantages (Connell, 2014b). Research on men and masculinities has been lacking in SSA, and in particular within rural and francophone SSA contexts, despite the rigid and entrenched nature of gender norms in these places (Badstue et al., 2021; Broqua & Doquet, 2013; Morrell & Ouzgane, 2005). With this paper I add place-specific, nuanced, and historically grounded evidence that agrarian masculinity in post-colonial Benin is constructed around notions of food provisioning, farming, strength and perseverance through adversity. When men's identities and roles as the household breadwinner are undermined by food insecurity, they experience deeply destructive feelings of shame and inadequacy.

Secondly, I find that women participate actively in the co-construction of hegemonic masculine ideals in this context, largely in response to their discontent with the gendered division of labour. Strict gender norms that dictate what is considered acceptable men's and women's work in this context has meant that men are not shouldering an equal burden of labour, particularly given the seasonal nature of farming in this region. In the face of scarcity, women tend to take on menial work while men, often unsuccessfully, search for waged labour. Food insecurity therefore poses a challenge to the delicate balance of women's autonomy and men's responsibility agreed upon within the marriage (Kandiyoti, 1988). In appealing to

hegemonic gender norms, women are contesting this unequal division of labour, and thereby challenging established "patriarchal conjugal relations" (Dinani, 2019 p.579). In order to do so however, they reify hegemonic masculinities that place men as household breadwinners, ultimately shaming and blaming their husbands for food insecurity. Thus, wives want their husbands to uphold their half of the "patriarchal bargain", but they do not trade their submissiveness in return (Kandiyoti, 1988). The tensions and arguments arising during the fraught process of renegotiating gender roles, and contesting the patriarchy itself (Perry, 2005), often devolve into violence as men try to reassert their dominance and masculinity. Empirically, these findings provide new insight with respect to how intertwined the nature of violence and food insecurity in this context, and how deeply gendered identity and relations are embedded in Beninese society and woven into agrarian livelihoods.

7.2.2. Research objective 2

My second research objective was to describe the gendered strategies that men and women employ to alleviate food insecurity. With the manuscript presented in Chapter 5 entitled *Community perceptions of gendered alcohol misuse in a food insecure context: The case of northwestern Benin*, I choose to focus specifically on one of the more problematic and gendered coping behaviours that emerged during data collection and analysis.

In this manuscript, I present several key empirical findings. While the concept that alcohol misuse is associated with food insecurity has begun to emerge in the literature (Abrahams et al., 2018; Sirotin et al., 2012), much of the research tends to be quantitative and therefore limited to statistical associations. As such, few studies have explored *how* and *why* alcohol misuse is associated with food insecurity,

particularly in rural agrarian contexts (Atuoye & Luginaah, 2017; Patts et al., 2017; Regassa & Stoecker, 2012). With this manuscript, I present evidence that hunger and distress represent dual drivers of alcohol misuse as a maladaptive coping response. These findings build on work by Chilton and Booth (2007) to demonstrate the multifaceted nature of food insecurity insofar as its physical and psychological impacts. My research also contributes to a better understanding of the far reaching consequences of alcohol misuse in agrarian SSA, which include diverting household resources and interfering with farm work, which may further diminish food insecurity and contribute to violence within the household. Taken together, these findings provide important insight into how food insecurity is damaging the social fabric of communities in the study context.

Further, existing studies have also tended to focus on alcohol use as a predictor of food insecurity (Regassa & Stoecker, 2012), despite Patts' et al. (2017) theory that the relationship is bidirectional. In this manuscript, I emphasize the importance of alcohol use as a maladaptive coping response to food insecurity, in addition to providing evidence of how food insecurity is further undermined my alcohol misuse in agrarian SSA contexts. Providing empirical evidence of this bidirectional relationship is an important contribution that improve our understanding of the driving forces behind food insecurity and alcohol use.

Additionally, there are inconsistencies in the literature with regards to the gendered nature of food insecurity and alcohol misuse in varying SSA countries (Eaton et al., 2014; Parcesepe et al., 2019; Regassa & Stoecker, 2012). These discrepancies point to the importance of place-specific factors that may play a role in explaining this relationship (Pellowski et al., 2018), such as gender dynamics. Our discussion of men's and women's alcohol use within the context of gendered social

norms and the division of labour highlights the importance of gender in shaping coping responses to food insecurity. In the context of scarcity, alcohol misuse, and an overarching discontent with the gendered division of labour, arguments and violence within the household may arise.

7.2.3. Research objective 3

Related to objective 3, I aim to test the relationship between food insecurity and IPV at the regional level and identity any demographic, social or economic factors that may explain it. This is the focus of Chapter 6, entitled *Food insecurity and intimate partner violence among married women in northwestern Benin.* In this manuscript, I present evidence that IPV represents a serious gendered consequence of food insecurity. As mentioned previously, the issue of IPV in relation to food insecurity is a thread that runs throughout my dissertation in Chapters 4 and 5 with respect to gendered norms, the division of labour, and alcohol misuse.

This manuscript makes several contributions to the empirical literature in Benin. First, the findings reveal the concerningly high prevalence of IPV among peasant farmers in northwestern Benin. Alarmingly, we find that 80% of women in our sample have experienced at least one form of IPV, a rate much higher than among the general population in Atacora, where current reports indicate that 51% of women have experienced physical, sexual or emotional IPV (DHS, 2019). The relationship between food insecurity and IPV, established herein, may account for these concerning figures, as peasant farmers are more likely to be food insecure in this context (FAO et al., 2020). Second, the findings confirm the importance of women's autonomy as a sociocultural determinant of IPV in the study context. Specifically, the results indicate that greater autonomy among women is negatively associated with

experiencing physical/sexual and emotional IPV. These findings contribute to the discussion as to whether women's increased autonomy is protective against IPV, and are congruent with literature from other contexts within and outside of SSA (Andarge & Shiferaw, 2018; Benebo et al., 2018; Lawoko et al., 2007; Rahman et al., 2013; Yilmaz, 2018).

Third, the findings identify that women farmers who are food insecure are more likely to experience IPV in northwestern Benin. As is widely recognized by critical scholars and, in particular geographers, SSA is not monolithic despite the tendency to conceptualize it as such (Mercer et al., 2003). At the national and indeed sub-national levels, there are unique historic and contemporary sociocultural, political, and economic conditions and processes that operate at multiple levels to shape a given place and the human experiences that occur therein. As established above, place-based approaches that foreground structural analyses are particularly important to the study of gendered power dynamics (Connell, 2014a; Thomas-Slayter et al., 1996) and thus gendered violence (Piedalue, 2015). While there are a handful of studies indicating that food insecurity is associated with IPV in the context of SSA (Andarge & Shiferaw, 2018; Bloom et al., 2020; Fong et al., 2016; Gibbs et al., 2018; Hatcher et al., 2019, 2020; Regassa, 2011), this paper makes a unique contribution to the conversation on food security in Benin, where, to the best of my knowledge, no previous studies of this nature have been undertaken.

Moreover, the existing literature examining the relationship between food insecurity and IPV has largely focused on urban SSA contexts, and the small number of studies that include rural participants are focused on specific groups such as women who are HIV positive (Hatcher et al., 2019; Regassa, 2011) or pregnant (Bloom et al., 2020). Among farmers in agrarian SSA, to the best of my knowledge,

the relationship between food insecurity and IPV has yet to be examined. The agrarian focus of this manuscript and inclusion of farm-level variables thus fills an important gap, particularly given that key explanatory aspects of IPV, such as the construction of agrarian masculinities (Adinkrah, 2012; Andarge & Shiferaw, 2018; Perry, 2005) and experiences of food insecurity for food producers (Atuoye & Luginaah, 2017; Ragetlie et al., 2021) are unique to the agrarian landscape. Indeed, these results reinforce the findings from the manuscripts presented in Chapters 4 and 5, particularly with respect to the discussion of family stress and threatened masculinity as potential pathways through which food insecurity may be driving IPV. These findings may also be applied to other agrarian contexts in West Africa where food insecurity and IPV are ongoing challenges, specifically in regions located within the Sudano-Guinean agro-ecological zone. Most importantly, these empirical contributions have significant and practical implications for women in northwestern Benin, which underscores the urgency with which policymakers must address food insecurity and problematic gender dynamics in this context.

7.3. Theoretical contributions

As discussed in Chapter 2, the positivist and neoliberal roots of food security research have meant an overwhelming focus on women as opposed to gender, and the quantification of disadvantage as opposed to answering questions of '*why'*, '*how'*, and '*what should be done'* (Jarosz, 2014; Lewis, 2015). I draw on feminist conceptualizations of gender as a social construct that is embedded in all aspects of household organization to challenge the dominant ideologies in mainstream food security research (Lewis, 2015). This approach is evident throughout my dissertation, wherein I illustrate how gender shapes and is shaped by shapes household structure, spousal dynamics, and the division of labour, particularly around farming and food.

Another important way in which I challenge dominant ideologies is by refuting essentialist narratives in the literature (Baruah, 2009). This approach is evident in Chapter 5, where I reveal how men utilize drinking as a strategy to manage hunger and buffer their families from food insecurity. Similarly to Dinani's (2019) findings in Tanzania, women's critical depictions of their husbands in Chapters 4 and 5 of the dissertation echo the myth of 'lazy' and irresponsible men, a colonial discourse that is still pervasive in development and gender research in rural Africa (Whitehead, 2000). Moreover, by considering men and masculinities, my research contributes to widening the scope of gender studies to include gender practices and relations, and therefore consider gender in its entirety (Connell, 2014b). These contributions illustrate how, in applying feminist theory to food security studies, we can shift the conversation away from the dominant neoliberal and positivist approaches and thus widen the theoretical scope of the discipline.

As do feminist scholars, political ecologists and, in particular feminist political ecologists, my dissertation emphasizes the importance of historically and politically grounded research that engages with issues of power, which is often lacking in disciplines such as food security research (Bernstein, 2010; Lewis, 2015; Patel, 2007; Schanbacher, 2010). This gap in the literature has been identified by scholars such as Behrman et al. (2014), who have called for studies to go beyond measures of agricultural productivity and income, and examine the more complex dimensions of access, power, and control at the household level and beyond. The narrow focus on improving yields in food security research has long been revealed as insufficient, as it obfuscates the root causes of disadvantage, including the social, economic and political structures that shape food systems and farmer livelihoods (Sen, 1981).

I also draw on the theory of FPE throughout my dissertation in order engage in multiscalar analyses that foreground agency by undertaking individual-level analysis, linking micro-level intrahousehold dynamics to macro-level processes. In Chapter 4 for example, I draw on the theory of hegemonic masculinities in order to conceptualize the construction of gendered identity, which shapes experiences of food insecurity within the household. Hegemonic masculinities draws on similar feminist conceptualizations of gender as does FPE, while also emphasizing the historical, social, and political processes and ideologies that have shaped masculinities in different places, such as agrarian SSA. In Chapter 5, I draw primarily upon political ecologies of health (PEH) given the focus on alcohol use as a maladaptive coping mechanism. As sub-disciplines of PE, PEH and FPE have much overlap, and I draw on both to examine the ways in which gender norms shape the division of labour and power over household decision making, which in turn shape patterns of gendered alcohol consumption. In so doing, I frame alcohol misuse within the broader structural forces that have led to poverty and food insecurity in the region, which intersect with social norms and power dynamics. In Chapter 6, while I apply the social ecological model of IPV, the nested multiscalar nature of this framework focuses on how gendered power dynamics at the individual and interpersonal levels are shaped by broader structural factors. This framework dovetails nicely with FPE theory.

