



Memory, Identity and Food Production among Zimbabwean Migrants in Durban, South Africa

By

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Supervisor: Mvuselelo Ngcoya (PhD)

Dissertation Submitted in Fulfilment of the Academic requirements for the degree of
Master of Art in Development Studies
The School of Built Environment and Development Studies,
College of Humanities
University of KwaZulu-Natal Howard College Campus.
Durban.

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Abstract

This study answered questions about the experiences and factors considered in food identification and choice among Zimbabwean migrants, the value chain of food choices among Zimbabwean migrants and how this food production process has influenced development in Durban.

This study explores qualitative approach methodology focusing on constructivism epistemology to interpret the relationship that exist between migrants and their food using food mapping as a theory and method to explain their experiences while tracing the food. Sixteen semi-structured interviews helped to follow plants of Zimbabwean origin in Durban from production to consumption tracing the developmental effect. Research shows that the experience of Zimbabwean migrants has a linkage to their culture and identity leaving a trace of home feelings while making choices in consideration to economic, biological and socio-cultural factors. Food value chain analysis helped to capture the sustainable impact of the production of these plants on the economic, social, agricultural and environmental developments. It was concluded that the consumption pattern of these migrants has weighty positive effect on the entire populace, thereby bringing about an aggressive transformation in the economic, social, agricultural and environmental interaction.

Declaration
COLLEGE OF HUMANITIES

I, **FEMI EMMANUEL ONI** (217079275) declare that

- 1.The research reported in this thesis, except where otherwise indicated, and is my original research.
- 2.This thesis has not been submitted for any degree or examination at any other university.
- 3.This thesis does not contain other persons' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.
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Signed.....

Date.....

Dedication

This research is dedicated to GOD the giver of life and wisdom.

Acknowledgement

My immense gratitude goes to The Almighty God, the reason behind the completion of this study, my succour, my caretaker and my sure foundation who in His avalanche love kept me throughout my research programme. I owe it all to Him.

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To all who have contributed to my study in South Africa I want to use this medium to accord warmest and sincere gratitude to you, may the good God I serve add value to your lives and career in Jesus' name.

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Finally, to the entire staff and students of School of Built Environment and Development Studies I doff my hat. Great minds, great people.

Abbreviations

ALPS	Agri-Food Local Productive System
CBD	Central Business District
CPRE	Campaign to Protect Rural England
DEFRA	Department for Environment, Food and Rural Affairs
FAO	Food and Agriculture Organisation
FVC	Food Value Chain
GDP	Gross Domestic Product
IGD	Institute of Grocery Distribution
SAMP	South Africa Migration Programme
SCDP	Scottish Community Diet Project
SED	Sustainable Economic Development
SFVC	Sustainable Food Value Chain
UNDP	United Nation Development Programme
WHO	World Health Organisation

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Chapter One: Introduction

1.1. Background of the Study and Problem Statement

Food is more than nutrition; it has veritable socio-cultural meanings and it encapsulates all manner of associations. A strong emotional state is associated with the things we consume, and food is one of the essential ways of life, yet what we consume often still seems trite. The tangible nature of food vanishes when it is consumed compared to other material commodities, but it leaves a tendency of a memorable social instinct to all else in life and the mind which include the past and the imminent. However, food has the capacity of mending time even though it vanishes when consumed (Mintz 2003).

Powerful association exists between food and memory. It was stated in Holtzman (2006), that their ironclad association is frequently offered to us initially insufficiently, so that a piece of this association at some occasion is of a hovering hint, although in unique ways. Food as an aspect can refer to a more realistic sense as substance that is required by us as organisms when consumed to acquire energy. However, it stands to be an inherently multifaceted and multi-coated topic with several dimensions which include social, psychological, physiological, symbolic phases, and with culturally cobbled up interpretations that are sometimes contradictory. On the other hand, Holtzman (2006) further enunciated that memory tends to be much more coded and complex when explored. It can be unerringly referred to as a collection of special processes that are not only limited to special dynamism but also have the intention to comprehend for very special reasons, as it is been generated from huge public planning to the schmaltz evoked by the biscuit that is soaked in tea. Based on these assertion, certain foods and plants can play the role of reconnecting with a missing past.

According to Koc and Welsh (2001), food is more than a basic source of nutrients; it is also an integral and intrinsic aspect of our culture, crucial to our identity. Identities, nevertheless, change with time and place, but on a social basis produced and reproduced around a given communal strata, bringing about certain irregularity in the existence and fictional physical restrictions in the experiences of individuals. It was further stated by Koc and Welsh (2001) that certain personal and collective influences which shape our food choices are relatable and cannot be overemphasized due to their constant occurrence and relevance to life.

Fischler (1988), stated that a cardinal element of our culture, food is also central to our identity. The personality of people in their daily hustling and bustling can be shaped to assume various identities, outlining who they are, and how they can live their lives can also be reflected in food as cultural identity. This cultural identity is bespoke in routine practices, which include but not limited to religious activities, a custom of passage, conversation, vacation activities, clothing, art, literature and, music. Building on this, Fox (2003) provided an argument that our food choices can play a symbolic role in defining us when it comes to religion, ethnicity, and social class as certain food have connotations. From this statement, it is clear that food and identity have a strong relationship and this becomes clear when examining the importance of food in migration.

As highlighted in Koc and Welsh (2001), the process of migration has both positive and negative effect on migrants. It introduces possibilities for metamorphosis in ways of life and changes in individual thought and identity. Vallianatos and Raine (2008) further elucidated that how and when these changes occur has to do with an individual's personal precedence in combination with the general, historical, political, and spatial context that surround migration.

The influx of immigrants can affect the economy of a country in diverse ways which in turn can influence the choices and consumption pattern of migrants in such a way that the migrant will have to adapt to the living conditions of the environment they found themselves. According to Venkatesha *et al.* (2016), economic growth in a country causes a reasonable shift in food preferences and consumption pattern and affects nutritional cachet of the people. Also, in order to maintain a better health and elimination of malnutrition, a diversified and balanced food basket is required as stated by Sangeetha *et al.* (2013) which should be ensured in the process of agricultural production. In the last 50 years, agricultural production environment, practices and culture have changed and crop breeding programmes have made farmers less dependent on seasons (Kearney 2010). Based on this, associations exist between cultural, individual activities and food which can affect consumption, marketing and production of food.

Looking closely at this scenario, there is need to traverse the study on memory, identity and food production bearing in mind how the cultural habits and memory of migrants from Zimbabwe have created a means of development in the agricultural sector in South Africa.

1.2. An Overview of Zimbabwean Migrants in South Africa

South Africa has become the major destination of migrants leaving Zimbabwe over the last decade (Crush and Tevera 2010). Several scholars examined various important themes in migration relating to these two countries (McGregor and Primorac 2010). A number of them include the scopes of migration (Tevera 2008); illegal migration (Bloch 2010); the memory drain (Chikanda 2006); diaspora commitments (Chikanda 2011); return migration (Makina 2012); abuse of migrants' human rights (Kriger 2006, 2007); migrant identities (Bolt 2010); the experiences and livelihood approaches of migrants (Rutherford and Addison 2007; Sisulu *et al.* 2007; Mosala 2008; Moorhouse and Cunningham 2010; Idemudia *et al.* 2013; Blaauw *et al.* 2012; Bolt 2013; Addison 2014); and the conflicting juxtaposition of policy responses between the South African government and migration from Zimbabwe (Bloch 2006; Baumann 2010; Kriger 2010; Hammerstad 2012). Having examined the above studies and a host of other academic literatures, a confirmation can be postulated that migration from Zimbabwe and Zimbabwean migrant is an intricate, dynamic and increasingly diverse subject matter.

“Mixed migration” during the post-apartheid era from Zimbabwe to South Africa has developed into a more assorted subject over time (Crush *et al.* 2015). There has been a lot of sceptical, oblivious conjecture and overemphasis in the South African correspondences over the total number of migrants. However, analyses have shown that there is considerable increase in the cross-border congestion between the two countries which ranges from less than 200,000 in the mid-1980s; rose to 600,000 in 2004 and ballooned to over 1.6 million in 2010 (Crush *et al.* 2012). It is worth mentioning that a sizeable number are non-permanent residents, visiting South Africa for business purposes, courtesy visits to friends and family or those seeking medical care. Based on 2007 assumptions, the estimated number of Zimbabweans in South Africa was 509,000 (Crush and Tevera 2010). According to the South Africa census 2011 records, the total number increased to 515,824 which was between the ages of 15-64 (Crush and Tevera 2010). The changes in the figure can be interpreted as stability in migration from Zimbabwe after 2007 but should not be confused with the preceding figure excluding children, despite the reduction in the migration process, which was as a result of partial restoration in the political and economic stability in Zimbabwe in the early millennium.

Migration from Zimbabwe to South Africa which became evident in the 1990s, was in its fluctuating phase as migrants were in their excited state as their stay was temporal. These migrants seldom stayed back in South Africa as they returned home more frequently. In a survey carried out by the South Africa Migration Programme (SAMP) in 2005 on Zimbabwean migrants, almost one-third of them said they returned to Zimbabwe at least once a month while 50% of them showed that they returned at least once every few months (Tevera and Chikanda 2009). In the last few decades, there has been a change of story with emergent evidence that migration to South Africa has taken a new dimension on a more stable characteristic, despite all efforts by the government to check it. To complement their 2005 survey, SAMP carried out another survey in 2010 which focused on new arrival into South Africa, and it was discovered that a negligible number of Zimbabwe returned home once a month, and a little fraction of them returned once every few months (Crush *et al.* 2015). Statistics have shown that 46% of these migrants have remained in South Africa since their entry which is similar to what was said initially that they wanted to remain in South Africa for few years. In addition, 13% said they desired to remain “indefinitely” and another 8% “permanently.” Inferably, two-thirds of the migrants viewed a long-term stay in South Africa as desirable. Based on these statistics, considerable number of Zimbabwean immigrants reside in South Africa and considering them as a subject of research happens to be viable and necessary in order to ascertain the state of their experience and its impact on the host community.

1.3. Rationale for the Study

According to Mija (2014) in a Ground Up article, Zimbabweans have introduced South Africans to new, several leafy green vegetables that have crept in over the time into the immigrant green market stands all over the city of Cape Town. These vegetables have become common in other parts of South Africa including Durban which is the focus of this study. The vegetables which were so patronised by some locals at that period, are well-liked by many immigrants from other African countries as well. They are found in many strategic locations spotted around the cities and market stands, mostly bulwarked by foreigners, which include Zimbabweans and others from the African continent. Varieties of these vegetables exist including but not limited to the following, rape, tsunga and chomolia/covo as the Zimbabweans call it. For portability and convenience, some of these vegetables are found sun dried or ‘mufushwa’ in Shona and chopped form.

The source of these vegetables according to the report of Mija (2014) was traced to importation from neighbouring countries and some of these greens are found in a processed form mixed with homemade peanut and sold as an introduced product at different stands where vegetables are sold. They are now being grown in South Africa including Durban. A combination of these vegetables with fish oil, tomatoes, onions and other spices, or mixed with meat when cooked forms a delicacy that can be serve as a relish. The relish becomes an important and popular component of Zimbabweans cuisine which goes well with a staple diet of maize meal “pap” or “sadza” in Shona. The leaves are said to be rich in various nutrients which are very healthy for the body. The purchasing power needed to get these greens is quite low as they can be purchased in the cost range of R5 to R7 per bundle depending on location, making it affordable for an average person, which is conveniently all right for two individuals to enjoy when served with “sadza”.

Another lucrative aspect of these vegetables cited in this report shows that, selling of these leafy vegetables has become a lucrative business. This business was first embarked on by foreign nursing mothers from Africa. It afforded them enough time to take care of their babies, while at the same time making earnings without any financial commitment to paying bills on babysitting. On rare occasions, the business has been upgraded into partnership between husbands and their wives or among siblings. This has gone a long way in providing means of livelihood for many immigrants who are unemployed and having language barriers.

Testimonials from report also showed that business of these vegetables is brisk, and demand is always high during the twilight as people coming from work usually patronise these vegetables at this hour Mija (2014). More so, challenges encountered by the vendors include; instability and unrest in the locations of vending these vegetables due to the activities of law enforcement agent.

Importantly, however, some South African farmers have developed interest in acquiring knowledge regarding the farming techniques to produce these vegetables in order to improve earnings. The availability of these vegetables in some South African cities poses a number of questions such as a critical examination of the basic facts responsible for the consumption of some of these plants, their availability to migrants, and whether their consumption has

influenced their production in South Africa. In short, this is the foundation of this study on memory, identity and food production among Zimbabwean migrants in Durban, South Africa

1.4. Objectives of the study

The overall objective of this research is to look at the experiences of Zimbabwean migrants in relation to their food and identity, the effect it has on them and agricultural production in Durban, South Africa. In view of this principal objective, specific objectives of this research include the following:

1. To determine the elements that are considered in food identification and choices among Zimbabwean migrants;
2. To trace the value chain of food choices among Zimbabwean migrants;
3. To analyse the effect of food identity of Zimbabwean migrants on agricultural production, economic and social development in Durban.

1.5. Research Questions of the Study

Pertinent research questions that guided the research and pinpoint areas that needed to be covered during the research include the following:

1. What are the elements considered in food preferences and choices among Zimbabwean migrants?
2. What is the value chain of food choices among Zimbabwean migrants?
3. How does Zimbabwean food identity influence agricultural, economic and social development in Durban South Africa?

1.6. Structure of the Dissertation

This study is divided into seven chapters. The first chapter provides an introductory background, statement of problem for the topic under research. It also offers a background on Zimbabweans migrants in South Africa. Then it describes the rationale behind the research and explains the need to undertake this research. The second chapter reviews important and relevant literatures showing the existing relationship between food and memory, food and identity and experiences of migrants with relation to food consumption. Chapter three discusses the conceptual tools that form the theoretical framework used in the study. It covers the introduction and background theories of food mapping, the relationship that exists between food mapping and urban agriculture, as this study tend to deal with food production, relevant case studies, applications of food mapping and finally limitations and challenges of using food

mapping. Chapter four presents the methodology employed in this research. It describes the study area, the research methods and the sampling technique and materials. It also covers the interview process and the challenges in the field work, and data analysis technique used for the research. The fifth chapter examines the findings of the in-depth interviews and analysis of the data collected focusing on the migrant's memory, identity, preferences and choices using food mapping. The sixth chapter further elucidates on Zimbabwean's food value chain analysis bringing into play its impact on the key players in the food system the entire community. The final chapter discusses the results and summarizes the whole study and puts into view possible recommendations and areas of further research.

1.7. Definitions of Food Concept Terms

Food circle: Food circle offers a wide range of vigorous, municipal-based and locally-cohesive food-systems perception. In departure to current direct trend of production to consumption systems, the food circle is a production consumption-recycle model. A festivity of cycles, this model mirrors all-natural systems and is based on the circumstance that all constant biological systems function as closed cycles or circles, carefully preserving vigour, nutrients, resources and the integrity of the whole (Benkeblia 2014).

Food Consumption: Food consumption is the vanishing of food substances, which measures the movement of raw and processed food commodities through the marketing system (USDA 2014).

Food Mapping: Food mapping can be defined as the process of finding out where people can buy and eat food and finding out what the food needs of local people are (Blair 2003)

Food Miles: The mileage food voyages from where it is grown or raised to where the consumer or end-user ultimately purchases it. Food miles and transportation costs are usually affected in a positive way by local food system, offering significant energy savings. It benefits the consumers by allowing them to get familiar with fresher, better-tasting, and more nutritious food, while more food dollars stay within rural communities (Benkeblia 2014).

Food Movements: Food movements is a factor that play a part in determining what an individual will eat, how the individual will see his or her body in the world, as well as how others will perceive him or her (Rawlinson and Ward 2016).

Food Preference: Food preference refers to the way in which people make choices among available comestibles based personal and community differences in line with biological or economical perceptive including sense of taste, value, purity, ease or difficulty of preparation, and the availability of fuel and other preparation tools. In much of the current anthropological literature, food choices are seen as conditioned by the capitalist or nationalist goals of food purveyors (Belasco and Scranton 2014; Nestle 2013; Schlosser 2012).

Food Production: Food production is a sequential process of converting seeds into prepared finished foods. Food production includes industries that take raw food products and convert them into marketable food items. Home food production includes converting produce into forms for long-term storage and consumption (BYJUS learning 2018).

Food Security: Food security is the accessibility of food always by all people in an affordable, nutritious, culturally appropriate manner, which should be derived from non-emergency sources and produced through sustainable practices to lead healthy and productive lives (Community Food Security Coalition. CFSC 2002).

Food Shed: This term indicates the organised nature of a local food system. In the same way a watershed is consist of diverse, interdependent plant and animal species, while a food shed is made up of local and regional food producers, their customers, and the retailers that carry their products, creating an integrated local economy showing the structure of supply and demand of the food will cover in the globe (Getz 1991).

Food System: A food system involves the pathway food journeys, which is from farm to fork. It includes the process of planting, picking, processing, packaging, moving, marketing, masticating, and marshalling of food. Food system allows the close monitoring of the inputs needed, and outputs generated at each step. It is an operation that takes place within and is influenced by social, economic, and natural environments. Each step is also dependent on human resources (UNDP 1996).

Food Value Chain: A value chain is the complete set of steps that take a product from its origin to its destination, i.e. ‘from farm to fork’. As part of their efforts to boost agricultural production in emerging economies, agricultural food (‘agri-food’) companies and governments

are heavily investing in their smallholder suppliers (KIT Sustainable Economic Development SED 2018).

Food ways: another name for food ways is food culture. Some thrilling components in the field of social science of food ways include culture, social, and economic practices relating to the production and consumption of food. Food ways is referred to as the connexion of food with culture, traditions, and history (Edge 2014).

Chapter Two: Literature Review: Food, Memory and Identity Relationships among Migrants

2.1. Introduction

Many migrants including Zimbabweans have moved along with their food irrespective of the distance of their migration trying to retain their identity with regards to food. This food migration has also created a psychological effect on the migrants, thereby reminding them of the past and creating a memory of home. This chapter reviews several relevant literatures creating a link between food, identity and memory of migrants by reviewing literatures on food identity in the global and African contexts.

