

11-14-2013

The Primacy of Context: An Exploration into the Causes of Food Insecurity in Kiterere, Kenya.

William O. Aludo
SIT Graduate Institute

Follow this and additional works at: <https://digitalcollections.sit.edu/capstones>

 Part of the [African Studies Commons](#), [Agricultural and Resource Economics Commons](#), [Anthropology Commons](#), [Civic and Community Engagement Commons](#), [Community-Based Learning Commons](#), [Community-Based Research Commons](#), [Economic Policy Commons](#), [Family, Life Course, and Society Commons](#), [Growth and Development Commons](#), [Health Economics Commons](#), [Human Geography Commons](#), [Inequality and Stratification Commons](#), [International Economics Commons](#), [International Relations Commons](#), [Physical and Environmental Geography Commons](#), [Political Economy Commons](#), [Politics and Social Change Commons](#), [Public Administration Commons](#), [Public Affairs Commons](#), [Public Economics Commons](#), [Public Policy Commons](#), [Regional Sociology Commons](#), [Rural Sociology Commons](#), [Service Learning Commons](#), [Social Welfare Commons](#), and the [Sociology of Culture Commons](#)

Recommended Citation

Aludo, William O., "The Primacy of Context: An Exploration into the Causes of Food Insecurity in Kiterere, Kenya." (2013). *Capstone Collection*. 2631.
<https://digitalcollections.sit.edu/capstones/2631>

This Thesis (Open Access) is brought to you for free and open access by the SIT Graduate Institute at SIT Digital Collections. It has been accepted for inclusion in Capstone Collection by an authorized administrator of SIT Digital Collections. For more information, please contact digitalcollections@sit.edu.

**THE PRIMACY OF CONTEXT: AN EXPLORATION INTO THE CAUSES
OF FOOD INSECURITY IN KITERE, KENYA.**

William Okoth Aludo

PIM 71 – January Start

A Capstone Paper submitted in partial fulfillment of the requirements for a Master of Arts in Sustainable Development with a concentration in Development Management at SIT Graduate Institute in Brattleboro, Vermont, USA.

Capstone Seminar Start Date: November 11th, 2013

Adviser: Nikoi Kote-Nikoi, Ph.D.

Consent to Use of Capstone

I hereby grant permission for World Learning to publish my Capstone on its websites and in any of its digital/electronic collections, and to reproduce and transmit my CAPSTONE ELECTRONICALLY. I understand that World Learning's websites and digital collections are publicly available via the Internet. I agree that World Learning is NOT responsible for any unauthorized use of my Capstone by any third party who might access it on the Internet or otherwise.

William Aludo

November 2013

Acknowledgements

I would like to express my gratitude to Ezekiel Apindi Anyango, for his valuable assistance in translating the questionnaire into *Luo* and coordinating the data collection process.

I further wish to convey my thanks to Joseph Ochieng A. Rayudhi, my father, for his contribution to the questionnaire translation process in addition to his love, support and encouragement throughout the study.

Additionally, I would like to recognize Joseph Okech Nyamanga, the local area Assistant Chief, for his consent and support to conduct the research in Kitere village, which falls under his administrative jurisdiction.

I also extend my appreciation to Kitere residents, groups and individuals who actively participated in the study.

Likewise, I am thankful to James Johnston for his valuable comments on the draft.

Last but not least, I give my special thanks to Dr. Nikoi Kote-Nikoi, my research project advisor, for his professional guidance and valuable critiques without which this study would not have come to a successful completion.

William Aludo

TABLE OF CONTENTS

Abstract.....	1
Introduction	2
Literature Review.....	9
Research Design.....	16
Presentation and Analysis of Data.....	21
Discussion.....	29
Bibliography.....	38
Figure 1: Map of Migori County	3
Figure 2: Estimated food security conditions in Kenya.....	5
Table 1: Migori County demographic data.....	4
Table 2: Analysis of the findings divided into categories.....	28

ABSTRACT

The purpose of this study was to explore the specific reasons why households in Kitere village, Kenya experience persistent food insecurity every year while the region enjoys the advantage of two planting/harvest seasons in a year. Kitere village lies within the lakeside region of Nyanza Province in Kenya, generally considered to be one of the more agriculturally productive parts of the country. The Participatory Rural Appraisal method was employed to gather qualitative data on the causes of food insecurity in Kitere village. The data sources were focus groups and a self-administered, one-time survey of random and non-random samples of key informants from the local community. Five main thematic categories derived from the data analysis: inadequate resources, people's practices, people's attitudes and values, natural factors, and existing trends/conditions. The intertwining and complex relationship among these factors depict characteristics of a systems problem, hence the need for systems-thinking and approach to analysis and intervention. The findings stand in contrast to reports based on countrywide and regional analyses — they reveal causes of food insecurity unique to Kitere village, which emphasize the primacy of contextual assessment. A decentralized food security strategy based on local context assessments with flexible support by the government is recommended. This paper proposes a community-based intervention that is people-driven, systems-based, holistic, non-reductionist, trans-disciplinary and contextual in nature.

Keywords: food insecurity; food security; food insecurity causes; household food insecurity; Kitere village in Kenya; Participatory Rural Appraisal; Systems Thinking; Systems Approach; local context assessments; context specific interventions; community driven interventions

Introduction

The purpose of this study was to provide an understanding of the factors responsible for food insecurity among the residents of Kitere village in Kenya. At this stage in the research, food insecurity was generally defined as a condition in which a household does not have the opportunity to continuously access sufficient, safe and nutritious food over a substantial period of time. The context was defined as the specific circumstances that make up the characteristics, and facilitate the understanding and assessment of a community and its issues. I was interested in exploring the specific reasons why households in Kitere village experience persistent food insecurity every year while the region enjoys the advantage of two planting/harvest seasons in the year.

My interest was motivated by two main reasons; First, I am an active stakeholder in the community as I grew up in Kitere village, and even as an adult, I continue to visit and spend time in the village. While a student at SIT Graduate Institute, I started my practicum in the summer of 2012 working with The Christian Mission to Learners (CML) at the CML Academy, a local private-school project that I co-founded in Kitere village, in the Nyanza Province of Kenya. The school started a feeding program, which did not have significant impact. Second, I am greatly concerned with the gravity of the food insecurity problem. Food insecurity is one of the critical global issues, and as a student in the Sustainable Development program, this problem was, and is still certainly in line with, my interest, considering also that I plan to work professionally within grassroots initiatives in facilitating sustainable development.

Kitere village lies within Migori County of Nyanza Province in the lakeside region Southwest of Kenya, generally considered to be one of the more agriculturally productive parts

of the country. Migori County borders Homa-Bay, Kisii and Narok Counties. See Figure 1 on page 3 for the location of Kitere, Migori County in Kenya.



Figure 1. Map of Migori County. Adapted from “County edition Kenya,” by Tabarin Consulting, 2012, Retrieved October 8, 2013 from <http://www.countyedition.co.ke/counties/l-m/migori.html>

The region has two seasons of rain, mainly in March-May and July-September, with temperatures ranging from 21°C to 35°C. Kitere village is located in the uplands of the lakeside region where the soil is dark red clay, which are fertile and well drained. The County’s agricultural produce includes sugarcane, tobacco, maize, beans, cassava, bananas, sweet potatoes, millet, groundnuts and vegetables. Livestock farming is undertaken on a small scale. Kitere village is inhabited predominantly by the *Luo*. The 2009 Census reported the County’s population at below 1 million people, and the female population outnumbered that of their male counterparts. Table 1 below shows the population distribution of Migori County.

