

**THE RURAL-URBAN LINKAGE IN THE USE OF TRADITIONAL FOODS BY
PERI-URBAN HOUSEHOLDS IN NOMPUMELELO COMMUNITY IN
EAST LONDON, EASTERN CAPE: A COMPARATIVE STUDY**

by

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Declaration

I, VIKELWA JUDITH MAJOVA, declare that "The rural-urban linkage in the use of traditional foods by peri-urban households in Nompumelelo community in East London, Eastern Cape: A comparative study", is my own work and that all sources that I have used or quoted have been indicated and acknowledged by means of complete references.

Signature.....

V.J. MAJOVA

Date.....

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Dedication

To my parents, Mama (Dlamini, Zizi) and Tata (Radebe, Hlubi). My brothers and sisters, Mni Jola, and our children Khaya, Kwanga, Kukhulu and Konke (Lerato), Mr B.M. Tiba and Mr J.P.Z. Sitshange, Loyiso (*mngane wam*), Ntombi and Xolisani Majova, MaHlubi, and my friends, Nana and Tiba Nolitha and Langa.

Abstract

The purpose of the study is to illustrate the challenge of providing sufficient micronutrients to the inhabitants of South Africa. Traditional foods have therefore been identified as one of the strategies that can be employed to lessen the problem in the community of Nompumelelo, Eastern Cape province and the research involves the availability of traditional foods in this area.

It is common practice for most rural people in South Africa to include traditional foods in their diets and Nompumelelo is no exception. Hence, the study also explores the rural-urban linkage of the use of traditional foods by peri-urban households in the Xhosa community of Nompumelelo.

It could be argued that the traditional foods produced in this community are accessible to the whole community, resulting in greater food sustainability. It is a fact that many communities are of the opinion that food is not readily available, not realising that traditional foods are locally available.

Key words: traditional foods, rural-urban, community, households

List of Acronyms

BCM	Buffalo City Municipality
FAO	Food and Agriculture Organisation
NRI	Natural Resources Institute
RDP	Reconstruction and Development Programme
RUL	Rural Urban Linkage

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CHAPTER 1

OVERVIEW AND RATIONALE

1.1 Introduction

Maxwell (1992) defines rural-urban interactions as linkages across space, such as flows of people, goods, money, information, wastes and linkages between sectors, for example between agriculture and services and manufacturing. According to Tacoli and McGranahan (2006), RUL includes flows of agricultural and other commodities from rural-based producers to urban markets; and in the opposite direction, flows of manufactured and imported goods from urban centres to rural settlements. Tacoli and McGranahan (2006) also argue that linkages between rural and urban locations, as well as between people and activities are key components of livelihoods and local economies and are also engines of economic, social and cultural transformations. Tacoli and McGranahan (2006) further posit that in broad terms, rural and urban activities include activities taking place in urban centres (such as urban agriculture) and activities often classified as 'urban' (such as manufacturing and services) taking place in rural settlements. .

As a point of departure, traditional foods are defined as food genuinely native to a particular region or that has been present in that region long enough to have evolved through natural processes or farmer selection (Jansen van Rensburg, Van Aveerbeke, Slabbert, Faber, Van Jaarsveld, Van Heerden, Wenhold & Oelofse, 2007). Related to this, Tacoli and McGranahan (2006) contend that traditional foods are shared by many people in rural and peri-urban areas. Studies in different areas of South Africa indicate differences in cultural practices for different traditional foods and the practice of mixing traditional foods into dishes is something common (Nesamvuni, 2000). In the Eastern Cape province, for instance, common traditional foods consist of *umbona* (maize), goat meat, milk that is often drunk in its sour form and *umngqusho*, which combines honey corn with beans (Shava, 2000).

However, the difference between urban and rural areas may seem so obvious that no definition is required. Most urban populations do not live in cities but in market towns, in small administrative centres, or in intermediate urban centres that are often accessible by centrally rural-urban linkage, with strong links and a complementary relationship with their surroundings (Tacoli & McGranahan, 2006).

Rural-urban linkages (RUL) in the use of traditional foods include the flow of the above-mentioned traditional foods and commodities from rural-based producers to urban markets, for local consumers involving human input. Such flows of people also include moving between rural and urban settlements, either commuting on a regular basis, for occasional visits to urban-based services and administrative centres, or migrating temporarily or permanently (Shava, 2000). Furthermore, rural-urban linkages focus on flows of information between rural and urban areas, which includes the information on market mechanisms, ranging from price fluctuations to consumer preferences, and information on employment opportunities for potential migrants (Shava, 2000).

Fahey (2005) notes that promoting traditional foods as nutrient-dense food sources for the majority of the world's poorest residents, local rural-urban linkages, investment patterns, and population movements are probably far more important than the much-touted global linkages, foreign direct investments and international migration. Rural-urban linkages are important because most urban populations originate in the rural areas, and work in urban areas to sustain their families in the rural areas (Shava, 2000). This is necessary to achieve balanced economic growth in South Africa. Isolated rural settlements that cannot tap into local urban markets will not benefit from expanding global markets as small urban centres that are bypassed by agricultural exporters do not play a dynamic role in national development (Maxwell, 1992).

However, RUL can reduce vulnerability, and play a critical role in the livelihood strategies of the poorest groups, both rural and urban. As Mertens (2005) asserts, low-income rural dwellers often rely on urban-based non-farm jobs and on remittances and other transfers from migrant relatives, while low-income urban dwellers often rely on

seasonal farm jobs, yet sometimes depend on rural relatives to look after their children and family property. From these accounts, it is evident that traditional foods are a reliable food source for both rural and urban communities, particularly during times of drought and famine.

Rural-urban interactions often have a critical influence on natural resource use and management, especially in the peri-urban interface. Back and Solomos (2000) note that these linkages and interactions are usually neglected by both local government, which tends to regard rural and urban responsibilities as being distinct from each other, as well as by national government, whose ministries rarely address rural-urban linkages directly. As such, rural-urban interactions play an important role regarding traditional foods, since they are generally derived from traditional crops and wild edible plants and are likely to be more accessible to rural communities than modern foods.

According to Shava (2000) it is an open secret that most peri-urban and rural households live below the breadline. Thus, their financial flows primarily include remittances from migrants to relatives and communities in the sending areas, and transfers, such as pensions sent to migrants returning to their rural homes, as well as investments and credit from urban-based institutions. These spatial flows, according to Maxwell (1992), overlap with inter-linkages between sectors, both at the household level and at the level of local economies.

The flow of goods include both backward and forward linkages between agriculture and manufacturing, including the related services, such as production inputs and the processing of agricultural raw materials. Tacoli and McGranahan (2006) assert that whilst, to some extent, these flows and linkages exist between rural and urban areas, their scale and strength are determined by the nature of economic, social and cultural transformations. Most urban centres, especially small and intermediate ones, rely on a broad-based demand for basic goods and services from the surrounding populations to develop their secondary and tertiary sectors. Wall and Whiteside (2003) claim that, overall, the synergy between agricultural production and urban-based enterprises is often

key to the development of more vibrant local economies and, on a wider level, to less unequal and more 'pro-poor' regional economic growth.

Some factors, such as an increased income from farming can be generalised as playing a key role in the growth of RUL, especially regarding small-scale producers (Tacoli & McGranahan, 2006). Often these farmers lack access to land, water or capital, are unable to intensify production, and switch to higher value crops. On the contrary, the growing number of rural residents that are engaged in non-farm activities that are often located in urban centres is essential in the wake of the demise of government-owned marketing boards (Cousins & Adams, 2001). Whereas potential markets are usually located in urban centres, better access to markets can increase farming incomes and encourage shifts to higher value crops or livestock. However, Steyn (1988) notes that population growth and distribution patterns affect the availability of good agricultural land and can contribute to rural residents give up farming. Therefore, the expansion of urban centres leads to a change in the way land is used, namely from agricultural to residential and industrial. In the peri-urban interface, these processes go hand-in-hand with transformations in the livelihood of different groups, with the poorest often losing out on income and resources.

Perhaps more significant than the absolute availability of income and natural resources in relation to population numbers and density are the mechanisms which regulate access to, and management of, such natural resources. Donoghue (1999) asserts that these include land tenure systems and the role of local government in negotiating the priorities of different users, as well as in providing a regulatory framework that safeguards the needs of the most vulnerable groups. At the same time, provision is made for the requirements of economic and population growth (Donoghue, 1999).

1.2 Traditional foods

Shava (2000) contends that traditional foods are mostly associated with health benefits as identified by their categories; millet, green leafy vegetables, roots and tubers, fruit, legumes, palm oil, wild animal meat and maize. According to Nesamvuni (2000) traditional foods hold an important place in well-balanced diets, yet the idea of this type

of food has not been widely publicised (Shava, 2000). Nevertheless, in Africa, most traditional foods are used as relish (*seshabo*), which accompanies the starchy staple food (Shava, 2000). The nutrients in traditional foods also play an important role to generate income and to ensure subsistence. For instance, the recent surveys carried out by the Natural Resources Institute (NRI) in Cameroon and Uganda provide evidence that traditional foods offer a significant opportunity for the poorest people to earn a living, without requiring large capital investment (Schippers, 2000).

Many rural societies over many generations have relied on a broad food base which includes traditional plants for their sustenance and to serve their nutritional requirements (Nesamvuni, 2000). In many traditional African cultures, the main meal comprises of a starch staple such as *imifuno*, accompanied by a supplement (the relish) of traditional plants and vegetables, meat, or a combination of these, which provides the other nutritional elements and flavour to the meals (Heever, 1997). According to Heever (1997) the relish is an important component of the diet. Rural households normally use traditional foods, such as relish, as part of their household consumption and also trade with it to generate income. Poor rural communities also adopt a range of livelihood strategies, including the consumption of, and trade in, natural resources, which might be used for traditional food, in an attempt to improve their lifestyle (Bryceson & Shackleton, 2001). Furthermore, local urban farmers, in seeking a better living than might otherwise be impossible, select the best of their products, such as grapes, peaches, bananas, and apples as well as wine, for the overseas market, as opposed to the local market, as well as for their own daily consumption (Tacoli & McGranahan, 2006). Although poor people tend to sell their traditional foods instead of using them in their own households, reliance on traditional foods, including plants, was noted by Lee (1979) in his study of the Kung San in Botswana. Lee (1979) noted that food security in the Dobe area was partly attributable to the fact that traditional plants or vegetable foods were the primary component of the local communities' diet. Plant foods are available in abundance, are locally available and predictable; while game animals are scarce and unpredictable. Although the Kung San hold meat in high esteem, they do not depend on it for their basic subsistence.

The importance and dependable consumption of traditional foods in some parts of Africa, such as the Zambezi Valley, is highlighted by researchers. For instance, Rodin (1985) documents the high-use volume of traditional plants by Kwanyana Ovambo people, while Reynolds (1989) writes about the reliance of the Tonga on traditional foods. Based on this, it is evident that the use of wild plants and traditional foods is generally a reliable food source for these communities. For instance, during drought and famine, wild food plants become a major nutritional supply (Lee, 1979; Reynolds, 1989; Rodin, 1985; Scudder 1962). But it is unfortunate that most local communities have come to regard their traditional food, including the wild plants resource base, as primitive and inferior and rely instead on an unstable modern agriculture system.

1.3 Traditional foods in South Africa as a food source

The majority of South Africa's rural population reside on the communal lands of the former homelands (Vurren, 2006) where poverty is common, leading to traditional foods being the only option for ensuring a nutritious diet (Cousins & Adams, 2001). However, despite their importance traditional foods have been overlooked for a long period of time, both by scientific and developing communities. In many areas, traditional foods are being displaced, partly because they are neglected by the scientific community compared to some recently introduced westernised foods, on which there is much more scientific information, and improved varieties, which are more easily available. Moreover, an insufficient number of traditional plants are being moved into the specialised micro-environments of urban and peri-urban agriculture (Heever, 1997).

Studies in South Africa, especially in the Eastern Cape province, indicate that, although westernised dishes are acceptable, cultural preferences and practices of mixing traditional foods in western dishes are common (Shava, 1999). Perhaps such behaviour is a result of the knowledge that people generally have of the nutritional value of traditional foods. As a result, Ruel (2003) argues that traditional foods are high in micronutrients, such as vitamin C, folic acid, iron and beta-carotene, so that they are considered to be the most

sustainable way of adding diversity to the diet, thereby controlling micronutrient deficiencies.

1.4 Traditional foods in Asia

Pingali (2004) asserts that rapid economic and income growth, urbanisation and globalisation are leading to a dramatic shift of Asian diets away from staples and increasingly towards livestock and dairy products, vegetables, fruit and oils. The rural-urban linkage in Asia, as far as traditional foods are concerned, is undergoing transition, due to various changes, such as globalisation, with the consequent global interconnectedness of the urban middle class being the driving force behind the convergence of diets. As such, Asian agriculture is currently on an irreversible transformation path leading away from its traditional preoccupation with cereal crop production, towards a system that is becoming increasingly commercialised and diversified (Pingali, 2004).

1.5 Rationale

Gelfand, Mavi & Fetuga (1985) note that most South African communities have traditionally relied on a very broad food base, including westernised Indian cuisine, while compromising their own traditional foods, which are nutritionally equally excellent. Gelfand et al (1985) further assert that traditional foods, presumably for a number of reasons, have been omitted from South Africans' regular diet. This, in turn, may have a negative effect on the local plant biodiversity, as some wild food plants are usually selectively conserved by local urban and rural communities, such as the Nompumelelo, in the Eastern Cape province. Since little work has been done in Africa and South Africa particularly regarding the documentation of RUL in the use of traditional foods by peri-urban households, this study will contribute towards such knowledge.