2.2. The Nature of Food and Food Study as Portrayed by Migrants

Food studies has become a vested interwoven and multidisciplinary field of study that looks into the complex association that exist among environments, culture and principally food from various angles in sciences, social sciences and even in the field of humanities, to mention but just a few. Various areas which cover engineering, art, sociology, education, economics, health, social justice, literature, anthropology, and history have provided several insights in food studies. More than a few institutes in various parts of the world are now offering programs in this field.

Almerico (2014) reported that food studies looks at people's associations with food and reveals several and salient information about them. He further stated that our food choices can interfere with individual and collective principles, passions, personalities, upbringing knowledge, and conjectures. Similarly, Hauck-Lawson (2004), a dietician brings together the idea of food voice. She propounded that a person's identity or emotion can be expressed in what one consumes or chooses not to consume in a manner that words alone cannot. The choices of food that one makes can suggest family lineage, migrations, ingestions, frictions, transformation, and individual as well as collective identity.

In contrast to the above literatures, Brown (2014), looked at food studies relating meaningful experiences of an individual from the psychological perspective to have a symbolic meaning. A scenario of these symbolic meanings that include food preferences is seen in our mutual elucidations. It was stated that "*psychological needs crisscross with social factors when foods*

are used more for the meaning they represent more than the nutrients they offer or provide” (Almerico 2014, 4).

According to Kniazeva and Venkatesh (2007), the first detailed food analysis in consumer behaviour relating to the live experiences of people and its relevance to other foodstuffs was tackled by (Levy 1981; Levy and Rook 1999), the explored interviews with married women showed the application of a structural approach following Lévi-Strauss (1963) propositions. The foundation of the assumption was based on the fact that events conducted have symbolic meanings. Based on this, food was seen as a process of searching for meaning in analysing the story of allegory that was gathered from the respondents. He asserted that consumers adapt to roles and symbols that conform to their identities, based on the roles and symbols that are prescribed by the accompanying society which reflect the nature of symbols. This was used to distinguish between identities by exploring the terminologies that are involved in cooking and eating. This form the basis for identifying symbolic distinctions and an important tool used by other scholars in the area of food study. This was applied among various study on specify foods, their mode of preparations and the ideas they carry.

In Heisley and Levy (1991), there are three different levels that are embedded in consumer behaviour which are used in the symbolic framing of food which have been helpful in the quest to open up the meanings hidden in foods. They allude to a certain attachment to a particular kind of food, its manufacturing procedure and preparation steps, and approach of eating whether taken slowly or fast, which connotes particular symbols. This view has helped consumers negotiate their identities to satisfy their complex demands in this contemporary world - a procedure that clinches food as one of the most communicative and universal tools. As a result of this, postmodernism of consumer cultural category can easily be understood and represented in food.

In the first level, well-articulated and collectively shared meanings and images are strongly related to specific foods which make this level straightforward. Examples highlighted include hamburgers symbolising teenagers’ food and fondue as a fun meal (Levy 1981); (Heisley and Levy 1991). These are reflected and expressed when these foods are consumed. Similarly, Wallendorf and Arnould (1991) in a study of thanksgiving rituals, gave some concurring examples that reflect the first level when they established that tradition and a bonded family

can be reflected in Jell-O. Messages that depict common America origins are sent by root vegetables, and the message of superiority of nature above commerce is conveyed by wide use of butter over margarine.

There was a shift in the second level, where devotion was moved toward ways by which food was manufactured. The technological materials that was employed was on the bases of the meanings that was inferred from the food and not the food itself. Accordingly, this in turn forms the units that are derived from the analysis. Words used include domestic, man-made, regular, organic, packed, treated, and stationary foods. Instances cited show food manufactured are signs of “industrialization”, “modernization and progress”, and “natural foods” signify the return to nature, a withdrawal from over- modification, and genuineness. (Kniazeva 2002, 2006; Levy 1981). Also, local foods, likewise, operate as a symbolic barricade against interruption of the market into the local area (Moisio *et al.* 2004).

The third level is the most complex and comprehensive. It looks into the multiple dimensions of foods, attributes ascribe to food and the combined meaning generated from the previous two levels. The symbols recognised the linkage that exist between the properties, patterns and values of food and justify behaviour of consumer. Instances from this level show that family unity is symbolically associated with eating at home and conformism, while festivity and separation are symbolically associated with eating out (Bove *et al.* 2003; Kemmer *et al.* 1998). In consumer terminology, self-indulgence, femininity, taking control and categorization of food is formed in this stage.

Almerico (2014) contributed that food symbolism gets deep into our social psyche. Certain expressions tending toward food are used to give certain interpretations to some expressions like happiness, grief, importance, physique, etc. Statements like, “*he’s the big cheese*”, “*she’s rolling in the dough*”, “*easy as pie*”, “*a bone to pick*”, and “*he’s a good egg*” were used for these expressions. In addition, she further conveys, one’s selection of food or restaurant can be influenced by one’s social status, for example “a diet of rice and beans insinuates poverty, whereas steak insinuates wealth” (Almerico 2014, 6).

On the African continent, Shepler (2011) supported the stand point of the symbolic nature of food by exploring the case of a West African country, Sierra Leone. Using the post-war

experience (1991 and 2002), Shepler analysed the central material and symbolic role of food in the African context. It was stated in post conflict that the narration of the experience during wartime can be expressed by the central phenomenon of food. She gave the explanation of daily war experiences using food as a medium and also as forefront in the suffering over the remarkable. She also delved into the cultural meaning of food and food idioms to explain and describe sociality, reciprocity, political clienteles, the greed of politicians considered responsible for the war, likewise wartime hardship stories narrated attributed to hunger. In addition, she described that there is shift in moral regime that brought about new ingredients and new method of preparation innovation during the displacement, and the new cosmopolitanism experienced in the everyday strategies of food finding under rebel control and in refugee camps.

In a comprehensive work carried out by Saleh *et al.* (2002) on food and migration, using a medical approach, their investigation shows that diet alterations result from migration using the situation of Ghanaian migrants that reside in Sydney, Australia in relation to Type II diabetes and obesity. Based on the research, information gathered showed each of the subject dietary data obtained with the aid of questionnaire, carries anthropometric and duplicate fasting blood glucose level measurements. According to the WHO criteria using the information gathered, men and women on the percentage of 20 and 11 were diabetic, ascribing 22% and 20% of sustaining impaired fasting glucose to each respectively. There was an increase in their body mass upon migration to Australia as a result of variation in their dietary consumption patterns. The comparison of their food intake as to when they reside in Ghana to after migration to Australia confirms that they consume 14.2 and 12.6 percent less in serving of fruits and 3.8 and 5.3 percent less in serving of fish for men and women respectively per week. It was also noticed that tropical root crops common to them had almost exclusively been replaced with potato starch which has increased the risk of Type II diabetes and obesity among the migrant population, inferring that changes in certain food consumption as a result of migration, can trigger damage in health condition.

In similar view, Renzaho and Burns (2006) ascertained that African migrants have a tendency of acculturation in their diet which might take a chronological progression of substitution,

supplementation and modification of recipes. Locating their indigenous traditional foods becomes almost impossible, and consequently they are in a way voluntarily adaptive to new foods found in their new settlement. The foods that form part of their new lifestyle upon their arrival now constitute of junk food and cereals obtained from fast food store, and some fruits and vegetables to complement. Noticeably, the non-availability of their traditional foods led to the consumption of fast foods from quick service restaurants like McDonald's. Also, there are other good reasons for eating out at these quick service restaurants which could be the cravings for most wanted foods, routine family outings, special occasions like birthdays and anniversaries and when there is really no spare time to do dishes at home. In the process of trying to conform to these dietary changes, a host of them may be predisposed to rapid weight gain and chronic diseases which are not consistent with good health. It was concluded that swift modernization and the foreign culture network in a compound way with traditional eating and socialization does more of shaping Sub Sahara Africa migrants.

All these assumptions cannot be generalized because culture and identity vary around the world and perception also differs. Also, consumption habits that affect health cannot be concluded based on individual differences alone. Change has occurred over time that gives limitations to some of these assertions taking into consideration the case of rice and beans as a diet that connotes poverty by Almerico (2014), the prices of these food items vary based on the production level and seasons which affect the prices, and therefore, renders the symbolism void that moment and creates a gap in his assumption.

2.3. Food as an Expression of Identity

Consumption has different ways to help us express our identity. Food is one of the fascinating areas of consumption which has received great attention in this context. Identity in food can be expressed by certain people who restrict themselves to certain types of meals for obvious reasons. For example, vegetarians, consumers of organic produce, and equally, those who do not take up any of these identity variations. However, food can be used to express group identity, for instance, as a household eating collectively, distribution of food and receiving of communion.

Kittler *et al.* (2012), from a general point of view introduced the word food habits (synonymous to food culture) to define how food is used ranging from how it is preferred, purchased, and

peddled to who makes, ministers, and munches it. It was specified that food habit is a process that is significant and exclusive to human beings as animals and other creatures are void of potential to perform these processes. They argued on why so much is expended by people with regard to time, energy, money, and creativity in food consumption and could draw an inference that forms a noticeable reflection and exemplifies the impression of identity and food is, “*you are what you eat*” (Almerico 2014, 3)

Coincidentally, Valentine (1999) also suggested the significance of food in expressing family identities, in collaboration with gender identities within a household relating to food. It was conveyed that a woman is always saddled with the duty of preparing food for the family, and make selection of the food her partner and children liked, side-lining her own preference. Consequently, her own food identity is sacrificed. An accurate instance of this situation was drawn by Slama and Wolfe (1999). They viewed a theatre piece of a woman who treated the needs of her children and husband over her own and later realised they had no value for the priority she gave to them. This made her identity shattered because her own identity was meaningless to her. The approach has created a cheerless identity on the part of the woman which I think is not an ideal way of forming family identity.

In the African context, food also plays a constructive role in identity formation among migrants leaving a trace in the identity construction of Africans in the diaspora. Gasparetti (2009), looked at food from the perspective of its cultural meanings and its multi-power character in shaping the identity of Senegalese migrants in Italy. He probed their experiences and concluded that when constructing and re-ascertaining their identity, they considered categorization and vivification that are imposed on them by the host community, making no difference between them and the host community, therefore overcoming the internal differences that exist. The home country, Senegal becomes the most important and common reference point in the process of creating and defining the collective identity of Senegalese in the context of migration. In this process, their food becomes an object of concern in linking them to their home country thereby nourishing the Senegalese in diaspora.

He further strengthened his study by stating that eating a kind of food “*tie bou jenn*”, one of their popular dishes collectively strengthens their wider sense of belonging and reinforces the internal

loyalty of the group. A host of their food can be purchased in the African shops manned by fellow Africans, where their women source all the necessary ingredients needed to make their dish “*tie bou jenn*” and the other ones they consume. “*Tie bou jenn*”, a special delicacy for most of people in Senegal, can be termed as not only welcome for consumption, but also creates a sense of belonging as Lévi-Strauss (1966) would say, that greater importance is ascribed to the cultural meaning that is constructed in Senegal in the migration context.

In addition, women in the region of Senegal depict the fanciful status of the mother and their homeland feeding of their children, due to the ideal portrayal of woman built by the entire Senegalese community. They are responsible for providing food for all Senegalese brothers as a welfare package, safeguarding the adhesion and recognition procedures of their assembly in all jurisdiction of their stay, both at home and in the street, where “*tie bou jenn*” is being sold.

Similarly, in order to create a flow for inclusion and exclusion, Walker (2012) noted that the relationship that exists between commensality and foods is quite an important marker of identity and kinship among Comorians in disbandment on the Comorian island of Ngazidja. Commensality generates cohesion in Ngazidja, where food differences are minimal; in the disbandment, these food differences form an important aspect and the identities are said to be invoked in the foods themselves. It was explored how these entities formed and maintained by Comorian identities in France and in Zanzibar as well as in Ngazidja, and how the opportunity of both sharing and denial of sharing has generated and transcended borders between them and their neighbours and between the Comorians in disbandment and at home. A firm decision was reached by analysing the special Ngazidja food “*ntsambu*”, creating a rupture within the broader Comorian identity which circuitously was often offered to be too Comorian to be eaten by Comorians in disbandment.

This is why Hahn (2008) argued that the popularity currently gained by the concept of “cultures of consumption” has an indicting understanding of consumption, as it is not only the fulfilment of needs to satisfy hunger, but also as a means of expressing social identity. He then stated that description given to consumption until now has only been done based on the achievements and specific problems that are been faced in the developed societies, that in the “less affluent world” that is the local areas, the fundamental assumption of consumer culture is of little or no relevance at all. This assumption was further faulted that consumption was merely geared

towards the fulfilment of basic needs only and fallen short in some areas to give a concrete explanation of economic constraints and unequal conditions of life in those countries. He was able to give a rejoinder to this criticism by showing how consumption in the African contexts may be proved useful in order to analyse abridging concepts about consumption. However, history and contemporary interaction of local, inter-region and global forces is very much needed in order to understand consumption in the Africa context. Global commodities are highly sophisticated and well utilized by many African consumers. In his attempt to use cultural assumption as a conceptual framework, he gave some detail analysis on the specificity of quantitatively reduced belongings in many African families. In this context, he coined that the wide range of cultural practises has a reflection on the different modes of transformation and consumption of globally circulating consumer commodities. Based on this, the expression of and the driving force for social change is being indicated in the agency of the consumers.

2.4. The Connection between Food and Memory

Holtzman (2006), stated that the centrality of sensuousness of food in the understanding much of its power as a tool that drives memory. However, Sutton (2001) created an important stand point for considering the connection between food and memory by a compilation of efforts exerted in order to tackle the subjects of memory from various ideals and perspectives. In his attempt to muddle out an accurate, appropriate and theoretical framework to look into less explored areas, he coined a foundation which he termed “Proustian anthropology.” Based on his observation, the information gathered shows that participants remembered past events through food citing, an example of an apricot fruit that was eaten in the exploration of an abandoned synagogue during one of their occupation. He was able to point out an important dimension that focuses on the many varied phenomena that are usually labelled memory. He was able to give different examples, how a pear in August was used to illustrate the seasonal food cycle, shaping prospective memory by looking ahead of past events; how past occurrences are being brought back to the present through food; how time in some instances is being held by consistently repeating daily habits; how reference memories have been used to understand the current anthropological interest. Meanwhile, narratives of past generosity are been used to frame social relationships; and how there is a connection between past and present meals as a result of understanding one meal from the orientation derived from previous meals. There is a great insight in the broad-ranging treatment of memory into the phenomena that were termed

memory, also to some extent of omission in the above-mentioned uncertainty concerning the disparities among the varying phenomena we term memory.

Many scholars have considered exploring the study of food and memory and have reached reasonable conclusions. From the angle of individual memory, Batsell *et al.* (2002), brought to light the experience of childhood in the United States, how it has fostered the clear-out of individual plate from the convincing “flashbulb memories,” remembering in clear detail the experiences of early childhood: a stage when little or none may be remembered. Conversely from a collective approach, Powles (2002) argued on the social memory of Angolan migrants in the settlement of Meheba, Zambia using collective memory of displaced immigrants, it was shown that experiences were honed most emotionally as a result of the physical experience of the non-appearance of fish which became a bad memory.

According to Almerico (2014, 5), the statement “*The memory as well as the spaghetti was delicious*” gives an interpretation that the memory of food connects to the heritage and ways of life of the family, and also gives a further backing that food carries more weight than the basic source nutrients. Emotionally, sensuously, and ethnically there is a trace of connections, found in food. Lupton (1994), similarly used the memory-work as an innovative qualitative research approach to look at implication of structuring eating habits as an emotional embodied memory that surrounds a particular food to unravel the meanings that surrounds food practices in industrialised societies. The memory was observed, showing the contribution of food as an important aspect to social relationships and cultural observations, explaining the individual adherence to certain eating habits, and the circumvention of others that can be pointed towards a further relevance of memory-work to explain the meanings and symbolic nature of food in the developed societies.

According to Arvela (2013), food is also a powerful cultural marker. A clear distinction was made with regards to food at home and food abroad, bringing into play the imaginary bridges that can keep someone connected with the memory of faces, practices, customs, tastes and smells that are common, which was left behind when staying abroad, and food as what he is taking for just mere reasons when taken at home. These have shown the crucial role of food culture in a strange environment in diaspora. Substantial examples include Fiss (2001), who recognized that Portuguese immigrants that reside in Brazil eat “*bacalhau*” a local meal to

remain connected emotionally to their motherland, its customs, traditions and the relevant others in the one they left behind. Also, Richardson (2003) after critically examining Australians' predilection for vegemite and how much expatriates missed this homemade food whilst away, he concluded that "most Australians living abroad have come to notice that their needs are available locally and they have been saved the stress of overloading their suitcase when travelling".

Cook (2008), conveniently looked at food and memory. He postulated that certain food can evoke memories of the past when it is prepared, cooked or experienced. The choice of this food when eaten or shared can serve as an act of nostalgia that makes consumers to remember their families, friends and places of history. Based on this, individual has the tendency of connecting irrespective of physical and temporary separation when food associated with home is consumed. Correspondingly, another literature of interest that supported Cook (2008) idea was Parasecoli (2014), who examined food with the connection of the past and found that memories of the past, a more or less traumatic displacement, and interactions inside and outside their familiar circles all contribute to shaping migrants' new culinary competences in their physical, emotional, and cognitive dimensions.

Gasparetti (2009), based on his privileged understanding said that, Senegalese migrants always "feel at home" when abroad as a result of the evocative power of food representing the place and space for memories. Also, the major key player in the development of syncretic identity for migrants from Senegal among other immigrant groups most often Africa is food whereby serving as a contributing factor to the establishment of new affairs outside the group. Extending Gasparetti's spatial reference, Christensen (2001), viewed the place of cooking as a fountain for memory; using his mother's experience to state that, "to open the covering of a garlic and dice its contents into grains has allowed a kind of rebirth making her a daughter again, to re-enter the female world of her puberty."