Table 1

Migori County demographic data

Male	Female	Total	Households	Area in Sq. Km.	Density
444,358	472,812	917,170	180,211	2,595.94	353.31

Note: Data adapted from “County Stats,” by Kenya National Bureau of Statistics, 2011,

Retrieved November 24, 2013 from <http://www.knbs.or.ke/counties.php>

Some expert reports based on national-level and provincial-level analyses would appear to give conflicting and confusing impression on the food security situation in Kitere village. According to the Famine Early Warning Systems Network (FEWS NET, 2013a), Nyanza Province is categorized within the region (see Figure 2 on page 5) that experiences no or minimal acute food insecurity, where “household groups do not experience short term instability; or household groups experience short term instability but are able to meet basic food needs without

atypical coping strategies” (FEWS NET, 2013b, Summary Description, Phase 1). This does not explicitly address the question of whether the region (or Kitere village) experiences food insecurity at all or maybe of a non-acute kind. It is also unclear whether there is a difference between “instability” and “insecurity” — although it would seem to appear that both are used interchangeably.

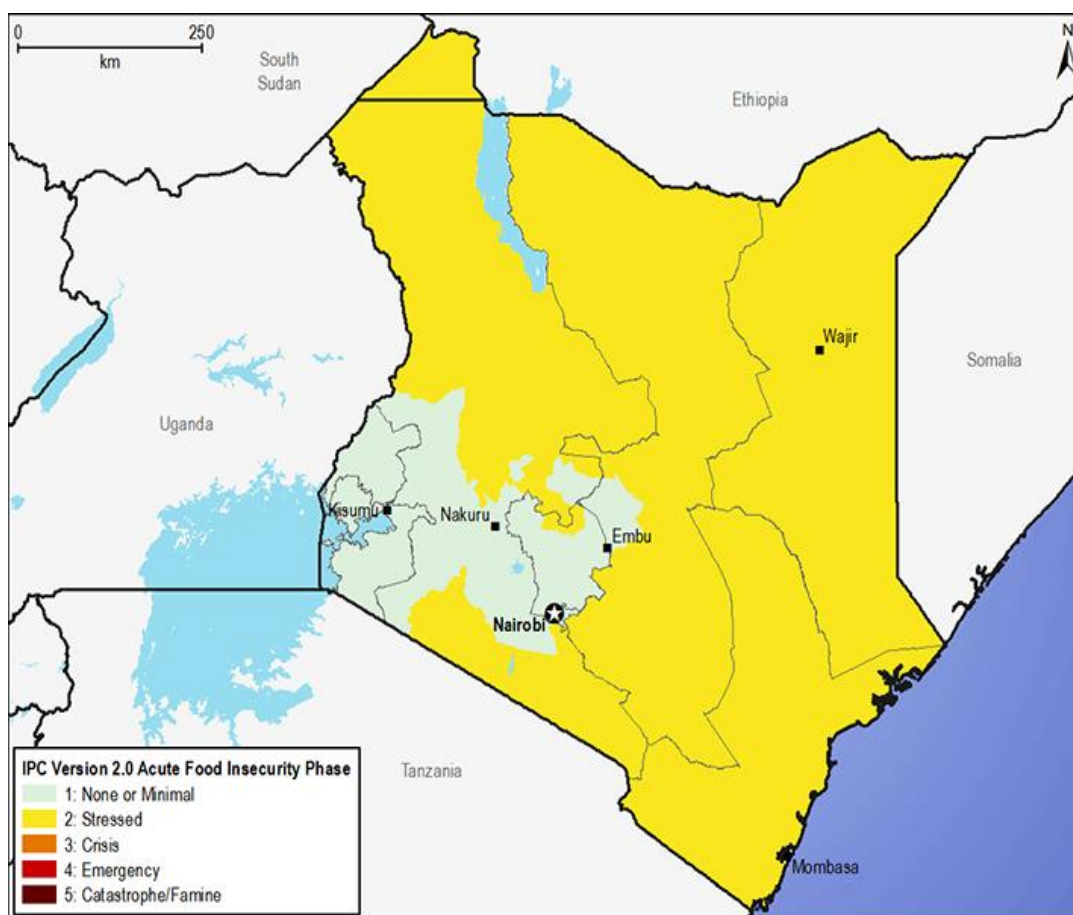


Figure 2. Estimated food security conditions in Kenya. Adapted from “Kenya: Estimated food security conditions, 3rd Quarter 2013 (July-September 2013),” by FEWS NET (2013a), Retrieved October 14, 2013 from <http://www.fews.net/pages/country.aspx?gb=ke&l=en>

This could present some ambiguity since “food instability” could have another meaning — the inability of food to retain its essential characteristics over a considerable duration of time. Even this meaning would not bring the phrase close to being a perfect substitute since it only relates to safety and nutrition which are but partial aspects of the whole concept of food security.

According to Feed the Future (FtF, 2012):

Agriculture is the backbone of Kenya’s economy and central to the Government of Kenya's development strategy. Yet only about 20 percent of the country is arable and productivity remains low. Most farmers work without modern seeds and technology or adequate financial or extension services. The population is growing by about a million people per year. This growth, combined with stagnant agricultural productivity and limited arable land, poses critical challenges to food security. Kenya faces chronic food shortages: Each year, two to four million people receive food aid. The total number of those considered poor has increased from 15.2 million in 1999 to 17.8 million in 2009. Furthermore, 35 percent of children under five are stunted due to undernutrition. Kenya’s agriculture sector employs more than 75 percent of the workforce and accounts for approximately 51 percent of Kenya’s GDP. Because so many rural people farm and/or herd, improving agricultural productivity and income is the key to increasing incomes, achieving food security, and improving nutritional status. The sector could grow significantly if irrigation, roads, agricultural inputs, extension, marketing, and policy constraints can be addressed. (Kenya Context section)

It would appear that, while addressing the situation from a geographical point of view (FEWS NET, 2013a, 2013b), Kitere village is not considered a priority area needing emergency response. In contrast, looking at the country as a whole, FtF places Kitere village among the rural farming communities in Kenya that need interventions to achieve food security.

FtF (2012) cites three main factors — population, land and agricultural production as the main factors in this general analysis of the nation's food security status. This approach is a typical analytical model dependent on simplified measurable factors employed by neo-classical economists to make such analyses possible. FtF proceeds to propose increasing agricultural productivity and income as the key intervention strategy for the whole country, including Kitere village. Such a “blanket proposal” of a single intervention for the whole nation, seems to disregard specific characteristics of different contexts within the country.

The World Food Program (WFP, 2013a) states their approach as follows:

Before intervening in a country, the first priority for WFP is to understand the food security situation of the population. WFP's food security analysis work is commonly known as VAM (Vulnerability Analysis and Mapping) and is carried out by 150 analysts around the world. (Food Security Analysis)

Although it would appear that the WFP recognizes the importance of understanding the population before intervening in a country, the approach implied here is not quite different from the other experts'. Just like FtF (2012), it also employs a helicopter view of the whole country situation. Understanding the food security situation of the population of a country is not equal to understanding the specific food security situation of specific communities within a country. Here again is a typical case implying the endorsement of universalism over local context analysis.

In response to the problem of child hunger and malnutrition, evidenced by various symptoms, the school management committee started a feeding program at the CML Academy in Kitere village. The symptoms included the presence of weak, inactive and stunted children, increased absenteeism and complaints of headache, and children experiencing difficulty concentrating in class. However, we soon realized that this does not address the problem of food insecurity at the household level since kids still have insufficient food at their homes. When our simplistic approach failed, I saw the need for an investigation into the problem.

The results of this study would provide vital information for the Kitere community, local grassroots development initiatives, local government administration, local department of agriculture and other national policy makers. I particularly plan to collaborate with Kitere community members and grassroots initiatives in an intervention program based on the findings of this study. Furthermore, the findings from this study would provide base information for future in-depth explorations of the causes of food insecurity in Kitere village.