While the theories used to frame my dissertation research are not novel, their application to food security research in Benin emphasizes how, and for whom, food insecurity and poverty have persisted. This research therefore contributes to shifting scholarly discussion away from productivist interventions, instead highlighting the need for extensive changes to the social, economic, and political structures that shape

rural livelihoods in order to better support poor farmers, and women in particular. The critical theoretical perspectives I apply are currently lacking in the literature on food security in Benin, and their application makes a broader contribution towards balancing the neoliberal bias within the discipline of food security research.

7.4. Methodological contributions

My research makes an important contribution towards the use of intrahousehold methods in food security research. As discussed in Chapter 3, headship is often used to collect household-level data, which cannot adequately capture intra-household dynamics between men and women or differentiate between women who are HOH versus those who are not (Baruah, 2009; Posel, 2001). The reliance of data collected from HOH in northwestern Benin (WFP, 2014; 2018) represents a particular problem, as most HOHs are men. This distinct gap has meant that research inadequately represents women's voices and experiences and suggests that gender relations with respect to factors central to food and farming, such as the dynamic of power over food, resources, and the division of labour, are insufficiently understood. My use of an intrahousehold approach contributes to addressing this methodological gap. Moreover, by looking within the household, I apply FPE methods to the study of gender and food, utilizing a multi-scalar, place-specific approach to explore the complexities of power dynamics through a nuanced analysis of local gendered experiences, that I then contextualize within broader structures and processes (Elmhirst, 2015; Rocheleau et al., 1996). In undertaking intrahousehold qualitative interviews, coupled with community-level focus groups and a regional-level quantitative survey, my dissertation research is multi-scalar, making an important methodological contribution towards FPE approaches to food insecurity.

7.5. Policy implications

Amongst researchers studying food and agriculture (Jarosz, 2014), as well as those in gender and development (Moser, 1989), there remains friction between scholars who advocate for approaches that prioritize immediate needs versus more transformative or systemic approaches. In order to frame my discussion of the policy implications of this dissertation, I draw upon Moser's (1989) differentiation between women's practical needs versus strategic needs as presented in Chapter 2. Moser's (1989) differentiation affirms that challenging prevailing systems while also improving daily living conditions are not mutually exclusive endeavors. I draw upon this concept to frame the following section, in which the practical and then strategic implications of this research are discussed.

7.5.1. Practical, shorter-term policy implications

The research presented in my dissertation emphasizes the social dimension of food security research by demonstrating how food security, farming, and gendered household dynamics are interwoven with other social issues such as IPV and alcohol misuse. These interconnected social issues are deeply gendered and therefore each cannot be addressed without also working on the others in complementarity. Therefore, a gender transformative approach, with a wide focus on social protection policy and programming, is necessary.

When we take the example of alcohol misuse, the findings presented in this dissertation suggest that municipality-level bans on illicitly produced and potentially toxic *sodabi,* accompanied by community educational workshops explaining the risks of *sodabi* consumption, have not been effective due to the powerful structural conditions that shape drinking behaviours. My findings lend some insight into why

these policies are ineffective, and reinforce the need for more transformative social change as opposed to narrowly targeted policies that fail to address the root causes of alcohol misuse. Similarly, with respect to gendered violence, gender-equity interventions that also address structural issues including food insecurity and economic stability appear to be most effective in reducing IPV (Gupta et al., 2013). Strengthening social protection programs to reduce vulnerability has also been identified a key strategy to improve food security (Devereux, 2016). For example, legislating school meal programs can create a "structured demand" for local produce, which provides a more stable source of income for farmers while also improving nutrition (Devereux, 2016 p.54). The findings presented in my dissertation confirm that policy-makers must embrace complexity and seek to address the root causes of vulnerability broadly, in order to improve the lives and livelihoods of the rural poor.

Given the structural and environmental factors that have undermined subsistence farmers food security, such as the variable rains and inaccessibility of fertilizer that were raised in Chapter 5, agricultural policy should also be focused on re-establishing agricultural subsidies and agricultural support programs. Improved access to agricultural inputs would be particularly helpful in this regard (Devereux, 2016). Participatory agroecology interventions also show promise with respect to improving nutrition and food security in a sustainable manner (Kansanga et al., 2020; Madsen et al., 2021). Such interventions may be best implemented through community institutions such as village councils policies, in parallel with the state's efforts to decentralize (Razavi, 2009). Beyond food and farming, policy makers must seek to improve social protection mechanisms that reduce vulnerability, including the establishment of a universal basic income, and subsidizing healthcare through a national insurance scheme. There is also a need to create better economic

opportunities for both men and women outside of agriculture, which will require establishing labour laws that protect the rights of workers and ensure they earn a living wage. As opposed to public works programs that pay poor wages, offer little stability, and exclude groups unable to engage in manual labour, Devereux (2016) suggests looking to employment guarantee legislation such as that in India, where applicants are provided with work or paid regardless. As long as fair wages and decent work are ensured, such legislation has the potential to transform rural livelihoods (Devereux, 2016).

Based on the findings presented in this dissertation, gender transformative approaches may be most effective when focused on altering gendered power structures within the Beninese household, which shape gender dynamics, experiences of food security, and coping responses. Given that gendered identity, and in particular the construction of masculinity is identified as an important problem with respect to food security and IPV, interventions will need to reorient gendered norms for men and women, beginning with boys and girls at a young age (Njuki, Kaler, et al., 2016). Building on the "men's school" initiatives undertaken in Atacora by a recent food security and nutrition project (Belgian Development Agency, 2018), community workshops that address issues of gender identity, power and control, may be effective in understanding and altering the rigid adherence to gender norms that arise within the colonial concept of the nuclear household model. Unpacking the root and consequences of gender norms may help resolve feelings of shame and inadequacy among men, thus reducing IPV and positively impacting men's mental health. Engaging men in gender work has been identified as an essential community approach in Tanzania, where alcohol use and gender imbalances in power are driving IPV within the household in similar ways to those identified in my research (Simmons

et al., 2020). My research also identifies gender dynamics around unequal power and the division of labour as a source of household tension, for which spousal-focused workshops on negotiation, bargaining and marital expectations may be most effective (Njuki, Kaler, et al., 2016). Involving men is an important component of these strategies, as it may reduce the risk of women experiencing backlash from their husbands, which often occurs when power dynamics shift and partners feel threatened (Angelucci & Heath, 2020; Eswaran & Malhotra, 2011; Rahman et al., 2013; Vercillo, 2020). At the structural level, discriminatory laws and inheritance rights (Kinkingninhoun-Mêdagbé et al., 2010) around land will also contribute towards improving women's position of power within the household.

7.5.2. Strategic, longer-term policy recommendations

In order to undertake the gender transformative approaches described above, there will need to be a broader shift at the local and national levels in Benin, away from the persistent women-only approaches that currently dominate. The Benin government must make a commitment to engaging in gender transformative approaches and establishing requirements for development organizations to do the same. In order to be effective, there must be hard incentives with either positive or negative consequences, as well as meaningful reporting that holds the government and development organizations accountable for operationalization (Hafner-Burton & Pollack, 2009). For example, this could include incentives such as making pay and promotions contingent on successful operationalization of gender transformative approaches within government (Hafner-Burton & Pollack, 2009). Moreover, the success of any policies and programs in rural areas within Benin will require a re-responsibilization of the state and a deeper collaboration between the municipal and national governments, and development actors. Due to "long histories of

marginalization" that have seen the retreat of the state, there is significant mistrust of government and development organizations among peasant farmers (Friedmann, 2016 p.681; Martinez-Torres & Rosset, 2010). The establishment of trust between the state and farmers will likely be a long and fraught process, requiring those in positions of power to engage meaningfully and actively collaborate with grassroots actors.

Based on the findings of my research, contextualized within a larger body of historical and contemporary evidence (Bello, 2009; Bernstein, 2006; Martinez-Torres & Rosset, 2010; Sankar, 2020; Schanbacher, 2010), it is my position that 'doubling down' on neoliberal market-driven policies and privatization will not improve the lives of most farmers in Benin. In this dissertation I have placed emphasis on locating the local within the broader regional and global processes that lie at the root of food insecurity. The policy implications are therefore global in scope, and there is a need to replace the corporate interests and trade agendas of select wealthy and powerful countries that are currently at the centre of the global food system, with better values that centre equity and ecological sustainability (Weis, 2007). Meanwhile, supranational collaboration would likely improve African nations' position of power within the global food system. With response to emergency crises for example, resilience could be improved by reinstating previously national-level food reserves at the regional level, which were phased out in the 1980s (Devereux, 2016). Jointly combining food stocks with financial reserves through the Economic Community of West Africa States (ECOWAS) may provide a more effective buffer against global crises (Devereux, 2016).

Beyond the state level, decades of scholarship and activism present a convincing argument that the way to improve rural livelihoods and food systems is to support peasant movements in constructing a resilient farming system focused on peasant's

rights, food sovereignty, as well as social and environmental sustainability (Martinez-Torres & Rosset, 2010). In order to accomplish this, governments must support and amplify grassroots movements and political organization such as La Via Campesina and APM-Mondial (Réseau Mondial Agricultures Paysannes, Alimentation et Mondialisation). I emphasize the need for support while also recognizing the need for autonomous political movements, both with respect to peasant movements and women's political engagement. There is a role for governments in creating space for activism and empowerment is a central component of shifting hegemonic gender ideals, norms and power imbalances. As Ababneh (2016) demonstrates in the context of Jordan, women's movements are not separate from the practical needs of women. Rather, improving the daily living conditions of women is a necessary aspect of political mobilization, and her work provides empirical evidence that practical and strategic goals are not mutually exclusive (Ababneh, 2016). Ababneh (2016) shows that many rural, poor women do not see themselves as 'political' despite their engagement in political movements, revealing the barriers inherent in top-down approaches. "Low" political movements however, have the potential to be more inclusive, accommodating women's needs, and better suited to addressing their priorities (Ababneh, 2016 p.105). This example provides a compelling argument for the need for grassroots movements led by West African women themselves.

7.6. Study limitations and directions for future research

Although my research has made numerous contributions, the scope of this dissertation is limited and thus cannot fully explore several important issues. Firstly, the qualitative findings presented herein are place-specific. While this undoubtedly has advantages with respect to the depth and nuance of findings, the results of the qualitative research are not generalizable at a broader scale. Given that national level

studies tend to favour breadth over depth, and in so doing marginalize the voices of women (WFP, 2018), future research taking a comparative but nuanced approach to questions of gender food insecurity may be most appropriate. Comparative qualitative research in different regions of Benin, as well as in rural and urban context of food insecurity will be important to shed light on points of convergence as well as potential contradictions, which will provide a more complete picture of how gender shapes food insecurity differently from place to place, thus enhancing targeted policy-making.

Despite intending to differentiate between different group's experiences beyond the broad categories of men and women, many of the findings presented herein still lump together 'women' and 'men' without focusing explicitly on the differences contained within these categories (Carr, 2008). In the quantitative analysis I was able to differentiate between women by controlling for factors such as wealth, ethnicity, and religion. However, my qualitative analysis placed less emphasis on questions of "which women" or "which men" (Jackson, 2002), instead focusing on broad areas of similarity and difference between genders. This may be, in part, due to the relatively homogenous sample of qualitative interview participants from Boukoumbe during my first field season. Nonetheless, future research that is explicitly focused on interrogating these differences has the potential to yield more complex results and meaningfully challenge the dominance of feminist empiricist approaches in gender and food security research (Hyder et al., 2005). Dynamics of power and control within the Beninese household extend beyond the couple, therefore future intrahousehold research must also be expanded to include all members of the household. Particularly in multigenerational and polygamist households, this

approach can provide a much more nuanced depiction of household organization that that presented in this dissertation.