2.5. Food Preference and choice among Migrants

Migrants are saddled with the challenge of living out of their comfort zone when it comes to issues of food and other essential commodities which has led to making choices from the alternatives as a result of their preference. Food preference can be seen as the way in which migrants make selection based on the availability of different comestibles on the ground of

social, biological or economic perceptions which may include their taste, value, purity, ease or difficulty of preparation, and the availability of fuel and other preparation tools. Currently, various literature from anthropology looked at food choices as being conditioned by the capitalist or nationalist goals of food gossipmongers (Belasco and Scranton 2014; Nestle 2013; Schlosser 2012) or a situation that is perceived as the result of new discovery in supply chains and economic conditions brought about by colonialism and globalization as well as the international aid process (Lindenbaum 1986). However, the decision of an individual within a social context actually affects what is consumed. According to Solms and Hall (1981), the act of consuming food may represent the ultimate basic locus of identity, conformity, and resistance, similarly is the mouth to body as it serves as the opening. Likewise, food choice in preparation and consumption can also be exercised by those who are said to be otherwise powerless, this have been a subject of consideration in the study to observe the subjugated marginal groups in which slaves are included (Armstrong and Kelly 2000; McKee 1995).

In complex societies, it was an important component of plant domestication that started 10,000 years ago at the end of the Holocene, food preference and its effect on human-nature interactions appears to be predated. As viewed by Harris and Hillman (1989) also in Smith (2001), it is a series of gradual and subtle transitions, whereby human control over plant reproduction entails decisions about which plants to keep and spread.

According to Vallianatos and Raine (2008), loss of tradition and new food ways has almost always been incorporated into the lifestyle of immigrants in the course of migration. The tendency to lose or incorporates foods depends on the situation surrounding each immigrant. Accessibility to some foods can be restricted. Some direct or indirect factors may include but not limited to physical, political, economic and sociocultural realities of the immigrant's fresh atmosphere. It all depends on whether the foods are simply unavailable, or they have negative associations in the immigrant's new terrace. It is glaring that the shifts in social identity and self-conceptualisation is corresponding to the changes in food ways. Following the constructs of Vallianatos and Raine (2008), the idea of Phinney (1990) can be re-ignited as it was highlighted that, multiple models exist to aid in the analysis and understanding of identity development processes due to the fact that identity is a dynamic construct that develops with time through the acquisition of new behaviours, attitudes and experiences. This was further

buttressed in Tse (2001) that models recognize the behavioural aspects of identity, and also play an importance role in identity development processes. Based on this assertion, the most basic sense in the consumption and preparation of food is a physical act. Therefore, models that are proposed could be useful tools in the analysis of the role of food and food ways in identity development. Indeed, this was what made, Mintz and Du Bois (2002) argued that the understanding of broad societal processes when studying food is critical and made a declaration that it can be useful in ongoing debates about anthropological theories and methods.

Critically looking at the work of Parasecoli (2014), one comes to realise that the adaptation process of migrants to the new land is shared, influenced, and constructed through interactions at least within the intimate circles of family, friends, neighbours, co-workers, and the immediate social sphere unless they find themselves alone and refrain from any contact which is out rightly impossible. These connections which are as a result of familiarization are so much of value as they have to adapt to the different and new activities that exist in this new environment which may include abstruse periodic cycles, overseas agendas, and new holidays where their food plays no part. As immigrants collectively expand and reshape their culinary competence to make sense of new situations, the communal repository of memories and experiences related to the place of origin may also influence the way they relate to each other. Migrant food preference is sharpened by his environment and has nothing to do with his identity.

Parasecoli (2014) concluded that migrant communities remain effective and significant to individuals and groups precisely because they are founded on bodies and embodied experiences that at the personal, communal, collective, and institutional levels constantly negotiate not only with such ideals such as nation, identity, authenticity, and tradition, but with the pull of more abstract networks that highlight connections while disregarding the emotional impact of embeddedness in specific places. The shift and unsteady nature of communities, and also their existential relevance can be revealed by the full understanding of food-related dos, norms, and ideas among migrants. However, the reflection on food, whose main function is to be destroyed by ingestion, could be of helping hands to facilitate modern theories of globalization in a general and specific, emotional, and deficient dimension of the body, with its advantages and its disadvantages.

2.6. Consumption, Marketing and Production of Local Food

Food can either be local or international. The uniformity in the definition of local food is still yet to be reached despite the fact that it is becoming an increasing topical issue in the current economic and agri-environmental climate (DEFRA 2003; Jones *et al.* 2004). However, there is a generally accepted definition by farmers' markets used in identifying producers who are permitted to sell there. According to DEFRA (2003), it was summarized that 'food planted, managed, bought and sold within a given geographical area usually of a restricted radius is termed local food. Due to the subjectivity of local food to business and consumer, there is hence some realistic flexibility that needed to be allowed in the definition. Distance is a subject of consideration when it has to do with consumer perspective of local food. For instance, IGD (2005) found that "local" is a symbol of small arena around where the consumer stays or buy the food. Additionally, the CPRE (2008) proposed a classification that food should be within the jurisdiction of 30 miles between origins and/or be processing and the store.

In contrast to the consumer perspective, an attempt to define local agricultural food system from another perspective brought about the definition of Fonte (2006) as the territorially coordinated production-consumption networks. Terms like "local production systems", "local productive systems", "agri-food local productive systems" (ALPS), "local agro-food clusters" and industrial clusters are used interchangeably with local agric food system. This concept is overlapping as consumption, marketing and production are involved, and small business that involves producers and marketers and consumer perceptions are considered appropriate.

Following the concept of local food, Dawson (2002) attributed values to consumers in the increasing scale of importance: production, nearness of production to household, and product value which have been personified and prepared by local food initiatives such as "farmers' markets, farm shops, food fairs and organic box schemes" (CPRE 2003; FARMA 2008; Archer *et al.* 2003). In order to align the relationship that exists between the key player in the concept, (Duffy *et al.* 2005; Tregear *et al.* 2007) conveyed that the dependency of the local food producer on the supporting network of regional and county food groups will aid promotion and marketing of food, hereby aiming at sustainable local business and generating revenue in the local economy, hence, more focus is given to benefiting the local producers and the local environment as a result of this diversification from mainstream agri-food.

Van der Veen (2003) then theorized the value of daily food in order to understand social cohesion. As a result of this, it enables us to see the reason agricultural reinforcing the result of elites was not solely provocative production for the purposes of social exaggeration through feasting,

2.6.1. Local Food Consumption, Marketing and Production as a Vehicle for Development Opportunities

Consumers' confidence regarding food originality and traceability have been increased as result of concerns that surround food fright. Also, moving from the conventional food supply chain to high quality market based on the origin, validity and organoleptic properties of food has generated a growing hope (Morley *et al.* 2000; DEFRA 2002). As highlighted in Britain (2002), locally produced foods have gained the opportunity of added values and profits as a result of building public enthusiasm for them by Policy initiatives as one of the responses (Weatherell *et al.* 2003). In Knight *et al.* (2007), it was argued that produce sourcing can be advantageous when it is being traced back to production by individual grower.

Marketing of locally produced foods and drinks is becoming a growing category in both supermarkets and independent retailers in the UK. As reported by IGD (2010) interest in the marketing of local food doubled from 15% in 2006 to 30% in 2010 as the sellers of these locally produced commodities claimed it. Similarly, Mintel (2010) also noticed 29% interest among the retail customers care who sells locally produced food product. In the process of the recognition of the defining problems, Mintel (2008), recorded an estimated value of R87.36 billion (current exchange rate) in the UK retail sales. Expenditures from food service outlets serving residents and tourists are been excluded from this analysis, what a jumbo and important market for a small food business. Over the year, the research carried out by (IGD 2010; Mintel 2010) showed that support for local farmers and other food producers as well as retailers have increased the buying of locally produced foods tremendously. Adding to this, Hingley *et al.* (2010) made a remark that great opportunities arise for the SMEs as a result of the emergence of farm shops, and other direct selling initiatives, making them profitable from this demand.

2.6.2. Challenges in Local Food Consumption, Marketing and Production

In a study conducted by Watkins (2008), local food production, marketing and consumption have challenges, as palpable complication for local food exists as a result of perceived price

premium, predominantly when there is recession in luxury food commodities which can be lay-off by the cost-conscious consumers. In the UK, (Weatherell *et al.* 2003; IGD 2005) have suggested that, although consumers have interest in locally produced foods, yet they find it more demanding in terms of cost than the other possibilities. Based on this, Mintel (2008) established the fact that the arch obstacle to augmentation of the marketing of locally produced foods is price, as 20% of the buyers' claim it is on the high side when it comes to price. Nevertheless, Mintel (2008) also found that those consumers sourcing for locally produced foods were trying to save cost, whereby bringing about a subject of confusion between the high cost of this local food and the local food itself. Hence, Hingley *et al.* (2010) raised the attention to address the issues that relate to consumers connection regarding their perception concerning price, quality and value for money.

Another challenge noted by Archer *et al.* (2003) was consumer's lack of convenience and preference for supermarket in sourcing for these locally produced foods which was attributed to lack of enlightenment and price factors. In addition, customers profile serve as a barrier to local foods. Archer *et al.* (2003) further found that the profile of these customers also affected the farmers' markets buyers. They cited an example of a retired grown up female of over fifty-five years with other majority travelling as far as ten miles at the cost of an average of R55-R180.

Similarly, IGD (2005) also identified the major barriers to the growth of local food market as awareness, accessibility and availability, together with price. Based on these findings, there is a need to place emphasis on the availability, accessibility and price of locally produced foods to boost the future confidence and growth of the food production sector.

2.7. Conclusion

Having looked at various literatures on food, memory and identity under various headings using different approaches, we have observed that the relationships that exist between food, memory and identity are important in the field of research as it has psychological, economic and social effects on both humans and the environment. Despite enormous research carried out in this area of study, it was noticed that the African context is not a major area of concern. No study has been conducted relating to food, memory and identity as it has affected agricultural production in a given geographical settings, which has been a motivating factor behind the

study on memory, identity and food production among Zimbabwean migrants in Durban South Africa.

Chapter Three: Theoretical Framework: Food Mapping

3.1. Introduction

Food mapping has become a unique method of conducting participatory action and multidisciplinary didactic research that is related to modern food systems. According to Marte (2009), it was justified in her studies that food mapping is both a theoretical and methodological tool that is used to give organisation to gathering of food primary data. However, it can serve a dual purpose at the moment of analysis as it can be used in the theoretical framing while retaining its methodological role in the gathering of information in the course of the research. It is useful not only for collecting information, but also for analysing, decoding, and expanding context of meanings through critical ethnographic readings to study participants while revealing the cultural poetics and politics that are embedded in food.

This study built on the existing protocols and new collaborative approach of food mapping as an avenue of theorizing and deliberating on the subject of memory, identity and food production among migrants in Durban. As I discussed in the previous chapter, food serves to ground the relationship that exists between body-place-memory in the way immigrants structure lifestyle, and ruminant on their cultural backgrounds in sequential ‘homes,’ navigating their movements around the neighbourhoods and the entire environment (Marte 2009). However, Marte (2009) further stated that food mapping helped in getting a quick view of the migrants regarding memory-work that helps produce a sense of place through food pedigrees and paths as migrants reproduce new cultural atmosphere of “home.” It stands to go beyond the scope of routing alone to root, rudiment and rumination of food to create a destination for food in the field of food studies.

In a further study conducted by Marte (2007), food maps are maps that show relations, perceptual models of how the experiences of people in the boundaries of local home through food connections. Therefore, they reveal areas of a protracted shifting map of the several localities that are necessary to traverse to feel at home. The term food map could take the place of any representational drawing that relates to food produced by an individual to a plate of food consumed, a hand drawing as map accentuating food ally, a food anecdotal, or audio-visual credentials that are food related (photographs, video clips, sound recordings). It was suggested that a food map could be done in conjunction with participants through food practices and

narratives in our food studies substantiating the experiential and perceptual boundaries of home. However, food maps reveal the connectivity that exists globally between immediate relations, personal histories, households and neighbourhoods as well as the localities involved, it is not just restricted to that, it can bring about memory linkage to the past in relation to food (Marte 2007).

In addition, Marte (2007) also conveyed that food can be studied through *mini* ethnographies using specific foods in relation to specific people on a shared ground and cultural perspectives serving as a binding factor of food mapping to this study. An important example was cited by using the navigation of daily activities involved in the survival of families and individuals, from their local homes within cities and regions to explain food relationship. Food mapping is a pictorial view of realities from the approach of research paying attention to the relationships that exist between people and food in relation to intelligence, emotions, and environments.

In an attempt to look into the key components in food mapping, Ground (2001) introduced food systems as a core in food mapping that inspire the vision of local food independence. Moreover, it was not with the intention of phasing-out the global society, but rather to foster the growth of food production in the local level as well as to encourage and support other communities to do the same. This process will help to achieve a full belly and heart, thereby allowing all to contribute in the creation of a culture of peace and plenty locally and internationally.

3.2. Contextual Theories on Food Mapping

The original intention of food mapping is a crucial aspect of the study in order to give a clear picture and a background information of this study. It was necessary to look at the foundational theories that form the bases of the study.

3.2.1. Food mapping on the bases of Community

According to Ground (2001), community food mapping involves finding out where people can produce, purchase, prepare and partake-in food in a given local area. Mapping as a powerful tool can be in the visualization and promulgating facts about a three-dimensional space which are farm, market and family. Basic relationship about lands and sometimes our relationship with other people are usually illustrated on maps. However, it is an incomplete representation of the world. The details that give it what a map ought to be is highly individualistic in nature,

hiding the objective nature of the map itself; as some distortions are always relevant. What details represented on the map in the hierarchy of significance is dependent on the values of the producer of the map, whether to add or to remove. It was also stated in Ground (2001) that there is possibility of eruption challenges when a map is used in place of a territory, given the map an objective view or representing it as a whole land as in the case experienced in the conventional planning processes. Although the map used in this sense can be very ambiguous and classical, but most times it does not show the multiplicity of interests or background of the geographic area depicted. When an information is removed from a map, most especially in planning, it distorts the interpretation thereby in turn given a distorted information regarding the decision taken in developing the exact needs of the people in the locality.

There is a particular uniqueness found in the land and ways of being of the people who lived in a particular place which has formed a story in the history. For example, in a study among indigenous communities around the Olympic Mountains in Canada, Ground (2001) expertly used food mapping to ask important questions about land and food among the Lekwungen people: Where do children go to play or learn about nature? Where do animals migrate in the winter? What green space or cultural amenities exist? Where do food and water come from? What kind of public space or events are there where people can socialize for free? Who are the decision-makers, and who owns the land? In other words, he showed that the more we know about a home, the more we can positively respond to the unique needs and challenges of community-based mapping, sometimes known as bioregional or barefoot cartography. However, its process of community can be centred on the experience of local people, identifying their social, cultural, economic and ecological assets that pay attention to their sense of health and belonging. In his study, the maps created using community-based mapping not only validates local knowledge, they provide a guiding vision to plan the future of local assets. Despite the use of mapping in the area of specialists, more hands which include indigenous people, citizen coalitions, conservation groups, health care providers and activists are placing themselves on the map and projecting a path of social, ecological, and economic change that sustains both people and place.

3.2.2. Food mapping and Local Food Systems

In the study of Ground (2001) local food systems can be traced using community mapping. It looked into the world and the challenges faced at home from a radically different perspective. It creates a map that connects a vision of a world that are interwoven by a diversity of dynamic associations and occasions. It was shown that when mapping a food system the consumer is the direct and key participant in developing a highly responsive relationships around a particular local food, citing an instance when one is buying a food from small-scale local or organic retailers, the consumer maintains a series of relationships with all other hands that are included in the creation and circulation of the food, from the source-which is the farm to the point of purchase.

In defining the processes that are involved in a food system, Ground (2001) shows that local food system does not only employ local people. It also keeps in mind the local agricultural lands that produce food of high quality that gives a feedback to the consumers in a manner that portray the sense of food security, stability in local economic and finally the relationship that exists among others and the same food and land. This enables a healthy food system as circulation of the resources and funds generated are done within the community and not transported out as soon as the transaction is completed. This in turn ensures a balance in the system making the sense, the needs and outputs (products and waste) correlate as well as being confined in the web of relationship as the overall situation is been influenced tremendously by personal choices.

Also in Ground (2001), there is an extension of similar occurrences when mapping in a larger scale that deals with large and multinational food stores which easily generate question like: Who has the purchases benefited? Where the fund does goes after the transaction? How do the consumers get feedback from the choices that were made? Thus, this local system has been able to supply salient information to people which are seemingly inexhaustible. Based on this, food sufficiency and sustainability can be achieved based on the information that was obtained from the local food systems. However, understanding our role in it and areas of how and where to influence positively will be difficult without a clear overview of the entire system.

It was concluded by Ground (2001) that snapshot of the food system can be created using food mapping as a tool while building an awareness on several of the resources and it alternatives

available locally in order to ascertain the food need of the people. In carrying out food mapping, great wealth of relationships and resources are usually drawn for support and analysis, but the primary challenge is to be able to recognise and lace them together to achieve a dynamic balance for the maximum development of whole community and food system.

3.3. Urbanization in Agriculture and Mapping

Mapping has significant relationship with agricultural activities in the urban area. In an attempt to incorporate mapping in urban agriculture, a report outlined in Ground (2001) showed many opportunities in mapping have been useful in conducting study and organising people around food. The Antonio Nunez Jimenez Foundation for Nature and Humanity in Cuba looked at mapping as a means in identifying new areas to start the production of food and to comprehend the what, where and who of this production. This Foundation was under the administration of Havana-wide Green Mapping network that introduced the idea of identifying ecologically significant areas in urban spaces using a uniform set of representations. Roberto Sánchez, a coordinator of the Foundation's Urban Agriculture Program made a comment in one of the workshops of green map, "I'm not so enthralled in a Green Map with all kinds of symbols that seem more like a tourist map. I would like us to create a map that focuses more on urban agriculture" (Ground 2001, 9). As a result of this, organisations such as the Felix Varela Centre, the National Centre of Community Culture, and the Institute of Ecology and Systematics designed a committee that organizes workshops where young people in schools and neighbourhoods created exclusive green mapping representations used in designing maps for the community and stating the important things to them, one of the strong features identified was food.