1.6 Statement of research problem

Traditional foods are being displaced in many areas, partly because they are being neglected by the science community, in comparison to some recently introduced western foods, which are more easily available (Shava, 2000). As such, the consumption of

traditional foods is decreasing, even in the rural areas of South Africa, in favour of introduced foods. The neglect by both policy-makers and researchers has led to a scarcity of information about traditional foods (Jansen van Rensburg, *et al.*, 2004). Documentation on traditional foods is scarce, with only elderly people remaining as the most valuable sources of information (Shava, 2000). The fear exists that, if nothing is done to preserve valuable information on traditional foods, this information may soon disappear from society, because the youth are generally reluctant to learn about such foods (Voster & Rensburg, 2007). As such, a research study of traditional foods was envisaged. The results of the study could improve the current lack of research on and knowledge about traditional foods. Although the community of Nompumelelo is largely poor, it has the potential to farm traditional foods and even to supply adjacent urban areas.

1.7 Research aims and objectives of the study

In order to achieve the aim of this study, the following objectives were set, namely:

- to investigate traditional foods, both in rural and peri-urban households in Nompumelelo;
- to explore changes in the use of traditional foods by the communities living in peri-urban areas over time;
- to make a comparative analysis of the use of traditional foods between rural and peri-urban households in Nompumelelo; and
- to make educational recommendations on how best to make use of the traditional foods to address nutritional deficiencies experienced by the average Nompumelelo household.

1.8 Research methodology

To achieve the objectives of the study an exploratory study was designed that was both qualitative and quantitative in nature. In other words, the mixed method approach was adopted. The study depicted the use of traditional knowledge, coupled with nutritional issues in terms of an action research approach, as suggested by Kuhnlein (2003). The literature study consisted of a review of relevant literature on the rural-urban linkage in

the use of traditional foods by peri-urban households. The research sample to be included in the study entailed relevant data that were systematically collected from at least 40 respondents of Nompumelelo households. In other words, the criteria was only restricted to single parents with children from 6 to 9 years enrolled in Nompumelelo Primary School (See Appendix C). The study examined narratives of the intergenerational knowledge among 40 households, consisting of single Xhosa mothers who had children ranging in age from between 5 and 10 years attending Nompumelelo Primary School. It was possible to reflect objectively on the research population. A questionnaire consisting of closed-ended questions, based on a five-point Likert-type scale (Leedy & Ormrod, 2001) and open-ended questions were used. Open-ended, qualitative questions were included to give the respondents the opportunity to make suitable suggestions. During a pilot exercise of the instrument the feasibility of the questionnaire was assessed and, where necessary, adjustments were made.

The ward chief was approached for permission to conduct the study in the community. The community was visited in July 2009 for data collection. Questionnaires were completed on a scheduled date, and at a time and venue that suited the selected households. The researcher explained the purpose of the study to the respondents, and their verbal consent was obtained before the distribution of the questionnaires. The researcher instructed the respondents on how they should complete the questionnaire. Participation was encouraged, but was voluntary. Confidentiality and anonymity were guaranteed. The data were analysed using the Statistical Package for the Social Sciences (SPSS, version 8.1).

1.9 Outline of the thesis

The outline of the remaining chapters is as follows.

Chapter 2: Literature review – This chapter starts by giving a background to indigenous food knowledge and its significance to the subject matter under discussion. Issues of rural-urban linkage are also discussed. Furthermore, the chapter highlights the role of traditional foods as a source of food and attitudes towards food practices involving

traditional knowledge. The main findings, as discussed by other academics in the field, are also given in terms of traditional foods and their significance both in rural and urban areas, the utilisation patterns of traditional foods, and other uses of traditional foods.

Chapter 3: Research design and methodology – This chapter gives a brief explanation of the research area. Research design and methods, as well as the instruments and data collection procedures that were used in the study, are highlighted. The chapter concludes by discussing ethical considerations, and outlines the ways in which constraints were dealt with in order to supplement the quality of the research process and results. The processing of the data is also presented in this chapter.

Chapter 4: Results and discussion – In this chapter, the results and discussion of the main findings of the study are provided. The chapter is divided into two sections, with the results being covered in section 1, and discussions in section 2. The results are presented in table and graphical format as well as descriptive sections. The discussions are interpreted and the linkages between the results and the literature are provided.

Chapter 5: Summary, recommendations and conclusion – A brief summary regarding the study is provided in this chapter. Secondly, limitations of the study are identified, and recommendations made. Recommendations regarding intervention strategies to increase traditional food use and future research are also made. Lastly, the chapter draws conclusions from the main findings of the study.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter gives an overview of available literature regarding the investigation of the rural-urban linkage in the use of traditional foods by households in the Nompumelelo area. The literature covers the roles of traditional food, the rural-urban linkage in the use of traditional foods, and the relationship between traditional food and health. It briefly outlines the Nompumelelo area as a link in the rural-urban and traditional knowledge of traditional foods and of the nutritional value of traditional foods.

2.2 South African food culture

2.2.1 A historical perspective of traditional foods in the Eastern Cape

The history of South Africa shows that most traditional rural people in South Africa moved to the south of KwaZulu-Natal about 1,500 years ago (Thompson, 2000). These people were primarily nomadic farmers, who combined knowledge of cattle-keeping and slash-and-burn cultivation with expertise in metalwork. The farmers chose to minimise the risk of crop failure rather than to maximise their production (Thompson, 2000). These rural people kept large herds of cattle and attached great material and symbolic value to these animals (Nesamvuni, 2000). Cattle were valued for their milk and hides, but were seldom slaughtered for meat, except for ceremonial occasions. Hunting game provided them with meat, a major source of protein, while additional supplies came from domesticated goats and sheep. Furthermore, rural people cultivated a range of traditional crops, including millet, sorghum, beans and melons, along with other grains and vegetables (Nesamvuni, 2000). Those people who settled close to the sea fished and collected shellfish. By using a range of food sources, the farmers spread the risks of food insecurity in an ecological system that was constantly subject to drought, disease and crop failure (Nesamvuni, 2000).

Traditional foods used by people in the rural areas of South Africa were derived mainly from wild edible plants (Fox & Young, 1982). The introduction of new crops and foods by Europeans, and new techniques for growing the crops resulted in a change of diet (Fox & Young, 1982; Thompson, 2000). The introduction of white-owned trading stores with attractive food items, such as processed fats and spices, meant that people had to find employment in order to afford to buy from the trading stores (Callinicos, 2004; Fox & Young, 1982). The growing population and an increase in livestock resulted in people having to pay the taxes and levies imposed by their chiefs (Callinicos, 2004). With time, it became impossible for the rural people to provide enough food for their households without having also to earn cash (Fox & Young, 1982; Thompson, 2000). The result of these changes was that people increasingly came to rely on purchased foods (Thompson, 2000). The reliance on processed foods very likely led to traditional foods becoming less dominant in traditional people's diets. There may be many other factors, however, that influenced the decline of traditional diets in the rural culture, such as improved knowledge about other food types and changing socioeconomic circumstances. In spite of western influence, there is evidence that traditional people in rural areas have maintained elements of their traditional lifestyles, including their tendency to use traditional foods (Fox & Young, 1982). Unfortunately, published literature on how traditional diets have been modified through the influences of modernisation (the introduction of exotic foods and associated changes in lifestyles affecting preferences) is very scarce.

2.2.2 Historical and contemporary Xhosa traditional foods

As a matter of fact, it is true that almost all rural people make traditional foods from cultivated crops and edible wild plants collected from cultivated fields and/or the veld (Modi, 2009). Cultivated traditional crops typically include cereals, legumes and cucurbits (Modi, 2009). Historically, the most common legumes used by rural people were cowpeas and groundnuts (Fox & Young, 1982). Popular cereals were bulrush millet, finger millet and sorghum (Fox & Young, 1982). Popular cucurbits were gourds; African melons see figure 2.1 below, and pumpkins (Fox & Young, 1982). These crops were used to make a variety of traditional dishes. An example of a popular traditional dish in rural

areas is shown in figure 2.2, and commonly used traditional vegetables for preparing traditional foods are shown in figure 2.3.

Figure 2.1: African melon, a traditional cucurbit of the Eastern Cape, known as *umxoxozi* in isiXhosa (Source: Modi, 2009).

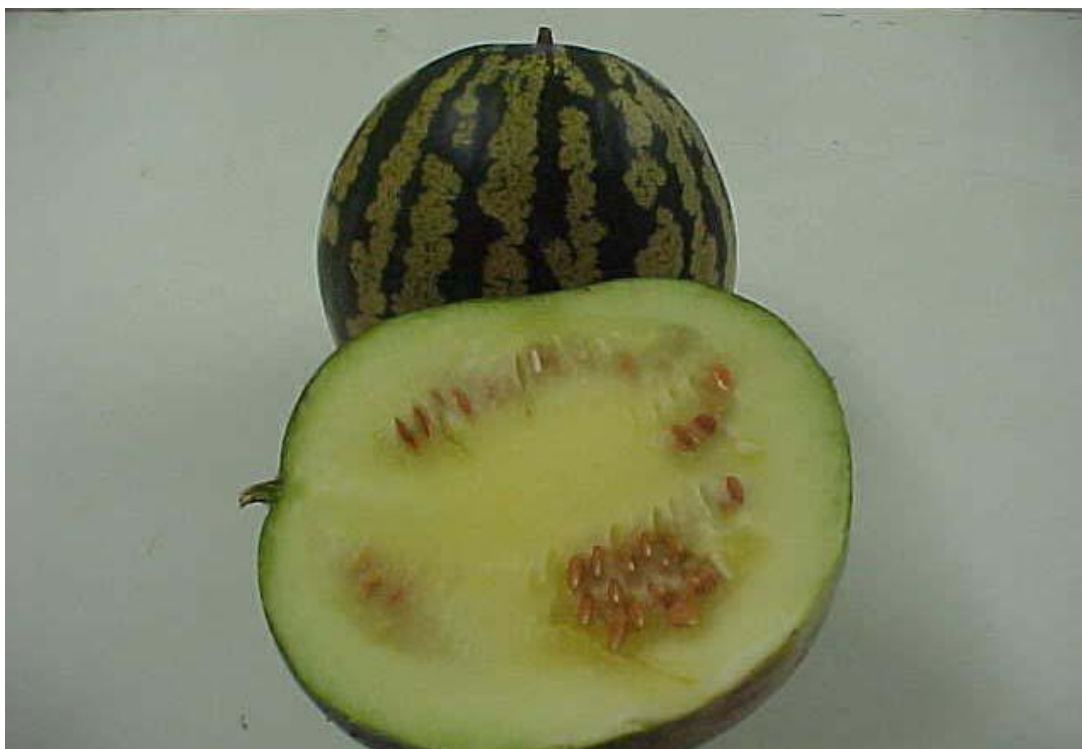


Figure 2.2: Four plates of *umqa*, a traditional Xhosa dish (Source: Modi, 2009).





Figure 2.3: Commonly available traditional vegetable used by Xhosa people and other ethnic groups in South Africa (*Amaranthus species*) (Source: Modi, 2009)



Figure 2.4: Isigwamba, traditional dish prepared from cooked Amaranthus and maize meal

Source: Researcher's own work

Table 2.1: Some popular traditional foods as postulated

Source: Nyembezi and Nxumalo (1966)

<i>Amarhewu is maize meal that is cooked to make porridge. Cool porridge is fermented overnight before it is ready to serve (Nyembezi & Nxumalo, 1966).</i>
<i>Inkobe is boiled maize grain. Maize grain can be used either fresh or dry.</i>
<i>Ugume or ukhothe-roasted maize powder is eaten as a traditional snack. Ugume can be stored in an airtight glass container for up to a year (Nyembezi & Nxumalo, 1966).</i>
<i>Ujeqe is bread made by boiling crushed green maize or sorghum. Green maize is crushed to make dough. The dough is raised by adding a small amount of traditional beer to it. The dough is then covered in maize husks and steamed in water until it is ready for use (Nyembezi & Nxumalo, 1966).</i>
<i>Umbaqanga is a thick porridge that is made from crushed maize or sorghum and beans (Nyembezi & Nxumalo, 1966). Beans are cooked until soft. Crushed maize and salt are then added to the cooked beans and the mixture simmers, while being stirred occasionally, until the maize is soft.</i>
<i>Umdokwe is porridge that is made from maize or sorghum flour and served warm. The flour can be fermented in warm water overnight and cooked sour before being served. Sugar may be added to the porridge (Nyembezi & Nxumalo, 1966).</i>
<i>Umngqusho is made from stamped dry maize cooked with or without beans (Nyembezi & Nxumalo, 1966). To make stamped maize (samp), dry maize grains are stamped (crushed into large pieces, while removing the seed coat) on a wooden stamping-block.</i>
<i>Umqa is made from crushed maize mixed with pumpkin (see figure 2.2). The pumpkin is boiled soft before maize meal is added. The mixture is cooked for a few minutes before being served warm (Nyembezi & Nxumalo, 1966).</i>
<i>Umvubo is prepared from fermented milk (amasi) and maize or sorghum. Maize or sorghum is boiled, pounded and then mixed with fermented milk. The mixture is allowed to stand for a while before being eaten (Nyembezi & Nxumalo, 1966).</i>
<i>Umxfafele is a mixture of inkobe, cooked together with wild vegetables or pumpkin leaves (Nyembezi & Nxumalo, 1966). Salt is added to the mixture.</i>
<i>Isigwamba is made from maize meal cooked with Amaranthus (Nyembezi & Nxumalo, 1966). Salt is added to the mixture.</i>

Even though table 2.1 shows popular traditional foods, the taste of these foods is changing due to modern ingredients currently being added, such as spices and cooking oil, which were not previously part of rural people's diet (Modi, 2009). Disuse of some traditional ingredients, such as traditional and wild plants, may be due to their lack of

availability, lack of knowledge (for instance, their nutritional value, cooking guidelines and so forth) about them, and pressure to comply with modern preferences in food tastes (Drewnowski, Henderson, Levine & Hann, 1992). Despite the rich food culture of rural people (Nyembezi & Nxumalo, 1966; Sosibo & Harvey, 2000) and interest in it, there has been no attempt to quantify the nutritional value of traditional dishes. Little literature has been published on the nutritional value of traditional dishes in South Africa, apart from the information on specific ingredients that was made available by Kruger, Sayed and Kirsten (1998). Recent studies, such as that of Modi and Modi (2006) and Mbenyane, Venter and Laker (2005) have argued that there may be a decline in knowledge about traditional foods. Modi and Modi (2006) suggested that wild vegetables are comparable, or might even be better than conventional vegetables, with regard to some nutrients. Mbenyane, *et al.* (2005), postulated that there is a need for investigation into the nutrient status of traditional foods, in order to promote their consumption in South Africa.