While I take a FPE approach in this research, I was unable to fully explore the 'political' aspect of political ecology with respect to agriculture. Hence, a dedicated analysis of contemporary agrarian policies and processes of agrarian change in this study is warranted. For example, it became apparent in my research that poor soils and the prohibitive cost of fertilizer were key issues for participants in this study, while maize is simultaneously gaining ground as a staple crop in the region that is difficult to grow without chemical fertilizer. This raised questions that I was unable to fully address regarding the government's strategic priority with respect to maize and its suitability for improving food security among peasant farmers in Atacora. Improved food security is often used a justification for productivist Green-Revolution type agricultural policy, yet examining how this plays out in nonwestern Benin was not within the scope of this study. Future research focus on the political ecology of maize and other crops in this region will be important insofar as answering questions regarding agricultural development, agrarian change, and its implications for food security. Similarly, future research is needed that further engages with the 'ecological' aspect of political ecology, examining how food insecurity and gender intersect with climate change in this context.

This dissertation was largely problem-focused, seeking to explore issues of scarcity and inequity as opposed to focusing on positive change. While my aim was to highlight the study participants' resilience and agency in the way that I analyze and presented my findings, there is a need for research that more thoroughly examines how women and men are exercising agency to address food insecurity and make political or strategic gains with respect to gender equity. This is particularly important

in Benin, because there are not immediately evident forms of widespread resistance or larger political movements with respect to food sovereignty or women's rights. In line with this call to shift the epistemic focus of gender and food security research towards change and transformation, there is a need for decolonizing approaches that challenges dominant Eurocentric research methods and development practices. Participatory and community-led decolonizing work must be shaped and led by Beninese scholars in collaboration with local stakeholders to ensure that the outcomes reflect local experiences, perspectives, and priorities.

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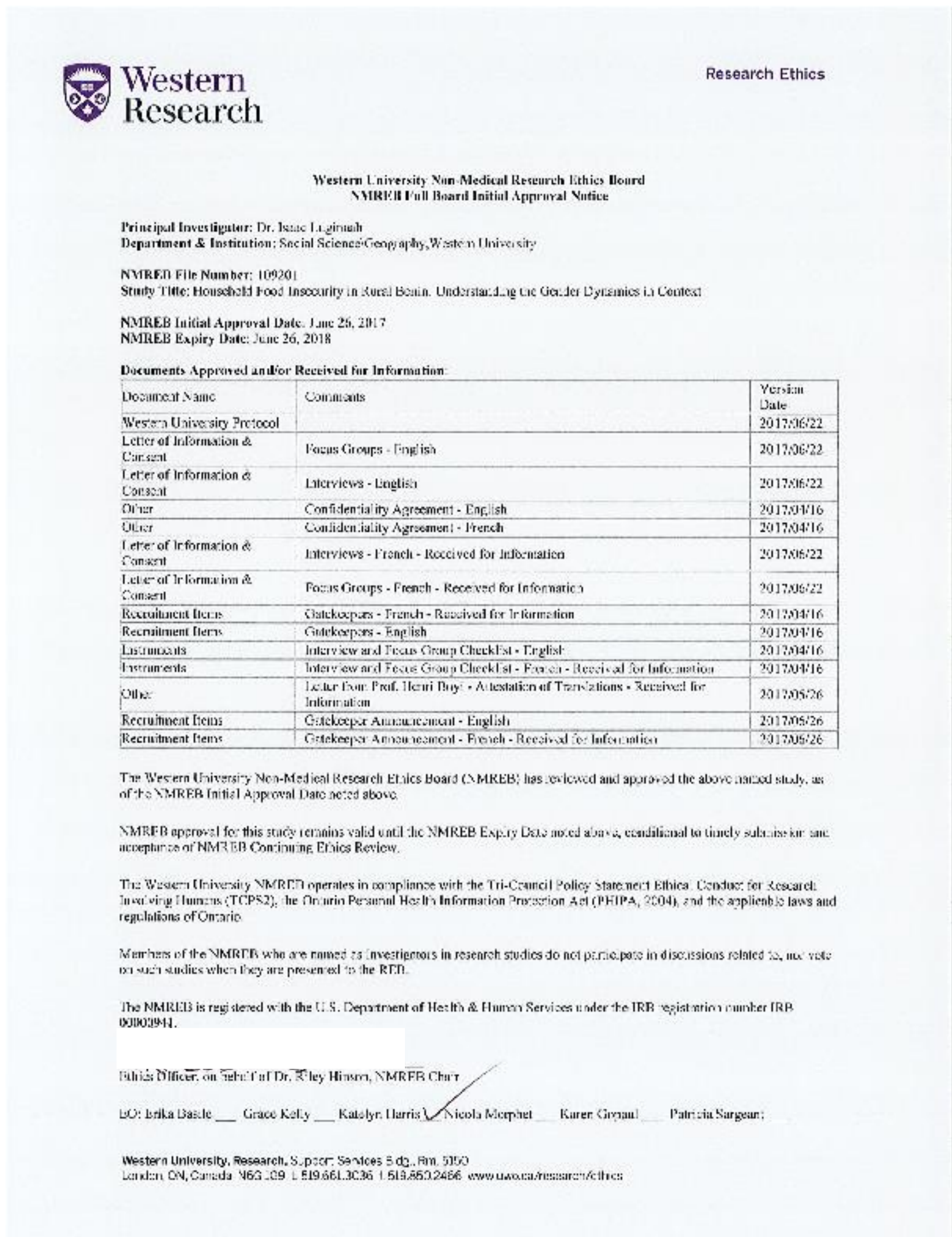
Appendices

Appendix A: Western University Non-Medical Research Ethics Board Approval



Western Research

Research Ethics

Western University Non-Medical Research Ethics Board
NMREB Full Board Initial Approval Notice

Principal Investigator: Dr. Isaac Luginaah
Department & Institution: Social Science\Geography, Western University

NMREB File Number: 109201
Study Title: Household Food Insecurity in Rural Benin. Understanding the Gender Dynamics in Context

NMREB Initial Approval Date: June 26, 2017
NMREB Expiry Date: June 26, 2018

Documents Approved and/or Received for Information:

Document Name	Comments	Version Date
Western University Protocol		2017/06/22
Letter of Information & Consent	Focus Groups - English	2017/06/22
Letter of Information & Consent	Interviews - English	2017/06/22
Other	Confidentiality Agreement - English	2017/04/16
Other	Confidentiality Agreement - French	2017/04/16
Letter of Information & Consent	Interviews - French - Received for Information	2017/06/22
Letter of Information & Consent	Focus Groups - French - Received for Information	2017/06/22
Recruitment Items	Gatekeepers - French - Received for Information	2017/04/16
Recruitment Items	Gatekeepers - English	2017/04/16
Instruments	Interview and Focus Group Checklist - English	2017/04/16
Instruments	Interview and Focus Group Checklist - French - Received for Information	2017/04/16
Other	Letter from Prof. Henri Boyi - Attestation of Translations - Received for Information	2017/05/26
Recruitment Items	Gatekeeper Announcement - English	2017/05/26
Recruitment Items	Gatekeeper Announcement - French - Received for Information	2017/05/26

The Western University Non-Medical Research Ethics Board (NMREB) has reviewed and approved the above named study, as of the NMREB Initial Approval Date noted above.

NMREB approval for this study remains valid until the NMREB Expiry Date noted above, conditional to timely submission and acceptance of NMREB Continuing Ethics Review.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario.

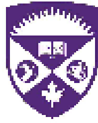
Members of the NMREB who are named as Investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB.

The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.

Ethics Officer, on behalf of Dr. Riley Hinson, NMREB Chair

EO: Erika Basile ___ Grace Kelly ___ Katelyn Harris ✓ Nicola Morphet ___ Karen Gopaul ___ Patricia Sargeant

Western University, Research, Support Services Bldg., Rm. 5150
London, ON, Canada N6G 1G9 t. 519.661.3036 f. 519.850.2466 www.uwo.ca/research/ethics



Western Research

Date: 21 March 2019

To: Dr. Isaac Luginaah

Project ID: 109201

Study Title: Household Food Insecurity in Rural Benin: Understanding the Gender Dynamics in Context

Application Type: NMREB Amendment Form

Review Type: Delegated

Full Board Reporting Date: 05/Apr/2019

Date Approval Issued: 21/Mar/2019 11:22

REB Approval Expiry Date: 26/Jun/2019

Dear Dr. Isaac Luginaah,

The Western University Non-Medical Research Ethics Board (NMREB) has reviewed and approved the WREM application form for the amendment, as of the date noted above.

Documents Approved:

Document Name	Document Type	Document Date	Document Version
Ammended Research Plan March 19 2019	Protocol	19/Mar/2019	2
Focus Group Guide - EN - January 15 2019	Focus Group(s) Guide	15/Jan/2019	1
PhD_Confidentiality Agreement - EN - March 7 2019	Other Document	07/Mar/2019	2
PhD_Confidentiality Agreement - FR - March 7 2019	Translated Documents	07/Mar/2019	3
PhD_Focus Group Guide - FR - January 15 2019	Translated Documents	15/Jan/2019	2
PhD_Focus Group LOI & Consent - EN - March 7 2019	Verbal Consent/Assent	07/Mar/2019	3
PhD_Focus Group LOI & Consent - FR - March 7 2019	Translated Documents	07/Mar/2019	3
PhD_Study_Announcement - EN - March 7 2019	Recruitment Document	07/Mar/2019	2
PhD_Study_Announcement - FR - March 7 2019	Translated Documents	07/Mar/2019	3
PhD_Survey LOI & Consent - EN - March 7 2019	Verbal Consent/Assent	07/Mar/2019	3
PhD_Survey LOI & Consent - FR - March 7 2019	Translated Documents	07/Mar/2019	3
Survey Instrument - EN - January 17 2019	Paper Survey	17/Jan/2019	1
Survey Instrument - FR - January 17 2019	Translated Documents	17/Jan/2019	1

Documents Acknowledged:

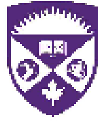
Document Name	Document Type	Document Date	Document Version
Letter for Ms. Rosalind	Translation Certificate	20/Feb/2019	
Letter for Rosalind's Ethics March 19	Translation Certificate	19/Mar/2019	2

REB members involved in the research project do not participate in the review, discussion or decision.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario. Members of the NMREB who are named as Investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB. The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.

Please do not hesitate to contact us if you have any questions.

Sincerely,


Western Research

Date: 6 June 2019

To: Dr. Isaac Luginaah

Project ID: 109201

Study Title: Household Food Insecurity in Rural Benin: Understanding the Gender Dynamics in Context

Application Type: Continuing Ethics Review (CER) Form

Review Type: Delegated

Meeting Date: 05/Jul/2019

Date Approval Issued: 06/Jun/2019

REB Approval Expiry Date: 26/Jun/2020

Dear Dr. Isaac Luginaah,

The Western University Non-Medical Research Ethics Board has reviewed this application. This study, including all currently approved documents, has been re-approved until the expiry date noted above.

REB members involved in the research project do not participate in the review, discussion or decision.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario. Members of the NMREB who are named as Investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB. The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.

Please do not hesitate to contact us if you have any questions.

Sincerely,

Daniel Wyzynski, Research Ethics Coordinator, on behalf of Prof. Randal Graham, NMREB Chair

Note: This correspondence includes an electronic signature (validation and approval via an online system that is compliant with all regulations).