In addition, Ground (2001) identified bodies and organisations that have been able to adapt mapping as a more formal planning tools for local food. This includes the Cuban Association of Agriculture and Forestry Technicians which used food mapping in identifying the locations of farms and gardens in Havana. As a tool for exploration planning, map was used by municipal extension workers who worked in collaboration with the urban farmers. The location of the different farms in their areas was identified with different coloured stickers indicating the type of farm, which include co-operatives, organopónicos (high yield organic gardens) or self-sufficiency gardens. Also, the Ministry of Agriculture's Department of Urban Agriculture used

food mapping in identifying areas of food need concentration in comparison to the urban space used for food production. Policies, the types of food and where to be grown were set based on the outcome of the research. Considering the role and the benefits of food mapping, it was identified as a way to identifying food resources and networking supports to people and organizations with diversity of perspectives and various needs surrounding food in Cuba. Conclusively, food mapping has increasingly become a tool for awareness to people regarding urban ecology in Havana through environmental enlightenment (agriculture inclusive) and development processes. This have placed economic and social development in the situation of reinstating in the local milieu.

3.4. Relevant Dossiers on Food Mapping to the study

Food mapping has been helpful in many situations of influence. So, this study among various cases of interest, will look at the following as a means of expatiating the theory of food mapping. It will be imperative to look at dossiers of what food mapping has contributed to the people, community, economy and the entire globe to establish its importance.

Ground (2001) explored the issue of food security on Vancouver Island as to what is going to happen if they were excluded from the global food chain using food mapping. It was aligned toward how survival will be attained when only 10% of food production is done locally as of today. This question was answered in Cuba during mapping the revolution in the report on food mapping conducted with a massive food crisis and risky regulating after the breakdown of the Soviet Union. In the course of the work term in Havana, dialogue transpired among the group of an average of thirty Cubans, which gave a direct account of people who never had enough to eat, the challenges of getting what to eat from one place to another without any personal stress, and unavailability of public transportation. On account of this, it marked the beginning of transitional change in Cuba from high input/import industrial state-run agriculture to low input, less centralized, near-organic rural and urban production. Urban food chain analysis hastily became a major part of urban agriculture using food mapping as a tool which after twelve years the movement for sustainability continued.

As a result of activity carried out using food mapping, Awuor (2007) also identified the flow of maize production within the areas of northern Tanzania, western Kenya and eastern Uganda all through the year. The map showed the areas that were expected to have surplus production,

as well as areas that tended toward importation of maize as shown in figure 3.1. The movement of maize noted showed that it flowed from Tanzanian border areas into Kenya, matched with the bimodal Masika maize harvest time in the seasonal calendar. The neighbouring importing regions can be affected a failure in the maize production surplus region. However, the assessment on whether neighbouring markets have connections with the other surplus markets or the import markets clarified market integration and traders' abilities in responding to the increases in demand

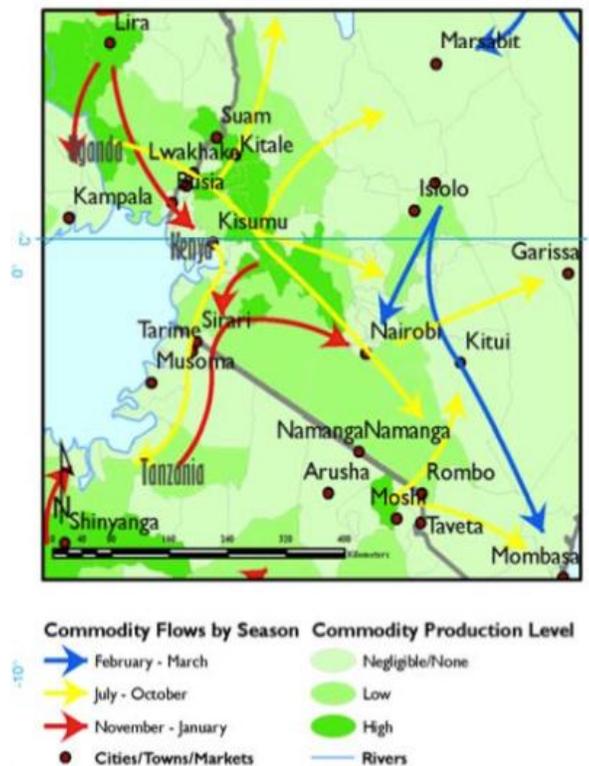


Figure 3.1. Mapping of maize production and trade flows in Kenya and Tanzania.

Source: (Awuor 2007)

3.5. The Purpose of Food Mapping

It is germane to explain the relevance of food mapping. The educational system as well as other advocacy, policy making, and planning institutions have employed and benefited from food mapping. Mapping is applicable to various situations and projects which include but not limited to understanding consumers or farmers needs or tutoring in the academic setting about issues that are related to food by using created panoramic picture of the entire food system and

illustrations generated in a sequential thematic stratum of information. However, it is necessary to highlight the different approaches of food mapping under different scenarios.

3.5.1. Education for Energy using Food Mapping

According to Ground (2001), in a conducive academic setting, new ideas relating to food and place association can be inspired by maps in the student. Young people can be empowered and out of curiosity, use maps as a learning aid. A logical explanation of where we live and the food we consume can be done using maps; it is not limited to the special relationship that is between an individual consumption and the land but also help to improve the quality of the relationship over time. For instance, having an agricultural land with a portrait of one hundred years back, fifty years back and the present day on map showing developmental patterns, will pass across a more succinct message than just an ordinary document explaining similar process of developmental change. In the field of pedagogic, maps are used as a primary tool in raising more questions than what the maps can answer in its ordinary form. However, maps can be taken to be unbiased because it gives an accurate representation of the world, encouragement should be given to young people in various institutions on the importance to ask critical questions: Who authored the map? What tales does it give about a place? And what is the missing idea on the map?

3.5.2. Paradigm Information for Policy and Planning in Food Mapping

Another application of food mapping highlighted in Ground (2001) conveyed that mapping food system helps in getting background inventory information on food assets or resources that exist in a given community that assist in policy making and planning. In a situation when the collection is done in a standardized way, the information become manageable to a wider range of people in raising awareness or to spearhead action that relates to food issues locally. In like manner, other groups in the conservation or ecological settings used mapping in an inventory endangered plant society. Mapping can also serve as a tool in creating indicators for local food security and policies. Maps are been created with regards to time, yet the picture or map acts as a yardstick in time. This yardstick can also be used as a baseline, in which one can use in measuring the impact of change in a particular region. The numerous aspects of food production, marketing and consumption can form an overlaid with each other which is used to create thematic strata as a baseline information on the map over time. For instance, in a map

dated to 1999, it showed the figure of those farms in a specific location that are productive in contrast to a similar map dated five years down from the subsequent year, the report provided gives an indication of the current state of agriculture in the region.

3.5.3. Sustainable Sustenance Systems by Strategy in Food Mapping

In addition, Ground (2001) further expounded that, the complexity and uniqueness of food system like eco-system are experienced from one region to another. However, the uniqueness of the food system and some other patterns and influence acting on it is important in understanding the goal of local food self-sufficiency. The needs and products of each resource or element in the system are better understood when the inventory of the local food resources is provided. A healthy connection can be nurtured and created between resources and people to ensure maximum potential and plenty of returns from the entire system, based on this information. The best organisation structure that facilitates an ideal food system design should be setup by a food roundtable stakeholder of the community comprising of consumers, retailers, producers, and supportive agencies. The strategy process involved in mapping and planning at times requires thinking creatively on the different ways the resources available can be deployed. For instance, in church, business and community arena, the utilization of commercial kitchens, food processing units or storage space that has not been known by them may be under-utilised until they are been encrypted on the map or otherwise declared to the entire community. In view of this catering coops, young entrepreneurs or community nutritionists, will be exposed to the different kinds of uses by creating a new association that supports them.

3.5.4. Food Mapping process and Community Development

In juxtaposing the processes of mapping and development, Ground (2001) reported that food mapping as a tool for community development explores the activities of everyone in ensuring a successful mapping process as almost all can map. The food that is generated as the greatest outcome of food mapping process becomes the matter of renewed interest and the dialogue that exist in the environment. However, a homogenous economic order that equated the unlimited economic development to well-being is the human and ecological richness of the communities throughout almost all the world. This in turn have affected globalization in such a way that it is being felt in the form of degradation of the environment, poverty and increasing

sense of alienation. The processes that are involved in food mapping through open dialogue, art, stories and shared history, have attempted to re-inspire the values and experiences that are core to personal health and community.

3.6. The Roles and Encounters of Food Mapping

The procedure in mapping food is intricate and rarely about finding swift fixes. Some of the issues to be considered in analysing these benefits and challenges include rate of recurrence, agency, and assets, to which I now turn.

3.6.1 Rate of recurrence

It was observed in a study conducted much earlier in food mapping in London, by Donkin *et al.* (1999, 555) that, “*the relationship between the cost of food available and household income and expenditure on food over time, is an essential element in interpreting data on economic food access.*” Mapping food therefore, should be a recurring activity. In order to monitor the progress available, mapping and measuring as a means should be put in place on a regular basis. This has posed as a challenge to food mapping.

3.6.2. Mapping as a Change Agent

According to SCDP (2004), food mapping is an important tool that can help drive a better relationship within the local business area. As research has shown that for changes to occur in food culture, more is needed than just a shop, but the changes will never occur, hence food mapping becomes a useful resource in indorsing exchange of ideas between the retailers, planners and policy makers, especially the three-dimensional maps as they found themselves in a context that the language and style are often familiar to them. However, on the other hand, producing meaningful food maps requires as a lot of time and effort. However, it was reported simple maps can be used and not underrated to kick start a mapping process as maps that are assorted are not really of importance in getting people to talk about food access in the process of food mapping.

3.6.3. Accessibility to Assets in Food Mapping

According to Awuor (2007), in a situation where there is poor networking of route, it is difficult to carry out a quick mapping that focuses on key attributes that are necessary. Reasons been that the regions will be isolated and have fewer or limited roads linking them to major

areas of surplus or slow down the importation process. Hence, mapping an area in detail may not be feasible if the geographical response will be isolated. On the other hand, food mapping can be used to address a situation where damaged infrastructures are encountered resulting in road or market blockage, alternative or secondary can be accessed quickly with the aid of mapping. Mapping in this case may provide a possible but limited route to navigate especially in a food insecurity chronic region.

Based on the relevance of food mapping reported above, it served as a useful tool in theorizing the consumption experience of Zimbabwean migrants in relation to their memory, identity and food production in Durban, South Africa. It is a fitting model in actualizing the objectives of this research and proffering solutions to the stated problems. In view of this, food mapping was suitable to follow Zimbabwean migrant foods: chomolia, repi and tsunga from production to marketing and consumption exploring their experiences regarding these foods: the reason behind the consumption of these foods, why they consume it, where they purchase the food, which in turn leads to examining other activities that surround the consumption of the food such as who are key players of marketing and production leading to sustainable food system. Food mapping was also useful in analysing the experiences of the migrants within the locality of Durban, as well as capturing with the theory the noticeable developments within the locality. This theory was found suitable as it has the potential to answer the research questions considered. When compared to all other theoretical approaches used in the literatures reviewed in the previous chapter. Food mapping covers and carefully analyses all the areas that were explored, while they only tend to answer questions regarding the experiences of the migrants using structural, narrative, medical and individualism approach without focusing on the food system and its influence in developing the entire community. These aspects, were the core areas of my study, thereby limiting the scope of my study.

3.7. Conclusion

This chapter has looked at the overall review of the theoretical framework applied in this study. It vividly takes a close look at the background theory of food mapping which is an essential component of this research, understanding the relational concept between food mapping and urban agriculture as they tend to deal with food production, case studies where food mapping is been utilized, areas where food mapping is applicable to show its relevance to this study and

lastly, it critically looked at the advantages and disadvantages of food mapping as a theoretical framework. Based on concrete evidences from the reviewed literatures food mapping as a theoretical framework was suitable for this research as it has all the needed context, applications and foundation to theorize the study on memory, identity and food production among Zimbabwean migrants in Durban.

Chapter Four: Research Methodology

4.1. Introduction

This chapter considers the methods and methodology that were used for data collection and analysis. It further provides justifications for choice of methodology and the research activities that were undertaken. Furthermore, it discusses the factors that have influenced the researcher's selection of the areas under study. The chapter takes the reader through the stages of the research process, from research design, data collection and data analysis. Issues around research ethics are also discussed in this chapter. It concludes by stating some of the challenges met by the researcher during data collection.

4.2. Area of the Study

The research was carried out in Durban, the major city in the South African province of KwaZulu-Natal. Durban is the third most populous urban areas in the metropolitan municipality ranking in South Africa next to Johannesburg and Cape Town. It is also known for its vital industrialised centre which is second in South Africa after Johannesburg. Durban also has the busiest port in Africa. Durban is part of the eThekweni Metropolitan Municipality which includes neighbouring towns, with a population of almost 3.5 million, making the combined municipality one of the biggest cities on the Indian Ocean coast of the African continent. The climatic condition of Durban is humid sub tropically with summer season warm as well as moist, and winter season enjoyably cool and dry, which are ice- and frost-free. It is also seen as one of the major centers of tourism because of the city's warm subtropical climate and extensive beaches (STAT SA 2008).

The area is the main economic driver in KwaZulu-Natal, which has contributed above half of the province's revenue, job and yield. Nationally, Durban ranks second most vital having Gauteng ahead in economic complex, contributing 15% to national output, 14% to household income and 11% to national employment (STAT SA 2008). It is been bordered by developmental regions linking Durban towards the north to Richards Bay and Maputo, and towards the west to Pietermaritzburg and Johannesburg. There was an increase in the Durban city and central suburbs population such as Durban North, Durban South and the Berea which was accounted for about 10.9% increase between 2001 and 2011 from 536,644 to 595,061. Black Africans increased in number while all other people from other racial groups decreased

in number. Black Africans increased from 34.9% to 51.1% (STAT SA 2008). The increase in the population is accompanied by a growing population of Africa immigrants who live in the city, including many Zimbabweans giving this research baseline with regards to participants.

There is a significant population of Zimbabweans in South Africa, which has placed them at the top of foreign migrants in the country. Estimates of their numbers range from one million to five million since 2000. An accurate number becomes difficult to compute as a result of great proportion of undocumented immigrants (Polzer 2008).



Figure 4.1. Map of Durban showing the surrounding cities. (Google 2018)

4.3. Research Design

A qualitative design was utilized in conducting the study as it aims to understand the experiences and attitudes of individual and community towards an issue and answer the question of what, how and why. This design was adopted for the research using food mapping as the methodological tool. As discussed in the previous chapter, food mapping was chosen because it has to do with the theoretical approach I adopted. Also, the food mapping methodology suits the nature of the research problem and research objectives that was considered which has to do with food identity, memory and value chain analysis. Based on studies that have been carried

out (Marte 2009; Albon 2007), food mapping used as methodology pays consideration to people's relationship with food through routing place-memory (in domestic and public spheres), through local practices, food-related descriptions and personal/collective antiquities. On a more clarified note, the food mapping approach centres on whatsoever people actually consume (whether it is been cooked at home and/or consumed in public food domains not only with cultural emblem staples), how it is been acquired, where it is been prepared or consumed –kitchens, neighbourhoods, state, country- and the interpretation it carries in their life trajectories. The description of food from a distinct perspective is used as key mapping strata that assist in contextualizing other aspects of food related issues that were gathered. This in a way, links the plate of food, place-displacement, and the personal-collective antiquities experienced, and how this specific food-people relationship occurred in specific place-time.

The food mapping method delineated here, was refined as part of this study to help me explore Zimbabwe migrants interaction with these particular plants from production level to plate and helped me in analysing the implication of producing these particular plants in Durban. I used the common Zimbabwean vegetables such as covo/chomolia, tsunga, and repi as my research prosthetics, whereby these plants were followed from the consumer to the market, down to the source which is the site of production. I chose food mapping as methodological tool as it was suitable to follow these plants from the consumers (migrants) to the producers (farmers) of these plants, while looking at the memory implication of these plants on the migrants and assist to understand the value chain of these plants.

According to studies conducted earlier (Ehsani *et al.* 2004; Milton and Steed 2007; Phillips *et al.* 2013; Wei *et al.* 2014), I used simple cell phone GPS as a technological device for the food mapping to ensure accuracy and efficiency of the mapping done and traceability of the value chain of the plants.

4.4. Data Collection and Methods

My study participants were selected among Zimbabweans living in the Durban area. They were chosen as key elements in qualitative data gathering. Convenience and snow ball sampling were used to select Zimbabwean migrants in Durban and farmers and marketers in the area. I used 16 individual in-depth interviews to gather information using a semi-structured interview schedule (see attached as appendix 1). The interviews which lasted for an average of twenty-

five minutes were used to explore the experiences of Zimbabwean migrants with regards to memory and the factors responsible for the consumption of covo, rape and tsunga, the view of the marketers taking into consideration the making of these plants and the overall perspective of the farmers on the production of the plants. Of the 16 participants, 13 comprised of Zimbabwean migrants, and a Nigerian migrant who were interviewed based on their experiences including their food identity, memory and means of getting their indigenous foods and food in the case of the Nigerian. I also interviewed five marketers which included both locals and foreigners to know their interests, and how marketable these plants are. Also, four farmers (producers) were interviewed on their interests in the production of covo, rape and tsunga. It was important to talk to producers about the production scale of these plants, to make reasonable conclusions on how their production has affected the agricultural sector, and the contribution to the livelihoods of the migrants and the locals. A few of the respondents straddled the roles of producer, marketer and consumer (see table 4.1 below).