2.3 The role of traditional foods in peri-urban households

According to Fox and Young (1982), traditional societies, through a process of trial and error experimentation in their environment, acquired immense knowledge on the use of fauna and flora around them. Based on the diversity of life, they relied on a high proportion of traditional foods for their diet. These traditional foods formed a very broad resource base. According to Allantyre and Flueret (1975) a substantial amount of research was conducted into the nutritional quality and importance of many traditional foods in South Africa. Some examples of traditional rural foods found and eaten in Nompumelelo are *amasi* (soured milk), *umngqusho* (samp and beans), *imifino* (wild leafy vegetables), *umphokoqo* (mealie meal with *amasi*), and *amarhewu* (an energy drink made with fermented mealie meal).

According to Flueret (1979), traditional foods played an important role in the traditional diets of African people until late in the 19th century. Lamentably, the rural-urban linkage, as far as the use of diversified traditional foods is concerned, is somehow weakening. Gomez (1988) claims that economic and technological growth have had a debilitating effect on traditional cultural values and food habits, which has led to a shift away from

traditional food resources. Maundu (1995) cites westernised markets, formal education, urbanisation, and change in food preferences as factors contributing to the loss of traditional knowledge regarding traditional edible species.

Maundu (1995) further asserts that rural-urban linkages can reduce vulnerability, and play a critical role in the livelihood strategies of the poorest groups, both rural and urban. Low-income rural dwellers often rely on urban-based traditional foods and on remittances and other transfers from migrant relatives. Low-income urban dwellers often rely on traditional foods, and on the help of rural relatives, in looking after children and family property (Maundu, 1995).

2.4 Rural-urban linkage in the use of traditional foods

Rural-urban linkage in the use of traditional foods is the result of several influencing factors, including population and migration pressure, the introduction of alien species, agricultural practices, and many more. Husselman and Sizane (2006) assert that, in rural areas, the main reasons why people prefer traditional foods are the impact of agricultural practices and the availability of the food.

Though traditional foods, such as *imifino*, are inexpensive (or free if grown at home), easy to prepare and very healthy, they are rarely grown any longer in the context of an urban lifestyle. This is leading to the loss of knowledge about, and the recognition of, the different varieties of traditional foods. Husselman and Sizane (2006) also note that *amasi* served over *umphokoqo* seems to be cheaper if made at home using fresh milk. According to Husselman and Sizane (2006), urban lifestyles are leading to distancing sources of fresh milk, and processed brands are taking the place of the home-made products. Hoppers (2002) claims that the shift to processed foods, typically leads to an increase in the use of sugar, colouring, preservatives and other additives, as well as an increase in packaging, which contributes to the solid waste problem.

Wehmeyer and Rose (1983) indicate that people might be compelled to consider using edible traditional food because of the rising costs of processed and other retail foods.

Allemann, Venter and Heever (1995) support this belief and indicate that the use of traditional edible foods is likely to increase, due to the rising demand for food, especially in places of low agricultural production, due to the unfavourable climatic conditions and to the community's annual population increase.

However, there is some resentment, however, from certain members of rural communities, who perceive traditional foods in a negative way. Allemann *et al.* (1995) and Singo (1996) indicate that agricultural scientists tend to neglect edible wild foods for two reasons: firstly, because such foods are perceived to be of low value, and secondly, because of the influence of westernised diets. This statement supports the claim by Billet (1990) that, historically, exotic foods were promoted by the early settlers, who introduced them for their cash value.

Some communities have come to rely on commercial crops, to the detriment of their local food sustenance. Slikerveer, Bennum and Stoller (1995) claim that, until the 1960s, Africa was self-sufficient in its food production. The introduction of high-yielding commercial crops marginalised the growing of traditional food crops. Some people in Nompumelelo rely on commercial crops, that is food which they previously grew for their own use and home-grown food that is sold on their streets. Mass-produced items are preferred to vegetables bought from the markets, or those that are grown in their community garden (Shava, 2000).

2.5 Indigenous people and traditional food knowledge

Knowledge that reflects an interest in and recognition of traditional foods is "local food knowledge that is unique to a given culture or society" (Warren, Bennum & Carlier, 1995). Such knowledge is on the increase, with the continued realisation of how this knowledge can benefit the country as a whole. The International Forum of Non-Governmental Organisations held in Rio de Janeiro (and which was reported on by the National Research Council in 2006) summarised the importance of traditional foods in the following classical phrase: "Environmental Education must recover, recognise, respect, reflect and utilise traditional history and local cultures, as well [as] promote

cultural, linguistic and ecological diversity." This phrase was later on adopted as one of its principles.

Traditional people, through a long period of interaction with their surrounding environment, are vested with comprehensive knowledge on the potential use of local foods in such an environment. Balick and Cox (1996) claim that ". . . the relationships between plants and people are often clearer in traditional communities than in our own, since the link between production and consumption is more direct to the nutritional value of traditional foods".

2.6 The use of traditional foods in South Africa

Wehmeyer and Rose (1983) posit that the role of wild or traditional foods in nutrition is recognised in Africa. Influences over 2,000 years have changed food consumption patterns considerably, specifically in terms of the use of modern food crops, which provide energy in the diet. In this process of change, the displacement of traditional foods has increased micronutrient deficiency (Modi & Modi, 2006).

In summary, in Nompumelelo, as well as in South Africa as a whole, traditional foods play an important role, as far as diets are concerned. Traditional food systems have enabled people to develop a kind of wisdom of their own, as they have come to realise the importance of diversity without knowing the specific nutrients in individual foods that go towards making a healthy diet (Johns, 2003). Dietary quality studies of traditional food systems can be strengthened by the scientific analysis of those nutrients that have not yet been analysed as forming part of the food concerned.

2.7 Significance of traditional foods in the history of the Xhosa people

A few studies on the uses of traditional foods have been conducted in different regions of South Africa. Wehmeyer and Rose (1983) examined the traditional foods used in the Transkei, Eastern Cape province, whereas Ferreira (1996) studied traditional plants used for medicinal purposes in the Western Cape. Nompumelelo is one of the communities where edible traditional foods are still frequently used. The gathering and use of

traditional foods have been noted as activities that still take place in the rural parts of the Eastern Cape province. Historically, rural people extensively used various types of traditional foods and had a wealth of knowledge about plants (Mabongo, 1990). Apart from eating the plants, they also used them to produce oils, medicine, firewood, beverages, baskets and other artefacts.

2.8 Conclusion

In this chapter it was noted that the importance of traditional foods has been overlooked for a long time, both by the scientific and the developing communities. Nonetheless, the researcher outlined the context of the study, describing the rural-urban linkage in the use of traditional foods by peri-urban households in Nompumelelo. In doing this, a range of literature was reviewed and the role of traditional foods in peri-urban households was defined. There is an assumption, particularly in the eyes of the youth and urbanised communities, that traditional foods are associated with poverty, the past and a sense of low self-esteem. Furthermore, it is an open secret that rural African people tend to know a great deal about traditional foods. Surprisingly, the interest in traditional foods by traditional food- and policy-makers contrasts with the extent of use and consumption of traditional foods by the communities.

The next chapter focuses on the research design and methodology.

CHAPTER 3

METHODOLOGY

3.1 Introduction

Research that focuses on the linkage between traditional foods and their peri-urban counterparts includes the study of methods that address the need for local participation, for respect and for making provision for the local culture and circumstances. In this study, the majority of respondents came from peri-urban areas whilst a minority group came from urban areas. However, such research requires the researcher to work in the local language and to build local capacity in order to assist such ventures (Kuhnlein, 2003). Individual interviews of community members and focus group discussions can be conducted when undertaking research on traditional knowledge, which can promote activities that improve a community's micronutrient status (Kuhnlein, 2003).

In this chapter, a description of the study area and the study population is provided, followed by a description of the scoping visit to, and the observation of, the research area, as well as a description of the piloting and data gathering visits that the researcher undertook for the purposes of the study. The chapter further documents the details of the research method used, in terms of the sampling, data collection and data analysis techniques employed. Ethical considerations for the study are also discussed and the chapter concludes by presenting the constraints faced during the data-gathering process.

The scoping of Nompumelelo as a potential study area was initiated by personal communication with a vendor who sells *umbona* (maize) at a street market in East London. The scoping and observation visit took place in March 2007, and the following observation parameters were set:

- the distribution of traditional foods;
- the similar location of peri-urban and traditional Nompumelelo households; and
- the geographical classification of the area.

Through personal communications with respondents it was found that traditional foods were growing prolifically in Nompumelelo, with most of the local inhabitants being known to utilise traditional foods in their diets. The literature consulted revealed that the Eastern Cape province has an abundance of traditional foods (Shava, 2000). The presence of two Xhosa communities, one peri-urban and one traditional, situated in Nompumelelo necessitated further investigations to establish whether their diet was in need of food-based supplementation, as well as their role as social leaders (peri-urban) and as participants in social groups (traditional), therefore determining their potential interest in the inclusion of traditional foods in their diets. The Nompumelelo community practises homestead farming, making use of home gardens that community members plant around each of their homesteads. In terms of these scoping and observation findings, Nompumelelo was considered to be a viable community as study area since the community could help the researchers to understand the RUL in the use of traditional foods better.

3.2 The study area

Geographically, Nompumelelo is situated within the Eastern Cape province of South Africa, about 10 km north-east of East London. According to Buffalo City Municipality (BCM, 2004) the area is a peri-urban community, with a population of around 1,200 families. According to the South African Cities Network (2004) the area is in transition, with houses increasingly becoming electrified, and steadily more water and sanitation services being supplied. Historically, the area houses migrants from the rural areas of two former homelands, namely the Transkei and Ciskei, who moved into the area in an effort to seek employment. Nompumelelo, which is adjacent to the upmarket suburb of Beacon Bay, used to be a squatter camp with an impoverished community, before the government built rural development programme houses in the area.

The Nompumelelo surroundings are portrayed in the following figures. Figure 3.1 below shows that the Nompumelelo community still needs more development, as can be seen from the fact that the local streets are not tarred. Despite Nompumelelo lying within the East London city boundaries, in the Beacon Bay area where advantaged people reside, most of the houses in the area are mere shacks. In addition, government intervention is urgently required, as the community is severely disadvantaged.



Figure 3.1: Untarred roads reflecting the poor infrastructure in Nompumelelo

Source: Researcher's own work (2009)

Figure 3.2 below shows Nompumelelo community's informal waste dumping site, from which some of the residents harvest traditional vegetables.



Figure 3.2: Nompumelelo community's informal waste dumping site

Source: Researcher's own work (2009)

Figure 3.3 below shows the waste ground in the area that is often used as a veld toilet by those who lack proper latrines.



Figure 3.3: Waste ground used as a veld toilet.

Source: Researcher's own work (2009)

Figure 3.4 below shows the exposed sewage pipes and the traditional vegetables that grow alongside the sewage flow. The residents of Nompumelelo collect edible vegetables that grow here to eat.



Figure 3.4: Vegetables growing alongside exposed sewage pipes

Source: Researcher's own work (2009)

3.3 The history and dietary habits of Nompumelelo residents

Nompumelelo residents live scattered throughout the area, supporting the findings of Stayt (1968) that the rural inhabitants of the region form part of a tribe that most recently migrated to the Eastern Cape province.

The staple food of Nompumelelo residents is a porridge called *isidudu*, in addition to which they also eat various traditional dishes, namely *umgubo*, *amabele* and *umghayo*. *Amabele* is another type of *isidudu* that is made from maize meal, but which is less frequently eaten in contemporary society. *Umgubo* is made of refined meal that is gradually added to boiling water while stirring until the desired consistency is obtained, and then simmered for about 30 to 40 minutes. *Umghayo* takes less time to prepare. Other foods that are cultivated in Nompumelelo include sweet potatoes, watermelon, groundnuts and vegetable marrow. This is discussed later on in the current study.

3.4 The piloting visit

Before commencing with the main study, a pilot study was conducted, in order to obtain valid and reliable information on the questionnaire design and layout, as well as on its wording and the measurement scales used. The feasibility of the questionnaire was assessed, and necessary adjustments were made. A preliminary exploratory study, as suggested by Strydom and Venter (2002) which was conducted in relation to *umbona* (maize) was used in order to obtain a preliminary access point for the purposive sample, so that those elements that represented the most characteristic attributes of the population could be ascertained. In this case, the attributes consisted of the presence of traditional foods, coupled with the assumption that the households concerned would be making maximum use of the traditional foods available. The relevant food managers were then interviewed. According to Lewin (1948) such food managers serve as the gatekeepers for the households' food decisions. The purpose of the interview was foremost to pilot the interview schedule (see Appendix B) and to gather the necessary information in order to allow for the planning of the main data-gathering visits in terms of the practicalities of data gathering, to securing of the details for the completion of the interview schedules,

as well as to gain access to the communities concerned through the correct authorities and tribal rulings.

During the first interview, information came to light that resulted in the adaptation of the interview schedules that had been compiled for use in the main study. It was discovered that strangers were not freely allowed into peoples' homes, which prevented strangers from being invited as part of a focus group to one of the interviewee's homes. The agreement of an extended family to participate in the focus group discussion was, therefore, obtained. Strydom and Venter (2002) propose that the judgement of the researcher determines the composition of the purposive sample in terms of which elements represent the most characteristic attributes of the population.

