

**“THE LAND IS SLEEPING”:
LOCAL STORIES OF HUNGER, FOOD AND FERTILITY
IN SOUTHEASTERN COASTAL TANZANIA**

by

Mai Lei Margaret Woo

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Abstract

Theoretical developments in the study of hunger and famines are largely grouped into two schools, one emphasizing environmental factors and the other, social factors. However, narratives from Sinde village in Southeastern Tanzania blur the environmental/social divide to describe an interconnected social landscape. Local food narratives reveal that landscapes embody power that determines where people can or cannot farm and fish. Drawing on participant observation of everyday life in the village of Sinde, as well as 14 in-depth interviews and a focus group discussion with members of the community, the study provides insights into the social impact of the recent implementation of the Mnazi Bay Ruvuma Estuary Marine Park and the Mtwara Development Corridor and the processes of displacement and deepening poverty. Subsequently, increased constraints on livelihoods have intensified the outmigration of young men in search of work in urban centres or along the East African coast. Structural violence is revealed as inequality becomes embodied in the higher likelihood of suffering from hunger and malnutrition-related diseases. Social suffering is vividly expressed in the lament that the land has lost its fertility, where the land is connected to social relationships and social reproduction, such as in the increasing concern that children are too hungry to pay attention in school. Local food narratives describe the interconnectedness between the fertility of the soil and the social fertility of families to raise healthy children with viable livelihoods. This thesis explores the processes behind increasing food insecurity in Sinde to complicate stereotypes of a “poor” and “starving” Africa. It suggests that food insecurity is neither timeless nor the result of “backwards”, unsustainable practices but rather exacerbated by two large-scale conservation and development projects implemented in the region that have intensified a vicious cycle of deepening poverty and inequality.

Preface

The author conducted all the research included in this thesis. The UBC Behavioural Research Ethics Boards approval number is H11-00460. The Tanzania Commission for Science and Technology (COSTECH) ethics approval number is 2011-253-NA-2011-72. The author had official affiliation with the University of Dodoma (UDOM) as a research associate for this study.

Table of Contents

Abstract	ii
Preface	iii
Table of Contents	iv
Glossary	v
Acknowledgements	vi
1. Introduction	1
2. Theoretical Framework	5
2.1 Perspectives on Hunger	5
2.2 The Globalization of Malthusian Thought	8
2.3 Hunger, Suffering and the Violence of Inequality	10
3. Research Settings and Methods	12
4. “I think the land has lost fertility” Local Stories of Food and Hunger	19
4.1 Mama Fatima	19
4.2 Mama Musa	26
4.3 Mzee Omari	31
4.4 Baba Haji	37
5. Discussion	42
6. Conclusion	47
References	50

Glossary

Aradhi imelala – The land is sleeping – referring to the lost of fertility in the land

Askari ya doria – park patrol

Baba- father, may also refer to father's brothers

Bamia – okra

Biriganya – eggplant

Biashara madogo madogo – small business

Camba cochi -crayfish

Chakula – literally, “food”; food group eaten by itself, starchy base

Dagaa – sardines

Fanana – similar

Kachumbari – salad, can also be called *saladi*

Karanga – peanuts, groundnuts

Khanga – local clothing

Kifuku –the long rains

Kisanvu – cassava leaves

Kumbwa – type of local fish that swims in the shallows

Maendeleo – development/progress

Makulalu- type of shellfish

Maisha magumu – hard/difficult life

Majani ya maboga – pumpkin leaves

Mama – mother, may also refer to mother's sisters and used as a respectful title for women of reproductive age

Matunda – fruits

Mbaazi - pigeon peas

Mboga- literally, “vegetable”; food group eaten with *chakula*

Mchicha – local spinach

Mhindi – maize

Muhogo - cassava

Mtama – millet

Mzee – old man; respectful title for male elders

Njugu- type of local legume, ground nuts

Nyanya – tomatoes

Pili pili hoho – green peppers

Rutuba – fertility

Samaki – fish

Shamba – farms

Shikamoo – respectful greeting for elders; literally it means “I lay my heart at your feet”

Shukas – Traditional Maasai clothes

Tumbana – We have been squeezed/constricted

Ugali – stiff porridge

Ujamaa – literally, ‘kinship’ or ‘brotherhood’ – used by President Nyerere as African socialism

Viazi – potato

Vifaa – equipment/tools, used in narratives to refer to fishing nets

Viokololo- type of shellfish

Vitumbua – Sweet fried rice balls

Viungo – literally, ‘spices’; food group added to *mboga* for flavoring

WaSwahili – Swahili people; literally, ‘People of the Coast’

Wasi wasi – worry worry

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1. INTRODUCTION

“The problem is that they need to help themselves,” said a man who taught classes in business. I was working on my thesis in a coffeeshop in Vancouver when we had started talking about my research on food insecurity in Sinde, a small coastal village in Tanzania. Two large-scale development projects meant to stimulate economic growth for local populations had recently been implemented in the area. However, rather than bringing in development and increasing food security, the projects have contributed to increasing food insecurity as the Mtwara Corridor Project has bought out farmland from the local people and the Mnazi Bay Ruvuma Estuary Marine Park has put restrictions on fishing areas and fishing methods by demarcating ‘no-take’ zones and buffer zones.

“They must have been fishing like that for thousands of years; why can’t they learn anything?” the man went on.

“Um... I don’t think it is fair to blame them if you look at some of the constraints they face...” I stuttered in reply.

“Oh the problem is *them*...they are nasty people. Ruthless and undercutting each other,” he stated. His experience with “them”, as I learned, came from teaching business classes in Barbados.

Unfortunately, his views are not unique but can be seen as embedded in development discourses that view hunger in the “Third World” as technical problems emanating from environment, education, hygiene, morality and employment rather than structural violence of unequal power relations and representation (Escobar 1995). Ferguson (2006) has pointed out that Western societies have historically constructed the place called “Africa” and its peoples as a primitive ‘Other’ for their own conceptualizations of progress, development, and modernity.

Africa today is described as a place of poverty and underdevelopment, often expressed in images of hungry bodies signifying the continent's failure to produce good food, good government and good economies (Ferguson 2006; Messer 2002; Escobar 1995). This thesis explores the processes behind increasing food insecurity in Sinda to complicate stereotypes of a "poor starving Africa" that is timeless and backwards. Instead of pointing the blame at local people for not being able to climb the ladder of progress and economic development as a problem of their own inherent human nature, Sinda villagers' narratives reveal the social barriers and the constraints they face. As such, the thesis demonstrates that hunger and food insecurity in the village of Sinda is neither timeless nor the result of backward practices but rather exacerbated by two large-scale conservation and development projects that have contributed to a vicious cycle of deepening poverty and inequality.

In this thesis, I first explore how hunger has been theorized in the literature, which has largely fallen into two schools of thought-- one that emphasizes environmental factors and the other, social factors (Baro 2006; Messer 2002; Shipton 1990). The theoretical background reveals an increasing separation of environmental and social factors that contribute to hunger. Discourses that emphasize socio-economic factors rarely include environmental and material constraints. Instead, they emphasize the need for trade to purchase food from elsewhere, such as illustrated in Sen's (1981) 'entitlement approach.' On the other hand, discourses that focus on environmental factors, such as the potential catastrophic consequences of global warming for human health, especially chronic undernutrition, do not fully explore the political and historical context (McMichael 2011; McMichael et al. 2008; Schmidhuber 2007; Campbell-Lendrum et al. 2007). Without attention to the local context, discourses subsequently make generalizations about global concerns that hide local needs and constraints. While anthropogenic climate change is indeed a reality (Campbell-Lendrum et al. 2007), it is also important to ask *why* environmental

factors affect poor communities the most and *how* did these communities become poor. In this thesis, I show how narratives from Sinde blur the environmental and social divide to reveal a social landscape that embodies power relations of where people can or cannot farm and fish. These power relations are experienced historically through the processes of marginalization during colonialism and currently through the implementation of the Mnazi Bay Ruvuma Estuary Marine Park and the Mtwara Development Corridor Project. Within the common theme that the land is not as fertile as before, that the land is sleeping, people blamed both the lack of adequate rainfall for lower crop yields and their displacement to marginal farmlands.

This thesis subsequently explores how food insecurity in Sinde constitutes structural violence. It examines the processes of deepening inequalities due to conservation and development projects such as the Marine Park and Mtwara Development Corridor that have increased people's vulnerabilities to chronic food insecurity. These processes include the interaction of drought, displacement from fertile farmland taken by the Mtwara Development Corridor, fishing restriction placed by the Marine Park, and the consequent outmigration of men in search of work, who then leave behind women, children and the elderly. Hunger is expressed as social suffering in narratives of the land losing its fertility, a theme that reflects on the wider social landscape including the misery of hard work coming to a loss, people lacking energy, children too hungry to go to school and the individualization of problems for households. Burdens are often placed on mothers who struggle with small businesses because men are away or local fishing is limited.

This thesis derives from an ethnographic project located in the village of Sinde where I lived during July-August of 2011 and June-July of 2012. I engaged in participant observation and participated in everyday activities in the village from walking to the beach in the morning to see the fishers' catch to spending hours in the evening cooking fish and rice with local women.

Fourteen in-depth interviews to elicit narratives of everyday life, food and hunger were conducted with nine women and five men. Additionally, a focus group discussion with six women was also conducted. The local narratives reveal the everyday suffering of families in Sinda as people struggle for survival within the constraints of unequal social structures and problems of access. There has been a naturalization of food insecurity that hides underlying issues of social misery and social inequalities where the people who are most vulnerable to rain irregularities are also the same people marginalized from power and displaced from optimal, fertile lands. Without awareness of the historical and contemporary processes of marginalization and displacement, development projects designed to alleviate the impact of climate change and to promote the growth of local economies beyond subsistence fishing and farming, such as the Marine Park and Mtwara Development Corridor, run the risk of further marginalizing vulnerable populations, exacerbating dependencies on resources in local ecosystems and blaming local populations for their own problems.

2. THEORETICAL BACKGROUND

2.1 Perspectives on Hunger

Western perspectives on hunger have been heavily influenced by Malthusian thought from 18th century England in the middle of the Industrial Revolution, as Malthus tried to make sense of the misery of the poor in society. Malthus (1798) argued that a utopian society could never be reached because population pressures will always constrain some to misery and vice in competition for resources since reproduction increases exponentially while production increases arithmetically. Overpopulation led to increased vulnerability of poor populations to marginal agricultural seasons as more people depend on limited lands. Higher risks of malnutrition among the poor and overcrowding due to overpopulation consequently increase the potential for epidemics and plagues. Famine in Malthus's eyes was the catastrophic end move by nature to kill thousands upon thousands in order to reduce the human population to below the carrying capacity of the land.