The main question of my inquiry was as follows: What do you believe are the root causes of food insecurity in Kitere village? However, in order to obtain a general understanding of the food insecurity situation in Kitere village, I crafted eight (including the main question) open-ended questions, which were then translated into the native language, *Luo*, by a member of the local community before the actual implementation process. These questions are listed in the research design section of this paper.

Literature Review

In my search for existing literature that substantiates the existence of food insecurity in Kitere village and possible intervention approaches that have been taken to address the situation, I found no data that focuses specifically on the situation in Kitere village. In the previous section, I shared some reports providing evidence to the existence of food insecurity in Nyanza Province of Kenya, the larger geographical region within which Kitere village lies. In this section, I share some general literature on food security and some relevant literature supporting the need for context assessment and participatory approach as prerequisites for sustainable development interventions.

Food security has been defined variously by different actors in the contemporary development field. According to the WFP (2013b):

People are considered food secure when they have all-time access to sufficient, safe, nutritious food to maintain a healthy and active life. Food security analysts look at the combination of the following three main elements: **Food availability:** Food must be available in sufficient quantities and on a consistent basis. It considers stock and production in a given area and the capacity to bring in food from elsewhere, through trade or aid. **Food access:** People must be able to regularly acquire adequate quantities of food, through purchase, home production, barter, gifts, borrowing or food aid. **Food utilization:** Consumed food must have a positive nutritional impact on people. It entails cooking, storage and hygiene practices, individuals health, water and sanitation, feeding and sharing practices within the household. (What is Food Security?)

According to the preceding definition, there seems to be an overlap between the two elements of food availability and food access, such that confirmed access implies availability. Both elements culminate into physical availability of sufficient or adequate quantities/stock of food as a result of local production and acquisition from elsewhere through trade (including barter), food aid and gifts. The definition in itself is inadequate insofar as it omits the element of affordability and purchasing power. If food security as defined is a function of food access, then access depends both on physical availability of food and affordability, i.e. whether or not the available food is within one's means to acquire. This is because food can be available, but that does not mean it is accessible to the one without the wherewithal to acquire it. So then, the fact that there is food shortage does not mean there is food insecurity for a given household if they can still pay the higher price for the food. Likewise, the fact that there is abundance of food does not mean there is food security for a given household if they cannot even pay the incredibly low price for the food.

Amartya Sen (1981) addresses this shortcoming in his publication on poverty and famines by introducing the *Entitlement Approach*, proposing that famine should be considered as a consequence of loss of endowment (e.g. land loss, loss of labor power), or loss of exchange entitlement (e.g. fall in wages, rise in food prices). Sen explains that in a private market, an entitlement set of an individual is determined by his endowment (i.e. original bundle of ownership) and additional bundles acquired. According to Devereux (2001), the Entitlement Approach, albeit somewhat limited, possibly has as its most significant contribution to conceptualizing famine, in helping to move the analytical focal point away from an obsession with the simple Malthusian reasoning that too many people implies too little food – people's inability to acquire food.

In their review of the conceptual framework of household food security, Maxwell and Smith (1991) looked at “some 30 definitions which have either been influential in the literature or which summarize agency views” (p. 8) and found that “there are four core concepts, implicit in the notion of secure access to enough food all the time” (p. 4). These are (a) sufficiency of food, defined mainly as the calories needed for an active, healthy life; (b) access to food, defined by entitlement to produce, purchase or exchange food or receive it as a gift; (c) security, defined by the balance between vulnerability, risk and insurance; and (d) time, where food insecurity can be chronic, transitory or cyclical. They further highlight seven conceptual problems with contemporary definitions of food security, namely intra-household issues; household food security and nutrition; household food security and livelihood; sustainability, resilience and sensitivity; perceptions and cultural acceptability; efficiency and cost-effectiveness; and household food security and human rights.

Their points of conclusion emphasize the need to give priority to context and people-driven interventions. Maxwell and Smith (1991) maintain that concepts of food security need to be “people-driven” (p. 51). As far as policy is concerned, preference should be given to food security interventions activated as needed by the food insecure people themselves. It may also mean extensive decentralization of community-based programs, and either way, “the emphasis is on choice by individuals and flexible support by the government, to protect and promote food security” (p. 51).

If we give priority to context, then a people-driven approach to intervention is more fitting for the purpose of facilitating what I would call “enhanced local ownership” of interventions. The people-driven approach is premised on the need to cultivate local empowerment through active local participation in the needs assessment, prioritization, design

and implementation of the interventions of the local people's choice. Through this approach, local community members have the prerogative to decide how to allocate their resources according to community priorities. It would seem that community-driven development (CDD) programs employ the principles of people-driven approach according to the following overview by the The World Bank (2013):

Community-driven development (CDD) programs operate on the principles of local empowerment, participatory governance, demand-responsiveness, administrative autonomy, greater downward accountability, and enhanced local capacity. Experience has shown that when given clear explanations of the process, access to information and appropriate capacity and financial support, poor men and women can effectively organize to identify community priorities and address local problems by working with local governments and other supportive institutions. (Community-driven development overview, context section)

Closely related to food security is the concept of food sovereignty. Food sovereignty gives priority to local community participation, autonomy and sustainability among other factors, in the determination of food security intervention policy. The following is a definition offered by People's Food Sovereignty Network Asia Pacific and Pesticide Action Network Asia and the Pacific (as cited in Windfuhr and Jonsén, 2005). The second paragraph of the preamble states:

By this Convention, Food Sovereignty becomes the right of people and communities to decide and implement their agricultural and food policies and strategies for sustainable production and distribution of food. It is the right to

adequate, safe, nutritional and culturally appropriate food and to produce food sustainably and ecologically. It is the right to access of productive resources such as land, water, seeds and biodiversity for sustainable utilization.

It is imperative to point out here, the difference between food security and food insecurity. In contrast to the broader concept of food security incorporating external aspects like the capacity to outsource food through aid, trade, gifts and borrowing (WFP, 2013b), food sovereignty is more of a legal right to determine and control their capacity to achieve food sufficiency from local resources without depending on external sources. Essentially, food sovereignty facilitates food security but to the extent that the local people actually exercise this right. When food sovereignty is actively and successfully exercised, it promotes food production and distribution dependent on local resources. Consequently, a local community may achieve food security without necessarily having food sovereignty if it depends on food from elsewhere. It therefore implies that food sovereignty and food security cannot be used interchangeably.

Other researchers have highlighted the need for food security interventions founded on local context assessment. In their study of food security interventions in the Great Lakes region of Africa, Levine and Chastre (2004) found that a significant number of food security interventions failed to address the needs of the people affected by crises due to a lack of local context assessment and problem analysis. This is because the “responses were often implemented without a proper analysis of the problem, instead relying on untested assumptions” (p. 19). They conclude by recommending that context assessment precede and form the basis for all food security interventions.

An investigation by Paul *et al.* (2011) into how context can improve complementary feeding interventions found that context assessment was vital to the design of potential complementary feeding interventions in the rural regions of Zimbabwe and Pemba Island, Zanzibar, Tanzania. From a generalized perspective, both sites were considered food insecure, and therefore required similar intervention methods. However, detailed local context assessment identified determinants at the local and household levels that necessitated the choice of two different supplementation options. Based on the poor agricultural and economic context of Zimbabwe, a food-based supplement was deemed vital to fill the nutrient gaps for children. In contrast, a food-based supplement was not found to be necessary in Pemba, “because the local agricultural and ecosystem context provided coconuts (energy) and fish (protein)” (p. 250). They further reckon that understanding the local context provides diverse opportunities for improvement of intervention efficiency.

A study by Eileen Kennedy (1989) on the effects of sugarcane production on food security, health, and nutrition in South Nyanza District of Kenya revealed that the overall food security was not jeopardized even though the proportion of land sown with food crops was significantly low for new entrants and sugarcane farmers, compared to non- sugarcane farmers. However, the mere fact that Kitere village lies within the sugar belt region of South Nyanza District does not automatically imply that these findings describe the current context of Kitere village itself. It is therefore impractical to generally assume that commercialization of agriculture has not affected the food security in Kitere village.

