USWA Research Journal of Agriculture, Science and Technology [Online]
© Published by University of Swaziland ISSN: 1029-9645
15: 28-39, 2014
Gadaga *et al.*,

Socio-economic and hygienic aspects of street food vending in Maseru City, Lesotho

T. H. Gadaga [1*], M. M. Ntsike[2], V. Ntuli[3]

[1]Department of Environmental Health Science, University of Swaziland, P.O. Box 369, Mbabane, Swaziland
[2]Department of Nutrition, National University of Lesotho, P.O. Roma, 180, Lesotho
[3]Department of Biology, National University of Lesotho, P.O. Roma, 180, Lesotho

ABSTRACT

Street food vending is a growing phenomenon in many countries and contributes to the livelihoods of many people. However, the safety of the foods is often a cause for concern because the environment in which they operate is usually unhygienic, leading to contamination. The objectives of this study were to assess the socio-economic contribution of street foods in Maseru and to assess the hygienic practices of the vendors in the city. A cross-sectional study was done by interviewing the street food vendors using a semi-structured questionnaire focusing on the contribution of food vending to the economy, and the hygienic practices of the food vendors. One hundred street vendors were interviewed at the Maseru Market, Manonyane bus stop, Mafafa market, Metro taxi rank, Sefika taxi rank as well as outside the Ministry of Health Government Office Complex. The majority of the vendors [77%] were women. Fifty three per cent of the vendors were in age range of 25-30 years and street food vending was the main source of income. About 51% reported profits above 100 Maloti [≅US$13] per day. The main types of food items sold were papa [thick maize meal porridge], boiled vegetables [moroho], roasted chicken, pork or beef, and beef stew. The vendors operated from makeshift structures and had no running water. All the street vendors used buckets for washing hands after visiting the toilet and before handling food. Fifty two percent of the vendors operated the street food vending business on individual basis. It was concluded that while street food vending in Maseru can be viable, the hygienic practices need to be improved. It is recommended the government and local authorities should assist vendors with appropriate shelters, running water, and electricity to improve the quality of food.

Key words:, Maseru, , Moroho, Motoho, Street foods, Vendors

Corresponding Author: T. H. Gadaga, Department of Environmental Health Science, University of Swaziland, Mbabane, Swaziland; Email: hgadaga@uniswa.sz/tgadaga@gmail.com

INTRODUCTION

Street vended foods are defined as foods and beverages that are ready-to-eat, prepared and/or sold in the street and other public places, for immediate consumption or consumption at a later time without further processing or preparation [FAO/WHO, 2006]. Street foods include foods prepared in small scale factories or at the home of vendors and brought to the street for sale, and food prepared and sold at the street food stall [Chakravarty and Carnet, 1996]. Those who sell street foods are regarded as micro-entrepreneurs and form part of the informal sector [Martins, 2006; Chukuezi, 2010]. The informal food vending sector is expanding in many urban and peri-urban centres due to limited work opportunities in the formal sectors.

Types of street vended foods vary greatly between countries and cultures and between vendors. In some countries, the types of foods purveyed are not documented, yet they are often unique and are an important source of nutrients for the population [Muzaffar *et al*., 2009; Tambekar *et al*., 2011]. Street foods therefore contribute to the food security of the low-income urban population, and provide a source of livelihood for a large number of potential workers who would otherwise be unable to establish a business for want of capital [Korir, 1994]. However, street foods are frequently associated with food-borne illnesses due to their exposure to contamination [Barro *et al*., 2006; Bryan *et al*., 1988; Bryan *et al*., 1992; Bryan *et al*., 1997; Gadaga *et al*., 2008].

In Lesotho the most popular street foods include complete meals consisting of staple maize meal porridge [papa] or rice served with stewed, fried or grilled beef, mutton, chicken or pork. Salads [including beetroot, carrots, green beans, and green leafy vegetables], gravies, spices, and snacks are also commonly served. Other meat portions include roasted chicken heads, feet, gizzards, fried Russian and Vienna sausages, and polony. Street foods are therefore an integral part of the diet in Lesotho.

Vendors in Lesotho mainly operate in the central business district and at major transit points such as the train and bus stations. They also sell their food items outside factories, schools, hospitals, construction sites, markets, shopping malls, and taxi ranks, where large numbers of minibuses operate from. These locations usually do not meet basic food safety requirements such as running water, toilets and waste disposal facilities [Ekanem, 1998; Moy *et al*., 1997].

Street food vending is an easy-to-enter business because it requires relatively small capital outlay, yet it can contribute significant income to the local and national economy [Iyenda, 2001; Acho-chi, 2002; NRI, 2003]. Increasingly, more people in Maseru are turning to informal food vending as a source of livelihood due to high unemployment and retrenchments from South African mines, where most Basotho were previously employed [Molefe, 2009; Matsie, 2009]. The objectives of the current study were to describe the demographic and socio-economic characteristics of street food vendors in Maseru, Lesotho, evaluate the contribution of street food vending to the livelihood of the vendors, and assess the hygienic practices of the vendors.