Malthus's theory of hunger as a problem of food availability, which is constrained by the landscape, proved to be an enduring one. Popular in the 1970s, the shortage school mainly blamed environmental factors such as poor soils, drought, floods, and bugs that reduced the overall availability of food (Messer 2002). Famine was seen as a technical malfunction, requiring the intervention of experts to introduce new technologies to increase productivity of the land (Baro 2006). In 1981, economist Amartya Sen's publication of *Poverty and Famines: An Essay on Entitlement and Deprivation* shifted the attention from environmental to socio-economic determinants. He argued that famines can occur without significant decline in national food availability. In a radical break from Malthusian thought, Sen argued that starvation did not occur because there was a lack of food but rather that some people did not have access to it. Consequently, famines are not just food crises but economic disasters (Sen 1981). The race

between food output and population, as described by Malthus and the shortage school, is oversimplified and does not take into account human capabilities and trade.

However, anthropologist Alex de Waal (1990) critiqued entitlement theory for overemphasizing economic market based causation and continuing the 18th century Malthusian conceptualization of famine as mass starvation unto death, which may not be how famine is thought of in local settings. Highlighting the importance of local conceptualizations, de Waal (1990) observed that people in Darfur, Sudan thought of famine as threatening to their livelihoods rather than only their lives, which meant that people do not act as “rational” economic actors as Sen (1981) imagined. People did not wish that they could connect with markets better so as to sell livestock in order to buy food; they rather kept their livestock hoping that their way of life would continue after the famine. By concentrating on accessibility of food through production and exchange, entitlement theory falsely sees famine victims as passive, assetless wage labours (de Waal 1990). Additionally, it ignores the central problem of violence in famine situations and the historical processes leading to the inequality and vulnerability of certain groups of people. Furthermore, most famine deaths in Darfur were not from starvation and lack of food, but rather, health crises from mass population movements and lack of sanitation and clean water in refugee situations (de Waal 1989, 1990). Consequently, famines may be better conceptualized as a “particularly virulent form of poverty...[where] the choices facing the victims of famine would therefore be merely a more agonizing version of the choices facing the very poor” (de Waal 1990: 484).

By the end of the 1990s and during the 2000s, discussions of hunger shifted to food insecurity and the need for socio-economic development before it got to famine levels (Baro 2006). Hunger came to be seen as an action point within the larger complex problem of underdevelopment and economic poverty. For example, the first goal of the Millennium

Development Goals, promoted by the United Nations, is to eradicate extreme poverty and hunger. Medical anthropologist Nancy Scheper-Hughes (1991, 1992) noted that programs promoting oral rehydration therapy and breastfeeding were initiated by the United Nations Children's Fund (UNICEF) to combat the high rates of infant mortality in Brazilian shantytowns. However, while framing infant mortality as a medical issue drew attention to the problem, it was individualizing and hid the social commentary on the failure of social systems. Similarly, Howard and Millard (1997) revealed that framing child malnutrition as technical household failure localized the blame on individual families, especially overburdened mothers. While neoliberal commercialization of agriculture is seen as the path to development by some, Howard and Millard (1997) found that some households benefited to the detriment of others, leading to deepening inequalities and extreme poverty. Paradoxically, though the Chagga people in northern Tanzania are very successful coffee farmers and some of the most highly educated in the country, they also have some of the highest child malnutrition rates in Tanzania.

The shift of hunger discourses from focusing on famine as a singular apocalyptic event to food insecurity vulnerabilities and a need for development mirrored a closely related shift: international health discourses moved to emphasize instead “global health”, thereby emphasizing globalization and transnational health issues and actors.¹ Within this paradigm, health statuses of individuals and populations became a “significant barometer of social progress” (Lee et al. 2007: 3). In other words, with these shifts in framing global hunger and malnutrition, they can now be seen as a measure for larger projects in health and development.

¹ While international health emphasized health matters that concern two or more countries, often relating to the developing world, and the modern bureaucratic state to build up the territorial boundaries of the state against foreign health threats, global health emphasizes health issues that have no borders and thus are beyond the capacity of states to address effectively through state institutions alone (Lee et al. 2007). Following neoliberal development strategies in the 1980s that reduced spending to public health systems, transnational corporations and non-governmental organizations (NGOs) have become important and influential actors as local state health infrastructure was weakened (Janes 2009). The World Health Organization (WHO) rebranded the concept of the global health discourse aims to coordinate the diversity of actors from states to philanthropies and other NGOs.

2.2 The Globalization of Malthusian Thought

While Scheper-Hughes (1992) and Howard and Millard (1997) have explored how inequality impacts access to food, they mainly look at socio-historical factors and do not elaborate on interconnections with physical, environmental constraints. In a separate stream of thought, the environmental approach has regained widespread attention with issues of climate change. It has become commonly accepted in most academic and popular circles today that anthropogenic climate change is occurring and that it will affect health, especially food and nutritional security (McMichael 2011; McMichael et al. 2008; Campbell-Lendrum et al 2007; WHO 2008; Schimidhuber & Tubiello 2007). McMichael et al. (2008) stated that Africa will be most affected because many people depend on agriculture and there will be negative effects on crops as rain patterns change. Subsequently, they predicted that poor agricultural yields from climate change would force populations to move, generating conflicts over territory and resources and increasing the incidence of infectious diseases including HIV as impoverished rural farming families move to city slums where conditions may lead to survival sex work. Whereas the social approach emphasizes socio-economic inequalities as main contributors to food insecurity, the environmental approach emphasizes environmental factors as the catalyst for increasing food insecurity and social inequalities.

Those who stress the environmental threats to health and food security revisit Malthusian themes of population and subsistence. Butler and Weinstein (2011) write,

“The United Nations Population Division has this year increased its overcast of the maximum human population likely this century from 9 to 10.1 billion... The fine print of this UN report is unlikely to state that this projection assumes no massive human catastrophe, such as large-scale famine, war or epidemic; however, such assumptions are implicit... To those with an ecological background, the idea that humans are the one species resistant to large-scale checks on population growth is naïve” (1).

Climate change affects human lives and livelihoods but it is also caused by humans, including by overpopulation. Butler and Weinstein (2011) argue that overpopulation of humans will lead to

large scale checks on population growth, including catastrophic famine, war or epidemics, much as Malthus suggested in the late 18th century. One of the critiques of Malthusian thought and the shortage school was that they were overly focused on the physical availability of food in a certain place and did not account for trade (Sen 1981). However, with climate change, the environmental argument has become global. Trade can offset any food shortages in a household or even a nation but humanity is still restricted to the planet Earth with global warming. Current research exploring climate change and public health reflect similar themes of globalization as found in contemporary global health discourses, including how threats do not respect borders.

Though climate change is global, the WHO (2008) notes that health risks from climate change are not equal. Additionally, Campbell-Lendrum et al. (2007) note that “the greenhouse gases that cause climate change originate mainly from developed countries, but health risks are concentrated in the poorest nations, which have contributed least to the problem” (235).

However, development recommendations seem remarkably focused on developing countries.

McMichael et al. (2008) describe how health professionals can promote “adaptive strategies” such as public education, preventative programs (vaccines, mosquito control, food hygiene and inspection, nutritional supplementation), early warning systems, neighbourhood support schemes, and water catchment. Schmidhuber and Tubiello (2007) recommend freer trade to improve access to international supplies, promoting sustainable agricultural practices and investments in transportation, communication and irrigation infrastructure. Additionally, Campbell-Lendrum et al (2007) recommend sustainable development in developing countries and protection of ecosystem services as fundamental for human health. Overall, there seems to be a missing call to action to reduce greenhouse gases in developed countries. The focus is instead on actions to mitigate the effects of climate change in developing countries.

Subsequently, the most vulnerable populations are held responsible for becoming more educated

about climate change and for new forms of local infrastructure and practices to address problems created by climate change. In Sinde, Tanzania, values of sustainable development coupled with the need to protect ecosystems have resulted in the implementation of a marine park and promoting eco-tourism. Climate change is described in public health discourses as exacerbating inequalities but they remain relatively uncritical of existing inequalities.

2.3 Hunger, Suffering and the Violence of Inequality

Theoretical developments in the discussion of hunger reveal an increasing separation between social approaches emphasizing economic poverty and environmental approaches emphasizing overpopulation, environmental degradation and climate change. While Messer and Shipton (2002) have argued that the two approaches are complementary, the following thesis argues one step further to suggest a social landscape where environment and society are not separate, complementary entities but intimately interconnected in lived experiences. The following thesis uses the concepts of structural violence and social suffering to explore the lived experience of suffering from chronic malnutrition and food insecurity as described in local narratives of food, fertility and hunger.

Johan Galtung, a Norwegian sociologist, coined the term “structural violence” in 1969 to reflect unequal life chances that result from systemic inequalities. Structural violence is violence of unequal distribution of resources built systemically into a social structure, such as when higher income, education, and medical attention are more prevalent in some districts and for some groups than for others (Galtung 1969). Recently, the term has been popularized by medical anthropologist Paul Farmer to discuss inequalities in health. Farmer’s (2005, 2004, 2001) work on structural violence emphasized the constraints and powerlessness of poor peoples in a materialistic sense of heightened vulnerabilities to poor health. While diseases are biological, the distribution of disease and treatment are socially-based on historical marginalization and

impoverishment through colonialism and contemporary marginalization. Consequently, without awareness of the constraints of poverty and powerlessness, the poor are blamed for their ill health and non-compliance to follow treatments.

While structural violence explores the unequal distribution of power and how these may result in inequalities of health, social suffering looks at misery as a social experience (Kleinman et al. 1997).² The inequalities that were discussed with structural violence become embodied as lived experiences and feelings of sadness, embarrassment, shame, anger, and hopelessness. It is the exploration of how social inequalities are translated into subjectivities. These experiences become chronic and a part of everyday life because the inequalities are built into social structures (Green 1998). As social inequalities become naturalized and the power some have over others appears legitimate, feelings of hurt become detached from the social relations that generate them and consequently the suffering becomes individualized and internalized (Frost 2008). However, social suffering also draws attention to the agency involved in endurance and resilience, and in continuing to dream for a better future and work within possible means towards what is imagined best. These experiences of the stresses of poverty and malnutrition are important to understand the complexities of food insecurity and the interconnectedness between land fertility and social fertility as described by Sinde villagers.

² Farmer (2001) critiqued anthropology for romanticizing difference and being blind to inequalities. While Farmer makes a valid argument that overemphasized agency in educational health programs tends to blame the victims when they cannot follow the advice, discarding agency is also problematic as local peoples are seen as helpless and requiring outside help. Bourgois and Scheper-Hughes (2004) suggest that structural violence is a “black box” where global forces are inputted and localized systemic violence is outputted without understanding the subjectivities and processes involved. One means of involving agency is by exploring how structural violence has resulted in social suffering and focusing on lived experiences (Lockhart 2008). Sense making and the attention to lived experiences gives justice to people studied as human rather than mere examples of global inequality and flaws in development paradigms.