S/N	Names	Age	Gender	Nationality	Roles
1	Martina	NA	Female	South African	Consumer and marketer
2	Mama	NA	Female	South African	Marketer
3	Regina	NA	Female	South Africa	Marketer
4	Success	40	Female	Zimbabwean	Consumer and marketer
5	Martha	55	Female	Zimbabwean	Consumer
6	Senior	34	Male	Zimbabwean	Consumer
7	Morning	24	Female	Zimbabwean	Consumer
8	Melvin	29	Male	Zimbabwean	Consumer
9	Peter	27	Male	Zimbabwean	Consumer
10	Julius	42	Male	Zimbabwean	Consumer
11	Lily	37	Female	Zimbabwean	Consumer
12	Danbo	NA	Male	Zimbabwean	Consumer and producer
13	Magi	51	Female	Zimbabwean	Consumer and producer

14	Mackey	NA	Female	South African (white)	Producer
15	Nelly	49	Female	Zimbabwean	Consumer, marketer and producer
16	Adedamola	41	Male	Nigerian	Consumer

Prior to mapping, I reviewed the maps of the location and the interview schedule. The interview guide asked the respondents their addresses, type of plant source (where the plants are obtained e.g. garden, street market, supermarket, etc.), prices, nutritive content, caloric, and ingredient data, time of selling for the marketers, food miles (the journey of the food from farm to plate), type of cultivation (organic or conventional), atmospherics (how the space looks, feels, and sounds), primary dishes (what is consumed with the plant); and to give a descriptive view about their reactions to the plants location and the response of the public to the activity itself.

4.5. Data analysis

Qualitative data was chronicled in the form of interview transcripts collected from participants of the research and other acknowledged literatures that reflect experimental context of the topic of study (Maree 2007). Thematic analysis was employed as the method of qualitative data analytical tools via NVivo software package.

Thematic analysis was found to be an accurate method for recognising, scrutinising and reporting patterns (themes) within data. Data sets minimally organized and described in detail using it. Furthermore, it goes ahead to interpret various areas of the research topic producing well-structured analysed data (Boyatzis 1998). Thematic analysis has become the most commonly used, yet, there has not been a confirm definition as to what thematic analysis is all about and how you go about doing it (Boyatzis 1998; Attride-Stirling 2001; Tuckett 2005).

Thematic analysis has become the introductory method for qualitative analysis. It is the first qualitative method of analysis that researchers learn, as it renders the essential skills needed to be able to conduct many other forms of qualitative analysis (Braun and Clarke 2006). The processes of thematic analysis were duly followed which are represented diagrammatically in figure 4.2 below.

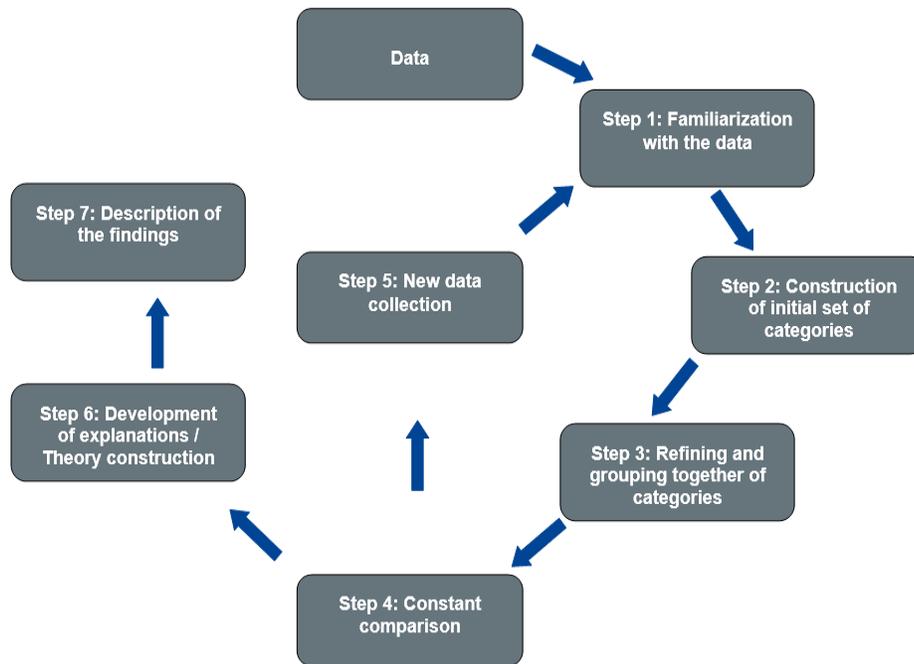


Figure 4.2. Diagrammatic presentation of Thematic Analysis

4.6. Ethical consideration

Ethical clearance for the study was obtained from the necessary authorities, i.e. the Research and Ethics Committees of the College of Humanities, University of KwaZulu-Natal (see attached as appendix 3). The study involved human subjects (migrants) but not of a sensitive nature as it deals with food consumption in relation to memory and identity (objects) which require less ethical concern. Respondents were briefed before the interviews on the nature and intent of the research as well as its implications and risks if any; they were also notified that participation was entirely voluntary, that they were free to refrain from answering any questions that they found too sensitive and they were free to withdraw at any time using the informed consent form (see attached as appendix 2). All steps were taken to ensure anonymity and confidentiality. In the presentation of the data no real names are used rather pseudonyms were employed and communities were given numerical codes.

4.7. Challenges Encountered in the Field

Field challenges are inevitable especially due to the nature of this research. As a Nigerian foreign student working on a research topic that has to do with another group of foreign nationals of different language background, the language barrier was one of the major challenges that I had to deal with. The majority of the respondents who do not speak English

well found it difficult to communicate in English which is the general medium of communication. A lot of time was expended in order to get needed information. Some instances involved long periods of waiting for over three hours to reach some of the respondents, and sometimes a whole day and week had to be devoted to study the regularity of the marketer and the producers when they visit the market as it is not a daily affair to them. Also, some of the areas of this research have been over researched and research fatigue on the part of some of the potential respondents resulted in denied audience. I had to use subtle means to capture the attention of the participants and create a cordial relationship with them before embarking on the interviews. Conducting research that has to do with moving from location to location was also a challenge. As a result, the breadth of my study is limited as I did not have the resources to cover more grounds which could have perhaps yielded better and more enthralling output.

4.8. Conclusion

This chapter discussed the research methodologies adopted for the study, especially the benefits and challenges of using food mapping methodology approach in studying the experiences of Zimbabwean migrants' and their food system, and its implication on South Africa food production. The chapter also provided a synopsis of how the data collected was processed and analysed, ethical issues were also discussed in this chapter. Finally, the chapter explained some of the challenges faced by the researcher in conducting the field research, how it has affected the result of the research conducted and how they were dealt with. As to enable easy familiarisation with the data of my respondents and an introduction to the next chapter, a description and the roles of my respondents is represented in the table 4.1 above showing their names, age, gender, place of origin and their roles.

Chapter Five: Results, Discussion and Analysis of Research Findings

5.1. Introduction

This section discusses the results and analysis of the research. It further reveals the results within the context of the research objectives bearing in mind the research questions. Furthermore, this chapter will look at the results of the findings and the research questions, existing literatures, field notes and food mapping theory as a baseline for effective and efficient interpretation of the results.

A quick synopsis of the purpose of this research is essential to give an impression of the organization of this chapter. To recap, the important questions that guided the study were:

1. What are the factors considered in food identification and choices among Zimbabwean migrants?
2. What is the value chain of food choices among Zimbabwean migrants?
3. How does Zimbabwean food identity influence agricultural, economic and social development in Durban South Africa?

As I indicated in previous chapters, in answering these questions, a multidisciplinary approach was employed based on my interest and background, as this study inclines towards food studies as an interdisciplinary field of study.

5.2. Popular Zimbabwean Plants among Zimbabwean Immigrants in Durban

Humans have always found themselves in motion and trying to maintain their shifting identities as they move across borders. Zimbabwean migrants in South Africa are no different. For some Zimbabwean migrants, their indigenous vegetables have become critical so that some of them have carried them along when crossing their border and introduced them to South Africa. However, some of the vegetables that Zimbabweans classified as indigenous to them have been traced to have a foreign origin. Some of which were introduced to Zimbabwe by the colonial agents. For clarification and identification, these vegetables which are leafy green vegetables are repi, tsunga and covo/chomolia. Chomolia, repi and tsunga have scientific names which are Brassica oleracea, Brassica napus and Brassica juncea respectively (see table 5.1 below). These plants are called kale, rape and brown mustard in English. A lot of discrepancies have

been displayed in the identification of these plants in published articles which was reviewed in present literatures. The varieties differ in the sense that chomolia when matured produces seeds for propagation, while covo does not produce seeds. It is propagated through stem cutting. All these discrepancies may be as a result of the background of the writer of these articles which may not be scientifically and agriculturally inclined.

Common Zimbabwean name	Common English Name	Scientific name	Where Found	Price Range in Rands	Uses
Repi	Rape vegetable	<u>Brassica napus</u>	Europe	5 to 7	Consumed with sadza, rice, beef, chicken, etc.
Covo/ chomolia	African Kale	<u>Brassica oleracea</u>	Zambia, Zimbabwe and UK	5 to 7	Consumed with sadza, beans, rice, beef, chicken, etc. and for making smoothies
Tsungu	Brown Mustard	<u>Brassica juncea</u>	West and Southern Africa	5 to 7	Consumed with sadza, rice, beef, chicken, etc.

5.3. Food as a moving Identity

Some of these plants are transported across the border in a processed form to enable migrants to enjoy the delicacy of their cultural identity. One of the respondents, Peter¹ said,

“When I have the opportunity of going back home, I always dry these vegetables in order to be able to bring them from home in dried form.”

¹ To protect the identities of my interviewees, I have used pseudonyms throughout the dissertation except when stated otherwise.

Attachment to their cultural identity has made them develop strong interest for these foods which made them devise a mean of carrying their food along in the process of migration.

Another respondent, Julius, stated that:

“We are in a global world and not living in isolation. This has brought almost all countries and cultures together. I never expected to find my foods here, the moment I landed at the King Shaka international airport on my way out I discovered my foods from home being sold on the streets by some Zimbabwe nationals who left home in search for greener pastures. And, upon getting to Durban on my first visit to Spar supermarket I saw some of my indigenous food right there, then I asked the white lady selling; she said she was formerly a Zimbabwean farmer before she relocated, and she is producing these plants here and they are readily available and in high demand.”

He further stated, *“my wife asked me how are you coping with the new food over there? I responded, what I am eating here is what I eat right back at home. I am not forced to adapt to South African foods. In fact, our foods followed me here.”*

Julius’s statement suggests that food moves and creates options for a migrant, so they do not have to adapt to strange foods. This departs from the work of Parasecoli (2014), saying immigrants are forced to adapt to new food when they find themselves in diaspora. We can say food has legs or wings that allow it to move from one place to another or magically, it can reappear in a location of choice in order for one to acclimatise leaving a good memory of far distance.

There is a correlation that exists between food and migration as food and humans are inseparable even at the point of movement to another country. Food has contributed a major role in the life of migrants as it assists in the preservation of culture, identity and memory. Loss of food in the diaspora is a loss of an important aspect of culture and identity as well as remarkable memories of home. The knowledge of this has glued migrants to their food even at an extra costs and sacrifices in the process of migrating from home.

5.4. Food as a Symbol of Life in a Migrant’s Context

My study confirms the centrality of food in migrants lives as suggested by one of the respondents, Martha who said *“food is everything to me!”* I took this to mean that food is an

integral part of her life, not only as a source of nourishment and vigour, but that it carries an extraordinary meaning as a source of life that terminates when life terminates. In agreement, (Lupton 1994; Fox 2003; Levy and Rook 1999; Almerico 2014; Shepler 2011), ascertained that food carries a symbolic meaning therefore, food in a way is symbolic to life. Julius, a 42-year-old Zimbabwean migrant, seemed to concur with this sentiment when he said,

“I was brought up eating some kinds of foods and I grew up eating these kinds of food and I still eat this food and cannot do without these foods, I love these foods. In short my foods are inherited.”

In other words, Julius’ food culture has been passed to him from his parents and he enjoys taking these foods and it will be very difficult to separate him from them which is as a result of his upbringing from childhood. It can be deduced that his food has become an important aspect of his identity and his way of life. By extension, he may inculcate the same into his children, making food to be a generational material which is a continuous process. This resonates with the existing literatures of (Nadia Seremetakis 1993; Fischler 1988) who argued that food culture can be transferred from generation to generation which gives a direct interpretation that food can be termed family as it has family connotation of family upbringing.

Another interviewee connected his food culture to his upbringing. As an academic who has been travelling since a tender age, Senior gave this interpretation of life which connotes food as a shaper of identity. He said,

“There are some kinds of foods I have consumed as a Shona person since I was growing up and therefore my identity is constructed around this food, making me who I am today.”

Based on his life experience with regard to food and identity his personality is a function of what he has been consuming from childhood and it has constructed his ways of life. Waking up to the fact that every individual has a peculiar family background, the assertion have come into play that identity construction borders around food consumption and plays a considerable role in forming our cuisines. This habit of eating a particular kind of food has now become a lifestyle that is very difficult to part with even when they find themselves outside the borders

of their home country. However, it was important to look at the transition of these migrant with respect to their food and how they have managed to survive away from their loved ones.

5.5. Food as a Gap between Life in the Diaspora and Life at Home

Memories are like wind that blows from one cardinal point to another. Food can be seen as the memory that bridges the gap between life at home and life in the diaspora. It blows from home down to diaspora and back. Memory is an invisible linkage that exists in food as a result of a shift in location which can be temporary or permanent. Zimbabwean vegetables in Durban which is as a result of moving identity has a way of reminding them of their lost experiences back at home.

One of the home remembrances these vegetables have exposed is the thought of childhood. As part of the culture, these vegetables have formed a major part of the cuisine of Zimbabweans as many children are brought up in Zimbabwe grew up eating these vegetables. Many of my respondents stated that their memories are tuned to these vegetables; however, a claim to be modern and have had the opportunity of moving around the globe and tasted delicacies from other parts of the world. Yet, even among them they stated that there was still a trace of these vegetables in their cuisine. These plants also have a way of evoking the memory of transition in political regime in Zimbabwe. Senior, a doctoral scholar said,

“These plants remind me of home and childhood. They also evoke a memory of a better Zimbabwe before the brutal regime and the falling of the political economy, therefore it makes me feel closer to home and evoke the feeling of nostalgia.”

Food in this sense has sparked memories of the economic state of the country before everyone was trying to leave to scavenge for a better life in Durban. Also, the loved ones that one grew up with eating these vegetables are remembered as a result of consuming these vegetables away from them. In some exceptional cases, loved ones who are even deceased are also remembered. The power of food is not just limited to these, some factors that influence food choice include economic, social, biological, and health factors.

5.6. Economic Conditions that Contribute to Food Preference and Choices among Migrants

Economic considerations such as income, price, and availability affect the respondents' selection of food. These considerations sometimes override the concerns of health, socio-cultural factors and even taste.

5.6.1. Price and Availability

The price of a commodity has a primary effect on the choice and preference of an individual which is a function of once income and socio-economic status. The choices of the foods by a migrant are linked to the relatively low price of these vegetables. One of the respondents said

“With the range of R5 to R7 I can prepare a relish that can satisfy me.”

From this statement the price range of these plants which was also confirmed by sellers as seen in table 5.1 above. It can be assumed that these plants are affordable for even a low-income earner. From analysing the response from one of my interviewees, R50 worth of these vegetables would be enough to provide a meal for a small family. Findings also show that migrants sometimes consume these plants when they are out of money because it is relatively cheap. There is tendency that there may be higher preference and choice for a higher income earner depending on his or her socio economics status and taste.

Availability and accessibility at the right time can also contribute to the factors considered in food preference and choices. Proximity to the market of purchase has affected the consumption and choices of Zimbabwean migrants. One of the migrants, Peter said:

“I am very lucky to be near a street vendor selling these vegetables at the entrance of my building which makes it easier for me to buy and consume anytime I feel like.”

At this junction, I can say he is enjoying the availability and accessibility of these plants which has contributed to his preference and choice. Some of these respondents were able say poor access to shops prevents them from consuming these vegetables. Food mapping theory will further explain how far they travel to be able to access these vegetables which was illustrated using Martha's food map in figure 5.3 below as she also falls into the category. This is another important factor influencing food choice, which is dependent on resources such as transport and geographical location.

5.6.2. Instruction and Information

When knowledge is applied, we say it is power and education also is a weapon. Apt knowledge of these plants' health benefits has empowered the preference and choice of these migrants. Magi, a 51-year-old woman based in Umlazi said tsunga helps to improve the immune system of the body which makes her healthy. Studies indicate that the level of education can influence dietary behaviour during adulthood (Nadia Seremetakis 1993). In contrast, there is not a straight causal link between nutrition information and good dietary habits. This is because information about health does not lead to direct action when individuals are unsure how to apply their knowledge making information useless when there is no instruction. Information about these plant with guided instruction can be a contributing factor to the preference and choice for it. Furthermore, conflict of interest in information dissemination as a result of conflicting sources from various authors and different participants on the nutritional value can limit the choice and preference for these plants as the conflict in information can malign the interest of the consumer and the motivation behind the consumption as a result of mistrust information as also supported in De Almeida *et al.* (1997). Hence, it is imperative to convey accurate and consistent messages through various media and articles on facts supplied on these foods, more so it should be channelled through health professionals.

5.7. Socio-cultural Interaction as a Consideration in Food Preference and Choices on Migrants

How and what migrants eat is shaped and controlled by circumstances that are essentially social and cultural. Social and cultural interaction has a deepened effect on food choice and preference of migrants.

5.7.1. Social Inspiration

According to Feunekes *et al.* (1998), social inspirations on food intake refer to the power that one or more persons have on the eating behaviour of others, either unswerving (buying food) or unintended (learn from peer' behaviour), either cognisant (transfer of beliefs) or intuitive. When they find themselves among a class of the same cultural and ethnic background, many immigrants tend toward their cultural food. For instance, Julius said:

“When my Zimbabwean friends visit to have a chat with me I prepare this sumptuous delicacy from these vegetables and we eat together as one family.”

Julius' socialization with his friends has generated a longing appetite for consumption of these vegetables. This has now become a habit that affects one when eating alone, food choice is prejudiced by social factors because attitudes and habits develop from the interaction with others. However, computing the social inspirations on food intake is difficult because the inspirations that people have on the eating behaviour of others are not limited to one type and people are not necessarily aware of the social inspirations that are exerted on their eating behaviour (Feunekes *et al.* 1998).

5.7.2. Cultural Inspiration

Cultural inspirations also lead to the different habitual consumption pattern of certain foods and in traditions of preparation. Certain culture imbibed right from childhood can influence the choice and preference for the consumption of these plants. Peter, a 27-year-old man who left home in 2011 said,

“I grew up eating these vegetables that I get naturally attracted to so that when I am not eating them I feel something is missing in my cuisine.”