MATERIALS AND METHODS

Study population

A cross sectional survey of street food vendors in Maseru [29.31°S 27.48°E] was done between February and March 2010. A street food vendor was defined as anybody selling ready-to-eat foods and drinks on the streets and public places, including markets within the area of study. No previous work on street vendors has been done in Maseru and therefore there were no records on vendors. Observations indicated that vendors mainly operated at bus terminals as well as next to factories and government offices. Vendors from the Maseru Market, Manonyane bus stop, Mafafa Market, Metro taxi rank, Sefika taxi rank, as well as the Ministry of Health Government Office Complex were included in the study. These locations had the highest

concentrations of food vendors. Because there was no register of vendors, purposive sampling was done, i.e. vendors who were willing to participate in the interview were included.

Questionnaires

Background information for the design of the questionnaires was obtained from previous studies done in Ghana and Zambia [NRI, 2003]. A semi-structured questionnaire was then developed and pre-tested on 15 street vendors operating outside the National University of Lesotho campus, Roma. The questionnaire was adjusted accordingly to make it clear and include the most relevant aspects of street vending in Lesotho. The final questionnaire had 92 questions and was divided into 4 sections; [i] demographic characteristics, [ii] legal issues, [iii] contribution to economy, and [iv] knowledge about food hygiene and sanitation. The questionnaire was administered through face to face interviews.

Ethical issues

Verbal informed consent was obtained from prospective respondents by explaining the purpose of the study and giving assurances about the confidentiality of the data.
Prior clearance to conduct the study had been obtained from Maseru City Council.

Statistical analysis

The data were captured in Microsoft Excel spread sheets and imported into the Statistical Package for Social Sciences [SPSS], V17.0 programme. Descriptive statistics such as ranges, percentages and cross-tabulations were used to present the findings. Comparison of responses and observations between categories of vendors was also done using Pearson's Chi-Squared analysis. Significant difference refers to $p<0.05$.

RESULTS AND DISCUSSION

Demographic characteristics of street vendors

The vendors interviewed mainly operated from fixed stands in the municipal market or in makeshift structures made from plastic, wood and corrugated iron sheets at the bus termini or taxi ranks. The majority of the vendors [77%] were female and most of them [97%] were aged below 55 years [Table 1]. The age range 30-55 years accounted for 53% of the vendors whereas 29% were aged 25-30 years. Fifty two percent of the vendors were married while 27% were single and 15% widowed, yet they were also the sole bread winners.

These observations are similar to those made in other countries such as Democratic Republic of Congo, South Africa, Botswana, Nigeria, Ghana, and Uganda [Martins, 2006; Iyenda, 2001; FAO, 1991; Nasinyama, 1992; Ohiokpehai, 2003; Omemu and Aderoja, 2008]. For example, in Kinshasa 55.1% of the street vendors were women [Iyenda, 2001], whereas in Gauteng, South Africa, 90.5% were women [Martins, 2006]. This however, contrasts with observations made in Dhaka City, Bangladesh, where 72% of the street food vendors were married men [Muzaffar *et al*., 2009]. In Guwahati City, India, 88% of the street food vendors were male [Choudhury *et al*., 2010], whereas in Trinidad 61.7% were male [Benny-Ollivierra and Badrie, 2007]. Similarly, in Nairobi, Kenya, Muinde and Kuria [2005] reported that 60% of the vendors were male. This may be a reflection of cultural differences between the countries studied. However, studies done by the WHO/FAO recognise street food vending as an important avenue for employment creation and poverty reduction for women who often bear the brunt of poverty [WHO, 1996]. Street food vending is therefore an avenue for women in Lesotho to earn an income and contribute to the livelihoods of the family.

More than half of the vendors [59%] had a secondary school qualification, and 32% had primary qualification [Table 1]. Only one vendor had no formal education. This is similar to observations by Muinde and Kuria [2005] in Nairobi, Kenya, where 62% of the vendors had primary education and below, 36.3% had secondary education, whereas only 1.3% had college education. In Nigeria, Chukuezi [2010] reported that

the majority [52.4%] of vendors had secondary education, 14.3% had no formal education, and 28.6% had college education. In Trinidad, West Indies, 72.5% had received primary level education [Benny-Ollivierra and Badrie, 2007], whereas in Guwahati City, India, 46% had attained between primary and high school level education [Choudhury *et al*., 2010].

Table 1. Demographic profile of street food vendors in Maseru, Lesotho.

Category	Frequency [%]
Gender	
Male	23
Female	77
Age of vendor [years]	
15-20	1.0
20-25	14.0
25-30	29.0
30-55	53.0
>55	3.0
Marital status	
Single	27.0
Married	52.0
Divorced	3.0
Widowed	15.0
Separated	3.0
Educational level of vendor	
Primary school	32.0
Secondary school	59.0
College	7.0
University	1.0
None	1.0

Muzaffar *et al*. [2009] reported that vendors in Dhaka City had a poor educational background, with a mean of 3.75 years formal education, reflecting the fact that most of them had not completed their primary education. This shows that street vendors come from all categories of people in the population, but most have basic education, which is a positive thing because the vendors may be trainable in various aspects of food handling. Due to current economic challenges, the Lesotho economy is not able to absorb all potential workers, who then take up informal employment. Street food vending is therefore playing a key role in absorbing such workers.