3. RESEARCH SETTINGS AND METHOD

Sinde village is in Southeastern Tanzania on the coast of the Indian Ocean and close to the border of Mozambique to the south. Located on the peninsula across from Mtwara Town, Sinde is a short boat trip from the Fish Market in Mtwara and then a 30 minute motorbike ride along the peninsula. On the western side of the peninsula, facing Mtwara Town, are lush mangroves, unbroken except for a couple beaches where fishers pull up their dugout canoes. On the eastern side is a long stretch of white sandy beach covered with cow hoof-prints as herders walk cattle south towards fresh water, by-passing the village itself. Swahili wooden sailboats named *dhow*s are anchored in the shallow waters and dugout canoes of fishers are pulled ashore waiting for the next day's high tide. The village runs along a sandy road that connects Sinde to the other villages on the peninsula and further south to the Ruvuma River, which acts as the border with Mozambique, approximately 40km to the south. Homes made from mud and clay with roofs made from palm leaves are strategically nested within the rows of coconut trees. There are a few homes made from concrete bricks, with corrugated metal roofs and solar panels for a couple hours of electricity in the evening and often to run a small cell phone charging business. Fishers spread out their nets under big mango trees and mend their nets when it is too windy to go out to sea. Women dressed in their colourful *khangas*, with one piece of cloth wrapped around their waist over their dresses and another over their head, walk to and from their farms, the beach where they gather shellfish at low tides and visiting family and neighbours. Beyond the houses is the wild bush, which around Sinde is characterized by hot sand, scattered gigantic *baobab* trees and bushes with a hard shelled round fruit named *matonga* that is very common during the rainy season.

Residents in Sinde are mainly farmers and fishers. One man, Baba Haji³, whose narrative will be told later in the thesis, described it to me as 90% of people are involved in fishing, 8% are involved in farming and 2% are involved in business. Members of the village predominately self-identity as Muslim and during the Holy Month of Ramadan, all adults fast from morning to dusk. A majority of people in Sinde are KiMakonde speaking Makonde, who are traditional to the Ruvuma River region (Middleton 1992). A minority of people in Sinde self-identify as Makua, who are traditionally from further south of the Ruvuma River, deeper in what is today Mozambique.

While the region feels very isolated from the economic centre of Dar es Salaam today, Southeastern Tanzania has had a long history of contact with outsiders, from Arab and Swahili traders to early Christian missionaries by the 11th century AD (Middleton 2004). The ocean was a means of connection between other Swahili centres up and down the East African coast and with the wider Indian Ocean trade with the Middle East, India and Asia (Middleton 2004).⁴ However, during European colonization in the 20th century AD, the sea became an isolating expanse of water rather than a medium of connection as it was earlier (Swantz 1998).

German colonialists asserted authority over the region by 1900 and made district and territorial boundaries that have largely been continued through British colonialism to post-independence today. The boundaries restricted the movement of people, which has led to an over-exploitation of the environment (Wembah-Rashid 1998). With the Indian Ocean to the east,

³ All names are pseudonyms

⁴ The Swahili or WaSwahili means "People of the Coast" who flourished as a mercantile civilization on the East African coast reaching from Somalia to the central coast of Mozambique and the northern tip of Madagascar who were highly involved in trade across the Indian Ocean (Middleton 2004). While specifics of modern Swahili identities are debated, whether the Swahili constitute a single tribe because they have a specific ancestry traced through their own clans and lineages or whether the Swahili have come to refer to a marginalized "Other" used, exploited and discarded by both powers and national inland based governments (Caplan 2004). However, the Swahili generally include coastal dwellers, often in stone-towns or country-towns, who have lived there for a long time, practice Islam and speak Swahili as their first language (Caplan 2004). The WaMakonde and WaMakua tend to be viewed as not completely Swahili. However, realities of identification are much messier as there is a lot of intermarriage and migration along the coast.

the Rufiji River to the north, the Ruvuma River to the south and the Lumesule River to the west, Southeastern Tanzania became closed off as there was no reliable means of transport, other than by foot, for the majority of people. The lack of transport to and from the region was intentional during colonization because the region was among the first to resist German colonial rule (Wembah-Rashid 1998). During the Maji Maji Rebellion (1905-1907), local warriors burned down government, Christian missionary and settler places. The German colonial administration retaliated by burning down entire villages, crops and stored food, which led to widespread starvation and famine estimated to have resulted in over 100,000 deaths (Wembah-Rashid 1998). Additionally, the German colonial administration subsequently concentrated development in northern Christian regions, believing that developing the south would facilitate the organization of effective resistance groups (Wembah-Rashid 1998).

When Germany lost its overseas colonies after World War I, the British took possession of Tanganyika in 1919 and built a harbor at the new town of Mtwara. In 1949-1950, the British conducted the vast Nachingwea groundnut project, designed to alleviate a shortage of fats and oils after World War II by flooding the European market with nuts produced cheaply in Africa (Hogendorn 1981). However, the groundnut scheme failed and the region was neglected by the British colonial government (Mihanjo 1998). The Mtwara and Lindi regions became sources of labour for plantations and for watchmen of houses in Dar es Salaam, a situation which continues to this day.

After independence in 1962, Tanzania began a villagization program in the 1970s under President Nyerere. With Nyerere's vision of African socialism, large numbers of scattered rural households were resettled into dense rural settlements where people could be supplied with water, schools and health facilities and people would work together towards self-sufficiency in what was called the "*ujamaa*" spirit (Voipio 1998). The villagization program was first carried

out in Mtwara and Lindi regions because of refugees flooding over into Tanzania during the Mozambican civil war (Swantz 1998). Severe budget crises hit Tanzania in the 1980s and President Nyerere resigned in 1985 deciding that his policies had failed. Structural adjustment programs with International Monetary Fund (IMF) loans under President Mwinyi severely cut social, educational and medical services, privatized national companies, liberalized imports and exports (including drastically cutting import duties), allowed foreign investment in Tanzania, and pushed the government to abandon its one-party structure (Howard 1997). The region is still isolated today due to a lack of infrastructure. An all-weather road from Dar es Salaam to Mtwara has been in the making for at least 30 years and some claim since the colonial days (Mesaki 1998). Without a paved road, Mtwara and Lindi may be cut off from the rest of the country for up to six months a year during the long rains (*kifuku*).

The eastern side of the peninsula has been declared as the Mnazi Bay Ruvuma Estuary Marine Park, which is Tanzania's second Marine Park after the Mafia Island Marine Park. The general management plan was launched in 2005 and the Marine Park is unique in the world for a high land to sea ratio. Funded in part by the United Nations Development Programme (UNDP), the Marine Park covers 650 square kilometers with over 45 km of coastline, 33 percent of it is land and it includes 11 villages and 30,000 people (MMRT 2005). The Marine Park contains a number of core zones which extend over especially environmentally delicate areas where conservation is strictly enforced; however, the Marine Park also incorporates a gas-to-power project where three natural gas wells have been drilled in the heart of the Marine Park by a Canadian company. The Minister of Natural Resources and Tourism, Honorable Meghji suggests that though sustainable fishing, eco-tourism and participatory conservation, the Marine Park can help the local people pull out of "the irritating poverty" (MMRT 2005: iii). Because Sinde is not technically within the Marine Park, residents have not been included in the "carrots"--the

livelihood projects including bee keeping, fish ponds and gear exchange of illegal sized small gauge nets for larger gauge nets--which have been primarily used to “reward” compliant villages (Robinson et al. 2012).⁵ However, fishers from Sinda do face the “sticks”, the enforcement component including the confiscation of nets and boats and physical harm through beating, as they still fish within park boundaries. Protected areas are often fraught with tensions over access to resources and negotiation on the purposes of landscapes (West et al. 2006). Walley (2004), who explored the politics of Tanzania’s first marine park on Mafia Island, found that while the discourse of the park promoted community participation, local development concerns were overshadowed by the overarching goal of conservation promoted by the national government and international donors.

While West et al. (2006) and Walley (2004) have described the politics of protected areas and the tensions for local peoples living in or around them, issues of power, access and inequality are intensified in Sinda as it is doubly affected by a marine protected area on one side of the peninsula and the establishment of a economic area on the other side of the narrow peninsula. Officially signed by the four national governments of Mozambique, Tanzania, Malawi and Zambia in 2004, the Mtwara Development Corridor is a transportation based development initiative along the Ruvuma River intended to link together the four countries for a greater flow of goods to stimulate tourism, export oriented agriculture, and resource extraction. The aim is to “reduce poverty by stimulating broad-based economic growth through the beneficiation of raw materials that will expand industrial production and boost export” (Mtwara Development Corridor N.d.:38). Spatial development initiatives (SDIs) were first pioneered in Southern Africa to “offer short, sharp catalytic interventions to facilitate investment-led growth in project areas”

⁵ The map in the Marine Park’s General Management Plan shows that Sinda is just outside of the park as the dot that represents Sinda village is on the south side of the road and consequently not within the park boundaries (MMRT 2005). However, in reality, Sinda village is on the north side of the road with some parts stretching almost to the beach. The south side is predominately shamba – farmlands both of cashews and subsistence, most of which has been bought out by the Mtwara Development Corridor Project.

(Regional SDI Support Programme N.d.:4). With initial funding by the World Bank, the SDI transitions to being funded by private industrial investors. For Mtwara, this project consists of expanding the port. Villagers in port areas were compensated and physically relocated. The Marine Park and especially the Mtwara Development Corridor fit within a neoliberal framework first promoted in Tanzania with IMF structural adjustment programs.⁶

During my time in Sinda village during July-August 2011 and June-July 2012, I lived with Mama Zahura and her granddaughter and engaged in participant observation. I participated in everyday activities such as cooking and sharing meals together, attending funerals and weddings, going to microfinance program meetings, local football games, walking down to the beach to see the daily catch of fishers and selling coconuts at the Fish Market in Mtwara town. I worked as a single female researcher, and socialized more frequently with women than with men. Therefore, the study admittedly has a gender bias. However, since food preparation is locally seen as a female gendered role, I felt that the focus on women was appropriate. Much of my participant observation involved working with women in their daily tasks. I spent many afternoons sitting with women in front of their homes talking with neighbours, selling oranges, cassava or tasty treats such as *vitumbua* (sweet fried rice balls), weaving palm mats or shelling peanuts while their children played in front of us. However, I also got to know male neighbours and relatives of Mama Zahura well and I also interviewed men for their experiences of food in the village.