This has made these vegetables almost an everyday routine. The power of cultural construct that can hardly be overemphasised. The family is widely recognised as being significant in food decisions. As postulated by Anderson *et al* (1998), the determination of food choices takes place in the home because the household can be a fount of encouragement in making and sustaining dietary alteration, espousing dietary strategies which may benefit the individual whilst also having an effect on the eating habits of others.

5.8. Produce, People, Place, Price, and Plate

There are certain channels food needs to follow in the production sequence; therefore, a cross examination of these channels will help understand the worth of this food using food mapping. A value chain analysis plays a strong role in foreseeing a sustainable development within area of consideration spreading across the entirety of it surrounding. From the definition of sustainable value chain as generated by FAO (2014) which is

“The full range of farms and firms and their successive coordinated value-adding activities that produce particular raw agricultural materials and transform them into particular food products that are sold to final consumers and disposed of after use, in

a manner that is profitable throughout, has broad-based benefits for society, and does not permanently deplete natural resources.”

One of the objectives of this study was to ascertain if Zimbabwean greens create a value chain that can lead to sustainable development in Durban, South Africa. The assumption is that the value chain of these vegetable has an effect on the social, economic and agricultural development in Durban, highlighting the power of food mapping theory. Food mapping has helped look at the vicinity of Durban and particularly the experiences that were encountered by migrants in a radically different light. It created a map that connects a vision of the area of study that are interwoven by a diversity of dynamic associations and occasions. It was shown that when mapping a food system, the migrant consumers are the direct and key participants in developing a highly responsive relationships around these particular vegetables. When they are buying their foods in which these vegetables feature, they maintain a series of relationships with all other hands that are included in the planting and selling of these foods, from the source (which is the farm) to the point of sale as illustrated in (Ground 2001).

In the case of my study, food mapping used as a mapping tool focused on food system in Durban. The key players of this research, the producers/farmer, marketers/distributors/retailers and the consumers/migrants relate under the big umbrella of produce, people, place, price and plate. The starting point for the mapping process focused on the Zimbabwean migrants - which coincidentally included some other migrants such as Nigerians as it was noticed in the course of the research that they also consume these plants, as consumers. Mapping was also used to link them to the source where they purchase these vegetables and the circumstances surrounding the purchase like price, quality, quantity and the reasons for the buying and selling these vegetables from the parties that are involved.

The process continued in order to know the where and who are those involved in the production of these vegetables as some consumers claim to have direct relationships with the producers and an important component in understanding a comprehensive food system within the value chain. As a result of the nature of the study, which involved individual interaction of the migrants with these plants and the community, mapping was done on an individual basis as it has been seen in previous chapter in table 4.1 that 16 individuals were employed with some having a straddled responsibility.

5.8.1. Individual Food Mapping

In the food mapping process, the consumer is the initiator and a key player, out of which 13 of 16 individuals are consumers as shown in table 4.1 above. The food maps of two of the 13 respondents were used to show the value chain in the food system ranging from the simplest to the complex. Martha and Melvin's food maps fall in these categories as a typical mapping system carried out in order to critically analyse the value chain of these Zimbabwe vegetables. This has also helped in knowing the food mile and relationship that exist.

5.8.1.1. Mapping Martha's Food

In mapping Martha's food, the mapping looks simple and direct. Martha, a 55-year-old woman who lives on Joseph Nduli street in the Durban CBD, was fortunate to find a stall of these vegetables at her entrance and thus she never needs to travel far to buy the vegetables. Martha having the company of her daughter has more preference for tsunga due to its taste and nutritional value. She buys a bundle of the vegetable for R7 which satisfies her need and her daughter for a day. They consume the vegetable at least five days a week her interchangeably with vegetables such as rape and covo depending on availability in the stall. I followed the route of her purchase to the street vendor on Joseph Nduli street who said she purchases her vegetables from a farmer in Richmond (about an hour or 100km away) who delivers these vegetables every Tuesday, Thursday and Sunday.

On tracing these vegetables to the farmer in Richmond, I discovered that he cultivates these vegetables on a plot of land of about 7.5 hectares. He hinted that he sources his seeds from a licenced seed agent, McDonald in Pietermaritzburg. This farmer, Danbo, a Zimbabwean national started the production of these vegetables in 2008 with the production in a small quantity for his family consumption and later due to interest of other Zimbabwean migrants, he increased the production in order to meet their demand while he is also making some earnings.

Based on information he received from other immigrants and acquaintances on the immediate need of the vegetables in Durban and its environs, he embarked on the production of these vegetables in a larger scale as shown in figure 5.2 which covers approximately 4 hectares out of the 7.5 hectares. He is currently one of the major suppliers of these vegetables in Durban.



Figure 5.1: Martha's daughter consuming tsunga with sadza (Field Survey 2018).



Figure 5.2: Danbo's farm showing a section with Rape vegetables (Field Survey 2018).

After these vegetables most especially tsunga travels a total of about 100km, it reaches the consumption stage where processing subjects these vegetables to various preparation procedures like washing, cutting, blanching in some cases, and cooking under moderate heating temperature with other ingredients, then it is ready for consumption. These Zimbabweans eat it with maize meal/ sadza and chicken meat which are the end product of the plate for serving. Martha's food map is illustrated in the figure 5.3 below.

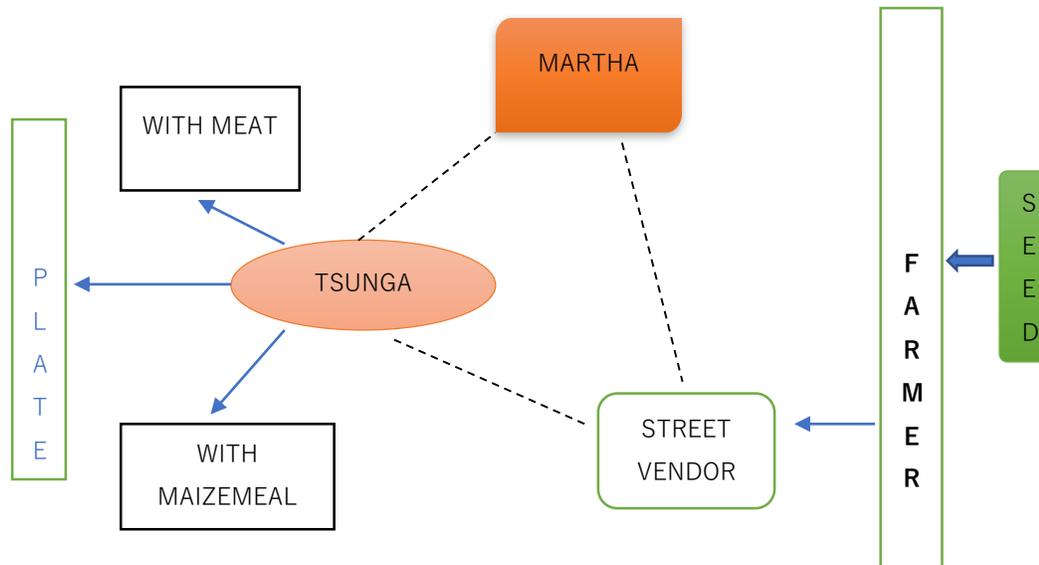


Figure 5.3. Martha's Food Map

5.8.1.2. Mapping Melvin's Food

Melvin's mapping seems a bit complicated because he sources his vegetables from many points. Melvin is a 29-year-old scholar who prefers vegetarian dishes, although he is not strictly vegetarian, and lives in Manor Gardens, a suburb of Durban. He happens to consume more of covo than the rape and tsunga. His primary sources of covo and rape are a supermarket, a farmer, a middleman, and street vendors. At times he goes very early on Sunday mornings to meet with a farmer who supplies the Durban market located around Warwick Junction, about 4.5 km from his residence to buy the vegetables that can last him a week. He also buys from a distributor who brings it to his doorstep on Fridays. He also gets covo and rape from supermarkets which include Woolworths at Bulwer Road, Musgrave and also Food Lovers in Westwood, all located 3.4km/h and 6.6km/h respectively from his residence. On interacting with his sources and information gathered, I traced the origin of some of his produce to the farm in Richmond and some other small producers in Durban. Information gathered tells us that the supermarkets get their supplies from white farmers who produce these vegetables in areas surrounding Durban. On regular bases of 3 to 4 times a week, he consumes these vegetables spending an average of R50 a week to acquire the varieties of these vegetables for his personal consumption.

It was difficult to get the actual food mile in the case of Melvin as a result of his multiple agents involved in his food system. When sourcing for covo and rape as well as tsunga occasionally from street vendors in Warwick Junction market which is the same location he accesses the producer he buys from, a rough estimate of over 100km is covered. He mostly buys covo and rape from supermarkets with an estimated distance of over 100km for Woolworth and 107km for Food Lovers in Westwood mall. Based on the information he gave, covo and rape get to his doorstep via a vegetable distributor whose identity was not disclosed after sourcing it from a farmer supplier from Richmond making these vegetables travel over 100km. The food mile travelled by these vegetable covers an average of 104km before reaching the consumption platform where he subjects them to cooking preparations. As a consumer who leans towards more of vegetarian dishes, he takes these vegetables alongside with beans and occasionally with chicken, meat and fish which are the finished food on the plate for consumption as shown in figure 5.3 below.

Looking at the two food maps, Martha's food map has one straight connection between the vegetable and the consumer, marketers, and producer while Melvin's food map has for four circuitous connections between the vegetable and the consumer, marketer and the producer. Martha's map has only one path the food/ vegetable follows before it gets to the consumption stage and Melvin's map has four paths in which the vegetable follows before getting to mastication stage. This is referred to as vegetable circle illustrated with dotted lines in the food map as shown in figure 5.3 and 5.4. Martha's food has to travel a shorter distance compared to Melvin's. Therefore, the distance one travels can never be a barrier to food consumption, in as much as that there is a need for the food, then one has the capability of crossing as many hurdles as possible to get to its final destination which is the plate. Also, when much value is attached to a particular food one goes to any length to get it.

5.9. Conclusion

Some of the important Zimbabwean migrant foods I identified include rape, kale and brown mustard, with rape and kale more dominant in the market based on my field notes. The role these traditional foods have played in the context of migration was a subject of concern when dealing with memory and identity of migrants as it has a clinching effect on them. These findings are consistent in certain areas with other previous research conducted on food and

memory, while in some areas negate and challenge the previous research thereby setting a pace for imminent research to follow or support. Nevertheless, some migrant participants have displayed feelings of admiration toward the consumption of these vegetables as the memory it brings are treasured. They accord so much value to these vegetables that it has a way of linking them back to home, thereby filling the vacuum between them and home. The encompassing nature of these vegetables has reaffirmed their identity in diaspora, creating an attaching preference to these foods. These findings also highlighted the factors considered in their food selection process which were centred on economic, and socio-cultural factors.

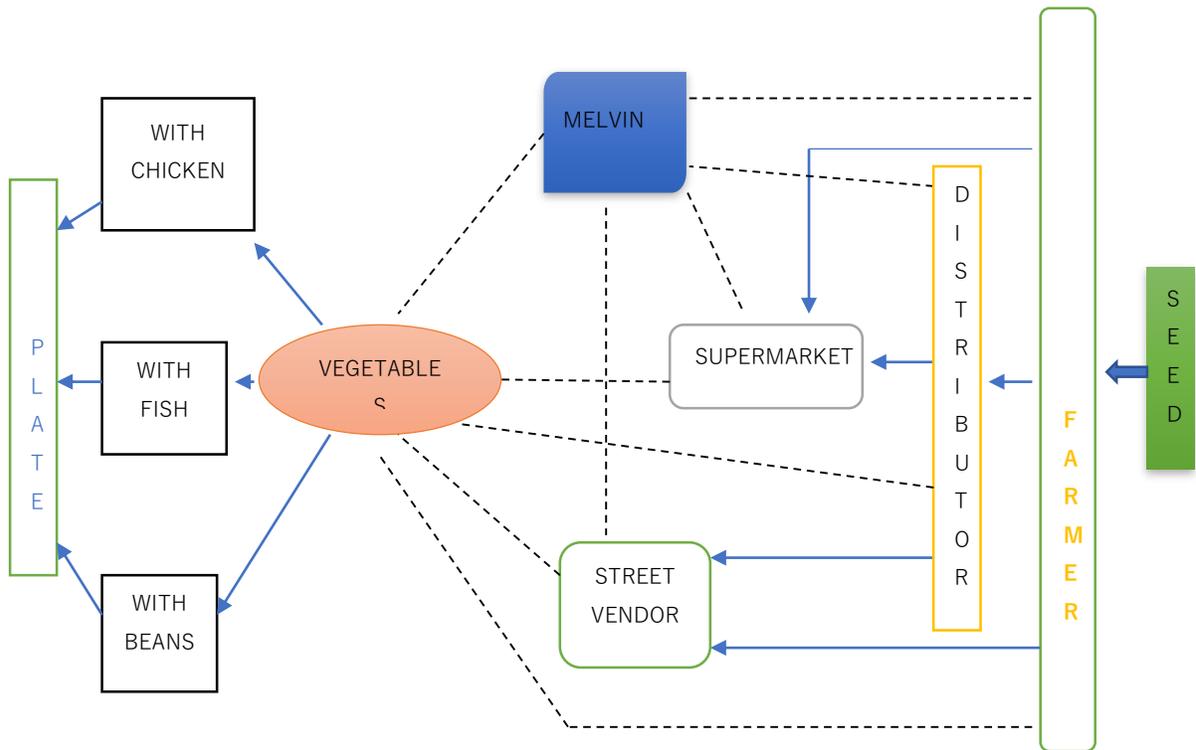


Figure 5.4. Melvin's Food Map

Chapter Six: Food Value Chain Analysis of Zimbabwean Migrants

6.1. Introduction

This section gives a perspective of value chain analysis regarding the migrants' food system as an important tool that can affect developmental process within a given geographical region while considering the necessary factors that supports the key players within the food system and their relationships.

6.2. Value Chain Analysis as a Tool for Sustainable Development

Production, marketing and consumption of food are key factors in fostering sustainable development. Value chain deals with the chain of activities that are involved in the processes of production, marketing and consumption of the food in order to convey it from conception to reception without distorting the processes. Value chain analysis as a tool for development engages in identifying each session that is involved in the production, while noting the aspects that needed to be eliminated and other possible improvement that can be incorporated in order to achieve a better satisfaction of the entire community. These processes and activities surrounding the production of these vegetables have impacted development in a sophisticated manner that almost affect most sectors of the locality. A cost and differentiation approach which deals with cost, income, opportunities and consumer priority was explored.

In this study, the idea of value chains goes beyond the normal chain series that are involved in the process, which is relatively straightforward: the producer is linked to the marketers and the distributor that further takes the product down to the final consumer who enjoys the benefits of the produce. My approach went further to look at the value aspect of the value chain of these vegetables. This is needed to give a sense of urgency and priority in order to capture their importance on developmental structures. This will assist in quantifying the value added and the significance in the differences between the non-labour costs of producing these Zimbabwean foods and their willingness to pay for the food, bearing in mind other externalities using food mapping theory. As an extension of Ground (2001), this theory went a long way in exploring food mapping as a tool for community development using the activities in production processes of these vegetables in ensuring a successful mapping process as almost all can be mapped. This in a way helps in understanding the values that are added by considering the way

these benefits and values are captured by various participants in the value chain of these vegetables. Also, local food systems can be traced using community food mapping showing the highly responsive relationships around a particular food from the conception to the ingestion.

In the course of this study, research has shown that activities that transpire within the value chain of the food system by migrants and other key players have a crisscrossing effect on developmental structure in the viable sector of a particular country which include economic, social, agricultural and environmental aspects. These in turn serve as a holistically triple bottom approach line in tackling the issue of sustainable development. These three aspects were captured and carefully subjected to critical and constructive analysis during food mapping.

6.2.1. Economic Development in Food Value Chains

One of the yardsticks used to measure the growth and development of a society is by looking at the economic opportunities that have emerged in the running of the society. Economic opportunity has arisen because of the activities that were introduced in the migration process of immigrants trying to maintain their culture and identity with regards to food. In mapping the experiences of these migrants, their craving for food from home origin has brought about a food production process which has in turn bring into existence economic opportunities. Due to the preferences and choices that are high, the demand for these foods has prompted the production of these vegetables.

6.2.1.1. Profit and Profitability Evaluation

Setting a sustainable standard, profit and profitability analysis goes a long way in ascertaining the economic impact of the production of these plants. On interacting with marketers and producers, the key factor that motivated them to the production and marketing of these vegetables is geared toward profit making. Except for some few who had the interest of these migrants in mind, as this was even a secondary reason, but the primary purpose was for profit making

Take into consideration the situation of Martha's food map illustrated in the previous chapter. Martha's consumption of tsunga and otherwise covo and rape as the case may be, can be used to show a clear picture of economic development, she never needs a large sum of money to

consume these vegetables. She buys a bundle of tsunga for R7 which is enough to provide a meal for her and her daughter and they consume it at least five times a week. Apparently, she only requires approximately R35 per week to satisfy an important part of her family's food needs.

Meanwhile, Martina, a South Africa Zulu marketer who started selling rape, tsunga and covo in 2013 at the Warwick Junction as soon as the business was introduced to her by foreigners, gave her report that she buys a big bundle of each of this vegetable for R45, which she in turn makes into a smaller bundles of about 20 bundles which she sells for R5 each. She sells over 120 bundles of these vegetables on a normal day returning home with about R600. There was a different experience regarding the selling of these vegetables on Sundays especially. She makes over a R1000 from it as a result of more patronage on this day of the week selling about 200 bundles. Selling of these vegetables started from a very small amount and now she has experienced a drastic increase which has generated for her over 100% profit. Another marketer on Joseph Nduli Street, Success, a Zimbabwean vendor who started selling covo, tsunga and rape since 2010 said,

I saw the people here in South Africa suffering from taking cabbage and spinach and said to myself what if I start selling tsunga, rape and covo when I came across it and the thought of making money from my fellow Zimbabweans and others who might be interested? It crossed my mind because Zimbabweans are desperate for these vegetables, then I went to a white man who was a farmer to ask how much he can give me a bunch of rape then said R10 then I started making smaller bunches to sell, it was like people were fighting for it. Until now I am making serious profit and I am surviving through this business.