Appendix B: National Ethics Committee for Health Research (Benin) Approval

REPUBLIQUE DU BENIN

MINISTERE DE LA SANTE

Direction de la Formation, de la Recherche et de la Médecine Traditionnelle

COMITE NATIONAL D'ETHIQUE POUR LA RECHERCHE EN SANTE

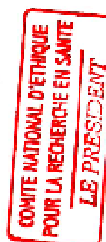
BP 01-882 BENIN

www.sante.gouv.bj

IORG/MS : IORG00005695; IORG/CNERS : 00005860 (expire janvier 2021)

N°59/MS/DC/SGM/DRFMT/CNERS/SA

Cotonou, le 25 juillet 2019



La présidente

A

Madame ROSALIND RAGETLIE

Messieurs

- AMOUSSA HOUNKPATIN Waliou B.A.
- LUGINAAH Isaac

COTONOU

Objet : Avis éthique favorable n° 25 du 10 juillet 2019 et autorisant la mise en œuvre de votre recherche

Madame et messieurs,

Le Comité National d'Ethique pour la Recherche en Santé (CNERS) du Bénin, a l'honneur de vous adresser l'avis éthique concernant votre protocole de recherche :

- dont le titre actuel est : **Insécurité alimentaire des ménages ruraux du Bénin : comprendre la dynamique du genre dans son contexte**
- étudié le **10 juillet 2019**, par ses membres dont les noms suivent :

Mesdames	1)	GANGBO	Flore	Messieurs	2)	BOKO	Martial
	3)	ALE	Chacou Charlotte		4)	HOUNSA	Assomption
	5)	AKINSHOLA	Amélie		6)	OKRY	Magloire
	7)	d'ALMEIDA	Thérèse		8)	HOUSSOU	Paul Ferdinand
	9)	HOUNNOU TCHABI	Sidonie		10)	ALLABI	Aurel
Monsieur	11)	MARTIN -CORREA	Louis - Jacques		12)	CHAFFA	Christian

- **sur la base des documents soumis, revus et approuvés:**
  - a) Protocole de recherche
  - b) Résumé
  - c) Annexe 1 : Note d'information et annonce d'étude
  - d) Annexe 2 : Fiche de consentement éclairé pour les discussions de groupe
  - e) Annexe 3 : Fiche de consentement éclairé pour l'enquêté
  - f) Annexe 4 : contrat de confidentialité
  - g) Annexe 5 : Guide de discussions de groupe
  - h) Budget
  - i) Chronogramme

Appendix C: Interview Guide (2017)

Household Food Insecurity in Rural Benin: Understanding the Gender Dynamics in Context **SEMI-STRUCTURED GUIDE FOR IN-DEPTH INTERVIEWS** **(MEN & WOMEN)**
Preamble: Hello my name is Rosalind Ragetlie, an MA student in the Department of Geography at Western University, Canada. This study seeks to better understand the nature of gender and household dynamics and their impact on food security in your household and community. **Informed consent obtained (Please circle) YES NO** **(do not proceed without informed consent)** 1. Date: 2. Name of interviewer: 3. Village area: 4. Village: 5. Pseudonym of the participant: 6. Marital status: (if married ask if polygamous) 7. If married, first name of spouse: 8. Who stays with you in your home? (# of children, how many dependents)

TOPIC	QUESTION	PROBES
1. Household responsibilities & gendered roles	- Can you tell me about your daily activities inside and outside the home?	
	- Which assets do you have access to?	- Land? - Food? - Animals? - Other – car, motorbike, etc.? - Why?
	- Which assets do you have control over and which do you not?	- Why
	- What are your roles in your household?	- Responsible for providing food, cooking, children etc.
	- What is your financial responsibility in your household?	- Who pays for food? - Medical treatment? - Farm equipment/labour? - Other expenses?
	- What are your different sources of income in your family? (e.g., farming, business etc.)	- How do you (individually) generate income? - Is this your preferred livelihood?

	- Would it be acceptable for you to decide how to spend the family's money? - Can you tell me about the last big decision that was made in your household related to income? What was it and how was it made? - Do you have external social support systems, such as kinship networks? - Do you access formal or informal credit systems? - Have you ever received help (financial or otherwise) from other community members? - From community organizations? - From family? - What kind of help did you receive and why? - What challenge(s) do you face in providing for yourself and your household? - What would you change in order to overcome those challenges?	- If not, what would you prefer to do and why? - Who makes these decisions and how are they made? - Support in times of need? - Knowledge networks? - Why do you / do you not access these? - Remittances, family loans, micro-finance, bank loans? - Why do you / do you not access these? - If "money", then why do you spend money on certain things instead of others? - How do you prioritize? - How is this decision made and by whom?

2. Food production, availability & access	- Tell me a little about what your food situation is like throughout the year? - Where does your food come from? - Do you own a farm by yourself? - What crops do you grow and why? - What was the harvest like last year? - Tell me about how the harvest works? What role do you play? - How long do you think your last harvest will last?	- Are you or your family members ever hungry? - Do you eat food from your garden? Farm? - Or with someone else? Spouse? - Was it comparable to the previous year? - If not, why was this this the case - Can you take any food when you need it? - Why do you say that? - If harvest will not last until next harvest, is this a typical year for you?

		- When it runs out what do you do?
	- Can you tell me who was involved in working on your farm this year?	- Roles played by wife/husband, different family, friends, hired labor, and what they worked on
	- Do you have to ask anybody in the household for food?	
	- What kind of foods do you purchase?	- Can you access the same types/variety of foods? - Are there times you do not need to buy as much food (i.e. harvest)? - Are there times you cannot afford to buy food?
	- How is the quality of the foods you purchase?	
	- How do you store your food?	
	- How does this change throughout the year?	
	- What are your roles in your household in relation to food?	- Are you responsible for growing food? - Preparing or cooking food? - Feeding your family?
	- What do you cook?	
	- To whom do you provide food?	
	- Where do you get your ingredients?	
	- How far away is it for you?	- Does this distance change seasonally?
	- Who pays for these ingredients?	
	- How much money do you spend in a year on food?	
	- Who makes the decision on what to spend and what to buy? How is that decision made?	
	- Tell me about the differences in roles and responsibilities for men and women?	
	- Do you think these responsibilities have changed?	- Recently? Generationally?
	- What do you do when there is hunger in this household?	

	- What strategies do you use to mitigate these challenges? - Do you borrow food from anyone in the community? And do you pay it back? - Are there any foods that you consume that you would like to change? If so, what and why? - What food would you ideally want if you had the ability to buy anything you wanted? - Do you think others in your community go hungry? - In the next 20 years, what do you think you and your community's food situation will be like?	- When and how often do you have this kind of food in a year? - Is it more notable at certain times of the year? - Why do you say that? - Is there anything those who go hungry can do to minimize their hunger?

3. Conclusions	Do you have any other information you would like to share?	

Appendix D: Focus Group Discussion Guide (2017)

Household Food Insecurity in Rural Benin: Understanding the Gender Dynamics in Context **CHECKLIST FOR FOCUS GROUPS (MEN & WOMEN)**
Preamble: Hello my name is Rosalind Ragetlie, an MA student in the Department of Geography at Western University, Canada. This study seeks to better understand the nature of gender and household dynamics and their impact on food security in your household and community. **Informed consent obtained for all present (Please circle) YES NO** **(do not proceed without informed consent)** 1. Date: 2. Name of interviewer: 3. Village area: 4. Village: 5. Pseudonyms of participants:

TOPIC	QUESTION	PROBES
1. Food, farming & gendered roles / responsibilities	- What does land mean to you? - Do you own land? - Does your husband/wife own land? - Do you farm your land?	- Do you farm on someone else's land?
	- Do couples make joint decisions on issues related to farming and the use of food items?	- Who makes that decision, the man or the woman, and why?
	- Tell me about how the markets work here?	- Do you sell food from your farm? - Who buys the food? - How is it transported? - How far is it?
	- Where do you get your food?	- Do you eat food from your farm? - Do you purchase food? Where?
	- What does food mean to you?	- Is it more than sustenance? - Are their cultural/traditional meanings?
	- What happens in the community if one family does not have enough food?	- Is this a household responsibility or a community responsibility?
	- Tell me a little about what your food situation is like throughout the year?	- Is there a lack of food in your household during the lean season?

	- What changes could be made so that no families would go hungry? - What does it mean to be a man in your community? - Are there spaces in the community that are just for men? - What are the men responsible for? - What does it mean to be a husband? - What does it mean to be a woman in your community? - Are there spaces in your community that are just for women? - What are the women responsible for? - What does it mean to be a wife? - What does it mean to be empowered? - Is drinking a problem in your community? [later addition]	- What coping mechanisms do you use (does this mean smaller, less frequent, and/or less varied meals)? - Do you or members of your household ever have to spend a whole day without eating? - How long does this period last? - Tell me about the state of food insecurity in the community as a whole. - If fertilizer, why? [later addition] - Do they relate to food production, procurement, preparation, consumption? - Food production, preparation, getting water, financials, etc.? - Do they relate to food production, procurement, preparation, consumption? - Food production, preparation, getting water, financials, etc.? - If yes, please explain. [later addition] - Do you drink because you are hungry, or for other reasons? [later addition]

3. Conclusions	Is there anything more you would like to add?	

Appendix E: Focus Group Discussion Guide (2019)

Household Food Insecurity in Rural Benin: Understanding the Gender Dynamics in Context **CHECKLIST FOR FOCUS GROUPS (MEN & WOMEN)**
Preamble: Hello my name is Rosalind Ragetlie, a PhD student in the Department of Geography at Western University, Canada. This study seeks to better understand the nature of gender and household dynamics and their impact on food security and alcohol use in your household and community. **Informed consent obtained for all present (Please circle) YES NO** **(do not proceed without informed consent)** 6. Date: 7. Name of interviewer: 8. Village area: 9. Village:

TOPIC	QUESTION	PROBES
1. Food, farming & gendered roles / responsibilities	- Do you own land? - Does your husband/wife own land?	
	- Do you farm your land?	- Do you farm on someone else's land?
	- Could you describe to me how couples make decisions related to agriculture?	- Do couples make joint decisions on issues related to agriculture? - If not, who makes these decisions? Is it the man or the woman, and why? - Does someone have the final say in decision-making?
	- Where do you get your food?	- Do you eat food from your farm? - Do you purchase food? Where?
	- Describe to me what families in the community do when they do not have enough food.	- Is this a household responsibility or a community responsibility?
	- Could you tell me what changes you think could be made so that no families would go hungry?	
	- Please describe the responsibilities of men.	- Please explain how men are involved in farming, food production, and the procurement, preparation and consumption of food? - Please explain how men are involved in other household

		tasks or responsibilities (e.g. childcare, financial decision-making). - Please explain how men participate in additional income-generating activities?
	- Please describe the responsibilities of women.	- Please explain how women are involved in farming, food production, and the procurement, preparation and consumption of food? - Please explain how women are involved in other household tasks or responsibilities (e.g. childcare, financial decision-making). - Please explain how women participate in additional income-generating activities?
	- Could you please explain to me what being empowered means to you?	- If a woman is empowered, what would that look like?
	- Could you tell me about the food situation in your household during the lean season?	- Is there a lack of food in your household during the lean season? - What coping mechanisms do you use (does this mean smaller, less frequent, and/or less varied meals)? - Do you or members of your household ever have to spend a whole day without eating? - How long does this period last? - Tell me about the state of food insecurity in the community as a whole.
	- Could you describe any issues that tend to arise in household during the lean season when people are going hungry?	- Does this contribute to arguing or even violence between partners?
	- Could you please describe what you think the effects of hunger and lack of food are on stress and mental health?	- Do you experience feelings of shame, sadness, frustration, anger, depression, hopelessness, or other feelings?

2. Alcohol and drinking behaviours	- Is alcohol consumption common in your community? - How would you describe the drinking behaviors of members of this community?	- In what situations do people drink (socialization, ceremonies, etc.)