With the help of my Tanzanian field assistant, Mariam, we conducted nine in-depth interviews (six women and three men) and one focus group discussion (six women) in July 2011 and five interviews (three women and two men) in August 2011. All interviews were conducted

⁶ Neoliberalism can be defined as "a theory of political-economic practices that proposes that human wellbeing can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets and free trade" (Harvey 2005:2).

in KiSwahili and recorded with permission. Given that translation is a subjective and political process (Muller 2007), the recordings were transcribed and translated into English with the help of my field assistant who was involved throughout the interviewing processes and is a native speaker of KiSwahili. The interviews and focus group discussion were used to elicit narratives about people's experiences with food and health and their own life histories. Narratives are stories that people tell to make sense of an experience (Garro 2000) and consequently, life narratives are windows into lived experiences and can increase the depth of understanding of a historical and cultural context (Yow 2005).

The first round of interviews focused on everyday life in the village, family histories and food security, and the second round explored local conceptualizations of food, health and wellbeing, both through a semi-structured interviewing method (Yow 2005). In addition, I used the 24 hour food recall method, which is frequently used in nutritional assessments to understand group nutrition profiles (Karveti 1985; Fengying et al. 1996; Mazengo et al.1997). The second round of interviews explored local categories of food by using a pile sort technique where cards with local food names were written on them, and participants were asked to group similar (*fanana*) items then name the type of group (see Bernard 2006). I returned to Sinde in June and July 2012 for further participation observation and follow up where I discussed and clarified research findings and conclusions with community members, especially with those I have extensively quoted in this thesis. Though still limited by seasonality, returning in 2012 allowed a small amount of time depth to explore if increasing food insecurity was because of a bad year or larger structural patterns of inequality.

4. “I THINK THE LAND HAS LOST FERTILITY”: LOCAL STORIES OF FOOD AND HUNGER

This section will feature local narratives of food and hunger by Mama Fatima, Mama Musa, Mzee Omari and Baba Haji, who reveal perspectives of food insecurity and hunger in Sinde village from the viewpoints of elders and a younger generation of adults between 20 and 30 years old, from both men and women. The four narratives I present here are by no means isolated stories and interweave with stories from the rest of the community. While there is variation from one narrative to the next, a central theme arose: the land is losing fertility (*rutuba*) and consequently food is not as plentiful as before. As Mama Zahura states, “*Aradhi imelala*” – the land is sleeping. The following narratives reveal how four members of the community understand the lost of fertility in the land and how they live with it.

4.1 Mama Fatima

Mama Fatima is dynamic Makonde woman, who is married with three children. At 45 years of age, many people greet her with the respectful greeting of “*shikamoo*” for elders. She is a subsistence farmer and produces cassava (*muhogo*), ground nuts (*karanga*) and pigeon peas (*mbaazi*). She occasionally sells coconuts at the fish market in Mtwara Town. Her son has migrated to Tanga in northeastern Tanzania where he is married and engaged in fishing. Mama Fatima said, “It does not affect anything. Our life is the same before he left and after he left,” suggesting that her son does not send home any monetary remittances. In narrating her story about food in the village, Mama Fatima explained,

MF: “Our traditional food is *ugali* of cassava...Long time ago, people ate cassava (*muhogo*), millet (*mtama*) and maize (*mhindi*) but now we are producing maize in small quantities. Before, they could produce maize in large quantities... Because during that time, the land was fertile (*rutuba*) but now, if you plant anything, it does not grow well. The output is decreasing because the land now is not fertile.... Before, when we cultivated, we would get food in large quantities, but now, if we cultivate, we get very little output. When our parents harvested food in July, they were able to stock up until the next year, but now, you cannot maintain stock of food for even a few months.”

M: “What are the reasons for that change?”

MF: “We don’t use tractors for preparing or cultivating the land and also we don’t have enough money to pay for labour who can assist in farming. Consequently, we cultivate small areas of land which produces small quantities of food.”

M: “Did people use tractors long time ago?”

MF: “Long time ago, when they farmed, they got enough in large quantities so they could store their products. So during the next season when they decided to prepare the land again, they employed labour so they could cultivate a large piece of land. The payment of this labour was food, which was stored last year or last season.”

M: “So you can employ labour force?”

MF: “Long time ago you could but not now.”

In this segment of her narrative, Mama Fatima expressed the theme that occurs throughout the interviews I did in Sinde: farm lands were a lot more fertile during the time of their grandparents than today. In the past, people would work on other people’s fields for food. However, with low quantities of food, there is no food to reimburse labourers and consequently, there is a cycle where a lack of food leads to smaller plots being grown and smaller yields. Mama Fatima framed tractors in social relations where the decreasing capacity of the land is embedded into social commentary on the breakdown of community relationships. Food is no longer shared or sold to neighbours because households struggle with their own food stock and food is increasing individualized. This is magnified with outmigration, such as that of her son.

Mama Fatima’s narrative reflects shifting food habits in Sinde village. Because of the land’s decreasing fertility, there is a shift from self-grown starchy foods to buying food from stores to make up for the gap between harvests. As harvests no longer last until the following year’s harvest, this has meant that households need money to buy food. Women from Sinde often have small businesses in addition to their regular subsistence work and managing the household, such as Mama Fatima who occasionally sold coconuts. Other families have cashew tree plantations, which are grown as a cash crop though as later narratives will reveal, many of the cashew trees have been bought out by the Mtwara Corridor. Most families’ income comes from

selling fish but as fishers have to sell fish to buy flour, this decreases the available fish for their own households.

In interviews, I was surprised to learn that everyone said that the traditional food in Sinde was cassava. Though there were many different answers to what traditional foods consist of in the village, including maize, millet, rice and groundnuts, everyone agreed on cassava. I was surprised that fish was never mentioned, which seemed counter-intuitive since Sinde is primarily a fishing village. Later interviews on the local taxonomies of food revealed that *chakula*, which roughly translates to “food”, is a group of food that can be eaten by itself and is usually the starchy base. *Chakula* includes rice and *ugali* (stiff porridge) of cassava and maize. *Mboga*, which roughly translates as “vegetable”, is a group of foods that needs to be eaten with *chakula*, and includes green leafy vegetables, okra, eggplant but also meat (*mboga ya nyamya*) and fish (*mboga ya samaki*). *Viungo*, roughly translating as “spices”, includes things that are added to *mboga* for flavoring, such as onions, tomatoes, garlic, peppers, salt, coconut, lime and okra. Foods tend to be grouped according to how they are used. For example, okra can be either a ‘vegetable’, if it is the main vegetable, or ‘spice’, if it is added to flavor another sauce. Other food groupings include salad (*kachumbari*) and fruits (*matunda*). A good meal will have all of these components including a salad and ending on some fruit. However, the starchy base is considered fundamental to the meal.

These food categories are especially meaningful in the context of local food narratives because they reveal how the starchy base is considered the most important component of the meal and subsequently, the logic behind how nutritionally rich foods such as fish may be sacrificed to buy energy rich but nutritionally poor maize or cassava flour. As local villagers shifted from home-grown cassava, rice and maize to store bought flours, it also meant that households must cope with the decreasing availability of fish and the corresponding need to

spend more time fishing. I found that meals typically consisted of a large starchy base with some vegetable in sauce. While all but one person interviewed reported eating sardines (*dagaa*) or fish (*samaki*) the day before, quantities of fish may be very small as it is served as the sauce for the starch. Subsequently, they may only get a couple of small sardines in their portion of sauce. Like Howard and Millard (1997) who described the paradox of high child malnutrition among the successful Chagga people, the process of selling fish to buy fundamental starches may help explain recent indications of malnutrition among children. A recent Tanzanian Demographics and Health Survey (NBS 2011) found rates of stunting (low-height-for-age – signifies chronic malnutrition) in the Mtwara region to affect 43.5 percent of children under 5 years old even though fishers are considered one of the most food secure groups (McKinney 2006). Additionally, 67.2 percent of children in the region were anaemic with only 29.2 percent consuming iron rich foods in the past 24 hours.⁷

Additionally, the need to sell fish to purchase other foods puts local people in tension with the newly founded Marine Park. As Mama Fatima described,

The Marine Park affects us because now people don't have tools (nets) for fishing. When people go to the sea, they just walk around and try to find another type of fish which is called *Kumbwa*. The fish are small in size. When people come back from the sea, they sell the fish so that they can buy food... The people from Marine Park (patrol) come to the fishing area and when they find someone (with illegal size nets), they take his nets and burn them. They don't give the fishers the substitute so that they can continue with their work. They don't do that. They leave the fishers with nothing, so it has affected us. The Marine Park's protocol mandates that local fishers use nets with larger gauges from 3 to 5 inches to avoid catching juvenile fish that have not reproduced yet, and that they do not fish in environmentally sensitive areas like the coral reefs. However, rather than encouraging

⁷ Anaemia is a condition characterized by low levels of haemoglobin in the blood that is commonly caused by inadequate dietary intake of iron (NBS 2011). Haemoglobin carries oxygen to body cells and anaemia can result in feeling tired all the time. Anaemic women who are pregnant risk higher rates of maternal mortality as even small amounts of blood loss can result in less oxygen to vital organs. While iron is found in a variety of foods such as green leafy vegetables and legumes, meat and fish have higher iron content and are in an easier form for the body to absorb. Iron, in addition to being a fundamental component of hemoglobin, which carries oxygen to body cells, is essential for cognitive development (NBS 2011).

sustainable fishing practices, local villagers have emphasized their constraints, such as another woman named Mama Salume said:

The Marine Park wants us to use big nets for fishing because they said that the small nets kill small fishes, which will be used for future generations, but the only problem we have is that we have no money to buy big nets and they don't want to give us big nets for fishing... On our side, we decided to use the small nets. We don't care because we need food.

When villagers who needed to sell fish to buy flour to make up for small harvests did not comply with the park guidelines, the park authorities used force to make them comply, burning their nets. While practices such as burning fishing nets and beating local fishers are indicative of physical violence, they could also be construed as invisible 'structural violence' because they hurt local populations nutritionally by systematically depriving people from accessing their primary source of food. Impoverished local fishers were unable to buy appropriately sized fishing nets due to lack of money and burning their nets systemically deepens their poverty. This practice makes families all the more desperate for fish, prompting some of them to engage in fishing with dynamite, a very ecologically destructive process. Mama Fatima used the word "tools" (*vifaa*) to emphasize that their nets are essential for their work and fishers struggle without them. There is less fish for households to eat, especially since the first priority is to sell the fish to buy flour. With the fish catch going to create income for daily meals and secondly, into the meals themselves, it is also virtually impossible to save up money to purchase new nets as required by the Marine Park. Though the projects were designed to emphasize community participation, practices in reality seem to be less focused on participation and more focused on enforcement. It indicates a larger issue of unequal power relations as local peoples lack the political and economic power to truly "participate" on equal terms.

Farmer (2001) suggested that with structural violence, social inequalities are naturalized as biological diseases, and poor patients are reprimanded for non-compliance though it is

actually poverty that limits abilities to follow through with medications. Similarly, Mama Fatima's story reveals how villagers are seen as "non-compliant" with development plans. However, due to poverty, they cannot afford to buy the new larger nets. As their old, smaller nets are burned, villagers have even less capacity to afford new nets. The structural violence is further revealed in the constraints that limit villagers' ability to access land and food. As Mama Fatima said, "We have been squeezed (*tumebana*) in between. One side is taken by the Marine Park and another side by the Mtwara corridor so we can't do anything."