From her statement, it can be deduced that the profit and profitability of these vegetables is high, the initial capital she used in setting up the business is low. Starting the selling of the vegetable then with just R10 acclaimed for the low capital and now according to the information given by Martina with just R45 one can start the selling of these vegetables. However, in comparing the price of these vegetables then in 2010 to the current price, there is an increase in the price as a result of the value attached to these vegetables which was evident by the rate at which these vegetables were rushed (field note experience on Tuesday

08/05/2018 at 12:50) by marketer to purchase them from the farmer supplier (Danbo) from Richmond as a result of high rate of demand by the consumers as proclaimed by the markets giving rise to their profit and profitability. My field notes from Tuesday 08/05/2018 at Warwick Junction Market, showed that over 10 of the marketers selling there, sell covo, rape and tsunga out of which 3 were interviewed. Regina, a Zulu marketer and one of the 3 respondents interviewed, started selling covo, tsunga and rape in 2017 in the market said she was initially not selling them, but as a result of customers' demands for these vegetables, she started the business of these vegetables and she has been making 100% profit from it. By extension, despite the increase in the number of marketers which has given room for competition, it has not affected the profit they make from this business. In the case whereby more ten marketers are clustered in a particular market street selling the same greens, each still attracts consumers to themselves. This implies that there is a sufficient market for these greens which can lead to scarcity if production is not intensified.

My research has shown that profit margin is usually high on Sundays because most sales are on Sundays. Danbo, one of the major suppliers said he supplies marketers that include, Zulus, Zimbabweans and Malawians in the area of workshop, CBD, Sunday morning market in Greyville area, Warwick Junction market and Joseph Nduli Street. He revealed that he sells close to four hundred bunches of these vegetables each worth of R45 to the marketers on Sundays which is worth a total of R18, 000. On a normal day he supplies an average of over 200 bunches of these vegetables amounting to R9, 000. What a super sale from just the activity of a day, an expression that was also confirmed by the marketers on how lucrative sales might be on Sundays. Farmers producing these vegetables stated that they started on a small scale and graduated into producing larger quantities, evidence to the fact that there is high profit. In Cape Town, Mija (2014) reported that selling these vegetables was so profitable that one person was able to purchase a car. In view of this, farmers tend to produce more as a result of increase in purchases level from both the consumers and the marketers which also affects the quantity of seeds that will be needed in the production of these vegetables.

6.2.1.2. Generation of Employment Opportunities

Unemployment is one of the major factors that has crippled the economics of so many countries around the world and has increased the level of poverty. Zimbabwe food introduced in Durban

by Zimbabwe migrants has created various job opportunities. Farmers are being introduced to these plants and production of these plants has generated means of livelihood for the populace of Durban. Some farming opportunities have opened up as a result of introduction of these plants, while some farmers have embarked in the cultivation of these plants instead of being idle. For example, Magi, a Zimbabwean producer in Umlazi who uses an abandon plot land which had become a refuse dumping site said:

"The little earnings I made from the production of covo, rape and tsunga have been benefitting in catering for the family needs."

From her statement, employment has been created for her as a result of the introduction of these vegetables which she was able to use in supporting the financial needs of the family as well as some portion for consumption. Capable hands are being employed to work on the farm and they are able to sustain their families consequently. One of the farmers, Danbo said he has about 30 frameworks on his farm. The capacity of this farm covering about 7.5 hectares of which over 50% of it is used in the production of covo, rape and tsunga and the remaining percentage used in the production of maize, spinach and other food crops. At this instance, employment has been created for thirty people, the majority of who are female.

Another aspect of employment creation is from the produce that emerged from this production. Marketing is the pillar behind a successful production. Prompt marketing is needed in order to sell out these plants as they are perishable. This has raised the opportunity platform that is being enjoyed in the production. Many street vendors now sell these vegetables to survive and to cater for their family's needs because they do not require large capital to start selling the plants. In the case of Melvin's food map, a host of different marketers are involved which include street vendors in Warwick Junction Market of which about 10 were noticed based on my field notes, the distributor that brings it to his door step, two supermarkets from Musgrave and Westwood, and ultimately the farmer he buys from who also sells to the street vendors. Information gathered showed that quite a number of these marketers are locals, and others include Zimbabweans, Malawians and other foreign nationals. This corresponds with the report given by Mija (2014) that stated the obvious that the unemployed became employed and the

employee became self-employed due to the production of rape, covo and tsunga, but by extension now include locals and white as one of the major marketers involved in it.



Figure 6.1. Adedamola's delicacy of rape vegetable with chicken drum sticks and pap (Field Survey 2018).

6.2.1.3. Consumers Benefits

The consumers determine the end market of these products. If consumers' benefit is left out, then the impact is left incomplete. In the course of my research, on a market day on Sunday 06/05/2018, I had to wait for over three hours to try get information from Success, one of the marketers at Joseph Nduli Street. While waiting, I noticed that not only Zimbabweans consume these vegetables which prompted me to have an interaction with a Nigeria (see table 4.1). This Nigerian Adedamola² prepares a nice delicacy with rape vegetable as shown in figure 6.1. He sometimes consumes it with rice. Therefore, the consumption of these vegetables is now not restricted to Zimbabwean migrants, it has been extended to locals (see table 4.1, Martina one

² His real name, as instructed by the interviewee because of interest in the research and never wanted to hide his identity.

of the marketers) and other foreign nationals like Nigerians, Congolese, Malawians and others who now also claim to derive satisfaction from these plants.

As a result of the value of these vegetables enjoyed by consumers, they are willing to pay for these satisfactions such as taste, nutritional content and home feelings. At the same time, the value also enjoyed by the consumers was added to by the producer producing these vegetables more efficiently. For instance, the white farmer that produces these vegetables in Richmond, was able to employ a sophisticated means in the production, such as plastic mulch protecting the crop from soil infection and weed control in order to reduce physical losses, and also upgraded equipment like the transplanting machine and stampers for making holes on the plastic mulch for larger production volumes, and selling it at the same price as prior to the increase in efficiency. These efficiency improvements have helped to support the production of low-priced vegetables that are targeted by more price-sensitive, low income consumers. Based on the level of competition in the market, consumers will directly capture part of the added value, as market prices may well be lower than the prices consumers are willing to pay in Food Value Chain. The producer takes adequate measures to ensure these products reach the consumer at a favourable cost while the farmer is also enjoying its benefits, making it a win-win approach. Aside from direct consumption, these vegetables are now been processed into by-product especially kale. It can be used in making smoothie which is naturally healthy.

6.2.2. Social Development in Food Value Chain

Another area of importance that has contributed to sustainable development is social impact registered as a developmental tool. Social impact for sustainability includes inclusiveness, equitability and social norms, the value chain has generated additional value (additional food as a social entity) that benefits sufficiently large numbers of poor households and middle-income earners, is equitably distributed along the chain (in proportion to the added value created) and has no impacts that would be socially unacceptable but rather socially accepted. That is to say, every stakeholder (farmers, marketers, young and old, women and men, locals and foreign migrants) feel they receive their fair share, and there is no social objection as they mingle with each other in the activities of these vegetables food systems. Local and foreign farmers developed interest and seek to engage in the production of these plants without them being forced into it which in a way has encouraged mutual relationship between them. In some

case, it has served as an alternative to the usually consumed vegetables for locals and to other migrants, who have cravings for vegetables and have not come across the usual vegetable they are used to. Thus, Adedamola said that:

I usually consume quite a number of different vegetables back at home and I have so much love for it because it is healthy for the body, but getting to South Africa, I could not find them, so I opted for spinach. But when I came in contact with a friend who introduced rape vegetable to me, I fell in love with it as it satisfies my desire.

The rape vegetable have socially constructed his identity. He has come to socially adapt and completely immersed into the consumption of these vegetables giving up the previous ones. Therefore, we can say the previously consumed vegetable A is an opportunity cost for these vegetables B, as he derives satisfaction from consuming it. Opportunity cost is an economic term which refers to the benefit, profit, or value of something that must be given up in order to acquire or achieve something else. In the meantime, every means; land, money and time, etc. can be put to alternative use, then every action, choice, or decision has an associated opportunity cost.

According to economist review (2010) the microeconomist theory, the opportunity cost, or alternative cost, of making a choice is the value of the most valuable choice out of those that were not taken. In other words, opportunity will require sacrifices. When an option is chosen from two mutually exclusive alternatives, the opportunity cost is the "cost" incurred by not enjoying the benefit associated with the alternative choice which might be as result of scarcity or preference. The notion of opportunity cost plays a crucial part in attempts to ensure that scarce resources are used efficiently. Opportunity costs are not restricted to monetary or financial costs: the real cost of output forgone, lost time, pleasure or any other benefit that provides utility should also be considered an opportunity cost (Buchanan 2008)

Opportunity costs are essential costs in economics and are used in computing cost benefit analysis in a project or consumption. Socio-economically, it can be deduced that the vegetable B is a forgo alternative to the previously consumed vegetable A, making the cost of B an opportunity cost for A. All the money he uses to buy A will be diverted to B thereby postulating a new socio-economic theory known as Consumer Forgone Alternative (CFA) Theory. CFA

theory can be further used to study consumer's behaviour with regards to other commodities. This theory tends to negate Renzaho and Burns (2006) which streamlined the context of their study to migrants being forced to adapt to new food. It supports and partly reciprocal to the study of Parasecoli (2014), support in the sense of other migrants and not Zimbabwe migrants, and partly reciprocal in the context locals adapting to migrants' food after socialising with it as professed by one of the respondents, Martina.

6.2.3. Agricultural and Environmental Development in Food Value Chain

Agricultural development and environmental development in the sense is non-negotiable as the subject of consideration is an agricultural produce being grown in a natural environment. The production of these vegetables has brought about a massive improvement in the agricultural and environmental sector. These improvements were viewed under three core headings, namely, increasing farm variety, crop complements and environment rehabilitation.

6.2.3.1. Increased Farm Variety

Farmers growing these plants have increased the crop varieties that is grown on their farms. This has helped them meet customers' demand. Success, a marketer that combines the sales of these vegetables with other farm produces said

'more opportunities have opened since I started selling rape, covo and tsunga, the sales of the other goods I sell has increased as a result of people coming to buy these vegetables, they also patronize the other goods I sell.'

The vegetables are more of a complementary food as it is taken mostly with other farm produce and more so require other farm produce as ingredients in the preparation e.g. tomatoes and onions. The crops when sold together help in the marketability of one another.

6.2.3.2. Rotational and Mixed Cropping System Complement

Rotational cropping and mixed cropping are agricultural farm practices that are employed in growing of crops. Rotational cropping involves growing or cultivation of more than one type of crop on a particular piece of land on a rotational basis in a specific period of time. In an interview with Kelly, a South Africa white farmer in Richmond who owns a large hectares of

land for production of different varieties of crops like tomatoes, green pepper, spinach, cabbages, kale and rape, although tomatoes and green pepper being her major production, said:

“Rape and chomolia serve as a rotational crop in the production of vegetables”

These vegetables serve as a complement in this practice. In the production of vegetables that consist of cabbage, spinach, rape and kale, these plants are grown as a complementary plant to cabbage and spinach. The essence of these types of cultivation is to ensure nutrient replenishment in the soil as it allows different plant with different nutritional requirement to be grown in different succession. Also, mixed crop involves the growing of two or more crops with different nutrient requirement on the same piece of land at a particular period of time in order to maximize the nutrient in the soil. These vegetables have also stand out for this purpose by been grown on the same piece of land with green pepper, tomatoes and other vegetables.

6.2.3.3. Environmental Therapy

The impact of the vegetable value chain is enormous in the production phase on the environment. Food production in the value chain critically affects and also depends on natural environment. The contribution of the production of these vegetables to environmental development was noticed in the interview with one of the farmer respondents in Umlazi. Although, production was in a small scale, but on inquiry on the genesis of the cultivation and acquiring of land, she gave ample contribution on the environment as she narrated her experiences:

‘I started growing rape, covo and tsunga in 2013 when my cousin brought these seeds from Zimbabwe. The little she gave to me was what I used to start the production. After getting these seeds I approached my property owner to spare me the small piece in front which was used for refuse dumping and has almost polluted the environment. The owner consented seeing that the area would be clean when I use it for the production. At first, it was mainly for consumption but when people passed by, including other Zimbabweans, South Africans, Malawians and Mozambicans, they were attracted by these vegetable and questions were raised which brought about their interest in the consumption and production led to upgrading of my production but still in a small scale due to space.’

From her narration, the production of these vegetable has brought about the use of fallow land which has almost become a nuisance to the public environment which she was able to salvage it from pollution.

6.3. Conclusion

Based on this information, the value chain analysis that was conducted to trace these foods from planting to plate, as well as capturing the areas, has a substantial impact on it as a tool for sustainable development. Food mapping theory as a sustainable sustenance system tool and agent of change was a better application to map the experiences of migrants in Durban, and also ascertaining the level of changes the process of familiarizing with their food has generated. Research has shown in the process of mapping the existence of these plants from consumption level to production level, it was noticed that activities involved in the production process of these plants have economic impact on the populace of the society which include the consumer, marketer, producer and the society at large. Quite a number of these developmental progresses were noticed in employment opportunities, profitability, consumer preference benefit, social decorum, agriculture, and environmental appearances.

Chapter Seven: Summary, Conclusion and Significance.

7.1. Introduction

This concluding chapter will do a complete thumbnail survey of the entire dissertation with a singular aim to look at the experiences of Zimbabwean migrants in relation to their food, identity and memory, and the effect it has on them and agricultural production in Durban, South Africa. It also answers salient questions with regards to the determining factors that are responsible in food identification and choices of these Zimbabwean migrants, whereby tracing the value chain of food choices as to how it has affected agricultural production, economic and social development in Durban. Consequentially, in trying to explore the experiences of Zimbabwe migrants, this employ a constructing channelled consultation with the key player that are involved in the production process of the migrant's food choice in Durban.

As a compendium for this study, food concepts regarding the study was abridged as a means to pre-inform the reader with the cons that are embedded in the study. A careful and constructive overview of extant literature relevant was explained to give an overview background of the study, highlighting their contributions and gaps created in the course of their studies. Based on the approach of the research, it was conducted using semi-structured interview of 16 mixed respondents of consumers, marketers and farmers as the case may be due to the nature of the research being guided by the food mapping theory. A succinct presentation of the findings and the innuendo to food mapping as to how it has fostered sustainable development is discussed in this concluding chapter. Viable recommendation and areas prone to further research is been built based on findings.

7.2. Summary of Findings

Food has resonating effect on memory and identity of migrants. Zimbabwean migrants in Durban conglomerated to ensure that the values and norms attached to these vegetables way back at home is not lost in diaspora. The Zimbabwean vegetables identified include rape, covo and tsunga. These vegetables have formed a solid intangible bond to these migrants food as they associate it with their lifestyle and gives it a strong symbol of life which has almost made them inseparable from these vegetables. They have made these vegetables their life partner that only death has the capacity of severing them from these foods. These vegetables have now become a habit that lives with them in areas they find themselves. They therefore, manoeuvre

on means, moving along with these vegetables as a sign of cultural identity and also to save them from being starved of these vegetables in diaspora. Life away from home at times might look absurd when it comes to food, but in the case of Zimbabwe migrants in Durban, life seems pleasurable and appealing as they enjoy home away from home having the thought of home while consuming these in the diaspora. The lifestyle of these migrants has saddled them with the responsibility of having preferences and choices for these foods they have access to in a foreign land. They are not beggarly as to the saying a beggar has no choice. This has given rise to explore the factors that were considered in food selection.

7.2.1. Considerations in Food Selection

Many factors surfaced in the exploration of information from the consumer respondents which cater for the pending desire of the migrants to satisfy their wants of food. One of the considerations hinged on economic factors, which as a result can support the preference and choice of food selection. These economic factors are spread out as price, availability, accessibility, information and instruction. Price as a factor boosts the purchasing power of migrants, and it also commensurate with their income. They find the price of these plants moderate that any average person can afford. Another factor is nearness to market, accessibility of the vegetables as it aids satisfying the quick desire of consumers. A close review showed that migrants have access to the foods except for some few which is due location, and it is not that they are completely cut off, but just involves some cost implication. Sequel to this, conclusion can be made that these foods are also available to the consumers. Also, the nutritional and health composition factor of these vegetables which can come as a result of information and adequate instruction can be supportive in choosing them. Information on nutritional composition and application knowledge was also noticed as contributing factor to food selection.

Secondly, socio-cultural factor has a pressing effect on food selection. The people you interact with has a social effect on food preference. Migrants confirmed that friends, family and relatives they socialise with can also be the bases of what they choose to eat at a particular time. Also, population studied has shown that there are clear differences in social classes with regards to food and nutrient intakes. Based on this fact, some of these migrants find it important and necessary to consume the vegetable when they are out of cash, it can be assumed

that the poor and middle-income earner have preference and choose to consume these vegetables because of its low price and those of higher pedigree have preference and chose to consume these plants because of its health and nutritional benefits. Cultural belief and family upbringing are also highlighted as consideration that enforces a particular kind of food on migrants.

7.2.2. Interconnectivity that exists in Food Value Chain

Activities that exist in the value chain process are linked together by a connecting factor. The networking that exists between the nodes (actors) is abstract, but they are interwoven as wires (interaction). Every step that is taken in food value chain is important and not just the step, the activities that surround the step and the key player. Findings have shown that food follows the direction of active key player. Every node is importance in the series of event. These vegetables which are the centre of attraction, started their journey from the cultivation of seeds. They experience the transformative stage with the assistance of the farmer, the lead actor. The interval that exists between the seed and the produce is time. The produce is being transported from the place of farming to the point of sales at a cost to the intermediaries. The activities involved within the marketing phase varies depending on how the vegetable is channelled. The final actor in the networking process obtained these produce (vegetable) at a cost, then subjects it to the normal protocol of preparation before getting to the plate. One constant factor that connects all the key players in the process is price, and no actor is independent of one another. Individual mapping of the food conducted brings into play the various activities that occurred within the food system. Therefore, food maps were generated showing the abundance of the simplest and the complex, presented as Martha and Melvin's food map. Martha's food map showing three active actors (consumer, street vendor and producer), and Melvin's food map showing five active participants (consumer, street vendor, individual distributor, supermarket seller and the producer) and their relationships.