		- Do some people drink to the point of drunkenness? Why do you think they do that?
	- Why do you think people drink alcohol in your community?	
	- Can you explain to me which alcoholic drinks are drunk most often and why?	- In what situations do people choose to drink sodabi, tchoukoutou, beer, wine, spirits, or other types of alcoholic beverages? - Would you say that sometimes traditional beer (tchoukoutou) is mixed with sodabi? Why?
	- Would you say that alcohol dependency or drinking is a problem in your household?	- If yes, can you explain why this is a problem? - Could you explain what effect problem drinking has on a couple? - Do you think drinking exacerbates or contributes to violence between partners? If yes, please explain how.
	- Would you say that alcohol dependency or drinking within the community more generally?	
	- Could you describe the drinking habits or behaviors of men and women in the community?	- Do men tend to drink more or less than women? Why or why not? - Can women drink in a bar or 'cabaret'? - Who prepares alcohol? - Who sells alcohol?
	- Is one type of alcohol more problematic than another?	- Why? - Are you aware of 'adulterated' or imitation sodabi and its negative health impacts?
	- Have you or someone you know ever purchased any type of alcohol on credit?	- If yes, can you explain how this process works? - How do you pay back the debts (farm income, non-farm income, a portion of your harvest, labour)?
	- Describe to me how drinking influences the farm work of people in your community.	- Does alcohol help people to work more? Why? - Does it force them to work less? Why? - Does it prevent people from going to the farm? Why?

	- Do you think that food insecurity is linked to problems with alcohol consumption?	- Do you think that alcohol consumption is related to poor harvests? Why? - Do you or people you know drink to forget about the stress caused by chronic food insecurity? - Do you or people you know drink to relieve the feeling of hunger? - Does spending money on alcohol mean less money for food or other household expenses?
3. Conclusions	Is there anything more you would like to add?	

Appendix F: Survey Questionnaire (2019)

Household Food Insecurity in Rural Benin: Understanding the Gender Dynamics in Context

Individual identification number: _____________ **Date: _____/____/____**

Household identification number : _____________

Municipality______________ **Village _________________** **Start time _________________**

Interviewer__________________________________ **Respondent's gender:** **Male______(1)**

Female______ (2)

	QUESTION (and Enumerator Instruction)	**RESPONSE OPTIONS**	**CODE**
1	What is the locality type?	Rural	1
		Urban	2
SECTION A: MIGRATION			
2	How long have you lived in this area?	0-5 years	1
		6-10 years	2
		11-15 years	3
		20 years or more	4
		Don't know	98
3	How many years have you lived in this house?	0-5 years	1
		6-10 years	2
		11-15 years	3
		20 years or more	4
		Don't know	98
4	Did you migrate from elsewhere to this place?	Yes	1
		No **(SKIP to Q6)**	2
		Don't know	98
5	What was the main reason for migrating?	Leave land for commercial farming	1
		Avoid natural disaster	2
		Access social services (education, health, …)	3
		Employment	4
		Marriage	5
		Commerce/trade	6
		Other (please specify) ______________________	97

6	Has any of your family members migrated to another region or country?	Yes	1
		No **(SKIP to Q8)**	2
		Don't know	98
7	If yes, what was the main reason?	Leave land for commercial farming	1
		Avoid natural disaster	2
		Access social services (education, health, …)	3
		Employment	4
		Marriage	5
		Commerce/trade	6
		Other (please specify) ___________	97
8	How does the migration of a family member affect your household economic status?	Much worse	1
		A little worse	2
		No change	3
		A little better	4
		Much better	5
9	How do you rate your household's quality of life relative to others in your village?	The worst	1
		Among the worse	2
		About the same	3
		Better	4
		The best	5
SECTION B: AGRICULTURE			
10a	How much land does your household farm?	Record amount (hectares) ___________	
		Don't know	98
10b	How much land do you personally farm?	Record amount (hectares) ___________	
		Don't know	98
11	Who owns this land?	Me	1
		My spouse/partner	2
		It's family land	3
		Borrowed (unpaid)	4
		Rented (paid)	5
12	Are your crops irrigated?	Yes	1
		No	2
13a	Did you use chemical fertilizer on your	Yes	1

	crops this season?	No		2
13b	If yes, was the fertilizer subsidized by the state?	Yes		1
		No		2
14	Did you use any other kind of fertilizer (e.g. animal dung, compost)?	Yes		1
		No		2
15	How much fertilizer did you use?	Record amount (kilos) ______________________________		
16	Were you able to purchase the amount of fertilizer you required or wished to use this season?	Yes		1
		No		2
17	Would you say that your fertilizer use in farming has increased, decreased or stayed the same in the last 4 years?	Decreased use		1
		Stayed the same		2
		Increased use		3
18	Did you use pesticides or herbicides on your crops this season?	Yes		1
		No		2
19	Have you used pesticides or herbicides on your crops in the past?	Yes		1
		No		2
20	Do you currently belong to at least one farmer's group/cooperative?	Yes		1
		No		2
21	**What crops do you grow?**			
21a		Maize	Yes	1
			No	2
21b		Beans/cowpea	Yes	1
			No	2
21c		Bambara Groundnut	Yes	1
			No	2
21d		Peanuts	Yes	1
			No	2
21[e]		Millet	Yes	1
			No	2
21f		Sorghum	Yes	1
			No	2
21g		Rice	Yes	1
			No	2
21h		Fonio	Yes	1
			No	2
21i		Yam/Igname	Yes	1
			No	2

21j		Cassava	Yes	1
			No	2
21k		Soy	Yes	1
			No	2
21l		Sweet potato	Yes	1
			No	2
21m		Garden products (vegetables)	Yes	1
			No	2
22	Last growing season were you able to grow enough food to feed your family through the year?	Yes		1
		No		2
23	Are you able to grow enough food every year to feed your family through the year?	Never		1
		Sometimes		2
		Most times		3
		Always		4
24	Are you currently in the lean season?	Yes **(SKIP to Q26)**		1
		No		2
25	Is your current food security situation better than it was during the lean season (a few weeks/month ago)?	Yes		1
		No		2

SECTION C: HOUSEHOLD FOOD INSECURITY

Part A: HFIAS (**Household Food Insecurity Access Scale**)

26	In the past four weeks, did you worry that you would not have enough food?		Yes	1
			No **(SKIP to Q27)**	2
26 a	How often did this happen?	Rarely (once or twice in the past four weeks)		1
		Sometimes (three to ten times in the past four weeks)		2
		Often (more than ten times in the past four weeks)		3
27	In the past four weeks, were you unable to eat the kinds of foods you preferred because of a lack of resources?		Yes	1
			No **(SKIP to Q28)**	2
27 a	How often did this happen?	Rarely (once or twice in the past four weeks)		1
		Sometimes (three to ten times in the past four weeks)		2
		Often (more than ten times in the past four weeks)		3
28	In the past four weeks, did you have to eat a limited variety of foods due to a lack of resources?		Yes	1
			No **(SKIP to Q29)**	2
28 a	How often did this happen?	Rarely (once or twice in the past four weeks)		1
		Sometimes (three to ten times in the past four weeks)		2
		Often (more than ten times in the past four weeks)		3

<table>
<tr><td rowspan="2">29</td><td colspan="2" rowspan="2">In the past four weeks, did you have to eat a smaller meal than you felt you needed because there was not enough food?</td><td>Yes</td><td>1</td></tr>
<tr><td>No (SKIP to Q30)</td><td>2</td></tr>
<tr><td rowspan="3">29 a</td><td rowspan="3">How often did this happen?</td><td colspan="2">Rarely (once or twice in the past four weeks)</td><td>1</td></tr>
<tr><td colspan="2">Sometimes (three to ten times in the past four weeks)</td><td>2</td></tr>
<tr><td colspan="2">Often (more than ten times in the past four weeks)</td><td>3</td></tr>
<tr><td rowspan="2">30</td><td colspan="2" rowspan="2">In the past four weeks, did you or any other household member have to eat fewer meals in a day because there was not enough food?</td><td>Yes</td><td>1</td></tr>
<tr><td>No (SKIP to Q31)</td><td>2</td></tr>
<tr><td rowspan="3">30 a</td><td rowspan="3">How often did this happen?</td><td colspan="2">Rarely (once or twice in the past four weeks)</td><td>1</td></tr>
<tr><td colspan="2">Sometimes (three to ten times in the past four weeks)</td><td>2</td></tr>
<tr><td colspan="2">Often (more than ten times in the past four weeks)</td><td>3</td></tr>
<tr><td rowspan="2">31</td><td colspan="2" rowspan="2">In the past four weeks, did you have to eat fewer meals in a day because there was not enough food?</td><td>Yes</td><td>1</td></tr>
<tr><td>No (SKIP to Q32)</td><td>2</td></tr>
<tr><td rowspan="3">31 a</td><td rowspan="3">How often did this happen?</td><td colspan="2">Rarely (once or twice in the past four weeks)</td><td>1</td></tr>
<tr><td colspan="2">Sometimes (three to ten times in the past four weeks)</td><td>2</td></tr>
<tr><td colspan="2">Often (more than ten times in the past four weeks)</td><td>3</td></tr>
<tr><td rowspan="2">32</td><td colspan="2" rowspan="2">In the past four weeks, was there ever no food to eat of any kind because of lack of resources to get food?</td><td>Yes</td><td>1</td></tr>
<tr><td>No (SKIP to Q33)</td><td>2</td></tr>
<tr><td rowspan="3">32 a</td><td rowspan="3">How often did this happen?</td><td colspan="2">Rarely (once or twice in the past four weeks)</td><td>1</td></tr>
<tr><td colspan="2">Sometimes (three to ten times in the past four weeks)</td><td>2</td></tr>
<tr><td colspan="2">Often (more than ten times in the past four weeks)</td><td>3</td></tr>
<tr><td rowspan="2">33</td><td colspan="2" rowspan="2">In the past four weeks, did you go to sleep at night hungry because there was not enough food?</td><td>Yes</td><td>1</td></tr>
<tr><td>No (SKIP to Q34)</td><td>2</td></tr>
<tr><td rowspan="3">33 a</td><td rowspan="3">How often did this happen?</td><td colspan="2">Rarely (once or twice in the past four weeks)</td><td>1</td></tr>
<tr><td colspan="2">Sometimes (three to ten times in the past four weeks)</td><td>2</td></tr>
<tr><td colspan="2">Often (more than ten times in the past four weeks)</td><td>3</td></tr>
<tr><td rowspan="2">34</td><td colspan="2" rowspan="2">In the past four weeks, did you go a whole day and night without eating anything because there was not enough food?</td><td>Yes</td><td>1</td></tr>
<tr><td>No (SKIP to Q35)</td><td>2</td></tr>
<tr><td rowspan="3">34 a</td><td rowspan="3">How often did this happen?</td><td colspan="2">Rarely (once or twice in the past four weeks)</td><td>1</td></tr>
<tr><td colspan="2">Sometimes (three to ten times in the past four weeks)</td><td>2</td></tr>
<tr><td colspan="2">Often (more than ten times in the past four weeks)</td><td>3</td></tr>
<tr><td rowspan="5">35</td><td colspan="2" rowspan="5">Compared to 4 years ago, how would you describe your household food security situation?</td><td>Much improved</td><td>1</td></tr>
<tr><td>A little improved</td><td>2</td></tr>
<tr><td>Stayed the same</td><td>3</td></tr>
<tr><td>A little worse</td><td>4</td></tr>
<tr><td>Much worse</td><td>5</td></tr>
<tr><td colspan="5">Part B: COPING MECHANISMS (short term & long term adaptive strategies)</td></tr>
</table>