As part of the piloting visit, a contact person in peri-urban East London referred the researcher to a community leader in the Nompumelelo area, through which contact was made to gain access to households that were members of various social groups in Nompumelelo. Finally, with the assistance of the community leader in Nompumelelo, the researcher was introduced to the ward councillor of Nompumelelo falling under Buffalo City Municipality (BCM). Permission was sought from the ward councillor concerned to proceed with the research to be conducted at Nompumelelo Primary School. Arrangements were made with the principal of the school to visit a group of women who had children under the age of ten years attending the school, in order to ask them to assist in identifying some common traditional foods that were used in the Nompumelelo community. The school's small hall provided a suitable venue for the interviews. None of the women respondents in the study gave their permission to be photographed or videotaped, despite such a method being recommended for indigenous research (Kuhnlein, 2003).

3.4.1 Data-gathering visit

Both quantitative and qualitative investigations were undertaken, which necessitated that two visits be conducted to obtain most of the data required. The gathering of information on the knowledge and utilisation of traditional foods and the peri-urban sampling (which

comprised the first half of the second, third and fourth research objectives) were conducted during October 2007. The traditional community was visited during February 2008, during which time the rural-urban linkage in respect of the use of traditional foods by peri-urban households (which comprised the second half of the second, third and fourth research objectives) was assessed. During both the visits, most of the traditional foods were in full bloom.

3.5 Research methodology

The researcher chose to conduct the study in the Nompumelelo area in order to share her concerns (which were related to health, traditional food and nutrition) with those female residents of Nompumelelo who were single parents. Such a focus would allow light to be shed on learning by means of co-engaged interactions about local practices and emerging concerns. A set of between 30 and 40 households were systematically selected, with focus group questionnaires relating to the use of traditional foods by the Xhosa community of Nompumelelo being administered to female single parents who were responsible for the food preparations in their households, as it was assumed that they were suitable candidates to interview about food accessibility and its utilisation. The participants' reasons for accessing food will be reviewed during the course of the study.

The data obtained by means of the current study were verified and compared with other research on traditional foods that was conducted in the rest of Africa and in other parts of the world. The literature study, as described in chapter 2 of the current thesis, focused on material relating to the accessibility of food. A set of 40 Xhosa households from the peri-urban community of Nompumelelo was selected and interviewed. The interviewees were asked about their awareness of the rural-urban linkage in the use of traditional foods by peri-urban households in Nompumelelo, and also about how they utilised food in their households.

The study investigated the nutritional value of traditional foods and considered ways of educating people about the value of such foods. The need to promote sustainable use of

natural resources for the benefit of 'poor people' in rural communities was examined and explored.

This research consists of an ethnographic case study of the link between rural and urban areas regarding the use of traditional foods by peri-urban households in Nompumelelo. Nompumelelo was chosen because the community is surrounded by others that cannot be expected to contain many individuals with such rich knowledge of traditional foods (Cunnigham, Jager & Hansen 1992). The relationship between people and traditional foods is often clearer in traditional societies, since the link between production and consumption is more direct, as has been noted by Balick and Cox (1996) regarding the rural-urban linkage and the knowledge of traditional foods.

The participants provided details about how they obtained the maximum benefit from their monthly supply of food by skipping meals during the day. They also explained how they accessed food. Those who were found to have a low score were assumed to be more likely to be interested in being introduced to an alternative food source due to their need to diversify their diet. The expected variation in the need to diversify the diets was verified in terms of the peri-urban and traditional Nompumelelo community.

The focus groups, with which fixed semi-structured interviews were used, were identified from the Nompumelelo community. Such interviews consisted of prepared questions that are asked in the same order of each interviewee. Although this style lacks the free flow of a friendly conversation, it provides the precision and reliability required in certain situations. This style is also called directive interviewing, which is an alternative to structured interviewing. The style stresses the need to understand the challenges faced by the interviewees. The interview consisted of preset questions and followed a fixed pattern.

3.6 Research design

According to Mouton (2001) a research design is defined by "a set of guidelines and instructions to be followed in addressing the research problem". Mouton (2001) also

explains that a research design mainly enables the researcher to anticipate the appropriate research decisions, in order to obtain valid results.

This research followed both a qualitative and a quantitative approach, and focused its investigation on one specific community. The research methodology dealt with individual female single parents who provided for their family within the context of the culture commonly practised in the Nompumelelo area (Wiersma, 1986).

The research was carried out using questionnaires and focus groups of 40 single-parent households. The rural-urban linkage regarding the use of traditional foods was evaluated by accessing the experience of single-parent families and their children, as well as by assessing health nutrition experience using the focus group technique. Efforts directed towards, and suggestions for, increasing the accessibility of food in Nompumelelo for female single parents in the focus group related to improving the relationship between the community and families in it, including those families with children ranging between the ages of 5 and 10 years. The questionnaire used in this study was adapted from the questionnaire used by Nesamvuni (2000) whose study showed some similarity to the current research.

Based on the preparations that were made during the scoping and observation visits, as well as the piloting visit, the research methodology used during this study is documented below.

3.6.1 Sampling

Purposive sampling was used to select the participants concerned. This was followed by the random selection of subcommunities from the broader Nompumelelo community. The random selection of the subcommunities took place in accordance with the guidelines set out by Vos (2002). A random sample of 40 conveniently chosen rural urban households with children under the age of ten, who formed part of the broader Nompumelelo community, was undertaken. The questionnaire used consisted of two sections: one that was sociodemographic in nature and one that tested the knowledge of those from among

the Nompumelelo community using traditional foods. The questionnaire is provided in Appendix C.

3.6.2 The research interviews

The choice of interviews or conversations was aimed at obtaining a much broader view of the level of input each single parent in a family had when using traditional food. Most of the interviews were conducted in isiXhosa, which enabled the researcher to be more informative and to overcome the limitations that would most probably have been encountered when using English. The use of their home language was significant for interviewing female single parent heads of households, as it facilitated obtaining a broader view of what happened in the Nompumelelo community regarding the use of traditional food and the processing of vegetables.

The participants in the study also had access to, and utilised, traditional foods and plants found around the area chosen for the study. Such a perspective was meaningful, cognitively sound, and had the capacity to be explicit (Patton, 1990). The involvement of members of the Nompumelelo community in securing food accessibility was of primary importance to the study. Their involvement was usually obtained after informing the families concerned, and after their permission had been obtained for the researcher to access information regarding food accessibility and the utilisation of indigenous plants as food. All that transpired during the interviews was recorded by hand. The researcher made no tape recordings or video clips, although the supervisor of the study took some photographs of the area concerned on the first day. The interviews ranged from between one and a half to two hours in length, depending on the enthusiasm and eloquence of the participants concerned.

3.6.3 Interview guide

The initial intent of the researcher was to approach members of the community of Nompumelelo in the absence of any kind of structured interview. The interview had to be prepared using a questionnaire as an interview guide, allowing enough room for change in a real situation, and allowing as much attention as could be gained to be paid to

relevant topics. The interview, which was semi-structured, contained open-ended questions, allowing for enough flexibility to incorporate new topics or questions and to discard unnecessary ones (Irwin, 1999). A full interview guide is given in Appendix C of this study.

3.6.4 Focus group interviews

The focus group interviews were originally intended for households headed by single mothers and for some individual participants, since it was thought that they were the relevant people with relatively more knowledge about the traditional foods that were available in the area of residence of the Nompumelelo community. During the field research, the focus group interviews were only used as a data collection technique with households consisting of families. The focus group interviews were, however, a convenient method of gathering data from the respondents, and they facilitated interaction between the participants concerned (Kitzinger, 1994).

3.7 Traditional food analysis

The use of condiments was determined by the type of food eaten and by their availability; however, an effort was made to cover (flavour) the different food types (fruits, roots / tuber plants, and wild spinach). Traditional food status was accessed by standardised questionnaires, allowing for the meaningful interpretation of nutritional standards. Indicators of socioeconomic conditions, cultural practices, health statistics, food-related behaviour and knowledge, attitudes and practices were also considered. The dietary intake was measured qualitatively in terms of the preparation of food that supplied energy and nutrients for satisfying constitutional requirements.

3.8 Data analysis

The purpose of data analysis is to shrink the information gathered into a manageable and interpretable form, in order to establish relations between the research problems considered and the conclusions to be drawn (Vos, 1998). Blanche and Durrheim (1999) explain that the data analysis process does not start after the data collection process has been completed, but should occur concurrently with the latter process. The quantitative

data in the present study were analysed using Microsoft Excel (2004) and are described as percentages in the relevant sections of chapter 4. The qualitative data themes were identified and developed and descriptive analyses of the data are also reported in chapter 4. Demographic information was analysed using frequencies. Numerical values were allocated to the data collected by means of the application of questionnaires. The quantitative data were then presented in tables, and the qualitative data were analysed and presented descriptively. Inconsistencies and unique statements were noted and given particular attention.

3.9 Ethical considerations

A letter (see Appendix B) seeking permission to conduct the study was written to the ward councillor of Nompumelelo explaining the nature of the intended research and the reasons for conducting the research. This was followed by a face-to-face meeting between the researcher and the ward councillor during the initial scoping study visit, in order to clarify the issues pertaining to the research process. It was explained that the councillor was under no obligation to allow the researcher to undertake the study in the area, and that no community member would, under any circumstances, be forced to participate in the study. The individual consent of the participants was sought by means of a consent form that was drafted and handed to each participant to sign before they decided to form part of the study. The consent form (see Appendix A) explained the details of the study and assured the participants that the information obtained would only be used for the purposes of the study.

3.10 Constraints

All the women who participated in the study stated that they were willing to participate in it, and to convey the necessary information to the researcher concerned. The participants gave the researcher an idea of the daily challenges that they were facing in their daily lives by bringing up their children alone. Certain families were found to be surviving by not eating food for two days, which was a key point made during the interviews.

Variations were found in the vernacular names used to identify traditional foods, which necessitated a follow-up visit for species identification and verification. Furthermore, the fact that the interviews were conducted in the vernacular further justified the follow-up visit to collect the identified traditional foods and to take them to a herbarium for identification and verification.

As mentioned in section 3.4, none of the women who participated in this study gave their permission to be photographed or videotaped, this being a method recommended for traditional research (Kuhnlein, 2003).

During the collection of samples, accessibility of some of the food became a problem, especially that which could only be harvested from natural fields or from along river banks. This meant that in these instances, the researcher and the research assistants had to walk long distances, as the places concerned were not accessible by motor vehicle. This became a problem, as most of the research assistants were elderly women who were unable to walk long distances. To deal with this constraint, a number of women were used as research assistants, so that they could work rotationally, thus allowing them periods of rest.

3.11 Summary

In this chapter, the study area and population, as well as the procedures for administering the research interview schedule, were discussed. The research design, the initial visit and the observations that were undertaken, as well as the method of data collection, were also highlighted. Ethical considerations that were taken into account during the study have been pointed out and the constraints that the researcher had to face were indicated. This chapter, therefore, reported on the procedures that took place to identify and document the utilisation and harvesting, the processing and the preservation practices regarding traditional foods from the Nompumelelo community. The chapter, furthermore, reported on the use of traditional foods in peri-urban households. In the next chapter, the results that were obtained are presented and discussed.

CHAPTER 4

RESULTS AND DISCUSSIONS

4.1 Introduction

The overall aim of the current study was to investigate the rural-urban linkage in the use of traditional foods. The analysis of the findings discussed in this chapter will take its lead from the set objectives. The findings are discussed to compare results in the first instance, as well as the nutritional content of foods. This approach helps to determine whether the respondents used traditional foods and, if so, how frequently. The role of traditional foods and their implications for the sustainability of traditional foods are also discussed.

This research consists of an ethnographic case study involving the link between rural and urban areas regarding the use of traditional foods by peri-urban households in Nompumelelo. Nompumelelo was chosen because the community has many individuals with a rich knowledge of traditional foods, which is not the case in the other surrounding communities (Masekoameng, 2007). The relationship between people and traditional foods is often clearer in traditional societies, since the link between production and consumption is more direct, as has been noted by Balick and Cox (1996) regarding the rural-urban linkage and the knowledge of traditional foods.

The participants provided details about how they obtained the maximum from their monthly supply of food by, for example, skipping out on meals during the day, and explained how they accessed food. Those who were found to have a low score were assumed to be more likely to be interested in being introduced to an alternative food source due to their need to diversify their diet. The expected variation in the need to diversify the diets was verified in terms of the peri-urban and traditional Nompumelelo community.

Members of the Nompumelelo community were identified to take part in the focus groups and fixed semi-structured interviews were conducted with them. Such interviews consist of prepared questions that are posed to each interviewee in the same order. Although this style lacks the free flow of a friendly conversation, it provides the precision and reliability required in certain situations. This style is also called directive interviewing and is an alternative to structured interviewing. The style stresses the need to understand the challenges faced by the interviewees. The interviewer concerned used preset questions and followed a fixed pattern.

The sociodemographic data are provided to give background information on the samples that were drawn. The usage patterns of traditional foods in the diet, the reasons for use, and the associated traditional knowledge are presented in response to the first research objective. This is followed by an assessment of the variations, in terms of household diet diversification for each of the samples, in response to the second objective. The acceptability of a possible introduction of traditional food as an additional diet is finally discussed in addressing some of the research objectives.

4.2 Sociodemographic data

Sociodemographic data are provided to furnish background information on the sample groups. Due to the descriptive qualitative discussion that the result section follows, the statistical quantification of data was limited to addressing the research objectives only, and, although correlations between sociodemographic data might exist, they were not pursued, due to the scope that has been set by the exploratory nature of the study. In this study, 70% of the data can be attributed to rural households whilst the remainder (that is, 30 %) came from urban households.

4.2.1 Geographical data

By means of maps, the next three pages illustrate the location of South Africa, the Eastern Cape, and Nompumelelo respectively. South Africa is located in the Southern African part of the African continent, as is illustrated by the map in figure 4.1 below.



Figure 4.1: Map of South Africa showing its current nine provinces

Source: Eastern Cape Tourism Board (2009)

The map in figure 4.2 below illustrates the location of the Eastern Cape province (including the city of East London), which is located in the eastern part of South Africa.