The National AIDS Control Council and the National AIDS and STI Control Programme (NACC & NASCOP, 2012) reports, “In 2011, Kenya estimates that approximately 6.2% of the adult population is HIV-infected” (p. 6). Furthermore, there is significant regional variation in

the distribution of HIV prevalence across the country. According to NACC (2010), the range varies “from a prevalence of 0.9 percent in North Eastern province to 13.9 percent in Nyanza province” (p. 6), more than double the national prevalence estimate. Consequently, the impact of the scourge may also vary across Nyanza province. “HIV/AIDS strips individuals, households, networks, and communities of assets” (Haddad & Gillespie, 2001, p. 17). It is widely agreed that the pandemic has great depletion effects on human capital. Haddad and Gillespie highlight the effect of HIV/AIDS on agriculture and nutrition in terms of labor losses, knowledge losses and weaknesses in institutions. However, it would still be too quick to design and implement food security interventions for Kitere Village with focus on the assumed impact of HIV/AIDS based on the larger Nyanza Province that Kitere is a part of.

While FtF (2012) highlights high population growth, stagnant agricultural productivity and limited arable land as the major challenges to food security in Kenya, the study by Maxwell and Smith (1991) emphasize the fact that different communities present multi-faceted food security issues unique to their specific households that require prior understanding before an intervention can be designed and implemented. This suggests the probable existence of other specific root causes of food insecurity apart from or side by side with those emphasized by FtF for households in Kitere village. The concept of food sovereignty highlights the need to involve local community participation for autonomy and sustainability. Other studies reviewed above emphasize the need for context assessment and the danger of generalization. Before designing and implementing an intervention that takes into account only the three factors emphasized by FtF, it is contextually imperative that an inquiry be conducted to determine the unique causes of food insecurity in Kitere village. Hence my main research question: what do you believe are the causes of food insecurity in Kitere village?

Research Design

The Participatory Rural Appraisal (PRA) approach was employed to gather qualitative data about what factors have caused persistent food insecurity in the village. The sources of data were focus groups (FG) and key informant (KI) interviews. The respondents were both male and female adults over the age of 18. The key informants were local members of Kitere village with good and experiential knowledge of the community. Surveying the KIs was an important adjunct to the FGs for the purpose of triangulation—to enhance the validity and reliability of the research findings. The following open ended questions were used in both the focus group sessions and the interviews:

1. Do households in Kitere village experience food insecurity/shortage?
2. If yes, what indicators show the existence of food insecurity?
3. If no, what indicators show the absence of food insecurity?
4. In what period(s) of the year are households most affected by food shortage?
5. What are some effects/consequences of food shortage in the community?
6. What are some coping methods adopted by the affected households?
7. What do you believe are the root causes of food insecurity in Kitere village?
8. What interventions (or countermeasures) do you suggest the community can adopt to address food insecurity in Kitere village?

Ten FGs were created from the existing local community groups that meet regularly within the community. Of the 117 FG participants, 71 were female. These are groups that were generally committed to safeguarding the community's welfare and development issues. They included the local chief's committee of elders, a local school's parents' and teachers' committees, a local church, self-help groups, a local sugarcane farmers union, employees of

Rongo University College, widows' and women's groups. The FG sessions took place during each of the respective group's regular meetings, and the relevant group leaders facilitated the brainstorming sessions using the translated version of the open ended questions listed above. It's unfortunate that there was no active youth group in the community to form a FG.

An explanatory self-administered one-time survey, targeting random and non-random samples of 25 KIs was conducted. Seven of the KI's participants were female. The same questions used in the FGs formed the content of the survey questionnaire. Apart from being local residents with first-hand knowledge of the community's residents, issues, problems and challenges, the non-random KIs were selected across the geographical area of Kitere village. The distinguishing factor about the non-random sample was their representation of the Kitere village population based on diverse backgrounds aimed at providing a wide range of perspectives. They included farmers, housewives, local small business owners, community elders, religious leaders, youths, widows, retired civil servants, gold mine workers, and students. Due to time constraints, the random sample of KIs was based on convenience — depending on residents' availability and willingness to spare time for interviews or to complete the questionnaires.

Issues of informed consent and confidentiality were dealt with adequately. Through my faculty advisor, I obtained the necessary approval on the Human Subjects Review Application. Full disclosure of the purpose of the appraisal and the data to be collected was provided to the participants and their consent obtained before conducting the research. Information about the title of the study, the researcher, background, study purpose and procedure, benefits, compensation/cost to subject, confidentiality, and voluntary participation were clearly explained to the participants in their native language before they appended their signatures to signify their understanding and acceptance. The above information was compiled in a document titled

“Informed Consent” (see Appendix A). The inquiry questions were compiled in the document titled “Questionnaire” (see Appendix B). Copies of these documents were attached to the Local Chief Authority Letter (see Appendix C) and addressed to the local area chief seeking his authority to conduct the research within his area of administrative jurisdiction. The chief signed the authority letter in duplicate; one copy remained in his official files while the other was handed to the researcher. Upon receipt of the local chief’s authority, we proceeded with the distribution of survey materials, scheduled and conducted the FG sessions and interviews.

The qualitative data from the research was analyzed to explore themes, categories, concepts and interconnections. I relied on the balancing effect between the responses from the two different data sources for cross validation purposes. In most cases, the two data sets complemented and corroborated each other. The findings and conclusions from the analysis were consequently connected back to the purpose of the inquiry and the literature review.

To address the issue of sustainability, I chose the PRA approach to facilitate the community members’ participation and sense of ownership in the study results, as well as the planned future intervention based on the final findings. For the same reason, I enlisted the help of a research assistant from the local community. Focus groups, key informant interviews and self-administered surveys are appropriate ways of obtaining public opinion on a crucial subject like food insecurity. The open-ended questions allowed respondents to be free to include more information including reflection of their attitudes, feelings and general understanding of the issue of food insecurity. By using the above methods and approach, I hoped to gain access to the true feelings of the respondents on the inquiry question.

Due to time constraints, and taking into account participants' busy schedules, I purposed to allocate between 20 -30 minutes for each FG session and to limit the number of participants to 5-15 in each FG to facilitate time management. In reality, some FG sessions went beyond the 30 minutes and three FGs had more than 15 individuals (17, 18, and 20 members respectively) present during their meetings. This is because everybody present in the meeting was excited to participate in the discussion. It was not easy for the leaders to stop the sessions in the middle of discussions or to ask some group members to leave the meeting when such an important issue as food insecurity was under discussion. However, I consider these to be positive developments since they resulted in more time for interactions with participants and relatively more ideas during the brainstorming sessions. This further contributed towards accuracy in projecting the entire community's opinions from the study results.

There is no research without limitations and this inquiry was no exception. The timeframe within which the research was to be completed in order to meet the capstone deadline was a constraint in itself. Not all the planned respondents completed the survey in time. The language factor posed some challenge as the research materials were originally designed in English, which is not the first language of the members of the community under study. With help of an assistant and another member of the local community, I had to take time to translate the inquiry questions into the local language and even then, there is a possibility that certain concepts of the subject of inquiry which were expressed in English may not have been captured adequately. Note-taking during the focus group sessions was done in English while the discussions were in the local language. Most of the KIs, who responded, had challenges in expressing their opinions in clear written English.

There was a potential unrecognized bias on my part as the researcher since I am also a member of the local community under study. For example, sometimes it was easier to identify as KIs; the people I assumed could be very interested in the survey. In several cases I was proved wrong when such individuals did not show the level of interest I expected. However, there is no doubt in my mind that my being a stakeholder in the community may have contributed to my passion and in-depth understanding of the people and the community. That I was one of their own facilitated a sense of belonging and ownership of the research amongst the respondents. This may have had a positive impact on the whole research process. The limitations undoubtedly had some impact on the inquiry process and findings. However, I consider them minimal compared to the positive aspects of the entire study.