As people "make do" with the changes and keep on surviving as best as they can, like trying to catch fish by hand in the shallows, the violence becomes a part of everyday life. Mama Fatima said, "Currently, children can't find food when they come home from school. They can't eat so they don't want to go to school. Also, we don't eat well either and that is why we don't have energy." The social suffering of chronic malnutrition is felt in bodies of adults who lack energy and children who are too hungry for school. Mama Fatima began her narrative of food in Sinde by discussing how the land has lost its fertility and ended it by lamenting on how it has hurt the ability of their children to go to school. According to Mama Fatima, children cannot pay attention or be interested in going to school because they are hungry. Consequently, children are not only undernourished, but also undereducated as well; without education, the cycle of poverty deepens.

Though the development projects promote economic stimulation beyond subsistence practices, opportunities for work outside of fishing or farming are also being constrained. Formal education and literacy are especially important in Tanzania as markers of social status and *maendeleo* (development/ progress) (Howard & Millard 1997; Walley 2004). The local language is KiMakonde and children learn to speak KiSwahili, the *lingua franca* of Tanzania, in primary school. Kingereza (English) is mainly taught in secondary school and becomes the language of

instruction in university. A lack of fluency in KiSwahili carries stigma as a stamp of lacking education and hinders mobility even to Mtwara town, where most people speak KiSwahili rather than KiMakonde. While many men could speak KiSwahili fluently because they had previously migrated out to find work up and down the coast, I found that women's KiSwahili was heavily accented and interjected with KiMakonde. In Sinde village, men will often speak KiSwahili among themselves while women often speak in KiMakonde with each other. Subsequently, the consequences of hunger here in Sinde are gendered as women are disproportionately disadvantaged. As women's opportunities are limited, especially with the intensification of the outmigration of men, mothers and her children are more likely to suffer from malnutrition. Further, mothers have higher chances of giving birth to low birth weight babies, who in turn have higher rates of morbidity and cognitive impairment (Fishman et al. 2004). From the decreased vitality of the land to produce food, Mama Fatima describes how the vitality of their future is being challenged.

Considered an elder by many in the village, Mama Fatima's narrative reveals the changing food habits and its effects on social relations between households and within families as many men migrate out in search for work. Mama Musa's narrative next presents the viewpoint of a woman among a younger generation in the village as they understand and cope with changes.

4.2 Mama Musa

Mama Musa is a 29-years-old Makonde woman. She was born in Mtwara Town but went to live with her grandmother when her parents had a divorce. After she completed standard seven in school, she went to Dar es Salaam to work as a house-girl. She returned to Mtwara and had two children with her first husband in the neighbouring village of Nemara but her first son died when he was 8 months old. After seven years of marriage followed by a divorce, she moved back in

with her mother in Sinde and met her second husband. Her mother, Mama Zahura, is one of the “wealthiest” women in the village by local standards. Today, Mama Musa lives in her own sturdy clay house with corrugated metal roofing with her second husband beside the homes of her uncle and mother. She has one child with her second husband. Her second husband is a fisher who works on a larger boat with a crew of a few other men. However, during July and August, he was frequently at home or repairing nets in the village as it was too windy to go out.

In 2011, Mama Musa engaged in small businesses including buying coconuts in Sinde then selling them at the Fish Market in Mtwara. She also bought tomatoes or onions from other villages and clothes from Dar es Salaam to sell in the village. One morning, I went with her to sell coconuts. We left before dawn to make our way to the ferry, a small wooden boat packed full with people, goods and bicycles often perched over the edge. Mama Musa had three large bags of coconuts she had bought from her uncle’s trees. As we slowly got off the ferry, we were already surrounded by people wanting to buy her coconuts. She bought them for 200 Tanzanian shillings (Tsh) each and sold them at around 350 Tsh, making about 150 Tsh per coconut (approximately \$0.09 CDN).⁸ As her last coconut was sold, I told her that she was a good businesswoman. She said that it was a really good day; some days, she is there until late afternoon with her baby strapped to her back. At the end of this market day, she went to get fitted for a dress for a wedding the following week and went to the market to buy a variety of grains to make a nutritious porridge for her baby – peanuts, rice, maize, soybeans, wheat grains, millet, and sorghum. After this, she had no more money left, but she was happy.

However, in 2012, Mama Musa was no longer selling coconuts because as she said, “There is no money at the market.” She recalled how she sat at the market for two days without finding customers for her coconuts. Instead, she goes out gathering shrimp for four to six hours

⁸ The exchange rate in Jun-Aug 2011 was around 1600 TSH = \$1 CDN

most nights to sell at the Fish Market in Mtwara the next day in addition to regular household duties. Prices fluctuate as a full 20 litre bucket of shrimp fetched 5000 Tsh (approx. \$3.13 CDN) one day to be shared between two women who work one net while a small dish of shrimp got 4000 Tsh (approx \$2.50 CDN) the next day in June 2012. The nets for catching shrimp are made from donated mosquito bed nets, which Mama Musa explained to me that they use because “*maisha magumu*” – life is hard and they have had to improvise with available materials to earn some money to buy food. Over the two years, Mama Musa has experienced increased dependence on marine resources.

According to Mama Musa, the local traditional food is *ugali* from cassava and shellfish (*viokololo* and *makulalu*). People in the past ate only cassava *ugali*. She recalled how food was readily available when she was young and living with her grandmother. Like Mama Fatima, Mama Musa said that the land had lost fertility and crop yields had decreased; food no longer lasts until the following harvest leading to lower food availability. She contrasted the past when even a little land could produce a lot of food with stores of cassava that last for only four months today.

I'm not sure but I think the land lost fertility (*rutuba*) because if you plant rice, it doesn't grow. For example, this year, many people planted rice but you find that a big part of land changed colour to yellow. Those plants, they changed colour to yellow. If you go there, you will feel sad. We used a lot of energy but we got nothing.

The theme that the land is no longer fertile threads throughout the narrative as Mama Musa vividly described the suffering of watching fields turn yellow and the feelings of sadness at all the hard work that produces very little or nothing. Like nearly all the people I interviewed, Mama Musa was concerned about the inability of children to attend school because of hunger. The vitality of the land was again connected to the vitality of the people as Mama Musa said that the consequences of the land's declining fertility are hunger and weakness.

Long time ago, when you cultivated small pieces of land, you would get large quantities of output. Now if you cultivate a big piece of land, you get small output...I think the outcome is hunger and weakness in the future because we don't have food. Even children fail to go to school because they are hungry. We don't have money to buy food. But all of these outcomes such as hunger happen because we don't have money. If we had money, we could buy food in different places such as in town or in different regions.

The crop yield is low so there is not enough food to eat until the next harvest. However, Mama Musa also said that households still need to sell a portion of food for money to send children to school, paying for school uniforms and books and buying medicine. It is a precarious situation of food insecurity where both availability of food is poor and accessibility is limited. The shortage of food is mirrored in a shortage of money, especially as the cost of food rises in stores as worldwide gas prices go up. Mama Musa described how the price of rice in the shops jumped from 1000 TSH per kilogram in 2010 to 1400-1500 TSH in 2011 and then to 2000 TSH in 2012. In this narrative, Mama Musa reflected what Sen (1981) has written about the entitlement approach of food security, suggesting that the real problem is that people lacked cash to buy food. Even though there may not have been enough food produced in the village, Mama Musa suggested that with money, they could get the food from elsewhere. However, unlike Sen's (1981) discussion where assets can be sold to buy food, narratives from Sinde highlight the problem when food *is* their asset. Echoing De Waal's (1990) emphasis that local conceptualizations and situations must be considered, fish is sold to buy flour and non-food items such as school uniforms and medicines. Consequently, the ability to connect to markets and sell goods may not always increase food security, especially when what people have to sell is their food.

In addition, as fishing and gathering sea products such as shellfish is a main source of income for many villagers, Mama Musa's narrative also recalled tensions between villagers and the Marine Park and the Mtwara Port project.

Since the Marine Park came here, our men have met with many difficulties in fishing. They have to take care of their safety because sometimes when they go fishing, they encounter a patrol (*askari ya doria*) so they have to run away. They come back home with nothing, without even 10,000 Tsh. They fail to buy even 1 kg of maize flour so the Marine Park affects the availability of food. Sometimes, when a person goes fishing, the policemen come with their boat. Even if he does not use bomb (dynamite) in fishing, they catch him and start to beat him and then he comes back home with nothing...Mtwara Corridor also affects because they took our land. They took our farms, which we used to plant *njugu*, ground nuts, and cassava. For some people, all of their farms were taken by Mtwara Corridor and they do not have another area to farm. Also they will fail to spray cashew trees because they don't own them. It has already been taken by Mtwara Corridor. Also, they can't get coconuts because all of that area was taken by Mtwara Corridor.

There are more overt forms of violence as authorities beat up local fishers but also indirect violence in the form of hunger to their families as the fishers come home with no fish. While the Mtwara Corridor project has allowed people to use the farms until the construction begins, villagers do not want to cultivate crops in the lands that have been sold to Mtwara Corridor because they report that other people will steal their food, stating that the land does not belong to them. Additionally, the neglect of the cashew trees in the Mtwara Corridor land has contributed to the growing problem of pests and fungus in Sinde, decreasing the "fertility" of the land -- the crop yields and storage of food. Due to difficulties with the Mtwara Corridor and infertile lands, Mama Musa has decided that she does not want to farm. Instead, she engages in small businesses such as buying and selling food or clothes.

I found that women were always doing small business (*biashara madogo madogo*), whether at the back of a wedding celebration or at the clinic. I went with Mama Musa one day to the dispensary in Namera village because her son had a fever, a common symptom of malaria. When we got to the clinic, Mama Musa pulled out her merchandise – bed sheets machine embroidered in Shanghai, *shukas*-clothes in Maasai styles, satin Arabic dressing gowns in rich colours of gold and royal blue trimmed with glitter, western beachwear wrap-around skirts and tank tops and underskirts made in China. The nurse called to another girl and soon we were surrounded by women looking at the clothes. Her son played with my shoe by our feet. At some

point, the doctor came from resting under a tree and went to the office. We continued looking at the clothes. Without actually talking to her once, he later gave Mama Musa three packages of pills, wrapped in pieces of lined paper. After the clinic, Mama Musa and I continued to walk around Namera trying to sell clothes, all the while her son was strapped to her back suffering from a malarial fever.