Figure 4.2: Map of the Eastern Cape, showing the city of East London

Source: Eastern Cape Tourism Board (2009)

The map in figure 4.3 below illustrates the location of Nompumelelo (coloured in yellow) in East London.

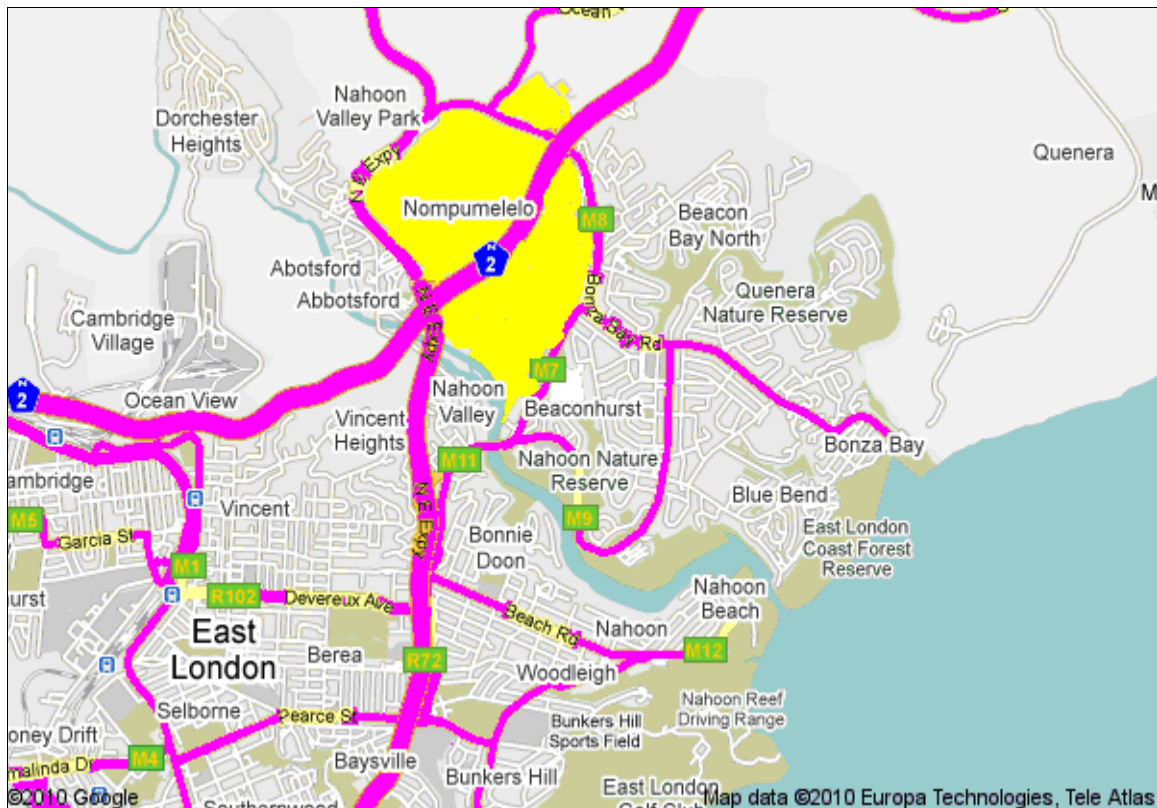


Figure 4.3: Map of Nompumelelo and surrounding areas

Source: Eastern Cape Tourism Board (2009)

4.2.2 Age of respondents

The respondents were grouped into five different categories, as is shown in figure 4.4 below. The results indicate that the majority (42.5%) of the respondents were relatively young, between the ages of 36 and 45 years. Those who were found between the ages of 26 to 35 years constituted 35% of the respondents, compared with those who were between the ages of 17 and 25 years, 46 and 56 years, and 56 years and above who were each found to constitute 7.5% of the total number of respondents.

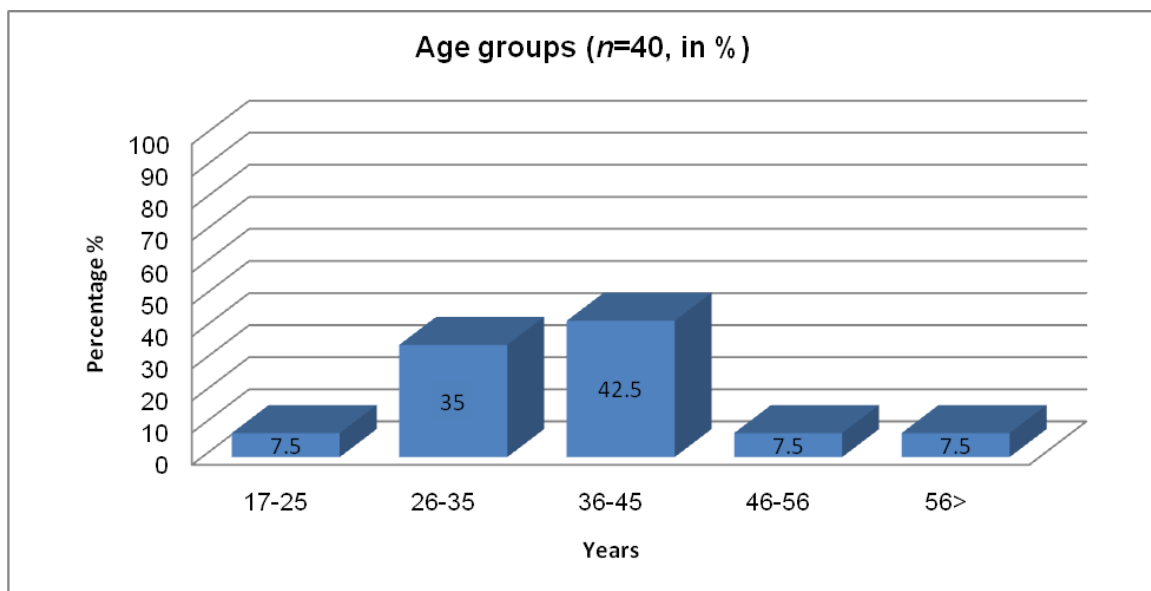


Figure 4.4: The age in years of the female single parents

4.2.3 Marital status

The participants were grouped into five categories, according to their marital status. They were categorised as: unmarried (living with a partner), unmarried (living without a partner), divorced, widowed and separated. Figure 4.5 below indicates the participants' marital status, showing all of them to be single parents. Unmarried participants staying with their partners constituted 15% of the study sample; unmarried participants staying without partners constituted 67.5%; divorced participants constituted 2.5% and widowed

participants constituted 15%. There were no participants who were separated from their partners.

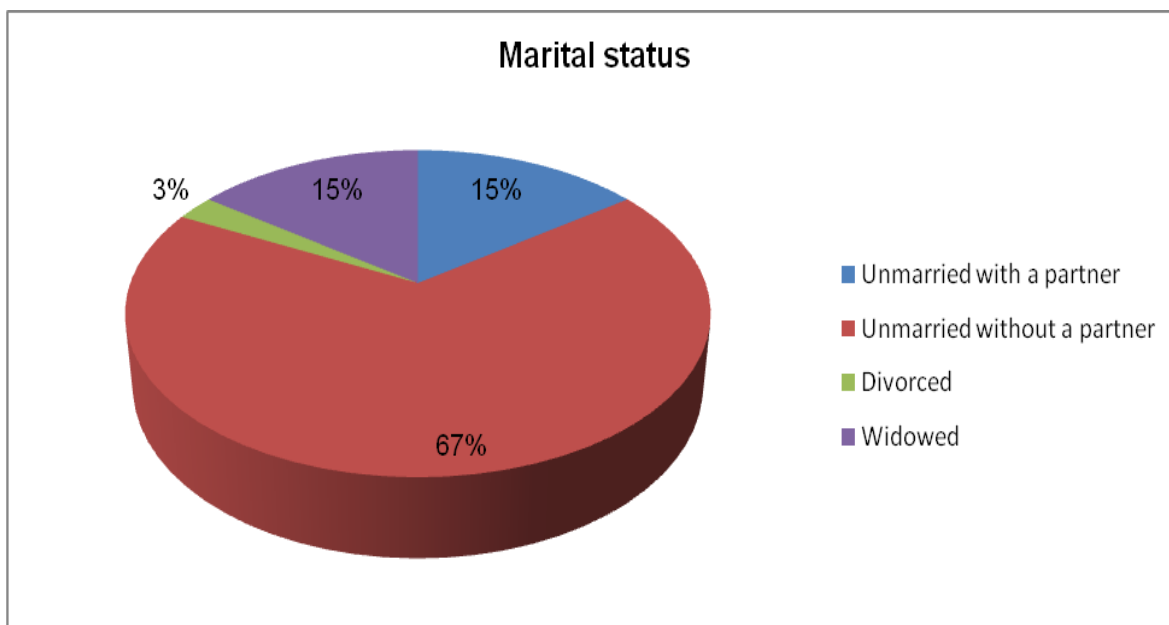


Figure 4.5: Marital status of the participants

In general, this study indicates that high percentages of young women with children under ten years of age are female single parents. Social grants as cash in hand are used by 65% of the women with children in rural areas (Everett & Smith, 2008). The tendency of mothers to be single in the Nompumelelo community is significant – the traditional community is seen as a safety net in African culture for urbanised Africans maintaining family ties with the rural areas for the purpose of livelihood, security and the receiving of cash from grants (Everett & Smith, 2008).

4.2.4 Educational level

The educational level of the participants in Nompumelelo is shown in figure 4.6 below. The highest number of participants interviewed, 82%, had a secondary education, whereas 15% had a primary education, with 3% having no formal education.

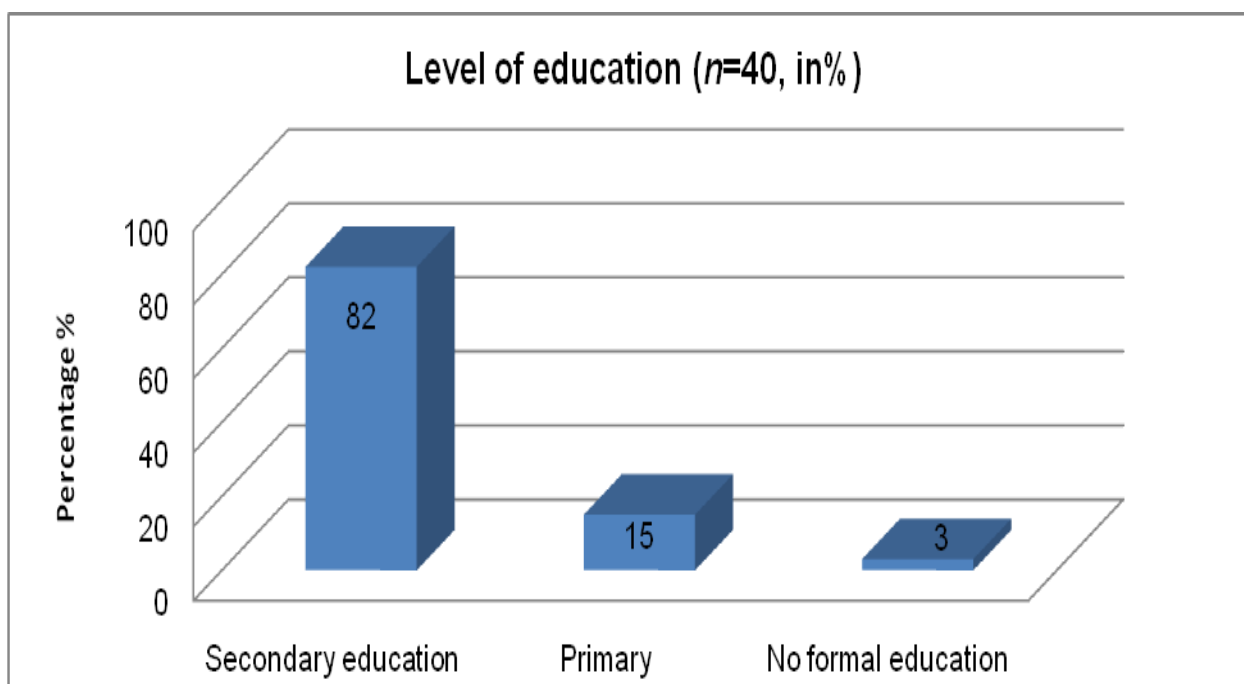


Figure 4.6: The educational level of participants in the Xhosa communities

4.2.5 Income and sources of income

The percentage of single parents who participated in the interviews was 94.5, some of whom were not employed, and some of whom were volunteers in the community clinic run by the Department of Health. These individuals survive with the help of social grants and pensions. The highest number, 55%, were found to be full-time employed participants, followed by 32%, who were in part-time employment, and lastly, 7.5%, who were unemployed as illustrated in figure 4.7. The research participants receive a social grant for each of their children aged between 0 and 10 years, which also helped to provide income for their households, enabling them to supplement their traditional foods with non-traditional foods from the supermarkets.