Presentation and Analysis of Data

The very first of the research questions was aimed at establishing the fact that there is food insecurity in Kitere village. It is worth noting that all the participants responded to the question in the affirmative saying, “Yes, households in Kitere village do experience food shortages”. This response was supported by several indicators showing existence of food shortage. Two main indicators featured prominently in their responses: residents having to reduce the number of meals they have in a day, and the reality that they do purchase food (especially maize, which is their main staple grain/food) produced by other communities. The respondents said that “people are having one meal instead of three meals a day,” and mentioned “people buying maize from other places”. Other indicators include the presence of children suffering from marasmus and kwashiorkor, the absence of granaries traditionally used to store excess grain after harvest and an increased number of sugarcane farms leaving less land for subsistence farming as greater part of land is committed to the cash crop, which takes comparatively long periods before harvesting. The general health of the people was also mentioned; “people are weak and sick” yet they are still found working hard jobs in the local gold mines lured by the prospect of quick cash to purchase food.

Concerning periods of the year, when households were most affected by food insecurity, respondents mentioned all months except February and August. In effect, food insecurity affects the community more than 80% of the time in a year. The only months not seriously affected are during the actual harvest times (normally February-March and July-August) when they experience what seems to be short-lived abundance of grains.

Increased cases of crime and disease ranked high as consequences of food insecurity. Specifically mentioned was “increased theft and robbery” involving food crops and other property. “Domestic quarrels” are seen to rise during the periods of food shortage as hungry couples get easily irritated with one another. Cases of stress also increase. Young ladies get involved in sexual immorality, e.g. prostitution, which makes them susceptible to sexually transmitted diseases. People and especially children are most affected by “diseases, e.g. marasmus and kwashiorkor” during the periods of food shortage. This further interferes with learning in the schools as children’s school attendance and performance are consequently compromised. To ease family household demand for food, some families encourage early marriage of the girl-child, hence increased school drop-outs. Because many people are sick and weak, they are not able to work properly in the farms leading to low food production. The respondents said this trend has led to “increased poverty and low living standards”.

The most prominent coping method adopted by the affected households is to resort to reduced food intake in terms of quantity and frequency. Most households are forced to “take one meal a day”, sometimes taking only “porridge for a meal”. Others resort to casual jobs offering manual labor and working in the local gold mines to get income to buy food. Some people sell their property including portions of land, cattle and cash crops to get money for food. Yet others resort to stealing other peoples’ property to survive. Some people have joined self-help groups with the hope of borrowing money for survival during hard times and others temporarily enroll their children in schools that run school feeding programs, so the kids can get a meal at school during the day. Others operate small businesses selling food items by the roadsides. Some women and young girls turn to prostitution. Some affected households cultivate drought resistant

food crops like cassava. Others beg for help from relatives and friends. All these are but temporary measures which do not address the underlying causes of food insecurity.

A combination of factors is believed to account for the food insecurity in Kitere village according to the respondents. Insufficient farming land and increased population were some of the first factors identified. “Some households have insufficient land” and “limited land compared to increased population” were some of the statements used to describe the situation. In addition, the respondents pointed out that the available land was infertile, due to “soil erosion” in some cases, and the resulting low farm yields could not be sufficient to feed the increased population. Aggravating the situation is the presence of “pests and diseases which destroy crops” and the practice of inappropriate farming or “poor cultivation” methods like mono-cropping, which do not promote soil fertility. The low production levels coupled with rising demand results in high produce prices. Some respondents blamed the government for not providing agricultural extension services to the community.

Another factor cited was unfavorable weather experienced in the form of “drought destroyed crops” and at times “too much rain and/or hailstones destroying crops”. Some households lack farm inputs like bulls for the plough, fertilizers and ploughs. The problem is worsened by “lack of money to purchase farm inputs”, which tend to be expensive. Others do not prepare their land at the right time so their crops either do not benefit from the rains, or they are flooded by the rains at the wrong stage of the cultivation process.

Subsistence farming is neglected for “quick cash activities”. Cash crop farming, mainly sugarcane and local gold mining is taking preference among the community members. Gold mining offers the prospect of huge quick cash, and sugarcane farming promises a kind of a “cash

boom” after a long waiting period of more than 18 months. When the income from cane harvest is finally received, some households lack money management skills to make proper use of the money.

Cultural taboos that hinder the cultivation of sorghum meant that households had to buy this grain at high prices. According to the local residents’ customs, if the older living member of a family does not cultivate sorghum in a particular season, then other family members are not allowed to plant the crop. Sorghum is mixed with maize to produce flour for making *Kuon*, by cooking in water until it forms a dough-like texture. *Kuon*, which is normally prepared from maize flour (cornmeal), is the staple food for the residents of Kitere village. Flour from a mixture of sorghum, millet and cassava, is used to make porridge (*Nyuka*). The inclusion of sorghum into flour for *Kuon* and *Nyuka* enhances the nutrition and is relatively heavier, hence preferred by some households for the food’s ability to feed many mouths, fill them quickly, and extend over relatively longer period than when the flour is made from maize alone. So, if a household that did not cultivate sorghum wishes to achieve the benefits of the grain, it has to acquire it from elsewhere, within or without the community.

There is “inadequate employment” and a number of youth have left farming to the elderly and are idlers, drunkards or are busy chasing quick money in the local gold mines. Others have migrated to the cities to look for white collar jobs. According to one respondent, “only the old go for garden farming”. Those who are available to engage in food crop farming are few, and some are weak. One respondent was bold enough to point out that because of the “effects of HIV, the strong are few”. The end result is that there are many more mouths to feed than people actually working to produce food — hence the statement that “consumers outnumber producers”. High unemployment rates mean low household incomes to purchase high priced food crops. In a bid to

get income to meet other needs, it's common to find households that "sell their food produce then remaining with less for subsistence". This happens mainly during the two months of harvest in the year when residents seem to enjoy temporary abundance. Some people have become hopeless, believing that they can never eradicate the problem of food insecurity.

The respondents had a number of suggestions for interventions that the community members would implement by themselves. Households could maintain a balance between subsistence farming and cash cropping. This calls for a trend towards "reducing sugarcane farming and increasing food-cropping". The community should plant more trees to attract rainfall. A balanced distribution of household labor between different activities was also suggested e.g. "between gold mining and also farm work". Every household would maintain a vegetable garden to avoid spending money on vegetables. Kitere village residents should "practice family planning to reduce the population". Households should "increase farming labor" by discouraging idlers and encouraging members, especially the youth, to "embrace hard work". People should diversify their income sources including "income generating businesses" and "income generating projects e.g. poultry and fish farming", which are also good sources of vital foods nutrients. Building rental houses was also suggested as a potential source of income due to high demand for off-campus students housing for the newly inaugurated Rongo University College right in Kitere village.

Households should ensure timely preparation of land and use of modern farming methods employing farm inputs like "fertilizers and certified seeds". Practices like inter-cropping, crop rotation, irrigation, mixed farming, agroforestry and use of greenhouses and organic fertilizers should be adopted. Environmentally friendly pest and disease control methods should be adopted by the community. Apart from maize, households should diversify their food crop cultivation to

include “vegetables, potatoes, cassava, beans, peas, millet, lentils, sorghum and peanuts”. Better food storage methods should include the “construction of granaries using metal sheets to keep away pests”. People should do away with cultural taboos and traditions, which do not facilitate the cultivation of a vital food crop like sorghum. Some respondents argued that just because the older member of a family has not cultivated sorghum, this need not prevent other members of the family from cultivating the crop if they so wish.