Entitlement theory shifted the focus of food security from absolute availability within a given landscape to economic access (Sen 1981). The Marine Park and Mtwara Corridor projects aim to encourage development outside of subsistence fishing or farming and subsequently, small businesses are promoted in development programs. Microfinance is especially promoted for women for whom small businesses are supposed to be empowering and allow mothers to look after their children better. However, small businesses can add to mothers' existing burdens, which may have adverse effects on infants' health. Mama Musa walked all over the village of Namera trying to sell clothes while her malaria stricken son was strapped to her back and she had the medicine in hand. Additionally, though small businesses are seen as a way to escape chronic food insecurity from living off of farming and fishing alone, the fluctuation of profits from small businesses can also lead to food insecurity if it is a primary source of income. The small businesses run by women are a lot of work and often result in very little profit.

Mama Musa's narrative reveals the determination and creativity of local people in Sinde where mothers often try to supplement incomes of their husbands, especially when fishing is bad, or struggle to obtain income for the entire household if her husband is away. Though these small businesses can be a lot of work and not very much money, Mama Musa was able to make a nutritious porridge for her baby and her son was one of the plumpest, healthiest looking babies I saw in the village. However, Mama Musa had to face considerable challenges in her small businesses, including small, fluctuating profits, the over burdening of her time and lack of sleep

as she fished for shrimp at night in addition to regular duties during the day. Additionally, Mama Musa had the support of her husband and her mother. For example, her mother takes care of her infant at night if she is out fishing. For others who may have a lower economic background or weaker social support, these challenges are magnified. Mzee Omari's narrative next reveals, from the perspective of a male elder in the village, the challenges of extreme poverty and being left behind as younger men migrate out.

4.3 Mzee Omari

Mzee is the respectful title for 'old man' and Mzee Omari is 76 years old. He has lived in Sinda village since he was very young. He is tall, soft-spoken and frail from age and a recent bout of tuberculosis. He slowly walked into the interview dressed his best in a white blazer and black trousers, ironed with a vertical crease down the front. Mzee Omari is from the Makua ethnic group and his story of food tells a story of coping with high mortality of his children and struggling as a farmer and fisherman.

I married six times at different times. I had five children but four are dead. I remain with only one child. I did not marry that many wives. Now I have only one....I am a farmer and also a fisherman; when we go to sea, we can get four or five fishes and we can eat one or two times a day. We get food for three months but we have no food for the other nine months. I don't have any other job than fishing. I go there (the ocean), I find fish, and when I get fish, I sell it then buy food for that day...If you're lucky on that day, you can get many fishes. If not, you will get few fishes, but I can't tell how much I get. I get an amount of money which is equivalent to 1kg of maize flour.

Mzee Omari's story is one of food insecurity and how food in his household is seasonal and dependent on daily fish catch to buy food. Access to food in his household fluctuates between different months as fishing is hard during rainy and windy seasons. When asked on what meat he eats, he replied that

We eat only fish. We eat spinach (*mchicha*), cassava leaves (*kisamvu*), pumpkin leaves (*majani ya maboga*). Many people eat two times a day. Some people eat only once a day. Myself, I eat once a day for example. In the morning, I drink a cup of tea only because I have no money.

His household is comprised of his wife, a daughter, who is his last surviving child, and her two daughters. Many men who face limited opportunities in Sinda migrate out to find work. This was the case with three of Mzee Omari's relatives, who are spread out up and down the Tanzanian coast working as a mechanic, a vendor and a fisherman. These men, who "decided to go to fight for their lives" as Mzee Omari said, leave behind women, children and the elderly, who receive little to no remittances and consequently, become extremely vulnerable to food insecurity and malnutrition.

For Mzee Omari, the story of his life and his children leads right into the story of his livelihood as a fisherman and subsistence farmer and into access to food. His narrative vividly reveals how food insecurity is connected to malnutrition and lower life expectancy as malnutrition weakens the body and immune system. For example, vitamin A deficiency is associated with increased respiratory and gastrointestinal infections⁹. Caulfield et al. (2008) demonstrate that undernutrition is a main underlying cause of child deaths associated with diarrhea, pneumonia, measles and even malaria, which constitute the principle causes of death in developing countries. While green leafy vegetables, such as pumpkin leaves, are high in vitamin A, they are also seasonal. Mzee Omari described how he grows pumpkins and watermelon during rainy season but after three months of food, there is nine months of hunger. There are little shops in the village but they sell mostly dried or packaged foods and household goods – rice, flour, salt, biscuits, soap, etc. There is no fresh food, perhaps because there is no electricity for refrigeration. Instead, fishermen come by on their bikes with fish (*samaki*), crayfish (*camba cochi*), and crabs (*mikiti*) in their wicker baskets and women walk by with tomatoes (*nyanya*),

⁹ Vitamin A as retinoic acid is used in the body in normal cell differentiation, a process through which stem cells develop into highly specific types of cells with unique functions including into epithelial cells. When epithelial cells differentiate, some become mucus secreting epithelial cells (goblet) and others into skin cells. Mucous membranes, such as along the bronchial tract and in the digestive system, is a front line of defense in your body protecting against micro-organism and goblet cells are destroyed relatively quickly, requiring more vitamin A to reproduce these cells

spinach (*mchicha*), green peppers (*pili pili hoho*), eggplant (*biriganya*) and okra (*bamia*) gracefully balanced in plastic baskets on their head. In June and July, fresh food vendors passed by often but by August, as the season became dry and too windy for fishers to go out to sea, the only people who biked by were cassava and orange vendors.

Local categories of food are meaningful in Mzee Omari's story. He described fishing as his only job, his only source of income. Because fish is *mboga* ("vegetable"), and it does not constitute a meal by itself, he sold the fish to buy a starchy base such as maize flour to make *ugali*. Depending on the day's catch, the vast majority of fish caught, if not all, may go into buying maize meal leaving the household very little fish to eat. Cassava and maize lack significant protein, vitamins and minerals so people can feel full but still be malnourished, especially in households like Mzee Omari's, which normally eats only one meal a day. The local categories of food also reveal that as crop productivity goes down and food storages of cassava and maize do not last until the next harvest, people increasingly turn to fish more as a source of income to buy these fundamental starchy bases.

Mzee Omari also suggested that there was less food available in the village because first, there are more people and secondly, less people are farming. As Mzee Omari said,

Old people used to eat *ugali* of cassava, *ugali* of maize and *ugali* of sorghum... Long time ago, we had food, but the food which we had matched with the number of people in the village. Now, we have food but the food which we have does not match with the number of people in the village. We are so many now, more than the food which is available... A certain person may produce food, for example, one hectare, but the other two families do not produce anything. They depend on my one hectare of food so this causes the shortage of food... We are many compared to the amount of food which is available because many people, they don't want to work. They don't want to produce.

Mzee Omari's story reflects narratives such as Mama Musa's above. Mama Musa said that she was not interested in farming, but she would rather engage in small businesses. Mzee Omari and others, especially men of an older generation, felt that the current generation does not want to

work hard and work the land. Another male elder, Mzee Hamadi, who is a subsistence farmer and travelled all along the Swahili coast fishing in his youth and adulthood, echoed Mzee Omari:

Long time ago, people in this village decided to be the farmers and they worked hard to increase output, but now people, they feel that farming or to be a farmer is too much hard work. That is why the output is decreasing. Nowadays, many people don't like to produce anything. I think the outcome is hunger because now people are very lazy. They don't want to work hard.

For Mzee Omari and Mzee Hamadi, declining agricultural output is expressed in the rhetoric of moral decline where people are just not as hardworking as people used to be. Mama Musa, on the other hand, said that she did not want to farm because farming was not producing enough food to feed the family until next harvest anymore. Consequently, hunger can be considered social suffering in this situation as social inequalities and poverty become embodied as moral flaws of laziness.

Mzee Omari and Mzee Hamadi, both male elders in the village at 76 years old and 82 years old, respectively, reminiscence of a better past with abundant food and hard working people in their narratives about food. In their narratives about food, there is nostalgia for the past, especially of the socialist past. Mzee Hamadi said, "Years back, there was plenty of food and the availability of food was good because people decided to do work. Also, the government gave advice to people to work hard. They gave advice to people that at least every person should have 1 hectare or 2 hectares of land so that is why we had a lot of food or that is why we had large output of food." This nostalgia for the past is similar to Kamat's (2008) discussion of how elders in Dar es Salaam, Tanzania talked about an idealized past to reflect on development gaps formed by recent neoliberal restructuring and reforms in health care. While Kamat (2008) talked about privatization of health care and how "healthcare now had to be 'earned' rather than provided as a 'right', as during the socialist period" (368), Mzee Omari and Mzee Hamadi from Sinde reflect on another aspect of neoliberalization. Their narratives do not touch on accessing health services

but at the core of health itself with availability and access to food and control over lands to farm. For Mzee Omari and Mzee Hamadi, the idealized past reflects on shortcomings of the neoliberal present including fluctuating food prices, marginalization from fishing resources as the government is encouraged to promote tourism as Tanzania's niche in the world market and marginalization from farm land to expand Mtwara's port. The Mtwara Port project is promoted in neoliberal development programs to allow for faster and more efficient transportation of mineral and resource extraction including forestry and gold mining in Northern Mozambique, coal mining in Southwestern Tanzania, gas from Mzazi Bay, Tanzania and tobacco and paprika production for export in Zambia (Mtwara Development Corridor n.d.). The trend of resource extraction in Africa has unfortunately often been a tragic story of exploitation where local people become marginalized from their land and resources (Ferguson 2006, Lockhart 2008).

In addition to the belief that the younger generation was lazy and did not want to farm, Mzee Omari also suggested that there are more people than before in Sinde. Because some people are not farming any more, the availability of food no longer matches the number of mouths to feed. However, as I walked under coconut fields with Mama Zahura, she told me that 'development' (*maendeleo*) in Sinde has really exploded. She pointed to the rows of homes, some with satellite dishes powered by solar panels and made from bricks, which are in contrast to the traditional houses made of clay, sticks and coral rock fill covered with plaster. They come from Mtwara town, Mama Zahura said. When I walked around Mtwara town with Mama Musa, she admired all the brick houses and said that she wished she could live there but could not afford it. While overpopulation is often blamed on a high birth rate, another factor may be the rising cost of living that is driving people living in urban areas to the outskirts where rapid population growth exceeds the growth in infrastructure (Foley 2010).

For Sinde, the extra population also comes at a time where villagers' access to land and resources are becoming limited. As Mzee Omari said:

The Marine Park affects us a lot because it protects the areas where we used to fish in. We cannot get food so we are hungry in this village...The Mtwara corridor affects us a lot too. For me, I had cashew nuts trees in my farm. When they came, they said that they would pay for the land but at the end, they paid us less money than the value of our land. Now we have already used all the money and we have nothing now, so the Mtwara Corridor affects us a lot.