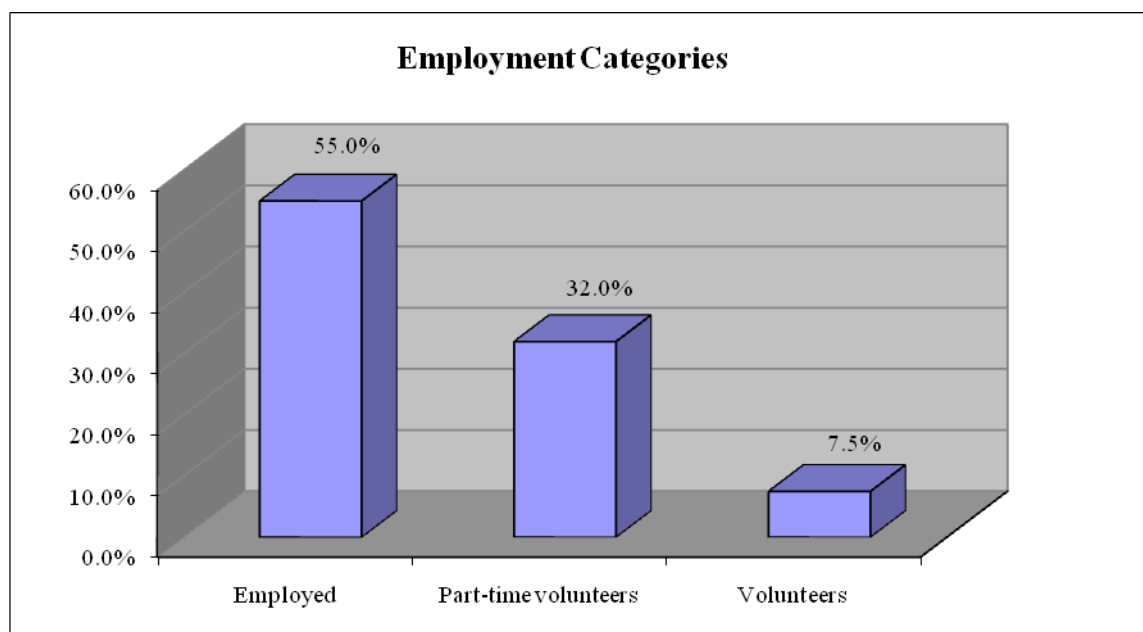


Figure 4.7: Illustrates income and sources of income

4.2.6 Living conditions

The living conditions of those participants in Nompumelelo who lived in shacks were not good, because they had no electricity, running water or toilets on their stands, to which they were entitled as part of their basic rights as South African citizens. One of the participants, who had lived in a shack for 14 years without being granted a Reconstruction and Development Programme (RDP) house, said that living in a shack was not easy because she was from a rural area. She said, "Unlike where I come from, here my neighbours are right in my face. When they turn on their TV or radio, I have to listen to it too." Shack living provides by far the cheapest accommodation, along with living in an RDP house. Although living in a shack is cheap, it is also very dangerous and even uncomfortable. A further condition of living in shacks is that participants who are without toilets sometimes have to go to a nearby bush to relieve themselves, very often making women and children vulnerable to rape. Besides living in physically dangerous conditions, there is unseen emotional brunt and stigma that is associated with living in a place that lacks even a flushing toilet. The participants of Nompumelelo are living on land that belongs to the BCM, so the local municipality is working on providing them with alternative accommodation. They are guaranteed the right to access RDP housing.

BCM has a plan to build more RDP houses for those living in the Nompumelelo peri-urban area, with the plan being known as one granting them a progressive living right.

4.2.7 Type of housing

The study found that different types of housing materials were used for the main buildings, with the majority of inhabitants living in corrugated iron shacks, or in brick houses with a corrugated roof, corrugated iron shacks, or wooden frame shacks of different shapes, colours and sizes. The RDP houses had sanitation-flushed toilets, electricity, and running water, with which the residents could irrigate their gardens, wash and cook. Shack housing was found to be unacceptable, as those residing in such housing lacked electricity, taps installed inside the shack, and flushing toilets. The lives of the people who live in informal settlements are often without dignity. According to the National Department of Housing, there are over 2 million shacks of different shapes and sizes in South Africa (UNICEF, 2006). More RDP houses are needed, as most of the above-mentioned shacks are used for housing people.

4.3 Rural-urban migration and the residents of Nompumelelo

Most of those who form the Nompumelelo community originally came from the rural areas of the former Transkei or Ciskei. They migrated through the wealthier parts of East London, and ended up building their own shacks with different building materials, using land that they had not purchased that was close to their work area. Many of the residents have been staying in shacks for 15 years, with some living in such shacks for up to 10 years before the government built RDP houses for them (BCM, 2004).

4.3.1 Appliances

Not all the participants used electrical appliances, and only 52% of them possessed a television set or radio. Of the participants, 15% used battery-powered radios, and 32.5% possessed no type of radio. Only 40% of the participants possessed their own refrigerator, with 60% not owning one at all.

4.3.2 Water sources and sanitation

There are different water sources installed in the area. These sources have different purposes, one being for bathing or body washing, another for food preparation, washing and household gardening. There are different kinds of sanitation facility, as indicated in figure 4.8 below: 65% of the participants were found to have toilets installed inside their house with flushing water; 2.5% had toilets outside the house, with no water; whereas 5% used the bucket system; and 27.5% used a veld toilet.

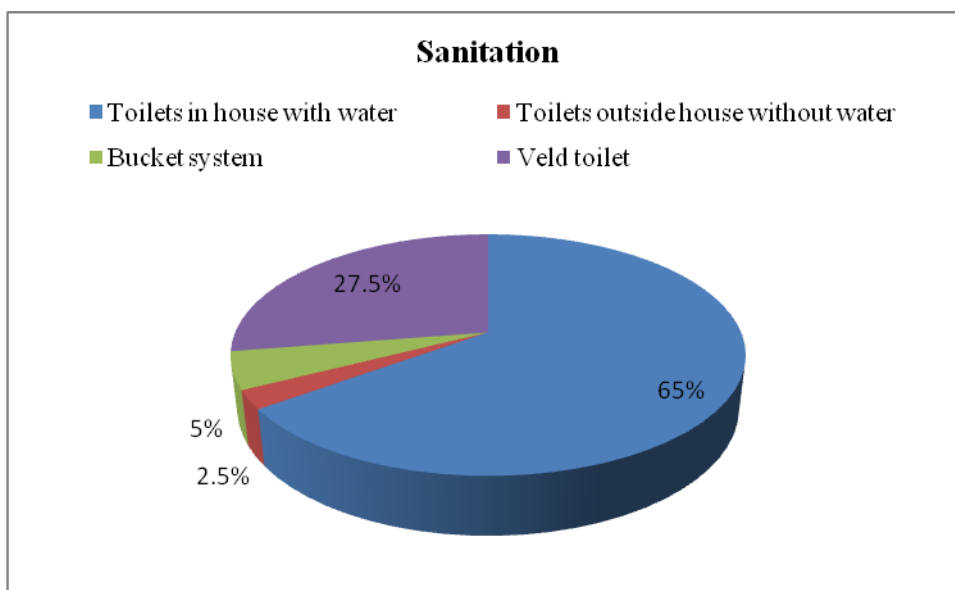


Figure 4.8: Shows the percentages of the various methods of sanitation used, with percentages

4.3.3 Household waste description

There are different kinds of waste removal facility: 2.5% of the participants dumped their waste; 15% burned their waste; whereas 82.5%, the highest number, had their waste collected by the municipality, as shown in figure 4.9 below.

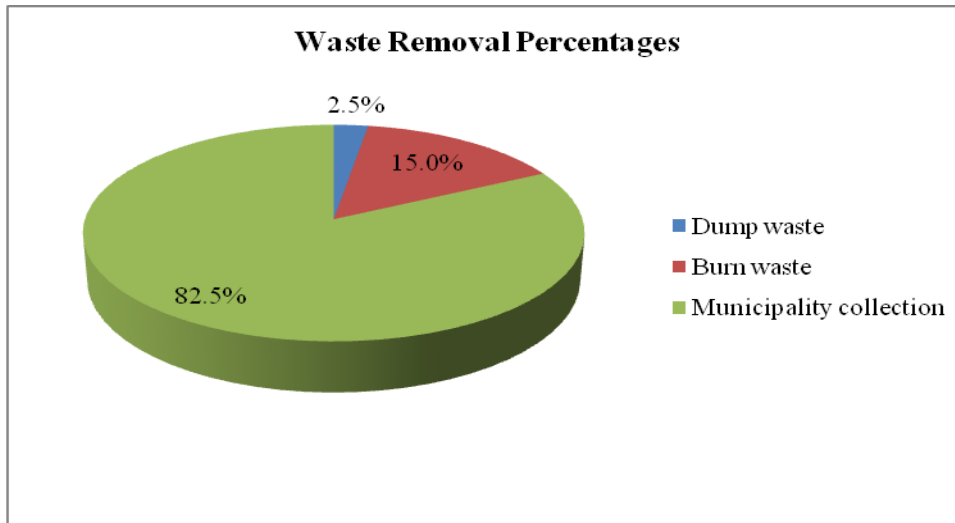


Figure 4.9: Shows the methods of waste removal with percentages

4.4 Consumption of traditional foods in Nompumelelo

Question 17 of the questionnaire state the varieties of traditional food consumed whilst the data from question 18 states the type of traditional foods purchased. Question 19 states the traditional foods processed and stored. The data from Questions 20 and 21 state the scarcity and coping strategies respectively by households in times of shortages of foods. Furthermore, it appears from data in question 23 of the questionnaire that the consumption of traditional foods by the younger generation, meaning generation Y, is decreasing. The respondents indicated that they only consumed those traditional foods that were known to be nutritious, such as *umnqutsho*, *ithanga*, *ikhiwane* and *umbona*. The consumption of traditional foods was largely attributed to the introduction of new foods and to the change in food preferences, which literally translates to a change in food habits.

Furthermore, change in lifestyle was another factor that was reported to be responsible for the decrease in the consumption of traditional foods by members of the community. In modern-day communities, people are allegedly no longer keen on walking long distances to gather traditional foods, so that they have lost interest in foraging in the forests and in ploughing the fields. Lastly, education and urbanisation have also led to the negative reception of traditional foods, largely as a result of instilling new values and

attitudes among the youth, at the expense of past cultural norms (Shava, 1999). Reduced consumption of traditional foods is a major concern, as it is the first sign of their pending extinction (Keller & Lapata, 2005).

4.4.1 Household participants according to age groups

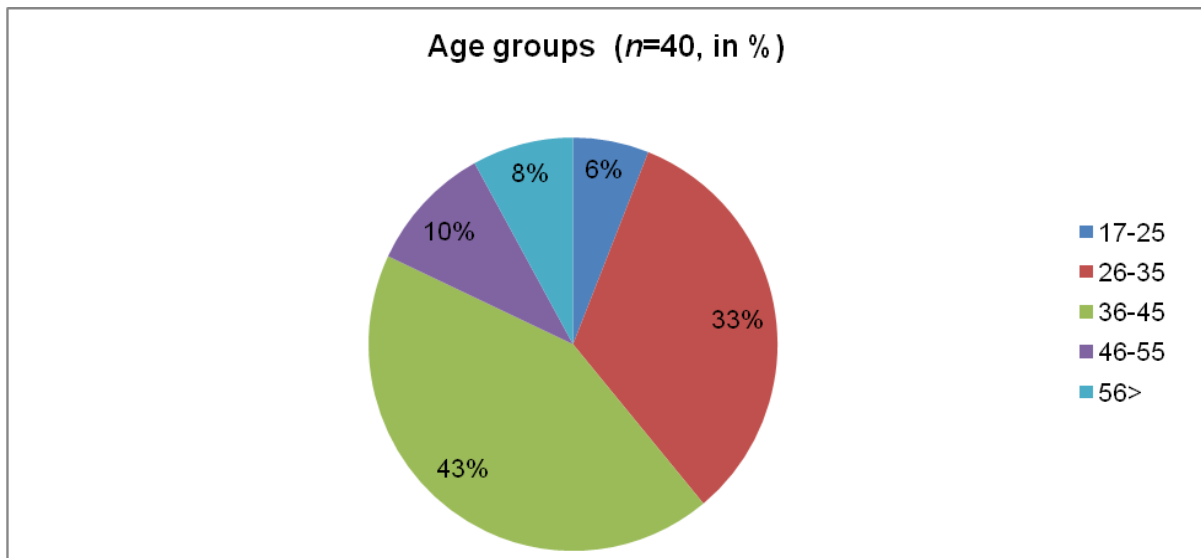


Figure 4.10: Chart showing percentage of those in different age groups in the Nompumelelo community

All the participants in the Nompumelelo community were requested to complete the questionnaire. The pie chart in figure 4.10 above shows the percentages of each age group living in the Nompumelelo community.

4.4.2 Food bought monthly

Figure 4.11 below shows the food bought monthly by Nompumelelo residents, together with the percentages of each food.

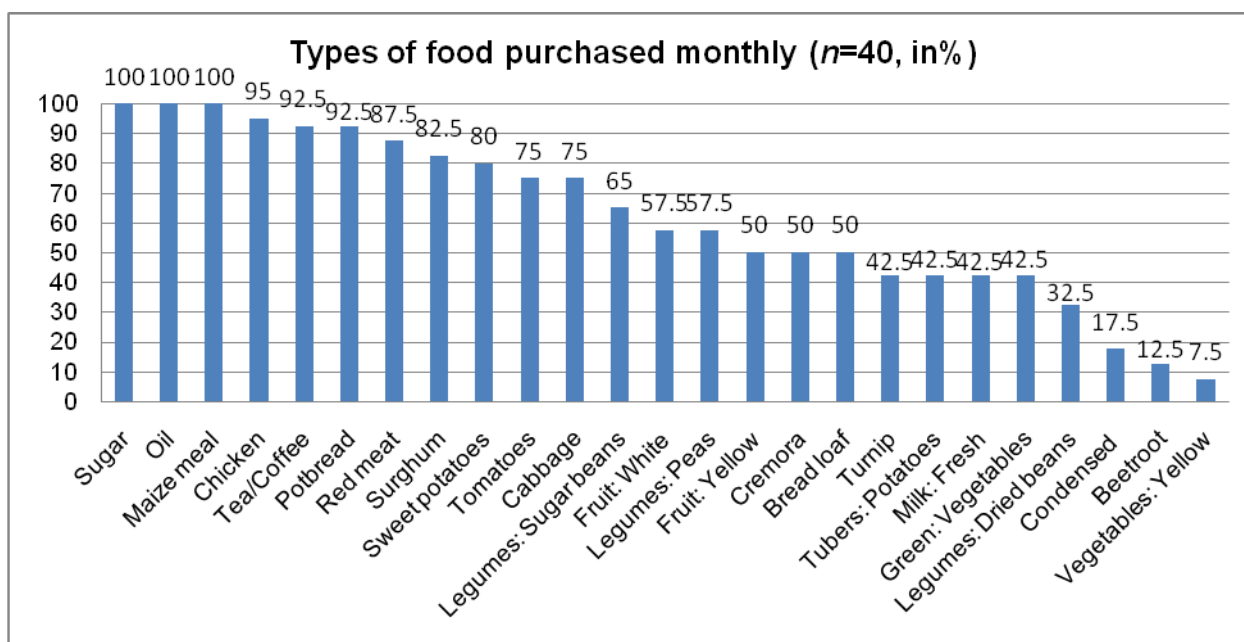


Figure 4.11: Types of food purchased monthly

4.4.3 Types of food purchased monthly

Pot bread is the most frequently homemade item (92.5%), as members of the community bake it at home and the bread can be stored for three days. The respondents stated that they believed that they saved money by not buying bread every day. Most people in rural areas do not buy pumpkins as their traditional food. The respondents stated that they obtained their pumpkins from the rural areas, which explains why the percentage of yellow fruit bought is 7.5%. Red meat was found to be cooked twice a week, once during the week and once during the weekend.