	In order to cope with food insecurity, do you:		
36	Make sure that some members of the household eat less so others can eat enough (maternal/paternal buffering)?	Yes	1
		No **(SKIP to Q39)**	2
37	If yes, which members eat less?	Children	1
		Father	2
		Mother	3
		Both parents	4
		Elderly	5
		Other (Please specify) ________________________	97
38	If yes, which members eat more?	Children	1
		Father	2
		Mother	3
		Both parents	4
		Elderly	5
		Other (Please specify) ________________________	97
39	Eat wild/foraged leaves, nuts, seeds, fruits and vegetables?	Yes	1
		No	2
40	Sell chicken and fowl?	Yes	1
		No	2
41	Sell livestock (goats, pigs, sheep, cattle) if you have any?	Yes	1
		No	2
42	Sell household possessions (small items)?	Yes	1
		No	2
43	Sell personal valuables?	Yes	1
		No	2
44	Seek food from relatives/friends?	Yes	1
		No	2
45	Work for someone in return for food?	Yes	1
		No	2
46	Receive remittance from a family member who lives elsewhere?	Yes	1
		No	2
47	Purchase food using credit?	Yes	1
		No	2
48	Send some family members to live elsewhere?	Yes	1
		No	2
49	Move the entire family to another community?	Yes	1

		No	2
50	Other?	Please specify ____________________________________	97

SECTION D: PERCEPTION OF ENVIRONMENTAL CHANGE

51	Have you noticed any changes in temperature over the past 10 years?	Yes		1
		No **(SKIP to Q53a)**		2
		Don't know		98
52	[IF YES] What changes have you observed? ***(Please select all the apply)***	a) Getting warmer	Yes	1
			No	2
		b) Getting colder	Yes	1
			No	2
		c) Longer spells of hot temperature	Yes	1
			No	2
		d) Longer spells of cold temperature	Yes	1
			No	2
		e) Shorter spells of hot temperature	Yes	1
			No	2
		f) Shorter spells of cold temperature	Yes	1
			No	2
		g) Rapid change in temperature	Yes	1
			No	2
		Other (Please specify) ____________________________		97
53a	Have you noticed changes in the **STARTING TIME** of rainfall over the 10 past years?	Yes		1
		No **(SKIP to Q54a)**		2
		Don't know		98
53b	[IF YES] What kind of changes in the **STARTING TIME** of rainfall have you noticed?	Starts early		1
		Starts late		2
		Other (please specify) ______________________________		97
54a	Have you noticed changes in the **END TIME** of rainfall over the 10 past years?	Yes		1
		No **(SKIP to Q55)**		2
		Don't know		98
54b	[IF YES] What kind of changes in the **END TIME** of rainfall have you noticed?	Ends early		1
		Ends late		2

		Irregular (no discernable pattern)		3
		Other (please specify) ___________________________		97
		Don't know		98
55	Overall, please describe the length of the rainy season?	The same		1
		Shorter		2
		Longer		3
		Don't know		98
56	Have you experienced any droughts in the past 10 years?	Yes		1
		No		2
		Don't know		98
57a	In your estimation, has the soil fertility of farmland changed in the past 10 years?	Yes		1
		No **(SKIP to Q58)**		2
		Don't know **(SKIP to Q58)**		98
57b	[IF YES] How would you describe the observed change in the quality of farmland?	Much better		1
		Better		2
		Worse		3
		Much Worse		4
58	What do you think are the underlying causes of environmental change? ***(Please select all that apply)***	a) Deforestation	Yes	1
			No	2
		b) Large scale land acquisitions	Yes	1
			No	2
		c) Overpopulation (births)	Yes	1
			No	2
		d) Overpopulation (migration)	Yes	1
			No	2
		e) Greenhouse emissions	Yes	1
			No	2
		f) Illegal resources extraction	Yes	1
			No	2
		g) Transgressing cultural values	Yes	1
			No	2
		h) God's will	Yes	1
			No	2
		i) Other (please specify) ________________________		97

SECTION E: HEALTH STATUS & ACCESS TO HEALTH CARE SERVICES			
59	In general, compared with other people of your age, how do you describe your health at the moment?	Poor	1
		Fair	2
		Good	3
		Very good	4
		Excellent	5
		Don't know	98
60	Would you say your health have improved, stayed the same or worse in the last ten years?	Improved	1
		Stayed the same	2
		Worsened	3
		Don't know	98
61	How would you rate your ability to handle the day-to-day demands in your life, for example, work, family and volunteer responsibilities?	Poor	1
		Fair	2
		Good	3
		Very good	4
		Excellent	5
		Don't Know	98
62	How would you rate your ability to handle unexpected and difficult problems, for example, family or personal crisis?	Poor	1
		Fair	2
		Good	3
		Very good	4
		Excellent	5
		Don't Know	98

Part A: INDIVIDUAL HEALTH STATUS (**Adopted from the Nottingham Health Profile**)		
Please answer Yes = 1 or No = 2		
63	Things are getting me down	
a.	I've forgotten what it's like to enjoy myself	1 or 2
b.	I'm feeling an edge	1 or 2
c.	The days seems to drag	1 or 2
d.	I lose my temper easily these days	1 or 2
e.	I feel as if I am losing control	1 or 2
f.	Worry is keeping me awake at night	1 or 2
g.	I feel that life is not worth living	1 or 2
h.	I wake up feeling depressed	1 or 2
i.	Things are getting me down	1 or 2
64	**Energy Level**	

a.	I'm tired all the day	1 or 2
b.	Everything is an effort	1 or 2
c.	I soon run out of energy	1 or 2
65	**Physical Abilities**	
a.	I can walk about only around my property	1 or 2
b.	I find it hard to bend	1 or 2
c.	I am unable to work at all	1 or 2
d.	I have trouble going up and down a hilly ground	1 or 2
e.	I find it hard to reach for things	1 or 2
f.	I find it hard to get dressed by myself	1 or 2
g.	I find it hard to stand for long	1 or 2
h.	I need help to walk about outside (eg. a walking aid or someone to support me)	1 or 2
66	**Pain**	
a.	I have pain at night	1 or 2
b.	I have unbearable pain	1 or 2
c.	I find it painful to change my position	1 or 2
d.	I'm in pain when I walk	1 or 2
e.	I'm in pain when I'm standing	1 or 2
f.	I'm in constant pain	1 or 2
g.	I'm in pain when going up a hilly ground	1 or 2
h.	I'm in pain when I'm sitting	1 or 2
67	**Social Isolation**	
a.	I feel lonely	1 or 2
b.	I'm finding it hard to make contact with people	1 or 2
c.	I feel there is nobody that I am close to	1 or 2
d.	I feel I am a burden to people	1 or 2
e.	I'm finding it hard to get along with people	1 or 2
68	**Sleep**	
a.	I take pills/alcohol to help me sleep	1 or 2
b.	I'm waking up in the early hours of the morning	1 or 2
c.	I lie awake for most of the night	1 or 2
d.	It takes me a long time to get to sleep	1 or 2
e.	I sleep badly at night	1 or 2
69	**Other - is your present state of health causing problems with your:**	
a.	Work?	1 or 2
b.	Looking after the home? (Cleaning and cooking, repairs, and other odd jobs around the home)	1 or 2

c.	Social life? (Going out, seeing friends, going to ceremonies, community meetings/events, etc.)		1 or 2
d.	Home life? (Relationships with other people in your home)		1 or 2
e.	Sex life?		1 or 2
f.	Interests and hobbies? (Dancing, arts and crafts, etc.)		1 or 2
g.	Do you take time off from your work to ceremonies, community meetings/events?		1 or 2
Part B: DRINKING BEHAVIOURS (**AUDIT General Health Behaviours Q71-72, 76-79, 84-88**)			
70	Have you ever drunk any alcoholic beverage?	Yes	1
		No **(SKIP to Q89)**	2
71	How often do you drink alcohol?	Once a month or less	1
		2 to 3 times per month	2
		Once a week	3
		2 to 3 times per week	4
		4 or more times a week	5
72	What type of alcoholic beverage do you drink most often?	Does not drink alcohol	1
		Sodabi	2
		Tchoukoutou (traditional beer)	3
		Beer	4
		Wine	5
		Other (Please specify) ______________________________	97
73	How often do you drink tchoukoutou?	Never	1
		A few times a month	2
		A few times a week	3
		Daily	4
74	How often do you drink sodabi?	Never	1
		A few times a month	2
		A few times a week	3
		Daily	4
75	Do you ever mix different alcohols while drinking?	No	1
		Yes	2
76	How many drinks containing alcohol do you have on a typical day when you are drinking? (one bottle of beer, a calabash of tchouk, and one measure of sodabi each represent one drink)	1 or 2	1
		3 or 4	2
		5 or 6	3
		7, 8, or 9	4
		10 or more	5
77	How often do you have six or more drinks	Never	1

	on one occasion?	Less than monthly	2
		Monthly	3
		Weekly	4
		Daily or almost daily	5
78	How often during the last year have you found that you were not able to stop drinking once you had started?	Never	1
		Less than monthly	2
		Monthly	3
		Weekly	4
		Daily or almost daily	5
79	How often during the last year have you failed to do what was normally expected from you because of drinking?	Never	1
		Less than monthly	2
		Monthly	3
		Weekly	4
		Daily or almost daily	5
80	Is your ability to do farm work ever negatively affected by your drinking?	Yes	1
		No	2
81	Have you ever sold foodstuffs in order to buy alcohol?	Yes	1
		No	2
82	Do you ever buy alcohol on credit?	Yes	1
		No **(SKIP to Q84)**	2
83	If yes, which of the following do you use to pay back the debt?	Farm income	1
		Other income	2
		A portion of your harvest	3
		Labour	4
		Other (Please specify) ______________________	97
84	How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	1
		Less than monthly	2
		Monthly	3
		Weekly	4
		Daily or almost daily	5
85	How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	1
		Less than monthly	2
		Monthly	3
		Weekly	4
		Daily or almost daily	5
86	How often during the last year have you been unable to remember what happened	Never	1
		Less than monthly	2

	the night before because you had been drinking?	Monthly	3
		Weekly	4
		Daily or almost daily	5
87	Have you or someone else been injured as a result of your drinking?	No	1
		Yes, but not in the last year	2
		Yes, within the last year	3
88	Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggested you cut down?	No	1
		Yes, but not in the last year	2
		Yes, within the last year	3
89	Has drunkenness ever contributed to intimate partner violence in your household?	No	1
		Yes	2
Part C: ACCESS TO HEALTH CARE SERVICES			
90	Is there any health facility in this village?	Yes	1
		No	2
		Don't Know	98
91	How far is it from where you live to the nearest health facility?	Less than 1 km	1
		1 to 2 km	2
		3 to 4 km	3
		5km or more	4
		Don't know	98
92	How easy is it for you to reach this health facility?	Not easy	1
		Fairly easy	2
		Easy	3
		Very easy	4
		The easiest	5
		Don't Know	98
93	Do you use this health facility when you or a member of your household is sick?	Yes **(SKIP to 96)**	1
		No **(SKIP to 94)**	2
94	If not, what other option do you use?	Traditional medicine	1
		Local pharmacy	2
		Home care service	3
		Social network	4
		Don't know	98
95	What is the major barrier that prevents you from seeking health care services?	No barriers	1
		Unavailability of services needed	2

		Inaccessibility of health facilities (e.g. cost, distance)	3
		Unacceptability of services provided	4
		Other (Please specify) ______________________________	97
		Ne sais pas	98
96	How satisfied are you with the health services that you get?	Not satisfied	1
		Fairly satisfied	2
		Satisfied	3
		Very satisfied	4
		Most satisfied	5
		Don't Know	98
97	In the past 12 months, have you had to sell food or livestock to pay for a family emergency (e.g. someone being sick)?	No	1
		Yes	2
		Don't know	98
SECTION F: INTIMATE PARTNER VIOLENCE (**adapted from DHS**)			
Sometimes a husband can get irritated or annoyed by things that his wife does. Do you think a husband is justified in hitting or beating his wife in the following situations:			
98a	If she goes out without telling him?	Yes	1
		No	2
98b	If she neglects the children?	Yes	1
		No	2
98c	If she argues with him?	Yes	1
		No	2
98d	If she buys or sells something without telling him?	Yes	1
		No	2
98e	If she burns the food?	Yes	1
		No	2
98f	If she refuses to have sex with him?	Yes	1
		No	2
98g	If she has been drinking or is drunk?	Yes	1
		No	2
98h	Did you beat your wife (*or did your husband beat you*) in the last four weeks?	Yes	1
		No	2
98i	Did you beat your wife (*or did your husband beat you*) in the last 12 months?	Yes	1
		No	2
Does your husband/partner ever do any of the following things to you?			