The process of compensation for farms and homes in the project areas is questionable because of inequalities of power and education. Mzee Omari reports that he thought the project was going to pay him well for his farm but received less than what he feels the value of the land was. In Tanzania, the land belongs to the State so each mango, cashew and coconut tree was compensated rather than the land itself. At best, the government allocated an alternative piece of land, though is usually marginal farmland or far away as further elaborated on by Baba Haji in the next narrative. While the project just saw the trees, Mzee Omari saw potential income from the land and the cashew nut trees for many years in the future. Mzee Hamadi, who confided in me that he does not actually know the date of his marriage because he lacks the education, said that people signed the form of acceptance before knowing the amount that they were going to be paid. Mzee Hamadi said,

When Mtwara Corridor came, they said they wanted to buy land, but we didn't know the amount of money they were going to pay. We accepted the offer and signed the form of acceptance. That time, we thought we would get a lot of money but at the end, we received only 6000 TSH (roughly \$3.75 CDN) per tree (coconut, mango and cashew). We used some money for days and then we had nothing.

The authorities used a 1996 compensation act and paid according to the 1996 rate though the real value of the money had gone down by 200% or 300%. In both Mzee Omari and Mzee Hamadi's cases, they are now both left with no farms and no money. As education becomes an issue here with illiterate villagers not really sure what they are signing, the experience where village

children are too hungry to go to school becomes a very important concern and an embodiment of deepening inequalities.

Mzee Omari's narrative reveals structural violence when the unequal distribution of resources, including of education and access to resources, and exploitative payment schemes compound challenges of poverty and can result in higher rates of chronic malnutrition. Chronic malnutrition is social suffering as it weakens bodies, increases susceptibility to illness, and compounds the stress of trying to access food. Rather than simply an individual household's problem, chronic malnutrition in the area can be framed in the wider social issues of the high rates of illiteracy, out-migration and displacement from fishing and farming resources. Baba Haji, whose narrative is next, is from a younger generation than Mzee Omari and also reflects on underlying social issues of chronic malnutrition in the community.

4.4 Baba Haji

Baba Haji is a 33 year old cashew farmer. He also runs a successful business selling furniture made in China and cell phones that he brings in from Dar es Salaam at his store in Mtwara town. He was born in the Mtwara region in a nearby village, completed up to standard seven in school and then started a small business and cashew farming, which he has continued until present day. He has also recently migrated to Mozambique for a period to work in the logging business there. Baba Haji divorced his first wife and has two children with his second wife. His wife, children and his younger brother and his wife live together in Baba Haji's house in Sinde.

Baba Haji also said that the traditional food in Sinde is *ugali* from cassava and maize. Interestingly, he reflected on how dietary patterns have changed over the years.

Old people used to eat *ugali* of cassava and maize flour. They ground it directly and it did not pass any process in between. I started my business 15 years ago and in the beginning, if you kept rice, cassava flour and maize flour, you would sell more cassava flour followed by maize flour because at that time, so many people did not have enough money. After many years, some projects came into our area and they gave people aid.

They gave nets for fishing and after that people started to eat different things. They could eat whatever they want. They may eat rice, *ugali* of cassava or *ugali* of maize...According to our geographical position here, the areas we used to cultivate were taken by Mtwara Corridor. When you cultivated cassava in those areas, you would get large quantities of output. We used to get large quantities of output so we would sell some of the cassava to other people who came from different areas, but later on, after some years had passed, when we planted cassava and harvested it, it was bitter. I think it was caused by the changes in the climate. When Mtwara Corridor came, it brought an end to the trade because we are not producing anymore.

Baba Haji touches on the reoccurring theme that food is less available now than it was before because the crop yield is less. Moreover, he suggested that the very taste of the cassava had now changed. The cassava, which used to be sweet, is today bitter. While sweet and bitter varieties of cassava exist, it does not really explain why it would have changed from sweet to bitter since subsequent crops of cassava are grown from stems of the previous plant. Instead, the discussion of sweetness and bitterness may be larger than the specific taste but reflect on the larger social context. One day, I asked Mama Zahura if she liked *viazi* (potato) more than *muhogo* (cassava) and she replied that she liked *viazi* more because *muhogo* was “*wasi wasi*” (literally, worry worry; they were eaten in times of worry). Like Baba Haji, Mama Zahura reflected on the bitterness of cassava and stated that she didn't like *muhogo* because she thought it was bitter. However, on the other hand, raw cassava is a favorite snack of both adults and children because it is slightly sweet. People can be seen running after the bikes with baskets piled high with cassava as they bike by, buying a couple of roots and sharing with all the children hanging around. Consequently, like the Haya of Northwestern Tanzania who associate cassava with times of hunger when their preferred food of bananas is not available (Weiss 1996), Sinda villagers may emphasize the bitterness of cassava to reflect on *maisha magumu* (a hard life) when they cannot cultivate or buy more preferred staples, such as rice and maize.

According to Baba Haji, government aid in the past had provided fishing nets, which had allowed people to prosper and eat whatever they wanted. However, people were not just eating whatever they wanted from the sea. What he meant was that people had a lot of fish and were

able to sell it and buy any food that they wanted. His comment, which might have been specifically targeted at me as a foreigner doing research in the village, suggested that people here are not opposed to development, countering a stereotype that Southeastern Tanzanians are development unfriendly (see Wembah-Rashid 1998 on a discussion of the stereotype), but rather want development that works for them and not against them.

Baba Haji suggested the cassava is now bitter because the land is not as fertile as before and the decreasing vitality of the land is due to a lack of rain this current year. The lack of rain or irregular rains that did not fit into normal farming seasons were often given in interviews as reasons why crops produced very little today. However, he also pointed out that the land is not fertile now because people have had to move their fields.

The availability of food in this year is not good because we did not have enough rainfall. The areas that we planted rice did not come out very well and we have a low amount of food. If we had rainfall, we could get large quantities of food but the availability of food this year is very bad, very low, because we did not have enough rainfall so we are hungry this year... Long time ago, we had food because we had our farms but after they took our land, we don't have farms to cultivate or produce so the availability of food goes down. We remain with the areas which is sandy. You can't produce anything on that area.

The strip of land that was taken away from the villagers for the expansion of the port was also the land where villagers had their farms. Villagers were relocated to areas that Baba Haji said are poor lands for farming and the marginal, sandy fields are more vulnerable to irregular rains.

Villagers complained to me that today they have to walk far to their farms and all of the farms (*shamba*) that I visited were closer to the next village of Kivinji than Sinda. When I went to the farms, I was shocked by the dead, yellow rice stalks growing in the hot sand; I was surprised that these dry fields could ever support a crop like rice. Some people cultivated around their homes

but the sandy soil was not very good for growing and was also prone to be eaten by wandering goats¹⁰.

Baba Haji reflected that life will continue to be difficult because food availability will continue to be low as villagers are marginalized from farming and fishing resources.

Life will continue to be difficult. If you go around the village, you will see children who are very hungry. Children will not grow very well because in the morning, they drink tea only and nothing else for lunch until dinner when they eat some food... Those who remain at home will be affected because in this coastal region, many people travel for fishing. They move to different areas like Mafia, Kilwa, Dar, and Zanzibar. When he goes there for fishing, he leaves a certain amount of money at home but they can use it for some days only and then they remain poor with no money. They continue with that way of life until he returns... Mtwara Corridor affects a lot because they took our land. People in this village don't have areas for production and cultivation so now, people don't have food to continue with their lives... The Marine park project also affects us because the areas which are protected are the areas where many fishes are available. That is why many fishers decide to travel to another area like Mafia, Kilwa or Dar es Salaam. Because the area is considered poor and in need of development, large scale development projects are initiated with the hope that they will "stimulate broad-based economic growth" (Mtwara Development Corridor N.d.:38). However, the narratives of Baba Haji and others suggest that broad-based economic growth projects do not work for local community members who do not have a high enough baseline of capital to participate by buying big boats to fish in deep water or start eco-tourism businesses. Because the people here are poor, the large-scale development project is placed here. However, because these large-scale development projects are placed here, villagers are displaced from their farms and fishing grounds and ironically, local poverty is deepened. Instead of large-scale development programs, Baba Haji expressed to me in

¹⁰ Mama Zahura, for example, showed me her sweet potato crops beside her home, which were just a couple of yellow vines on top of mounds of soil she hoed earlier in the year. "No rain and goats eat the leaves," she said to me sadly. Goats were a part of livelihood projects in the Marine Park with neighbouring villages. Residents of the different villages intermarry and often visit each other. Livestock embodies household status and as some people get them, others feel that they need them too. Unfortunately, goats have become a big problem eating village crops. Goats are promoted by development organizations to provide access to fat and protein rich goat milk, though I found that milk was usually reserved for the animals' young. In Sinde village, goats and cattle were seen mostly as "living bank accounts" to collect "interest" in the form of offspring. Livestock is sold for emergency cash. Their high economic and social value meant that they were very rarely conceptualized as household food resources.

a follow-up conversation in 2012 the need for local irrigation development. It was ironic, he said, that local farms are vulnerable to irregular rains when thousands of liters of fresh water poured out from the nearby Ruvuma River into the ocean every day. He emphasized that there can be no meaningful development here without food as people do not have the energy to work and children cannot pay attention in school without food.

As Baba Haji expressed, many people facing constraints here in the village opt to migrate to other places to find work. All but one person I interviewed had a family member working far away. However, the same structural inequalities of poverty and lack of education continue to be barriers and many migrants have a difficult time finding work in the formal sector and many struggle to survive as hawkers in urban centres (Mihanjo 1998). Subsequently, very few resources and money trickles back home to their families. As men migrate away, women, children and the elderly struggle to cope in their absence as was seen in Mzee Omari's narrative. Baba Haji tells us, "They (those who remain) will be affected with hunger while he is away."

5. DISCUSSION

The four narratives of Mama Fatima, Mama Musa, Mzee Omari, and Baba Haji reveal that food insecurity can be considered as a form of structural violence resulting from a lack of power over resources and income essential for a decent livelihood. The lack of power manifests in social inequalities where local villagers are systemically marginalized due to low educational levels and lack of capital to adequately “participate” in the development projects. Food insecurity in Sinde has resulted from lower crop yields as many villagers were displaced from their farms by the Mtwara Port Authority, which has led to increased stress to find income to buy food to make up for shortages between harvests. As money is often earned from selling fish, this has resulted in conflicts between fishers and Marine Park authorities. While the Mtwara Corridor project has reduced people’s ability to farm, the Marine Park has reduced people’s ability to fish without equivalent viable livelihood alternatives leaving villagers in Sinde more vulnerable to irregular rainfall and inflation of commodities in the retail market. Sinde villagers are doubly displaced by the Mtwara Corridor and the Marine Park.