Households should discourage the trend of early school dropouts, because educated people stand a better chance of getting employment with relatively higher income. Families should keep their children in school, because “educating children can help them get some good jobs in future” to ensure availability of income to purchase farm inputs and food. Skilled community members should offer money management training sessions to the local residents through community-based self-help groups and other community forums like church groups and community meetings. Residents should join and actively participate in local cooperative self-help groups like the Jarire Self Help Group that trains members on productive organic farming methods among others.

All the above information is vital for a general insight into the food insecurity situation in this village. However, central to this inquiry was the question about the root causes of food insecurity in Kitere village. Through qualitative analysis of the findings above, I organized the data into the following categories: limited farm land, drought, too much rain, lack of farm inputs, lack of farm equipment, increased population, high food prices, lack of industries for employment, cash crop farming, selling food produce, inadequate rain, valuing quick cash from mining, consumers more than producers, lack of income, cultural taboos, mining, one crop farming, lack of awareness, untimely land preparation, infertile land, low farm produce,

neglecting food crop farming, impatience with farming, hailstorm, soil erosion, lack of seriousness, laziness, lack of hope, drinking habits of the youth, pests and diseases, HIV/AIDS prevalence, rural-urban migration, limited labor, farming left to the elderly.

The derived categories above were then grouped further into the following five broader categories:

- 1) Inadequate Resources
- 2) People's Practices
- 3) People's Attitudes and Values
- 4) Natural Factors, and
- 5) Existing Trends/Conditions

These are the condensed results of the analysis of the findings. Table 2, on page 28 shows the summarized themes divided into categories.

Table 2

Analysis of the findings divided into categories.

Inadequate Resources	People's Practices	People's Attitudes and Values	Natural Factors	Existing Trends/Conditions
Farm Inputs; Income; employment opportunities; land; industries; knowledge; awareness; farm produce; & farm labor.	Mining; cash cropping; selling farm produce; growing one kind of crop; untimely land preparation; & drinking habits of the youth.	Valuing quick cash from mining; impatience with farming; lack of seriousness; cultural taboos; laziness; & lack of hope.	Drought; hailstorm; too much rain; inadequate rain; & soil erosion.	Soil erosion; high population growth; high food prices; more consumers than producers; infertile land; low farm produce; neglecting food crop farming; unemployment; increasing cash crop farming; pests and diseases; farming left to the elderly, HIV/AIDS prevalence; & rural-urban migration.

Discussion

Prima facie, the practice of neglecting crop farming in favor of gold mining and cash crop farming may seem to be having a negative impact on the community's food security situation. However, based on the Entitlement Approach (Sen, 1981, 1986), this trend needs further investigation, because it could possibly have both negative and positive implications. To certain households, it would mean trying to spread their eggs in different baskets in a bid to diversify their means of establishing command over food. Hence, it would seem that a household that distributes its labor force employment in different economic activities, in this case, direct food production, local gold mining and cash crop (sugarcane) production, stands a better chance of reducing the impact of food insecurity since it would have relatively wider sources of income for acquiring food, even when faced with high food prices.

Only one respondent made reference to HIV/AIDS as a factor responsible for food insecurity in Kitere village. This corroborates the negative effect of HIV/AIDS on the human capital, agriculture and nutrition as highlighted by Haddad and Gillespie (2001). In addition, HIV/AIDS was also mentioned as a consequence of food insecurity. Food insecurity implies a lack of sufficient nutritious food, which is vital for the immune system of the body. People, who are HIV positive, are more susceptible to full blown AIDS when they don't get vital food nutrients as a result of food insecurity. On that basis, HIV/AIDS was identified in this study as one of the diseases that increased as result of food insecurity in the community. Perhaps, and this is subject to further investigation, an explicit reference to HIV/AIDS was not made by many respondents due to the stigma still associated with the scourge among the members of Kitere community.

Culture has different dimensions in the discourse of food security. This study reveals a negative aspect of culture as a potential obstacle to the cultivation of a certain vital food crop — sorghum by the residents of Kitere village. Given that Kitere residents purchase sorghum produced mainly by the nearby Rachuonyo district, could this cultural practice be a local way of facilitating specialization in food crop production among communities? It would be worthwhile investigating why this cultural restriction seemingly bestows the decision to cultivate sorghum in this community upon the older members of the family units. Nevertheless, I see this as an aspect of food sovereignty in that, through culture, the local people are exercising their right to regulate/control what food crops are cultivated within the community.

The research confirmed that the residents of Kitere village do experience food insecurity. The indicators of food insecurity as identified by the respondents do bear some correlation to the aspects of definition of food insecurity as propounded in the literature review above. For example, the existence of children suffering from marasmus and kwashiorkor reveals a lack of “secure access to enough food all the time” in terms of sufficiency of food, defined mainly as the calories needed for an active, healthy life, according to Maxwell and Smith (1991). Residents having to reduce the number of meals they have in a day and the reality that they do purchase food, especially maize which is their main staple grain/food produced by other communities, indicates a lack of sufficient food within the community.

The study’s results are vital in revealing the unique contextual nature of Kitere village as exemplified by certain factors specific to the community. These are factors that have some bearing on the issue of food insecurity in this particular village but may not automatically be found to exist in all the other villages within the larger Nyanza province, let alone Kenya as a whole. They include the local gold mining activities, local cultural traditions, sugarcane farming

as the main cash crop, and the existence of Rongo University College campus within the community. Not all villages in Nyanza province are endowed with gold deposits like Kitere. Every community has cultural practices but not all of them hinder the cultivation of sorghum. Other communities have different cash crops, e.g. tobacco in Kanyamkago within Nyanza and tea in central Kenya. Not all villages have the opportunity to host a university college campus and the associated demand for accommodation due to influx of people from different communities. Even maize as the main food crop is unique in the sense that not all communities in Nyanza province cultivate maize as the main grain. For example, communities in the nearby Rachuonyo district along the shores of Lake Victoria are specifically known for growing sorghum as their main crop.

This variation in local contexts across the nation and within provincial boundaries supports the devolution policy currently under implementation in Kenya. The main purpose of the devolution program is to empower local communities through the transfer of power from the central government to the county government, as propagated by the current constitution. Part of the objects of a devolved government is to empower the local people for self-governance and to encourage local communities to manage their local affairs and resources, and to further their own development initiatives. This study shows that the people of Kitere village appreciate their own context and thus, are better placed and potentially capable of initiating and managing local food insecurity interventions, and other development initiatives that are efficient, contextually relevant and culturally-sensitive.

The findings indicate that the residents of Kitere village have a certain level of awareness of their situation that cannot be ignored. This implies that grassroots communities are better placed in terms of knowing their context compared to outsiders. Therefore, any context analysis

to precede food security intervention design and implementation, should at best involve active participation of the local community members. This should act as a humbling factor for some arrogant so called “international development experts” who approach grassroots communities with a know-it-all attitude based on “untested assumptions” (Levine & Chastre, 2004, p. 19) and preformed opinions of what is best for the villagers.

Implications of the Research Findings

(1) Contrary to the general countrywide report (FEWS NET, 2013a, 2013b), this study results reveal that households in Kitere village do actually experience more than transient food shortage and employ atypical coping strategies since food insecurity affects the community more than 80% of the time in a year, and some of the coping methods are unique to the community.

(2) High population growth, stagnant agricultural productivity and limited arable land (FtF, 2012) were alluded to as partly responsible for, but not necessarily the main causes of, food insecurity. Even the suggested interventions are not solely geared towards reducing population growth and boosting food production. The indicators and coping methods also show that the residents appreciate other means of dealing with their food insecurity, making use of income from local gold mining, sale of property and loans from self-help groups etc. to purchase food from elsewhere. This at least gives hope that the residents are less likely to fall prey/succumb to the fallacy of “Malthusian optimism” (Sen, 1986, p. 6), whereby food insecurity intervention would have, as its central focus, the comparison between the rate food production and population growth rate.