7.2.3. Effect of Sustainable Food Value Chain in Development

The effect of Zimbabwean migrant's food value chain can be used to measure the level of values that has been added, using a cost-differentiation advantages value chain analysis as a tool in understanding the considerable areas of impact in the region of Durban, South Africa. Findings have shown that the activities that take place within the food system have influence

on the economic, social, agriculture and environmental sectors. The figure 7.1 below summarises these developmental impacts and also shows the relationships that exist among them creating a kind of Sustainable Food Value Chain (SFVC).

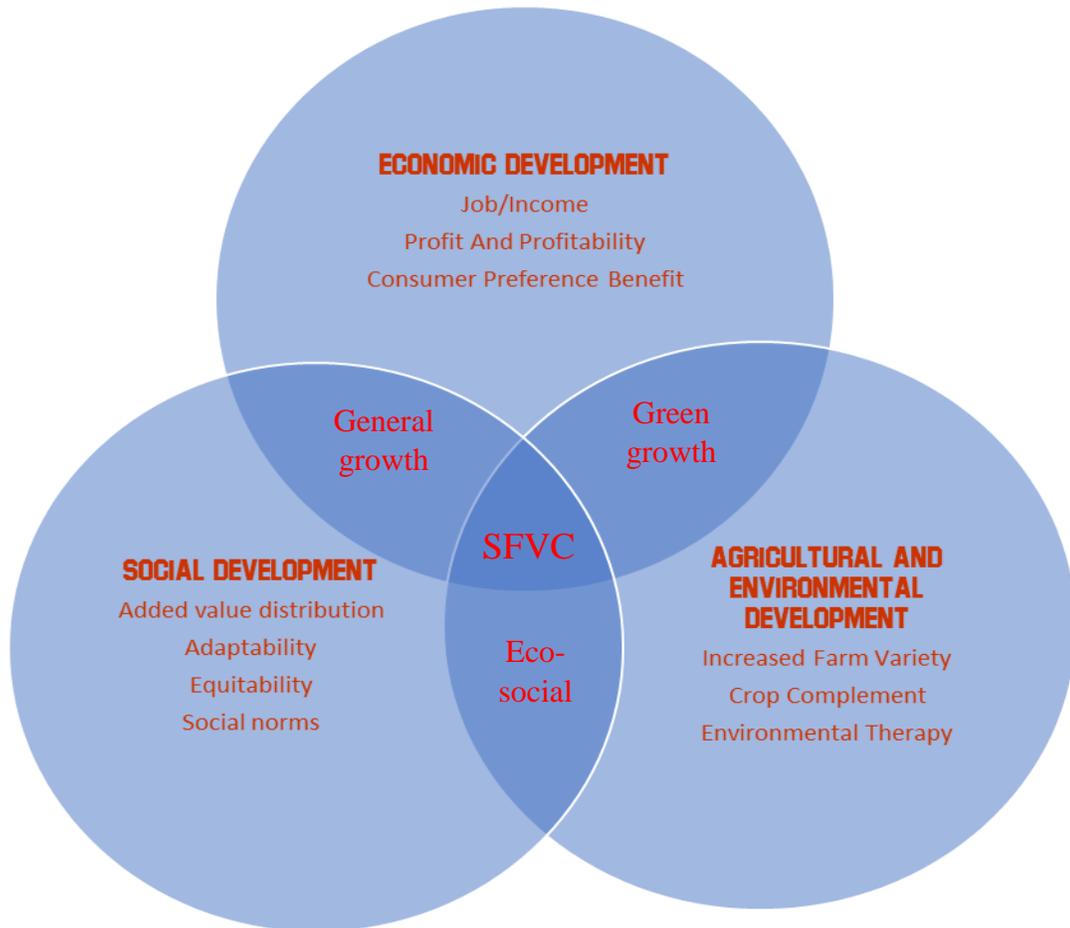


Figure 7.1. Measuring the Impact of Sustainable Food Value Chain of Zimbabwe Vegetables in Durban

From the diagram above, the level of development that is brought about by the production, marketing and consumption of these vegetables is classified into three broad approaches. We see that as a result of these activities, it has brought about job creation and income stability to local, and even foreigners. Also, the process of production and marketing generate profit and profitability is high, while the consumers are enjoying satisfactory benefits following preference given to these vegetables. In the case of the social development, the social value added are distributed amidst the populace of Durban; old and young, male and female migrants and locals with equity, while also adapting to the consumption of these vegetables. There is an

interference in the social and economic development which brought about general growth categorised under the socio-economic development (SED). The improvement under the agricultural and environmental covers the area of increase in the farm produce variety, rotational and mixed cropping complement and environmental therapy. The overlapping benefits of the agricultural, environmental to economic development is restricted to green growth because governance has not looked into this aspect of development which can also be a means of revenue generation which contributes to the GDP of the country. The extension of the benefit in the agriculture, environmental to social development is still in progress as one of the farmer respondents said that abandoned land for refuse disposal was converted to site for the production of these vegetables serving as environmental therapy.

7.3. Implication of the Findings

7.3.1. Implications on Food Mapping Theory

The research results skilfully suit the food mapping theory and goes in accordance with the concept of food studies relating to memory and identity. It has helped to trace the food map of these Zimbabwe immigrants as to help track the role of Zimbabwean vegetable in the way they search for home in Durban as Marte (2007) postulated. These vegetables can also serve to ground body-place-memory in the way these Zimbabwean migrants live and re-imagine their cultural histories in consecutive ‘homes,’ manifesting their movements through neighbourhoods, cities, and countries. Through food mapping we get ample sight of the way this immigrant memory-work helps to produce a sense of place through food roots (origin) and routes (path) as they re-invent new cultural regions of “home” away from home. These results have added more flesh to Marte’s (2007) studies making this theory relevant for the study. Also, regarding food mapping, my findings have helped to broaden the scope of food mapping as it assisted in migrants’ preferences and choices to certain foods’ while considering their experiences outside the boundaries of home. The value chain evaluation in the course of mapping migrants’ food experiences in a new environment has shown an immense level of impact on development, mapping process has a causative effect on the progress of country.

7.3.2. Implications for Attitudes towards Migrant and Migration

Findings of this study have brought about a revealing implication toward migrants and migration. As I demonstrated in chapter two, various studies that have examined the

experiences of migrants with regards to food have proffered different views about migrants' food in the diaspora. Findings have helped shape attitude towards migrants and migration, as it has undraped the contributing factors that are associated with migrants and migration processes. While studies have shown that migrants have to conform to new environments, this study has delineated that migrants need not always adapt to the situations in the area of migration, but can affect important shift in the dietary preferences in host countries, thus disrupting the linear lifestyles of their hosts cause a drastic change to the areas taking away, the linear lifestyle of their hosts by exposing them to newer foreign varieties.

7.4. Conclusion

Consuming these vegetables has a lot of significance among the Zimbabwean immigrants' identity. Also, consumption in and outside the boundaries of home has established a link to the memory of home. The importance assigned to these vegetables, has led to the production of these vegetables, and the level of production has increased over time as well as a corresponding increase with the marketing activities, while the consumers' benefit has gained more reputation. Research has proved that the majority of these Zimbabwean migrants cannot do without these vegetables which has made the demand for them high, making it correspond to the level of production. However, more marketing strategies have been developed making these vegetables among some of the greens available even in the supermarkets within the community. As I have argued above, the consumption of these vegetables is not limited to Zimbabwean migrants alone, South Africa locals and other foreign migrants now enjoy consuming these plants, including myself. After tasting these vegetables, I have been advocating for the consumption of these vegetables among friends. Following these innovations, it can be concluded that these vegetables have gained preference among other nationals, thereby taking these vegetables in preference to others as a forgo alternative, confirming the theoretical postulations of the Consumer Forgone Alternative theory (CFA) that I discussed above.

Also, the consumption, marketing and production of these plants have added value to the entire populace of Durban. Values which have contributed to the economic, social, agriculture and environment of Durban and its environs. After consideration using value chain analysis, the impact of these activities forms an impression that migrants have a lot to contribute to the

agricultural, welfarism and economic situation of a country, in creating a comfortable atmospheric condition for themselves and others if granted the opportunity.

7.5. Significance of study and Areas of Further Research

In juxtaposing the burgeoning effects of migrant's food identity and memory on developmental processes, it will be alarming to neglect the gaps that needed to be filled with contributions, in other to sustain the improvement and as a way compensate and support the efforts of pioneers of these appealing developments. It will be needful to mention areas that further needed to be tackled. As a result of this study, food has penetrated into the ethnic borders of individuals, and advanced further from previous studies reviewed that a particular food is restricted to a particular ethnic group. As my study has shown, these vegetables are not only consumed by Zimbabwean migrants, but now includes locals and other migrants e.g. among Nigerian migrants. This has brought intra relationship between ethnic groups as a result of introduction of the vegetable by migrants. Migrants should be given the opportunity to implement activities that are supportive to the well-being of the community under the supervision of the appropriate authorities. This will help in the governance of activities when monitored and also checkmate excesses that are involved in these activities, whereby generating revenue for the country and also contributing to the Gross Domestic Product (GDP). For example, the consumption and impacts of these plants have been so stunning that if these plants should be registered in database of department of forestry and agricultural development, it will enable them offer farming incentives to farmers that are into the production of these plants, while the country also benefits from additional revenue generation through accrued taxes from these produces when purchased.

Another contribution of this study that can serve as recommendation in theorisation is that the combination of food mapping and value chain analysis have helped to move the studies of food, memory and identity beyond an affective ideology to a dis-affective level. As postulated in the extant literatures reviewed in chapter two above, food and identity have an affectionate impact like memory and psychological effect on an individual, but in this case, it has gone beyond that by bringing about economic, social, agricultural and environmental developments like employment creation, trans-food culture, increased farm crops varieties, environmental therapy etc. which are dis-affectionate.

Areas that should be further explored in the field of research should include, comparative studies that will help analyse the production level, consumption level and the nutritional level in comparison with the regularly consumed vegetables and also checking the externality factors between them. In studying this further, the level of impact will be known to establish a concrete conclusion on the production of the plants and also the guided policies that should affect it.

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Appendix 1: Interview Schedule



**UNIVERSITY OF
KWAZULU-NATAL**

INTERVIEW SCHEDULE

MEMORY, IDENTITY AND FOOD PRODUCTION AMONG ZIMBABWEAN MIGRANTS IN DURBAN, SOUTH AFRICA

My name is Femi Emmanuel Oni, a master's student from the department of development studies university of KwaZulu-Natal. The aim and purpose of this research is to know the experiences of Zimbabwean migrants with regards to memory and food identity of certain plants and how it has affected the agricultural production in Durban South Africa. I would like to ask you some questions about your experiences as a Zimbabwean migrant on some plants and what it means to you, your interest in selling these plants and what are the motivations in cultivating these plants in Durban South Africa. Your knowledge of these plants in South Africa and more specifically Durban.

Thank you for agreeing to take part in the project. Before we start I would like to emphasize that:

- Your participation is entirely voluntary;
- You are free to refuse to answer any question;
- You are free to withdraw at any time.
- Your name will not be revealed unless you give permission

Section 1: Personal Profile

1. Gender? (Male or Female)
2. How old are you?

3. Where were you born? (What country were you born in?)
4. Where did you grow up?
5. What is your first language? (What is your mother tongue?)
6. Do you speak other languages?
 - a. If yes which languages?
7. When did you first come to South Africa? (How long have you been in South Africa?
/when did you arrive in South Africa)
8. What do you do for a living in Durban?

Section 2: Factors that are considered in food identification and choices among Zimbabwean migrants (objective 1)

9. What is food to you?
10. How do you relate food and your identity?
11. What has your experience been like with respect to your indigenous food in Durban?
12. Have you encountered the following plants in Durban?
 - a. Covo,
 - b. Tsunga,
 - c. Muboora (Pumpkin leaves),
 - d. Rape,
 - e. Gaka
13. If yes, how will you describe each of these plants?
14. What are your immediate thoughts when you first encountered one of these plants in Durban?
15. What does eating these plants signify to you?
16. Are these plants accessible in Durban?
17. Are these plants affordable in Durban?
18. How often do you consume these plants?
19. How do you prepare these plants?
20. What do you take the plants with?
21. What attracts you to the plants?

22. Do these plants have any cultural importance?

Section 3: value chain of food choices among Zimbabwean migrants (Objective 2) and Effect of Zimbabwean food identity of migrants on agricultural production in Durban South Africa (Objective 3)

Questions to ask the migrants

23. When do you start consuming these plants?
24. How do you encounter these plants?
25. What attract you to eating of these plants?
26. Like how much do you need before you can buy these plants?
27. In what quantity do you consume these plants?
28. How far will you go before you can get these plants?

Questions to ask the marketers

29. When did you start selling these plants?
30. What did you know about the plant before you started selling it?
31. What motivates you to sell these plants?
32. Do you have competitor in selling these plants?
33. What opportunities have opened since you started selling these plants?
34. Can you describe the volumes of your sale? (In other words, on what days do you sell the most and how much do you sell?)
35. Where do you source your produce? How far is it?

Questions to producers

36. When did you start producing these plants?
37. How did you come to know about these plants?
38. What interest you to produce these plants?
39. What are the costs that are involved in the production of these plants?
40. Do you have competitors in the production of these plants?
41. In what scale do you produce these plants?
42. How would you describe your market/customers? How did you get in touch with them and how do they obtain your produce?
43. Since you started producing these plants, what impact has that had on your work?
44. What kind of technology do you employ in the producing these plants?

45. What is the cost of technological tools employed in the production of these plants?
46. What is the duration in the production of these plants?
47. How do you manage to attract buyers?
48. Are you satisfied with the quality and quantity of your produce? If no, what are you doing to improve them?
49. How do you describe the profitability in the production of these plants?

THANK YOU FOR PARTICIPATING

Appendix 2: Informed Consent Form



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INFORMED CONSENT

Date

Dear Participant,

My name is FEMI EMMANUEL ONI with student number 217079275 from department of Development Studies University of KwaZulu-Natal. My contact details are phone number 0740364312 and emails: femolaemma2@gmail and 217079275@stu.ukzn.ac.za

You are being invited to consider participating in a study that involves research on MEMORY, IDENTITY AND FOOD PRODUCTION AMONG ZIMBABWEAN MIGRANTS IN DURBAN SOUTH AFRICA. The aim and purpose of this research is to know the experiences of Zimbabwean migrants with regards to memory and food identity of certain plants and how it has affected the agricultural production in Durban South Africa. The study is expected to enroll twenty participants. Ten drawn from Zimbabwean migrants who reside in Durban on their experiences with regards to certain indigenous plants, five from marketers within Durban on their interest and how marketable these plants are and five from local producers on the productivity of this plants and what scale and rate they will be willing to continue in the production of this plants. It will involve the following these plants from the consumers (migrants) to the marketers (sellers) to the source (Producers) to enable us to trace the value chain of these crops. The duration of your participation if you choose to enroll and remain in the study is expected to be approximately thirty days. Self will fund the study.

The study will not involve form of risks and/or discomfort of any kind. The study will provide no direct benefits to participants. The study stands the chance to improve agricultural production that can foster agricultural development in Durban South Africa. Also, the study tends to add value to agricultural and social sciences research among many others.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (approval number: HSS/2134/017M).

In the event of any problems or concerns/questions you may contact the researcher at:

Department of Development Studies
Shepstone Building
University of KwaZulu-Natal

Durban 4000, KwaZulu-Natal
South Africa.

Or the UKZN Humanities & Social Sciences Research Ethics Committee, contact details as follows:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus

Govan Mbeki Building

Private Bag X 54001

Durban

4000

KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604557- Fax: 27 31 2604609

Email: HSSREC@ukzn.ac.za

The participation in this research is voluntary participants and may withdraw participation at any point, in the event of refusal/withdrawal of participation the participants will not incur penalty or loss of treatment or other benefit to which they are normally entitled. In the case of withdrawal of participant, it will alter the research procedure as to the exact number of participants that are to participate in the research which may alter the expected result. In view of this the participant is expected to withdraw orderly by pre-informing the researcher with ample time before withdrawal. The researcher might be prompted to terminate the participant from the study if he/she fails to provide the necessary information needed by the researcher.

The participant will not incur any cost during their participation in the study and there will be no incentives or re-imbursements for participation in the study.

The identity of the participant will be kept confidential by no using their real names/identity in reporting the study. The data and stored samples will be stored confidentially only for this study.

CONSENT

I..... have been informed about the study entitled **MEMORY, IDENTITY AND FOOD PRODUCTION AMONG ZIMBABWEAN MIGRANTS IN DURBAN SOUTH AFRICA** by **FEMI EMMANUEL ONI**.

I understand the purpose and procedures of the study.

I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

If I have any further questions/concerns or queries related to the study I understand that I may contact the researcher at:

Department of Development Studies
Shepstone Building
University of KwaZulu-Natal
Durban 4000, KwaZulu-Natal
South Africa.

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION
Research Office, Westville Campus
Govan Mbeki Building
Private Bag X 54001
Durban
4000
KwaZulu-Natal, SOUTH AFRICA
Tel: 27 31 2604557 - Fax: 27 31 2604609
Email: HSSREC@ukzn.ac.za

I hereby provide consent to:

Audio-record my interview / focus group discussion	YES / NO
Use of my photographs for research purposes	YES / NO

Signature of Participant

Date

Appendix 3: Ethical Clearance Letter



4 December 2017

Mr Femi Emmanuel Oni 217079275
School of Built Environment and Development Studies
Howard College Campus

Dear Mr Oni

Protocol reference number: HSS/2134/017M
Project Title: Memory, identity and food production among Zimbabwean migrants in Durban, South Africa

Full Approval – Expedited Application

In response to your application received 1 November 2017, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

.....
Dr Shenuka Singh (Chair)
Humanities & Social Sciences Research Ethics Committee

/pm

Cc Supervisors: Dr M Ngcoya
Cc Academic Leader Research: Prof Oliver Mtapuri
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