99a	Slap you?	Yes	1
		No	2
99b	Twist your arm or pull your hair?	Yes	1
		No	2
99c	Push you, shake you, or throw something at you?	Yes	1
		No	2
99d	Punch you with his fist or with something that could hurt you?	Yes	1
		No	2
99e	Kick you, drag you or beat you up?	Yes	1
		No	2
99f	Try to choke you or burn you on purpose?	Yes	1
		No	2
99g	Threaten or attack you with a knife, gun, or any other weapon?	Yes	1
		No	2
100a	Physically force you to have sexual intercourse with him even when you did not want to?	Yes	1
		No	2
100b	Force you to perform any sexual acts you did not want to?	Yes	1
		No	2
101a	Say or do something to humiliate you in front of others?	Yes	1
		No	2
101b	Threaten to hurt or harm you or someone close to you?	Yes	1
		No	2
101c	Insult you or make you feel bad about yourself?	Yes	1
		No	2

SECTION G: HOUSEHOLD STRUCTURE, DECISION MAKING & DIVISIONS OF LABOUR

102	Which of the following best describes your household structure?	Nuclear (husband and wife with/without children)	1
		Extended (husband, wife, children and relatives)	2
		Polygamous and nuclear	3
		Polygamous and extended	4
		Other (please specify) ____________________________	97
103	In your household, who contributes most of the income?	Children	1
		Male head/Father	2
		Female head/Mother	3

		Male relative	4
		Female relative	5
		Other (Please specify) ___________________________	97
		Don't know	98
104	In your household who contributes **THE SECOND MOST** of the income?	Children	1
		Male head/Father	2
		Female head/Mother	3
		Male relative	4
		Female relative	5
		Other (Please specify) ___________________________	97
		Don't know	98
105	In your household, who is considered to be in charge of decision making?	Everyone contributes equally	1
		Male and Female heads decide together	2
		Male head/Father	3
		Female head/Mother	4
		Male relative	5
		Female relative	6
		Other (Please specify) ___________________________	97
		Don't Know	98
106	In your household, does someone have the final say in decision-making?	No, it is joint	1
		Male head/Father	2
		Female head/Mother	3
		Male relative	4
		Female relative	5
		Other (Please specify) ___________________________	97
		Don't Know	98
107	IF POLYGAMOUS, which wife/wives are involved in decision-making?	All wives are involved equally	1
		Primarily the 1st wife	2
		Another wife who is **NOT** the 1st wife	3
108	In your household who makes decisions about making large household purchases? (Example: vehicle, furniture etc.)	Everyone contributes equally	1
		Male and Female heads decide together	2
		Male head/Father	3
		Female head/Mother	4

		Other (Please specify) ___________________	97
		Don't Know	98
109	In your household who makes decisions about making household purchases for daily needs?	Everyone contributes equally	1
		Male and Female heads decide together	2
		Male head/Father	3
		Female head/Mother	4
		Other (Please specify) ___________________	97
		Don't Know	98
110	In your household who makes decisions about visits to distant families and relatives?	Everyone contributes equally	1
		Male and Female heads decide together	2
		Male head/Father	3
		Female head/Mother	4
		Other (Please specify) ___________________	97
		Don't Know	98
111	In your household who makes decisions about what food to eat each day?	Everyone contributes equally	1
		Male and Female heads decide together	2
		Male head/Father	3
		Female head/Mother	4
		Other (Please specify) ___________________	97
		Don't Know	98
112	In your household who makes decisions on paying for any health related expenses?	Everyone contributes equally	1
		Male and Female heads decide together	2
		Male head/Father	3
		Female head/Mother	4
		Other (Please specify) ___________________	97
		Don't Know	98
Can your wife (*or you if it is woman*) ever:			
113a	Own land?	Yes	1
		No	2
113b	Own a house/home?	Yes	1
		No	2

113c	Decide on her own how to use the household's land?	Yes	1
		No	2
113d	Decide to plant crops on her own?	Yes	1
		No	2
113e	Decide to sell crops on her own?	Yes	1
		No	2
113f	Decide how to spend HER PARTNER'S money?	Yes	1
		No	2
113g	Decide how to spend HER OWN money?	Yes	1
		No	2
113h	Decide on her own to join an organization such as a village bank?	Yes	1
		No	2
113i	Decide to visit family or friends outside the village on her own?	Yes	1
		No	2
113j	Be in a leadership position in an organization that required her to travel away from home?	Yes	1
		No	2
114a	Do you (*or does your husband*) ever help with child care?	Yes	1
		No **(SKIP to Q115a)**	2
114b	How often per month?	Daily	1
		Often	2
		Rarely	3
115a	Do you (*or does your husband*) ever help with food preparation?	Yes	1
		No **(SKIP to Q116a)**	2
115b	How often per month?	Daily	1
		Often	2
		Rarely	3
116a	Do you (*or does your husband*) ever do laundry?	Yes	1
		No **(SKIP to Q117a)**	2
116b	How often per month?	Daily	1
		Often	2
		Rarely	3
The following farming tasks are done by which people in your household:			
117a	Preparing the soil (e.g. with hoe)?	Both men and women	1
		Men only	2
		Women only	3
		Women and children	4
117b	Sowing/planting?	Both men and women	1

		Men only	2
		Women only	3
		Women and children	4
117c	Weeding?	Both men and women	1
		Men only	2
		Women only	3
		Women and children	4
117d	Harvesting?	Both men and women	1
		Men only	2
		Women only	3
		Women and children	4
118a	Has the amount of farming work that women do changed?	Yes	1
		No **(SKIP to Q119a)**	2
118b	[IF YES] How has women's workload in farming changed?	They do much less work than before	1
		They a little less work than before	2
		They do a little more work than before	3
		They do much more work than before	4
119a	Has the amount of farming work that men do changed?	Yes	1
		No **(SKIP to Q120)**	2
119b	[IF YES] How has men's workload in farming changed?	They do much less work than before	1
		They a little less work than before	2
		They do a little more work than before	3
		They do much more work than before	4
120	Are men increasingly becoming involved in household (women's) work?	Yes	1
		No	2
SECTION H: SOCIO-DEMOGRAPHIC INFORMATION			
121	What is your gender?	Female	1
		Male	2
122	How old are you?	______________________________	
		Don't know	98
123	Is your family polygamous?	Yes	1
		No	2
124	What is your position in your household?	Non-head	1
		Head of household	2
125	How many people in total live in your household?	Please specify (number): ______________________________	
126	How many of the people in your household	Please specify (number): ______________________________	

	are children (under 18)?		
127	How many children in your household go to school?	Please specify (number): ______________________________	
128	How many elderly people live in your household (over 65)?	Please specify (number): ______________________________	
129	What is your religion?	Christianity	1
		Islam	2
		Animism/voudoun	3
		Non-religious	4
		Other (please specify) _____________________________	97
130	What is your ethnicity?	Ditammari	1
		Dendi	2
		Waama	3
		Bariba	4
		Kabiye	5
		Berba	6
		Fulfulde	7
		Other (please specify) _____________________________	97
131	What is your highest level of education?	No formal education	1
		Some Primary	2
		Some Secondary	3
		Completed Baccalaureate (high school)	4
		Some post-secondary education	5
132	What is your primary occupation?	Farming	1
		Commerce (or petty commerce)	2
		Trade (mason, plumber etc.)	3
		Civil service	4
		Unemployed	5
		Other (please specify) ____________________________	97
133	Would you mind if I ask you about your household's average income last month (Franc CFA)?	Please specify: __________________________	
		Ne sais pas	98
Do you have access to the following?			
134a	Tontines (savings group)?	Yes	1
		No	2

134b	Credit (formal or informal)?	Yes	1
		No	2
134c	Social support or aid from the state?	Yes	1
		No	2
134d	Other non-state aid (ONG, development project etc.)?	Yes	1
		No	2
135	Which one of the following housing type best describes the type of dwelling this household occupies?	Traditional Tata Somba (beaten earth, hay roof/granary)	1
		Modern house (cinder block, metal, wood)	2
		A mix of traditional and modern buildings	3
		Room in a house	4
		Precarious dwelling (e.g. hut, shack)	5
		Other (please specify) : ______________________________	97
Please answer yes or no to following questions (Yes = 1, No = 2)			
136	Does your household have :	a) Electricity/solar panels?	1 or 2
		b) Running water?	1 or 2
		c) A mobile phone?	1 or 2
		d) A landline telephone?	1 or 2
		e) A refrigerator or freezer?	1 or 2
		f) Electricity generator/Invertor(s)?	1 or 2
		g) Computer/Tablet?	1 or 2
		h) Access to the Internet in any device?	1 or 2
Please answer yes or no to following questions (Yes = 1, No = 2)			
137	What type of fuel does your household use for cooking?	a) Electricity	1 or 2
		b) Liquefied petroleum gas	1 or 2
		c) Natural gas	1 or 2
		d) Biogas	1 or 2
		e) Kerosene	1 or 2
		f) Coal/lignite	1 or 2
		g) Charcoal	1 or 2
		h) Wood	1 or 2
		i) Straw/stems/shrubs/grass	1 or 2
		j) Animal dung	1 or 2
		k) No fuel is used in the household	1 or 2
138	Where is your kitchen located?	Inside	1
		Outside	2
		Both	3

139	Does any member of this household own the following: ***Please answer Yes=1, No=2***	a) A bicycle?	1 or 2
		b) A motorcycle?	1 or 2
		c) An animal-drawn cart?	1 or 2
		d) A car or truck?	1 or 2
140	Does your household own any livestock? IF NOT, SKIP to END.	Yes	1
		No	2
141	Which of these animals does your household own? ***Please answer Yes=1, No=2***	a) Pig(s)	1 or 2
		b) Goat(s)	1 or 2
		c) Cow(s)	1 or 2
		d) Donkey(s)	1 or 2
		e) Sheep	1 or 2
		f) Poultry	1 or 2
		g) Rabbits	1 or 2
		h) Pigeons/doves	1 or 2
142	Would you mind if I ask you about your household's average income per year (Franc CFA)?	Less than 200 000 FCFA	1
		200 000 to 400 000 FCFA	2
		400 001 to 600 000 FCFA	3
		600 001 to 800 000 FCFA	4
		More than 800 000 FCFA	5
		Don't know	98
THANK YOU!		**End time** ___________________	

Appendix G: Curriculum Vitae

Rosalind Ragetlie

PROFILE

- Internationally experienced researcher with academic training in gender and development, food, and farming in sub-Saharan Africa
- Experienced in the use of qualitative and quantitative data collection methods (in-depth interviewing, focus groups, surveys) and data analysis (QSR Nvivo, SPSS, Stata)
- Varied teaching experience in health and development geographies
- Proficient in preparing ethics applications, grant proposals, and other funding applications
- Experience working with a diverse range of stakeholders in an international setting, including farmers, various levels of government, civil society organizations, and fellow academics