4.5 Knowledge of traditional foods among the Nompumelelo community

Table 4.1 below depicts the type of food eaten by the residents of Nompumelelo. The researcher found in the interviews that all the participants recommended the eating of traditional foods by their children, and that they all had good knowledge of traditional foods. All the traditional vegetables and fruits were commonly consumed by Nompumelelo residents.

Table 4.1: Knowledge of traditional food among the Nompumelelo community

Common English names	Common isiXhosa names	Scientific names	Uses of the plants
Black jack	<i>Umhlabangulo</i>	<i>Bidens pilosa</i>	Wild spinach cooked as a vegetable
Koobo-berry, bushveld cherry	<i>Umgxube</i>	<i>Cassine aethiopica</i>	Wild fruit
White goose-foot, fat-hen	<i>Imbikicane</i>	<i>Chenopodium</i>	Wild spinach or pot herb
Wild watermelon	<i>Umxoxozi</i>	<i>Citrullus lanatus</i>	A vegetable cooked with maize meal
Pumpkin	<i>Ithanga</i>	<i>Cucurbita</i>	Pumpkin leaves used as a vegetable
Yellow nut-grass	<i>Inqoba</i>	<i>Cyperus esculentus</i>	An edible root
Cape fig	<i>Ikhiwane</i>	<i>Ficus capensis</i>	A wild fruit planted in home gardens
Wild plum	<i>Iingwenya</i>	<i>Harpephyllum caffrum</i>	Wild fruit found in home gardens
Wanderer's food	<i>Igontsi</i>	<i>Ipomoea simplex</i>	An edible root or tuber
Wild olives	<i>Ingwenya</i>	<i>Africana</i>	Wild fruit
Native potato	<i>Itapile</i>	<i>Plectranthus esculentus</i>	An edible root or tuber
South African blackberry	<i>Iqunube</i>	<i>Rhus pinnatus</i>	Wild fruit
Black nightshade	<i>Umsobo</i>	<i>Solanum nigrum</i>	A wild spinach, also a wild fruit
Wild thistle	<i>Irhwabe</i>	<i>Sonchus oleraceus</i>	Wild leaves used as pot herb
Oxalis	<i>Umuncwane</i>	<i>Oxalis spp.</i>	Used for salad
Mushroom	<i>Ikhowa</i>	<i>Schulzeria</i>	Vegetable
Amaranthus	<i>Unomdlomboyi</i>	<i>Amaranth</i>	Wild vegetable cooked with maize meal

4.5.1 Consumption of traditional foods and plants

Green plants are important for human consumption as they aid the human metabolism. It is generally understood that indigenous plants are wild plants that grow naturally. Indigenous foods play an important role in the traditional diets of African people (Allantyre & Flueret 1975). All of the respondents interviewed seemed to consume indigenous plants in the form of both the pods and leaves, also in the form of the plant roots.

4.5.2 Reasons for consuming traditional foods

Respondents cited various reasons for consuming traditional foods. Some cited availability as their main reason (Question 20) since traditional foods are readily ubiquitous. One respondent explained ".....we consume traditional foods because they are readily available hence they are not an expense as compared to retail foods". The participants had the opportunity to indicate all the reasons why they preferred to eat traditional foods, so that more than one option could be selected. Of the respondents, 63% indicated that they consumed traditional foods because they were nutritious and healthy; 86.3% indicated that they consumed traditional foods because they were tasty; and 13.6% said that they consumed traditional foods because they were readily available. Of the total sample of the Nompumelelo community, 77.2% of the respondents had no other reason for consuming traditional foods apart from the reasons categorised above, and 22.7% gave other reasons why they consumed traditional foods.

Among the reasons given for the consumption of traditional foods in response to the open-ended questions during the focus group discussion were that it was good for people suffering from such diseases as diabetes (1), that it was enjoyable (2), that the respondent had been raised eating them (3), and that they were good for vegetarians. Triangulation was embraced since focus group discussions were used in the findings thus bringing in all the benefits of triangulation in the study.

4.5.3 Associated knowledge of traditional foods

The majority (81.8%) of the participants prepared traditional foods together with other vegetables, and 13.6% prepared the leaves of traditional foods with other vegetables as well. Of the participants, 27.2% stated that they added chicken to their traditional food dishes containing pods, whereas 4.5% added chicken to traditional food dishes containing leaves. Those participants who prepared traditional foods with red meat formed 13.6% of the total, with 9% preparing the leaves of traditional food with red meat. Some (18%) of the participants said that they cooked traditional foods plain, whereas 4.5% prepared traditional foods with either sour milk or yoghurt. The notion of using traditional foods in mixed dishes was evident and fit in well with the cultural practices of rural dwellers,

since they also indicated that they used mixed dishes when cooking with traditional leafy vegetables.

Furthermore, traditional foods were said to have other uses, apart from being used as a food source. When asked whether the respondents knew of other uses of traditional foods, apart from their being used as a food source, 36.3% of the participants indicated the affirmative, whereas 63.6% indicated that they did not know of any other uses for traditional foods. Other uses of traditional foods about which the participants knew were revealed during the focus group discussions, and pertained mainly to medicinal uses, including the treatment of certain diseases, and their use to counter water retention. None of the respondents indicated the awareness of the use of traditional foods that was found in the literature review, such as fodder for small ruminants, as seed oil, or as water purification, even when they were prompted to provide more uses than those that they gave during the focus group discussions (Shava, 2000).

All (100%) of the participants interviewed indicated their willingness to recommend traditional foods as a food source to other people. During the focus group discussions, the respondents gave four reasons why they would recommend traditional foods to others food types: 45% of the respondents indicated that they would do so because it was tasty, 20% stated that they would do so on the basis of it being nutritious, 25% noted that they would do so for medicinal reasons, and 10% stated that they would do so because it was readily available.

The information gathered from the interview scheduled on traditional foods administered to the local households provided sufficient findings to support the objective that was set for this portion of the research, namely to establish traditional food usage patterns and the reasons for the use of such food, and to gather associated traditional knowledge.

4.5.4 Preparation of traditional foods

Nompumelelo residents stated that they used various methods of cooking traditional foods, in particular green leafy vegetables. One of the participants stated that, whereas she prepared the leafy vegetables on their own, others added meat to the vegetables. The respondent explained ".....even though we use traditional foods we tend to supplement with some retail foods". In the same vein of thought, others stated that they added ingredients such as peanut butter or instant soup to their traditional vegetables.

All the participants in the study prepared traditional vegetables together with other vegetables and maize meal. One of the respondents elucidated "... usually when we prepare traditional vegetables we add peanut butter or butternut soup to make them more nutritious and appetising". Some (10%) of the respondents made the same assertion. Furthermore, the respondents were found to believe that, by adding green leafy vegetables from a traditional food source, the proteins and micro-nutrients present could make the traditional food more nutritious.

4.5.5 Processing and preservation of traditional vegetables

When the participants in the study were asked whether they processed and preserved traditional plants for future use, 100% answered in the affirmative. Through the focus group discussion, participants in the Nompumelelo and traditional communities who preserved traditional vegetables indicated that they would pick them from the field or garden, and wash them. The vegetables would then be boiled and mashed into a paste, which was shaped into tiny balls and dried in the sun. When the vegetables were thoroughly dried, they were stored in airtight containers, to be used when fresh traditional vegetables were scarce.

Masekoameng (2007) states that, in the Sekhukhune district of the Limpopo province, traditional vegetables are processed by washing and cooking them. The cooked leaves are then mashed and rolled into tiny balls and dried on top of corrugated-iron roofing sheets.

Such a finding agrees with the response received from the participants as to how traditional vegetables are processed and stored in local households.

4.5.6 Traditional food use

Literature about traditional foods used regionally and in several countries in Africa illustrate the usage patterns and that the associated traditional knowledge of these foods is largely absent in South Africa. This section is intended to document traditional food usage patterns, the reasons for their use and the associated knowledge within a sample of Nompumelelo households that utilise mainly traditional foods as a food source.

4.5.6.1 Usage patterns of traditional foods

Traditional foods were found to form part of the diets of most of the participants in the study. The participants were asked to list any traditional foods that were commonly consumed by their households. Differences in the consumption of traditional foods were found among the different age groups. A positive relationship was found to exist between the consumption of traditional foods and the age of the inhabitants. In other words, members of the older generation were found to consume more traditional foods than members of the younger generation.

4.5.6.2 Reasons for consuming traditional foods

Each of the participants in the study explained why they consumed the traditional foods they listed. Reasons included the fact that such food is healthy and nutritious, that it is tasty, that it saves money, that some of the food is medicinal, that it can be grown with ease and that the foods were readily available. The fact that the present study found that the participants regarded the traditional food as nutritious and tasty can be regarded as significant.

4.6 Food accessibility and analysis

This study has devoted considerable attention to investigating the food accessibility variations in Nompumelelo. The food analysis was accomplished by means of simultaneously considering the processes influencing variations in food accessibility and

its utilisation in Nompumelelo and the patterns of food associated with the processes. The community members were grouped according to all the factors previously mentioned.

4.7 Other uses of traditional foods

The participants indicated that traditional vegetables were good for controlling high blood pressure, hepatitis and heartburn, as well as for the treatment of joint pain. One respondent articulated ".....in some instances we tend to use traditional foods as traditional medicines and they have proved to be very fruitful". From the focus group held with elderly participants in Nompumelelo community, as well as from identification and collection trips in the veld, the researcher compiled an inventory comprising more than eight different species of edible wild plants used in the community. These could be broadly categorised into wild spinach, wild fruits, edible roots and tubers, and other plants with edible gums and resins, bark or other vegetable parts. It should be noted that some plants fit into more than one category, for example belonging to both the wild spinach and fruit categories.

An interesting discovery was the fact that most of the wild spinach mentioned is usually considered as arable weeds on cultivated lands in modern agricultural terms. In this study, the women knew slightly more about wild spinach and, in contrast, knew about a broader range of wild fruits and roots / tuber plants. Almost 60% of the participants were able to recognise, identify and verify the local names of the plant foods that they eat without difficulty. It appeared to the researcher that, traditionally in rural cultures, wild spinach fell in the domain of the women who collected and cooked them, hence their broad knowledge of the plant.

Mtshali (1994) made a similar observation about spinach in her study. Most wild spinach in the village is what would be described in modern agricultural terms as weeds (Shiva, 1991). The researcher observed that wild spinach grows between cultivated crops in the Nompumelelo area. Some fruits, such as wild plums (*ingwenya*) still grow within the vicinity of the Nompumelelo area and youngsters still gather their wild fruits. Almost 55% of the participants claimed that wild food plants have played a supplementary role in

the traditional diet. The participants, however, did acknowledge the popularity of some wild food plants, in particular wild spinach and some favourite wild fruits. It was also stated that, in the past, when young boys herded cattle, they relied heavily on wild food plants that were available in the veld, so they did not have to return home during the day.

These two statements reveal that wild food plants may have had a greater role to play in the traditional diet of the community. Maundu (1995) warned of the neglected role played by wild food plants when he stated that wild food plants are often used casually and during food shortages. Nompumelelo community, especially the children, depend on the supply of wild food and on buying such essential dietary components as vitamin C from the shop. Some community members largely depended on buying fruit, vegetables and roots for food. Wild food plants play a very important role for pastoralists, but this often goes unnoticed by researchers, as much eating is done casually and away from home.

The researcher believes that community members do not fully recognise the role of wild food plants in their diets, as the plants were consumed casually. A traditional food plant has a very major dietary role to play in the traditional role of the community of Nompumelelo, since they are consumed when there is a shortage of food. Half of the participants noted that there was a decrease in the use of wild food plants within the Nompumelelo community. Maundu (1995) states that there are similar causes for the decline in the use of traditional plants. Sibanda (1999) claims that many local people treat their own culture, knowledge and tradition as inferior compared to the western knowledge system, and hence they do not want to talk about it. Sibanda (1999) further posits that "their own knowledge has suffered serious erosion over time, because it was treated as inferior for so long".

4.7.1 Diet and health

While the participants claimed that they never ate any of the wild food plants for health reasons, they did state that the traditional diet kept them healthy and long-lived, compared to the effects that modern diets have on the youth. Almost half of the elderly participants particularly mentioned how the modern diet afflicts the younger generation

with all the health problems that they reported. Regarding the claims that some of the traditional foods were not eaten for various reasons, one of the participants said: "... we ate wild food plants, because we were told that they were edible, and because some had a sweet taste. We never ate them because we knew they contributed to our health. In fact, we did not know of this health aspect." She supported this claim when she stated that when they were herding cattle, they tended to eat most of the wild food plants to satisfy their hunger and for their taste, rather than for health purposes. One of the respondents noted that people tended to have a long lifespan in the village. Figure 4.12 below illustrates some traditional food vegetables that are used by the Nompumelelo community (Creekwalker, 2001).