With rising tensions between fishers and the Marine Park, fishers risked physical violence of being beaten by the Park rangers, and their nets confiscated and burned. Consequently, due to constrained opportunities and the risk of violence, people were motivated to look for work elsewhere¹¹. It is mainly men who migrate out to work but can often only find work in informal sectors due to their low education levels (Mihanjo 1998). Men who go to find work in other places up and down the coast (such as Mozambique, Kilwa, Mafia, Dar es Salaam and Tanga) leave behind women, children and the elderly who are in an even more desperate situation to make ends meet. Women who are left behind have the extra burden of making both ends meet between one year’s stock and next year’s harvest. Many women creatively engage in

¹¹ As the community experiences a high level of gendered male out-migration, there is an increased likelihood that both men and women find sexual partners outside of marriages, and this in turn can contribute to the transmission of sexually transmitted infections and break-up of marriages. This is a potential area for further research.

small business such as buying and selling oranges, but profits are small and unreliable. Small businesses are promoted by development projects especially for women to reduce gender inequality. However, in practice, these microcredit programs may increase gender inequality because women are shouldered with the extra burden of making very little profit and simultaneously suffer the everyday violence of stress and sheer exhaustion by taking on more responsibilities while suffering energy deficiencies from malnutrition.

Furthermore, the structural violence of food insecurity becomes embodied as the social suffering of hunger. Chronically undernourished people lack energy as some villagers complained that they did not have the energy to farm, which are now farther away and sometimes by the Ruvuma River around 40km to the south. There was a reoccurring theme of misery that comes from hard work and invested energy and time that results in nothing. This can be seen in narratives of businesses that result in a loss, worry about farming in Mtwara Corridor lands and the feelings of sadness in a rice field where everything turned yellow and died. Social suffering is vividly expressed in the lament that the land has lost fertility. While on the one hand, fertility of the land is linked to the materiality of marginal soils that are farmed year after year without any fallow periods or crop rotation, fertility is also connected to social relationships and social reproduction. The land's declining fertility is associated with decreasing labour relations and food sharing between households. These social relations are further broken down as some family members migrate out.

Additionally, the theme of misery is especially prevalent in reflections on children for whom parents struggle to care for but continue to suffer from protein-energy deficiencies and a high prevalence of infection and morbidity. People's narratives of how their children are hungry and consequently, do not succeed in school, suggest the powerful metaphor that their future is already being starved. Education is strongly valued in Tanzania as a marker of progress and

development (*maendelo*) and without education, there is a stigma of poverty. A lack of fluency in KiSwahili represents an indication that one has not attended primary school where KiSwahili is taught, and consequently hinders the children's future opportunities in formal work outside of the village. A lack of fluency in KiSwahili may also be a structural barrier to get people's voices heard, especially those of women. Children too hungry to go to school are both structured by and reproduce inequality in the unevenness of education and literacy.

Within the social suffering of hunger, problems such as school performance and malnutrition are internalized to individual children and individual households. Households are increasingly seen as responsible for procuring food and women talked about how people now rarely share food because there is not enough to feed one's family in the first place. In contexts where hunger becomes individualized, it is seen as a technical failure of a household rather than a shared experience of social misery that could serve as a critique of unequal power relations (Scheper-Hughes 1992, Escobar 1995). There is an assumption that ignorance is the main problem and if the mother can be educated with proper nutrition, then malnutrition problems will go away (Scheper-Hughes 1991, Howard 1997). The same assumptions underlie the attitude that if villagers can just be taught to use their environment sustainably or engage in eco-tourism businesses, then food security would be less of a problem (Pottier 1999). However, this ignores the everyday suffering as families struggle for survival within the constraints of unequal social structures and the problems of access. It also ignores how hunger is experienced socially and the sense of shame that families can feel for having a malnourished child. In addition to the stress of seeing their children suffer, parents are themselves stigmatized for their poverty and lack of development, which further limits their opportunities.

A higher risk to the effects of climate change is another manifestation of structural violence where unequal distribution of resources and displacing poor populations to marginal

lands increases their vulnerability to climate change. Researchers and policy makers must be careful to avoid a naturalization of food insecurity that politically sanitizes the social dimensions of how some people are more vulnerable to hunger than others. I am not suggesting that climate change is of no consequence to Sinda villagers, but instead suggest a theoretical expansion to see backwards to the political and historical context rather than just forward. By this I mean that climate change is happening as villagers talk about irregular rains affecting their farming but the story of food in Sinda is more complex than a Malthusian causal relationship of environmental limitations leading to hunger. Without understanding the history and current situations of villages within its jurisdiction, the Marine Park and Mtwara Corridor projects have ironically exacerbated problems they were meant to solve. The marginalization of people from their farms has driven people to become *more* dependent on rain and *more* desperate for fish, which has increased conflict with park authorities over resources. Due to constraints on fishing and farming areas, limited opportunities have promoted a gendered out migration for work instead of stimulating local economies as the projects were intended to do.

Rather than a debate whether hunger arises from an environmental lack of food or a social lack of access, the narratives from Sinda demonstrate that environmental and social factors are intricately interconnected to a point where the dichotomy of nature and culture is blurred. People lamented the lack of rainfall and infertile land in one sentence and the constraints imposed by the development projects in the following breath. Consequently, the physical landscapes themselves are social spaces interwoven with power and history. While villagers reported that there has been a lack of rain in the past year leading to crop failures, this is exacerbated by relocation of farms to land that is sandier and less fertile. Geographically, families are split up as many men migrate out to find work in urban centers and women suffer the everyday violence of stress and sheer exhaustion by taking on more responsibilities while

suffering energy deficiencies from malnutrition. Tracing back in history, the landscape embodies the legacy of colonialism as the German colonial administration punishing southeastern Tanzanians for the Maji Maji rebellion by purposeful neglect and restrictions on movement. These borders of displacement and marginalization on the landscape manifest on bodies of stunted children and adults who complain that they do not have energy.

Additionally, in the past decade, the landscape has been radically reconfigured from subsistence and cashew farming to new borders of access being drawn. The Mtwara Corridor port project and the Marine Park reorient the landscape to a global space for trade and tourism while physically marginalizing local populations who do not seem to fit with new conceptualizations of the land's value. The isolation of Southeastern Tanzania can be seen as a marketing tool with Mtwara as "the last frontier" where the road from Dar es Salaam literally ends. Other than via aircraft, the only possible means of continuing further into Mozambique is in a boat across the hippo inhabited and papyrus strewn Ruvuma River. The Marine Park markets itself as remote and pristine for the adventurous traveler who wants to 'get-off-the-beaten-track' of popular tourist sites such as Zanzibar. The Mtwara Development Corridor evokes colonial dreams of penetrating into the heart of the continent and opening up the remote areas of Northern Mozambique, Southern Tanzania, Malawi and Zambia to the touristic lens and resource extraction. However, the empty wilderness is socially constructed onto the landscape with entrance fees for locals to enter the core of the Marine Park and in the bare rectangular patches of packed dirt in the Mtwara Corridor lands where homes have been relocated.

6. CONCLUSION

As in the opening vignette of the teacher in Vancouver who saw the problem in the inherent inability of African peoples to work together, learn and develop, people who suffer from structural violence are often blamed for their own situations of inequality and food insecurity. Some argue that opportunities for neoliberal economic development in the Marine Park or the Mtwara Development Corridor have been given but that the problem is “*them*” and their inability to help themselves and capitalize on these opportunities. However, in contrast, this thesis has revealed that increasing food insecurity in Sinda is not an effect of “backward” practices and an inability to learn but rather exacerbated by the Marine Park and Mtwara Corridor development projects. Due to the double displacement of Sinda villagers between the two development projects, the deepening poverty has led people to fish regardless of Marine Park guidelines, virtually criminalizing local livelihoods rather than enabling sustainable fishing practices. Local villagers are seen as “non-compliant” people who do not want to participate, uneducated and ignorant, instead of as people facing considerable multi-dimensional constraints. By focusing on how local villagers do not follow development plans, they are framed as stubborn and unable to learn. This continues colonial stereotypes of Africa and African peoples as timeless and primitive instead of asking who these projects actually benefit from opening up the area to global markets and tourism, an area for further research.

Similar to the proliferation of actors and the growth of public-private partnerships in global health (Janes 2006), the Mtwara Development Corridor and the Marine Park projects includes many powerful partners with vested interests such as international development agencies and non-governmental organizations like the World Bank, the United Nations Development Programme and the World Wildlife Fund, transnational corporations such as the Canadian based gas company drilling in the heart of the Marine Park, and the four national

governments of Tanzania, Zambia, Malawi and Mozambique. Though the projects are intended to alleviate local poverty, local voices are drowned out by the multitude of global voices that often have more political and economic power to be heard and listened to. Global voices also often share an ability to speak English, which local villagers predominately do not due to constraints on education. Global concerns of conservation, climate, trade and resource extraction are portrayed as local interests though its values are globally defined by various project partners. Local narratives of food and hunger suggest that the landscape has been divided between different values of the land as imagined by the project partners. Consequently, conservation may rationally exist beside port expansion and resource extraction industries because the landscape has been partitioned off as separate. Like colonial borders, these borders that demarcate territories dedicated to preservation of biodiversity and economic development push local community members into marginal physical and social borderlands that displace them from resources essential for their livelihoods.

This thesis has highlighted local voices to emphasize a need to look at food insecurity as structural violence and hunger as social suffering in order to better understand chronic malnutrition as a lived experience. In contrast to seeing socio-economic and environmental factors to hunger as separate and sometimes complementary, a division that mirrors the separation of economic expansion with the Mtwara Development Corridor and conservation in the Marine Park, lived experiences of hunger reveal an interconnected social landscape. Within the central theme that the land has lost fertility, local community members describe how problems of food insecurity is connected not only to issues of failed rains and poor soils but also how they became increasingly dependent on marginal farmlands and the effect it has had on the vitality of their community. In other words, the land loosing fertility is not simply a comment that the soil lacks nutrients. Rather, the food narratives emphasize the interconnection between

landscapes and the lives lived on them, between farmers and fishers and between men who migrate out to find work and the heightened vulnerabilities of people left behind. Food narratives describe the interconnectedness between fertility of the soil and social fertility of families to raise healthy children with viable livelihoods. Consequently, dealing with food insecurity as a failure of individual households or failed rains misses the point. Rather, hunger is about social misery and social inequalities where people who are vulnerable to irregular rains are also those marginalized from power and often displaced to suboptimal lands.

However, local villagers also expressed their current problems of food insecurity in the phrase that, “The land is sleeping.” The land is sleeping suggests an infertility of the landscape at the present but also the possibility of waking up. Food security is complex and involves many interconnected domains. However, as Messer and Shipton (2002) have warned, stating that hunger is complex should not be the end of the discussion with people feeling overwhelmed. Within the complexities of poverty, illness and hunger, there is a remarkable opportunity where attention to local lives and perspectives, such as providing regulation sized fishing nets, meal programs in schools, irrigation development and most importantly, meaningful discussions to build mutual respect between the projects and local communities, may lead to an upward spiral with small successes stacking upon each other.

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