(3) Contrary to the results of the study by Kennedy (1989) on the effects of sugarcane production on food security, health, and nutrition in South Nyanza District of Kenya, this study shows that the residents of Kitere village believe that sugarcane farming jeopardizes food production in their community. However, it was also noted that sugarcane is one of the main cash crops from which households in this community get income to purchase food and other essentials. Sugarcane can also be used in crop rotation to preserve the productive capacity of the soil; it was noted that maize does quite well when cultivated on the same piece of land in succession to the last sugarcane ratoon harvest.

(4) This study reveals that the principal factors responsible for food insecurity in Kitere village are largely unique to the village, corroborating the position held by Levine and Chastre (2004) and Paul *et al.* (2011) that context assessments need to precede and form the basis for all food security intervention design and implementation. Just like Kitere village, different local townships are likely to display unique characteristics and development dynamics. It is therefore imperative that development interventions be context specific and should involve active local stakeholder participation to ensure some level of sustainability. Food insecurity interventions should be tailor-made for the specific context if they are to effectively address the root causes in a particular community/region and for the intervention to have sustainable impact. Hence the title of this research and paper: The Primacy of Context: An exploration into the causes of food insecurity in Kitere, Kenya

Recommendations

The large number and overlapping nature of the factors according to the findings indicates the complexity, diversity, interconnectedness and interdependence of factors that may

be responsible for food insecurity in the community. The presence of natural factors cautions us to be aware of human limitations in terms of what factors the people can control or change. People's practices and attitudes indicate possible areas of potential change through learning, acquisition of knowledge, capacity building and people taking responsibility for their own life outcomes. The inadequate resource base shows where capacity building, strategic investment and resource mobilization can be of use. The existing trends and conditions, which may be economic, social, demographic, market, cultural, agricultural, etc., can be a result of the people's practices, attitudes and values, natural factors or inadequate resources. The relationship among these factors is intertwining and complex, indicating a high probability that we are looking at a systems problem, which then calls for systems thinking and approach to the analysis and intervention process.

The study results reaffirm the fact that food security as a desirable social objective, like any other elements of development, is a complex concept within a complex ecosystem. Kitere village is a sub-system within Kenya, which is also a sub-system of the larger global ecosystem. The relationship among the factors in the findings depicts characteristics of a systems problem. Systems problems are bound to arise from within systems, and they are best analyzed and addressed using systems approach. Different systems have inherently unique dynamics and relationships (Meadows, 2008). The same intervention applied to a given ecosystem is likely to produce completely different results in another ecosystem. By inference, the only sustainable approach in addressing the food insecurity problem in Kitere village will be a systems-based intervention which is holistic, non-reductionist, trans-disciplinary and contextual in nature, a fundamental argument maintained by several different authors (Alperovitz, 1996; Daly, 1996; Daly & Cobb, 1994; Marglin, 1986; Meadows, 2008; Milbrath, 1996; Mohanty, 1988).

The Rationale

In addition to being complex systems, human beings live and operate in a system which consists of sub-systems that are complex, open, multidimensional, co-evolving and therefore adaptive in nature. The sub-systems often produce positive feedback and are full of unknowns. These unique characteristics of complexity, openness, and adaptiveness, by necessity, render human knowledge and understanding of these sub-systems incomplete or partial, hence the implied permanent existence of uncertainty as a characteristic of system dynamics and outcomes. As a result of our incomplete or partial knowledge and the implied uncertainty, there is an inherent existence of unlimited and unknowable consequences of human actions within any of the systems. Given the above resultant consequences, our best approach to development is that of precaution (i.e. treading softly, cautiously and circumspectly). Given all the above, humility is necessary. Consequently, given all the above, our optimal choice of quest for knowledge must be systems-based, holistic, non-reductionist and trans-disciplinary. The implication is to avoid universalism and apply contextuality.

Practical Applicability

By way of remedy, my cautious proposal would be for the Kitere community to collectively come up with a comprehensive and holistic intervention program that takes into account the uniquely diverse and complex nature of the problem by addressing all the factors they believe are responsible for food insecurity as identified in this study's findings. In other words, I propose a holistic, community-based, and people-driven intervention, which at minimum, should simultaneously and deliberately address the problem of food insecurity through the lens of inadequate resources, local people's practices, attitudes and values, natural

factors and existing trends/conditions. I am hopeful that such an intervention would be a deliberate initiative resulting from a careful and collective consideration of this study report by the local community members and other stakeholders representing diverse backgrounds and disciplines.

For policy purposes, the Kenya government should embark on decentralized food security strategies. The national government and county governments should take active steps towards promoting, encouraging and supporting local context assessments in their approaches to problem analyses and interventions. The current devolution program is a positive initial step towards empowering local communities in analyzing and addressing their own problems. The nature of support should be informed and directed by the needs activated by the local people themselves. Such practical support may include capacity building programs that empower local communities with needed skills, education and information, agricultural extension services including provisions of yield-enhancing inputs and services, and mobilization of resources for strategic local investments to improve infrastructure e.g. roads and local market facilities.

The results of this study will be shared with the members of Kitere community and stakeholders for awareness, further deliberation, feedback and deliberate action. The information will be disseminated through public forums like the local chief's open meetings, local community groups (e.g. youth groups, widows groups, self-help groups, including the ones that participated in this study's focus groups), local churches, fundraising meetings and other grassroots development initiatives. In addition, this study's results will be made available to other stakeholders, including the county government, various national government departments and ministries, local administration and policy makers at county and national levels.

This research report will provide base data for future researchers interested in the subject of food insecurity in Kitere village. The study findings may be useful for future in-depth research by informing the process of inquiry formulation. For example, it may be necessary to conduct further investigations into the impact of the people's attitudes, values and practices on food insecurity in Kitere village. Another worthwhile study would investigate the households' entitlement structure and food acquirement strategies. The categories developed in this study's data analysis may form *a priori* categories for the analysis of findings in the future in-depth study. Other questions arising from this study may also form subjects for further inquiry. These include the origins and socio-cultural purposes of the traditions governing the cultivation of sorghum and the reasons for the absence of active youth groups within Kitere community.

For all development practitioners and scholars, this study's results will hopefully serve to concretize the primacy of local context assessments and how contextuality imperatively necessitates systems-thinking and approach in the design and implementation of local food security interventions, and by extension, other local development interventions.

BIBLIOGRAPHY

- Alperovitz, G. (1996). Sustainability and “the System Problem”. In D. Pirages (Ed.), *Building Sustainable Societies* (55-67). New York: M.E. Sharp.
- Daly, H. E. (1996). *Beyond Growth*. Boston, MA: Beacon Press.
- Daly, H. & Cobb, J. (1994). *For the Common Good*. Boston, MA: Beacon Press.
- Devereux, S. (2001). Sen’s entitlement approach: Critiques and counter-critiques. *Oxford Development Studies*, 29(3), 245-263. doi: 10.1080/13600810120088859
- Famine Early Warning Systems Network (FEWS NET) (2013a). Kenya: Estimated food security conditions, 3rd Quarter 2013 (July-September 2013). Retrieved October 14, 2013 from <http://www.fews.net/pages/country.aspx?gb=ke&l=en>
- Famine Early Warning Systems Network (FEWS NET) (2013b). IPC acute food insecurity reference table for household groups. Retrieved October 14, 2013 from <http://www.fews.net/ml/en/info/pages/scale.aspx>
- Feed the Future (2012). Country/ Kenya: Context. Retrieved October 14, 2012 from <http://www.feedthefuture.gov/country/kenya>
- Haddad, L. & Gillespie, S. (2001). Effective food and nutrition policy responses to HIV/AIDS: What we know and what we need to know. *Journal of International Development*, 13 (4), 487-511.
- Kennedy, E. T. (1989 December). *The Effects of Sugarcane Production on Food Security, Health, and Nutrition in Kenya: A Longitudinal Analysis* (Vol. 78). Washington, D.C.: International Food Policy Research Institute.
- Kenya National Bureau of Statistics (2011). County Stats: Migori. Retrieved November 24, 2013 from <http://www.knbs.or.ke/counties.php>