Figure 4.12: Some traditional food vegetables used by the Nompumelelo community

4.7.2 Summary

The results of the research and the interviews undertaken in the Nompumelelo community were discussed in detail in this chapter. The results of the study provided the support that was required to introduce a new, highly nutritious food source to the Nompumelelo community. This could play a potential role as agents of change and to help the community's need to diversify their nutritional intake. The information on food gathered in Nompumelelo provided the information that the local residents currently utilise the resources of the community in the form of food and indigenous foods. The results of the study provide sufficient evidence to determine the level of food accessibility among the sample groups in the community.

It was found that the participants from the Nompumelelo community generally had a low level of education, and most of them were also unemployed. The research revealed that the methods of cooking food differed from household to household. The general belief among Nompumelelo single parents who participated in the study was that the vegetables were nutritious. However, it was found that vegetables were not used as a main ingredient but were only used as a supplementary ingredient in households where the income was low. This study shows that these vegetables could make a significant contribution to the daily nutrient intake of the Nompumelelo community with respect to their intake of vitamins A and C, folic acid and iron.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

Chapter 5 draws conclusions that attempt to answer the research questions and sub-questions of this study. Based on these conclusions, recommendations are made on the use of traditional foods. Finally, this chapter presents an evaluation of the study in terms of reliability, validity and contribution in respect of traditional foods, and research ethics. In this regard, the chapter consists of the following subsections: a summary of the findings, limitations, recommendations and conclusions.

5.2 Summary of the findings

The main focus of this study was to investigate the usage of traditional foods in the rural-urban linkage in Nompumelelo community. It has been noted that there is a positive relationship between the use of traditional foods and the location of households (Nesamvuni, 2000). In other words, as people reside in rural areas they tend to consume more traditional foods. On the contrary, as they move out of rural areas into peri-urban areas there is a decrease in the consumption of traditional foods because they tend to consume less traditional foods (Shava, 2000). This might be attributed to the unavailability of land for farming and the availability of retail foods in urban areas. Moreover, in peri-urban areas people tend to have more disposable income earned as salaries in their jobs.

Furthermore, particular attention was paid to the extent to which traditional foods were utilised and to the potential future use of traditional foods in this rural area.

In order to investigate the main research problem, three research objectives were identified, namely:

- to document the traditional foods that are available in Nompumelelo community;

- to document how these foods are utilised by the households concerned; and
- to determine the harvesting, storage, preservation, and cooking practices of traditional foods by Nompumelelo rural households.

5.3 Limitations

Obtaining permission from the households proved to be time consuming, with some refusing to participate in the study. As such, the viewpoints of those respondents who refused to participate in the study are lacking. Furthermore, the study has limitations in that it is a pilot study and follow-up studies are still required. These findings may not be generalised to households in the rest of South Africa, due to the distinct socioeconomic and geographical setting where the study took place. Future studies similar to the current one should be planned carefully, so that the quantities of all ingredients used are included, which will improve the accuracy of the nutritional analysis.

5.4 Recommendations

5.4.1 Nutrition value of traditional foods

Although Nompumelelo residents might be very well aware of their dietary requirements, the availability and cost of certain foods may be inhibiting. Nutritionists and health workers should, therefore, be informed of the nutritional value of locally available wild food plants that the community can harvest at no cost. They, in turn, should educate the community about these alternative sources of nutrition. The communities should also be educated about how best to prepare the foods so as to preserve their nutritional value.

5.4.2 Processeing and storage of traditional foods

Traditional vegetable leaves are an excellent source of Vitamin C, but the community of Nompumelelo should be taught how to prepare them in order to retain its nutritional value. They should also be shown how to use the vegetable cooking stock (the water in which the plants are cooked) optimally, rather than throwing it away. With regard to health requirements, some refined foods are not very nutritious but are fashionable, such as white bread, which is preferred to brown bread. The traditional foods questionnaire

needs to be improved in order to collect more detailed data on such parameters as the participants' income and level of education, and the frequency of use of the recipes concerned.

5.4.3 Nutrition education and health benefits of traditional foods

The community of Nompumelelo needs to be educated in these differences, so that they are able to make wise choices about the nutritional value of the food they consume. Efforts should be made to investigate the nutritional value of wild food plants for the benefit of the community in which such plants occur. Traditional knowledge is still evident in the Nompumelelo community. The value of such knowledge should be supported through our formal education systems, which should embrace different kinds of knowledge about traditional food in the community and the value of traditional knowledge. The relevance of such knowledge to local settings should be revived, as this could be beneficial to their diets.

5.4.4 Integration of traditional foods in diet

The Nompumelelo participants included at least one of the vegetables in their diet almost every day when it was available. It is therefore, recommended that a person should eat small quantities of vegetables over a number of meals, rather than one or two large amounts, so that by the end of the month they still have enough food to sustain themselves.

In the case of this study, the community could benefit from the use of healthy traditional foods that are freely available locally, and which would also help them to preserve their cultural pride. The nutritional value of traditional food plants requires further investigation to determine how they compare nutritionally with the modern diet. The use of the traditional food plants also has the potential, by means of selective conservation and domestication, to contribute to the maintenance of botanical diversity. Traditional conservation practices relating to traditional food plants are a dimension of traditional

knowledge that can be further researched. Further research, however, is required for the following reasons:

- to conduct a nutritional analysis of traditional food in South Africa, as well as the traditional food consumed by Nompumelelo residents;
- to establish the medicinal value of some traditional foods;
- to investigate the implementation of a national intervention strategy that uses traditional food as a supplement for micronutrient deficiency; and
- to compare the traditional food in Nompumelelo with traditional foods in other communities and to test the acceptability of traditional foods in Nompumelelo and in other communities and cultural groupings for a wider awareness of the possibilities of using such foods in addition to the existing ones.

5.5 Conclusion

The inequalities of the development associated with food accessibility in Nompumelelo have resulted from the actions of the BCM. There is a shortage of capital, agricultural implements, trained and skilled labour and training facilities, which has caused agricultural food production to be below expectation. Unless incomes and social grants can be raised, expansion to agricultural food production will be difficult. For these reasons, Nompumelelo cannot look elsewhere for some of their inputs. The non-availability of land for both agricultural and industrial pursuits, due to some cultural values, makes it impossible for the Nompumelelo authorities to provide land for the local residents. Yet as, Pingali (2004) asserts land is a factor of production, especially in today's era where food consumption patterns are changing rapidly as incomes increase.

This social factor has been militating against Nompumelelo's development. Land tenure in Nompumelelo is in the form of municipal, free RDP housing, government land, municipal land and other institutional land. Almost all land in Nompumelelo is owned by the municipal authorities. The land tenure system and its administration, where there is no formal right of land occupation, are critical to development. Many in the Nompumelelo community believe that there is no substitute for land, and therefore that it should not be

offered for sale, enabling them to grow the types of food crops that they require. Nader (1996) believes that this problem has been a major factor in underdeveloped areas such as Nompumelelo.

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APPENDICES

APPENDIX A

INDIVIDUAL CONSENT FORM

The purpose of this study is to determine the rural-urban linkage in the use of traditional foods by peri-urban households in the Nompumelelo community in East London, Eastern Cape.

At the end of the study, the leaders of the project will give a full report to the communities concerned. The researchers will return to the communities for this, and will be available to discuss results with individuals, if they should so wish.

If you would like to participate in this interview, it will take about 30 minutes of your time to answer questions about the traditional foods that you know and eat. All information will be confidential and not publicly attached to your name. Number codes will be used on all the forms in place of your name.

At any time, you can refuse to answer any or all of the questions and ask us to leave. The researcher will answer any questions that you might have about this study, or will refer them to the research supervisors concerned.

Research Advisor

1. Mrs F. Ferreira / Prof. Albertse

Do we have your permission to begin?

Yes No

Respondent's signature _____

Respondent's name _____

House number _____

Community _____

APPENDIX B

Walter Sisulu University
School of Tourism & Hospitality
College Street
East London

Dear Ward Councillor,

My name is Vikelwa Majova. I am currently a student at the University of South Africa (UNISA) in the Department of Agriculture, Animal Health and Human Ecology. As part of my studies, I am required to undertake research into the rural-urban linkage in the Nompumelelo Community, hence I hereby ask for your approval and permission to do so within your Ward.

The reason behind selecting Nompumelelo for the study emanates from the fact that the area lies within a wider communal area, and most of the traditional foods are still in such areas, hence I thought it would be relevant to my studies. The research will involve oral or face-to-face interviews and some fieldwork.

Thanking you in advance for your understanding.

Yours sincerely,

.....

Vikelwa Majova

Walter Sisulu University
School of Tourism & Hospitality
College Street
East London
Cell: 0833406917
Tel.: 043 702 9225

APPENDIX C

QUESTIONNAIRE ON TRADITIONAL FOODS

Criteria: Single women parents responsible for food with children between 6 and 9 years of age in Nompumelelo Primary School.

Name of respondent _____

Town/Area _____

Date of interview _____ Time: [:] to [:]

A1 What is your age in years? (Choose the correct range)

17–25	
26–35	
36–45	
46–56	
56+	

A2 What is your marital status?

Married	
Unmarried, staying with a partner	
Unmarried, staying without a partner	
Divorced	
Widowed	
Separated	

A3 Who is the decision-maker on food issues in your household?

A4 What is your highest educational level?

No formal education	
Read and write (ABET)	
Junior Primary Foundation >	
Primary Intermediate Grade 4 (Std 2) <	
Secondary	
Tertiary	

A5 How many years have you been living in Nompumelelo?

Shack.....RDP.....years

A6 Where did you live before Nompumelelo? East London ...Town...Rural ...

A7 Where did you grow up? (Please specify) East London ...Town....Rural ...

A8 How many household members live in the house?

Adults and children (0–5)..... (6–9).....(12–18)(19–25)26 <.....

A9 List the sources of income for your household.

Income source	No members earning under roof	Age of each member	No. attending school/clinic	Amount earned by each
Employment – Full-time				R
Employment – Part-time				R

Piece work / Vendoring /Volunteering				R
Social grants / child / disability/ pension /				R
Remittance				R
Other				R

Amount spent on food a month				R
Do children receive food at school / clinic / crèche?				Food parcel? Meals?

A10 What type of housing / with what type of material is your house built?

Type of house / main building material	Type (mark)	No. on stand
Brick house with corrugated roof (RDP) ...(other)...		
Mud house with corrugated.... or thatch.....		
Corrugated-iron shack		
Wood-frame shack		

Other		

A11 What kind of energy do you use?

Energy source	Food preparation / Cooking	Lights	Electrical equipment: radio / TV	Refrigerator / washing machine
Electricity installed				
Electricity prepaid				
Firewood				
Paraffin				
Gas				
Other				

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A12 Where do you get water / from which sources and for what purpose is each source used in the household?

Water source	Bathing / washing body	Food prep	Washing	Gardening
Installed taps				
Outside taps in yard / on stand				
Street/community taps				
River				
Well				
Drums with water				

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A13 What kind of sanitation (toilet) facilities are you using?

Type of toilet / sanitary facility	Water-flushed	Without water
Toilet inside the house		
Toilet outside the house		
Bucket system		
Pit system		
Hired toilet (bucket/chemical)		
Veld toilet		

Other		

A14 What do you do with household waste?

Type of waste removal	Not sold	Sold
Waste dumped		
Waste buried		
Waste burned		
Waster recycled/sold		

Waste collected by municipality		

A15 Do you belong to a religious affiliation that restricts the type of food that you may consume?

Yes	
No	

A16. If yes, please indicate the foods to which you are restricted:

A17 Which food did your household eat on the previous day?

Question, and then only tick the foods mentioned:

What did you eat for breakfast?

What did you eat for lunch?

What did you eat for supper?

Did you eat anything between meals?

A18 Do you buy food?

Yes	No

A19 If yes, what foods do you buy, process and store?

Type of food	Buy monthly	Buy weekly	Buy 2–3 x week	Process/Prepare	Store
Maize meal					
Sorghum					
Bread loaf Pot bread					
Oil					
Sugar					
Tea/Coffee					

Milk: Fresh/ Condensed/ Cremora					
Fruit: White/ Yellow					
Vegetables: Yellow F/L / Green F/L / Beetroot F/L / Cabbage L / Tomato F/L / Onion F/L					
Legumes: Dried beans / Sugar beans F /L / Peas F /L / Other					
Tubers: Potatoes T / Sweet potato					

T/L / Turnip T/L					
Meat: Red meat / Chicken / Fish F/C / Polony					

A20 Does food become scarce at certain times of the month?

Yes	No

A21 In the past 30 days, if there were times when you did not have enough food, or enough money to buy food, what was your coping strategy in order to get food?

A22 Do you know of any Xhosa traditional food? If yes, give reasons for consuming them.

Yes	No

A23 Is traditional food available in Nompumelelo, or where do you get traditional food from?

In Nompumelelo ? Gather from veld Buy from vendors.....

Nearby farms

Rural area / family and friends

A24 Which traditional foods do you eat in Nompumelelo?

Types of food	Prepare	Process	Storage method
Vegetables: Pumpkin/ <i>Ithnaga</i> / Small squash / <i>usengca</i> / Melons/ <i>umxoxozi</i>			
Vegetables: leafy/ <i>Umfino</i>			
Legumes/Seeds: Dried beans / Pumpkin seeds			
Tubers / <i>Amadumbe</i>			

Fruit: <i>Inqwenya</i> / Wild olives / <i>Amaqunube</i> / Wild berries			
Wild meat: birds / insects / small animals			

A25 Do you prepare indigenous foods for your children?

Yes	No

A26 Do your children like indigenous foods?

Yes	No

A27 If the answer is yes, will they recommend indigenous foods to others?

Yes	No

A28 Are you enthusiastic about preparing meals including indigenous food for the household?

Yes	No

A29 Do you have a home garden?

Yes	No

A30 What type of garden do you have?

Type of garden	What do you plant?	Which	How	Why do
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		season?	many times do you eat from the garden?	you make a vegetable garden?
Community				
Household/ordinary				
Garden pots/ container/sack				
Door-size gardens / mulch				