LANGUAGES

- English – native level of competence
- French – advanced level of competence

EDUCATION

Ph.D. Candidate, Geography and Environment **Aug. 2021**
Western University (London, ON)

- Specialization: Food security, food systems, smallholder agriculture, peasant farming, gender, development, sub-Saharan Africa

MA*, Geography and Environment **2017**
Western University (London, ON)

*this degree was not awarded, as I was offered the opportunity to upgrade directly into the Ph.D. program

Honours Bachelor of Geography and Environmental Studies Bilingual (Co-op) **2015**
University of Ottawa (Ottawa, ON)

AWARDS & HONOURS

- International Development Research Centre (IDRC) Doctoral Research Award, 2018 [20,000$]
- Social Sciences and Humanities Research Council of Canada (SSHRC): Joseph-Armand Bombardier Canada Graduate Scholarship, Doctoral, 2018-2021 [105,000$ over 3 years]
- Jordan International Experience Award, 2017-2018 [5,000$]
- Ontario Graduate Scholarship, 2017-18, PhD in Geography [15,000$]

- Western Graduate Research Scholarship, 2017-18, PhD in Geography [16,700$ over 4 years]
- Samuel Clark Research Grant, 2017, MA in Geography [5,000$]
- Social Sciences and Humanities Research Council of Canada (SSHRC): Joseph-Armand Bombardier Canada Graduate Scholarship – Masters, 2016-2017 [17,500$]
- Ontario Graduate Scholarship, 2016-17, MA in Geography, 2016 [15,000$]: *declined*
- Western Graduate Research Scholarship, 2016-17, MA in Geography [15,000$ over 2 years]
- CBI Home Health We Care Post-Secondary Scholarship, 2016, MA in Geography [3,000$]
- Canadian Association of Geographers Undergraduate Award for the most outstanding student graduating in a Geography honours/majors program at the University of Ottawa, 2016, HBA in Environmental Studies and Geography
- University of Ottawa Faculty Plaque in Geography (for the highest standing in the Department of Geography), 2016, HBA in Environmental Studies and Geography
- University of Ottawa Merit Bursary, 2015, HBA in Environmental Studies and Geography [1,000$]
- University of Ottawa Co-op Student of the Year, 2014, HBA in Environmental Studies and Geography
- Faculty of Arts Co-op Student of the Year, 2014, HBA in Environmental Studies and Geography
- Dean's Honour List 2011-2015, HBA in Environmental Studies and Geography
- University of Ottawa Admission Scholarship, HBA in Environmental Studies and Geography [12,000$ over 8 semesters]

TEACHING EXPERIENCE & CERTIFICATION

Instructor **Jan. 2021 – May 2021**

University of Western Ontario, Department of Geography and Environment (London, ON)

- Designed and prepared course content for Geographies of Health & Health Care, a 3rd year geography course with 32 students
- Applied teaching and learning pedagogy to course design, delivery and assessment in order to ensure active, student-centered learning
- Developed proficiency in the use of online teaching technologies, both synchronous and asynchronous
- Worked collaboratively with the Teaching Assistant on tutorial delivery and grading

Teaching Assistant **Sept. 2016 – Apr. 2020**

Western University, Department of Geography and Environment (London, ON)

- Assisted in teaching various courses, including Environment and Development Challenges (GEOG 3431), Geographies of Development (GEOG 3442), Public Health and Environment (GEOG 2430), Geographies of Health & Health Care (GEOG 3431), and Geographies of Tourism (GEOG 2144).
- Enhanced student learning through the development and delivery of lecture content, tutorial leadership, and grading for a variety of class sizes ranging from 15-600 students

- Created a student-centered learning experience through the design and development of active learning activities, assignments, assessments, and rubrics

Advanced Teaching Program **Feb. 2020 – Mar. 2020**
Western University, Centre for Teaching and Learning (London, ON)
- Completion of a course which encouraged the development of pedagogy and teaching skills, including course design, assessment design, as well as active learning and classroom community
- Included the development of a course syllabus, and a microteaching component to refine and practice teaching skills by giving and receiving peer feedback

Teaching Mentor Program **Oct. 2020 – Dec. 2020**
Western University, Centre for Teaching and Learning (London, ON)
- Completion in peer-to-peer teaching feedback program with an interdisciplinary group of graduate students and postdoctoral scholars, to observe and offer feedback on one another's teaching

RESEARCH EXPERIENCE

Lead Researcher **Sept. 2016 – Sept. 2021**
Western University, Department of Geography and Environment (London, ON)
- Designed, developed, and conducted an independent MA and Ph.D. research project on gender, development, food security and farming in Benin
- Developed and maintained collaborative relationships with a range of different stakeholders (farmers, local government, local researchers, civil society organizations)
- Managed a team of researchers, secured funding and ethics approval for the project
- Communicated research findings to expert and non-expert audiences

Research Consultancy **Mar. 2019 – Jun. 2019**
International Centre for Agricultural Research in Dry Areas (ICARDA):
Resilient Agricultural Livelihoods Systems Program (remote)
- Exercised innovative thinking and applied research abilities in conducting a broad literature review on gender and seeds with regards to access, preferences, characteristics, adoption, and impacts

Research Consultancy **Sept. 2018 – Jan. 2019**
International Centre for Agricultural Research in Dry Areas (ICARDA):
Resilient Agricultural Livelihoods Systems Program (remote)
- Applied research skills and demonstrated excellent intercultural competency in travelling to Amman, Jordan to meet with stakeholders and conduct face-to-face interviews
- Analyzed primary data, conducted a literature review, and prepared a peer-reviewed journal article on gender programming in Jordanian civil society organizations

Research Coordinator **Sept. 2014 – Dec. 2014**

University of Ottawa, Department of Geography (Ottawa, ON)

- Demonstrated excellent organisation, coordination and event management skills while planning a forum which brought together prenatal environmental health experts from across North America.
- Applied research skills through formal report writing, comprehensive research of both peer- reviewed and grey literature, and the preparation of a literature review for publication.

Research Assistant **May 2013 – Aug. 2013**

University of Ottawa, Department of Geography and Environment (London, ON)

- Demonstrated strong analytical skills and critical thinking, organization, and excellent time management while applying research skills
- Developed skills in spatial analysis software through ArcGIS mapping and data analysis
- Developed a diverse set of skills in formal report writing, comprehensive literature review, English-French translation work, conference organization, and grant proposal writing

PROFESSIONAL EXPERIENCE

Lifecycle and Rehabilitation Project Officer **May 2014 – Aug. 2016**

National Capital Commission (Ottawa, ON)

- Exercised excellent project management, organisational skills, and multitasking skills while managing various projects simultaneously
- Proficient in technical aspects of project management (estimates, requisitions etc.)
- Developed and maintained collaborative relationships with a range of stakeholders

ecoEnergy Program Assistant **Jan. 2014 – Apr. 2014**

Aboriginal Affairs and Northern Development Canada (Ottawa, ON)

- Exercised strong research and organizational skills in reviewing funding proposals for renewable energy projects in northern and aboriginal communities across Canada
- Developed excellent communication skills while preparing written reports, responding to requests for information from the public, consultants, and government officials, and preparing social media content

RESEARCH CONTRIBUTIONS

Peer Reviewed Publications

Ragetlie, R. (submitted June 2021). The monetization of social reproduction and the erosion of the moral economy: ongoing agrarian transition in northwestern Benin. *Agriculture and Human Values*.

Ragetlie, R. & Luginaah, I. (submitted Mar. 2021). Undermining masculinity and contesting the conjugal contract: Food insecurity and the gendered division of labour in northwestern Benin. *Gender & Society.*

Ragetlie, R., Najjar, D. & Baruah, B. (under review). The status of gender and development programming in Jordan: still "adding women and stirring?" *Women's Studies International Forum.*

Ragetlie, R., Hounkpatin, W. A. & Luginaah, I. (under review). Pathways to violence: the impact of food insecurity in northwestern Benin. *The Journal of Development Studies.*

Ragetlie, R., Najjar, D. & Baruah, B. (forthcoming). Paying 'lip service' to gender equality: The hollow implementation of gender mainstreaming in Jordan. *Civil Society Review.*

Ragetlie, R., Hounkpatin, W. A., & Luginaah, I. (2021). Community perceptions of gendered alcohol misuse in a food insecure context: The case northwestern Benin. *Social Science & Medicine*, 114016.

Sano, Y., Konkor, I., Antabe, R. & **Ragetlie, R.** (2021). Physical Intimate Partner Violence Justification and Female Genital Mutilation in Kenya: Evidence from the Demographic and Health. *Journal of Aggression Maltreatment and Trauma*, 1-11.

Ragetlie, R., Sano, Y., Antabe, R., & Luginaah, I. (2020). Married women's experiences of intimate partner violence and utilization of antenatal health care in Togo. *Sexual & Reproductive Healthcare*, *23*, 100482.

Crighton, E. J., **Ragetlie, R.**, Luo, J., To, T., & Gershon, A. (2015). A spatial analysis of COPD prevalence, incidence, mortality and health service use in Ontario. *Health reports*, *26*(3), 10.

Peer Reviewed Presentations

Vercillo, S., Rao, S., **Ragetlie, R.,** & Vansteekiste, J. Nourishing the nexus: a feminist analysis of gender, nutrition and agri-food development policies and practices. The Canadian Association for the Study of International Development Annual Meeting. Online, June 2nd, 2021.

Ragetlie, R. Panelist in Special Session: Zooming into New Feminist Futures. The Canadian Association of Geographers Annual Meeting. Online, June 7th-11th 2021.

Ragetlie, R. Agrarian change in context: Atacora farmers' struggle for subsistence in the global food system. American Association of Geographers Annual Meeting. Online, April 7th-11th, 2021.

Ragetlie, R. & Luginaah, I. Gender and food insecurity: Looking within the agrarian household. 4th International Conference on Global Food Security. Online, December 7th-9th, 2020.

Ragetlie, R. Smallholders, food production, and subsistence within Benin's neoliberal capitalist economy. The Canadian Association for the Study of International Development Annual Meeting at the Western Congress of the Humanities and Social Sciences. London, ON, *event cancelled*.

Ragetlie, R. & Luginaah, I. A gendered approach to exploring smallholder farming and seasonal food insecurity in Atacora, Benin. American Association of Geographers Annual Meeting. Online, April 6th, 2020.

Ragetlie, R. Food insecurity and gender in Atacora, Benin: why does context matter? Power and Global Health Conference. London, ON, Western University, November 14th, 2018.

Ragetlie, R. & Luginaah, I. Household gender dynamics & food insecurity: alcohol misuse in Benin. American Association of Geographers Annual Meeting. New Orleans LA, April 9th-14th, 2018.

Ragetlie, R. & Luginaah, I. The role of gender in determining experiences of food insecurity in rural Benin. Canadian Association of Geographers Ontario Division. Kingston ON, October 20th-21st, 2017.

Other Contributions

Ragetlie, R. & Crighton, E. (August 2013). Spatial Analysis of COPD Health Outcomes and Health Service Use in Ontario. Prepared for the Ontario Ministry of Health and Long Term Care (MOHLTC) and the Institute of Clinical Evaluative Sciences (ICES).

COMMUNITY INVOLVEMENT

Representative **Sept. 2020 – Aug. 2021**
Public Service Alliance of Canada (PSAC) at Western University, Gender Equity Committee

Member **Sept. 2017 – Aug. 2021**
Graduate Affairs Committee, Western University, Department of Geography and Environment

Volunteer Spousal Programming Assistant **Sept. 2017 – Aug. 2020**
International Student Centre, Western University

Executive Member **Jan. 2012 – Jan. 2019**
NGO Eco-Logique Benin

Various Positions **Sept. 2012 – Aug. 2014**
University of Ottawa Geography Students' Association