- Levine, S. & Chastre, C. (2004 July). *Missing the point: An analysis of food security interventions in the Great Lakes* (Network Paper 47). London, UK: Humanitarian Practice Network at the Overseas Development Institute (ODI).
- Marglin, F. A. (1986). *An Anthropological View of Food, Hunger and Poverty*. Unpublished manuscript, Smith College, Northampton, Massachusetts.
- Maxwell, S. & Smith, M. (1991). Household Food Security: A Conceptual Review Part I. Retrieved from the International Fund for Agricultural Development website: http://www.ifad.org/hfs/tools/hfs/hfspub/hfs_1.pdf
- Meadows, D. H. (2008). *Thinking in Systems: A Primer*. White River Junction, VT: Chelsea Green Publishing.
- Milbrath, L. (1996). Becoming sustainable: Changing the way we think, in D. Pirages (Ed.), *Building Sustainable Societies* (pp. 275-297). New York: M.E. Sharpe.
- Mohanty, C. (1988 August). Under Western eyes: Feminist scholarship and colonial discourses. *Feminist Review*, 30, 61-88.
- National AIDS Control Council. (2010). *UNGASS 2010: United Nations General Assembly Special Session on HIV and AIDS. Country Report – Kenya*. Retrieved from http://data.unaids.org/Pub/report/2010/kenya_2010_country_progress_report_en.pdf
- National AIDS Control Council & National AIDS and STI Control. (2012). *Kenya AIDS Epidemic update 2012*. Retrieved from <http://nascop.or.ke/library/3d/FINAL%20Kenya%20Update%202012,%2030%20May.pdf>
- Paul, K. H., Muti, M., Khalfan, S. S., Humphrey, J. H., Caffarella, R. & Stoltzfus, R. J. (2011).

- Beyond food insecurity: How context can improve complementary feeding interventions.
Food and Nutrition Bulletin, 32(3), 244-53.
- Sen, A. (1981). *Poverty and Famines: An Essay on Entitlement and Deprivation*. Oxford, UK: Claredon Press.
- Sen, A. (1986). *Food, Economics and Entitlements* (Working Paper Number 1). Helsinki, Finland: World Institute for Development Economics Research.
- Tabarin Consulting (2012). Migori county overview. Retrieved October 8, 2013 from <http://www.countyedition.co.ke/counties/l-m/migori.html>
- The World Bank (2013). *Community-Driven Development Overview*. Retrieved October 18, 2013 from <http://www.worldbank.org/en/topic/communitydrivendevelopment/overview>
- Windfuhr, M. & Jonsén, J. (2005). *Food Sovereignty: Towards democracy in localized food systems*. London, UK: ITDG Publishing.
- World Food Program (2013a). *Food Security Analysis*. Retrieved November 8, 2013 from <http://www.wfp.org/food-security>
- World Food Program (2013b). *What is food security?* Retrieved November 8, 2013 from <https://www.wfp.org/node/359289>

Appendix A

Informed Consent

Research Topic: Food Insecurity in Kitere Village

Researcher:

Name : William Aludo
Institution : SIT Graduate Institute
Phone : +254-720-937-838
E-mail : william.aludo@mail.sit.edu

Background:

You are being invited to take part in a research study. Before you decide to participate in this study, it is important that you understand purpose of the research. Please take time to read/listen to the following information carefully. For further questions, please ask the facilitator/researcher.

The purpose of this study:

The purpose of this study is to provide an understanding of the factors responsible for food insecurity among the residents of Kitere village in Kenya. At this stage in research, food insecurity will be generally defined as a condition in which a household does not have capacity to access sufficient, safe and nutritious food over a given period of time. The researcher is interested in exploring the specific reasons why households in Kitere Village experience persistent food insecurity every year while the region enjoys two planting/harvest seasons in a year.

Study Procedure:

If you are a selected key informant in the community, you are requested to take time to respond to the 8 inquiry questions. If you are a member of a focus group, you are requested to participate in the brainstorming discussion responding to the 8 inquiry questions. The facilitator/recorder will be a member of the group/community.

Benefits:

There will be no direct benefit to you for your participation in this study. However, we hope that the information obtained from this study may be used to inform further research that may result in a community-based program to address the problem.

Compensation/Cost to Subject:

There is no monetary compensation to you for your participation in this study. There are no costs to you for your participation in this study.

Confidentiality:

For the purposes of this research project, your comments will not be anonymous unless you request that they be. You may request that all or part of your responses be kept anonymous at any time. Every effort will be made by the researcher to preserve your confidentiality including the following: Assigning code names/numbers for participants that will be used on all researcher notes and documents.

Voluntary Participation:

Your participation in this study is voluntary. It is up to you to decide whether or not to take part in this study. If you do decide to take part in this study, you will be asked to sign this consent form. Even then, you are still free to withdraw at any time and without giving a reason. You are free to not answer any question or questions if you choose. This will not affect the relationship you have with the researcher.

Consent:

By signing this consent form, I confirm that I have read/listened carefully and understood the information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I voluntarily agree to take part in this study.

Name of Focus Group Participants/ Key Informant and Signature

Date_____

Name:

Signature:

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____
11. _____
12. _____
13. _____
14. _____
15. _____

Appendix B

Questionnaire

Research Topic: Food Insecurity in Kitere Village

Researcher:

Name : William Aludo
Institution : SIT Graduate Institute
Phone : +254-720-937-838
E-mail : william.aludo@mail.sit.edu

Thanks for volunteering to participate in this research and for taking your time to complete the questionnaire. Once you are done, kindly ask the researcher to collect the completed questionnaire.

Research questions:

1. Do households in Kitere village experience food insecurity/shortage? _____

2. If yes, what indicators show the existence of food insecurity?

3. If no, what indicators show the absence of food insecurity?

4. In what period(s) of the year are households most affected by food shortage?

5. What are some effects/consequences of food shortage in the community?

6. What are some coping methods adopted by the affected households?

7. What do you believe are the root causes of food insecurity in Kitere village?

8. What intervention approaches do you suggest the community can adopt to address food insecurity in Kitere village?

Appendix C

Local Chief Authority Letter

William Aludo
SIT Graduate Institute
william.aludo@mail.sit.edu

Date: _____

Joseph Nyamanga
Area Assistant Chief

Dear Sir,

Research Study: Food Insecurity in Kitere Village

This letter serves to inform you as well as seek your consent authorizing us to undertaking a participatory research into the issue of food insecurity in Kitere village which falls within your administrative jurisdiction.

The research is intended to provide an insight into the problem of food insecurity among the households in Kitere village. At this stage in research, food insecurity will be generally defined as a condition in which a household does not have capacity to access sufficient, safe and nutritious food over a given period of time.

I am interested in exploring the specific reasons why households in Kitere Village experience persistent food insecurity every year while the region enjoys two planting/harvest seasons in a year. My concern has been triggered by the observation of the fact that many households in the community have to purchase (“Rundo”) grains every year before harvesting time. The findings will inform a future intervention in the form of a community-based program to address the problem.

Qualitative data will be gathered through focus group (FG) discussions and survey questionnaires to be completed by a sample of key informants who are members of the community with good knowledge of the community. The FGs will consist of between 5-15 participants created from existing local community groups/stakeholders.

Kindly authorize and provide a signed copy.

Thanks and blessings!

William Aludo