Income and economic impact of vending on livelihood

Most of the vendors [56%] reported that they had no other source of income. Fifty two percent had not been involved in any other occupation before becoming food vendors. Forty two percent had been food vendors for periods ranging from one year to five years, while about 39% had been trading for over five years. Several vendors [38%] had migrated from other areas to Maseru and took up food vending for a living. Fifty two percent of the vendors operated a one-person business, while 48% of them employed other people to assist them.

Nearly all the vendors reported making a net income [profit] at the end of each day. However, for most of them [51%] the profit was less than 100 Maloti [M100 = c.a. $13, Exchange rate: $1=M7.70], yet some [24%] reported profits between M100-200. Only 18% had profits greater than M300. At M100/day, a vendor would easily make M3000 a month, which is almost 5 times what workers in the textile factories earn, and

10 times the minimum wage [Government of Lesotho, 2007]. Omemu and Aderoja [2008] also reported that street vendors in Abeokuta, Nigeria, earned more than the minimum wage. In South East Asia vendors' earnings were 3 to 10 times more than the minimum wage [FAO, 1991]. Similarly, Iyenda [2001] reported that in Kinshasa, Democratic Republic of Congo, the majority of vendors had a weekly profit between US$51-80. In Accra, Ghana, street foods were estimated to have a turnover of $100 million and to employ more than 60000 people [NRI, 2003]. In Cotonou, Benin, the turnover was US$20 million [Codjia, 2000].

Many of the vendors [53%] had bank accounts, but only 73% of them were saving the money from the vending business. Although the income was seemingly low, 47% could support their families from this income. The income could cover basic needs such as food, rent, school fees, funeral policies and tax. Some of the vendors [42%] paid rentals and taxes to Maseru City Council and the Lesotho Revenue Authority. Forty five percent of the vendors indicated that they had an additional source of income, which included husband's salary [42%], and wife's salary [11%]. Other sources of income mentioned were parents salary, sibling's salary, selling beer, rentals, farming [vegetables, chicken], pension and other small business [e.g. run a small taxi]. However, 53% indicated that they could not adequately support their families because the family members were many.

Forty eight percent [48%] of the vendors indicated that they engaged one or two other persons to help with the business. This observation is similar to what was observed in Owerri, Nigeria, where 47.6% of the vendors employed an additional hand to help with the business [Chukuezi, 2010]. In contrast, Martins [2006], commented that street food vending contributed very little to job creation in South Africa, and most of the vendors are engaged in one person operations. However, it is our opinion that street food vending can contribute to employment creation. In addition, street food vendors usually buy from small scale suppliers including fruit and vegetable vendors and butchers, thereby linking directly with other small scale enterprises [FAO, 1991].

Legal issues

Almost all the vendors [99%] were renting their stands from Maseru City Council [MCC]. Only 16% of the vendors reported previous eviction by City authorities because of selling at undesignated sites. However, 12% of the vendors were aware of food laws but a few [5%] knew the enforcing authority. Ninety six percent [96%] of the vendors had health certificates. This adherence does not truly reflect the health status of the vendors as this is a one off requirement. Many never get regular check-ups. It is a requirement under the Public Health Order in Lesotho that all food handlers should be medically examined before handling food. However, there was no significance [$P>0.05$] difference in income patterns whether one had a licence or not.

Legally, food handlers have to be licensed to run a food catering business. Eleven percent of the vendors were licensed by Ministry of Trade and Industry and MCC. Street food vending is illegal in Maseru. Regardless of this, food vendors seemed to operate without much disruption from the local authority during the study period. Once in a while the Maseru city council often tries to remove vendors from the streets because of perceived and real incidents of disruption of vehicular and human traffic. For example, in 2004, the Maseru City Council [MCC] evicted vendors, including food vendors, from the main street of Maseru [Kingsway] to the market area [Setsăbi and Leduka, 2008]. This suggests that the vendors could be tolerated well if they were to operate at the market place. Unfortunately street vendors usually follow their customers in order to offer the best convenience to the client. In other countries, street food vendors and most traders in the informal sector are in a cat and mouse game with the police and local authorities. Chukuezi [2010] observed that 73% of the street food vendors in Owerri, Nigeria, had been harassed by government officials while doing their business.

However, the vendors recognised the need to abide by the public health laws to avoid food poisoning outbreaks as shown by the frequency of health permits [96% vendors] and licences [11%] in possession of

some of the vendors. This observation is unlike what was observed in Abeokuta, Nigeria, where only 31% of the vendors had health certificates [Omemu and Aderoja, 2008]. Unfortunately the current principal food law in Lesotho, the Public Health Order, was last reviewed in 1970 and may not be consistent with current trends and emerging public health challenges.

The operations were not monitored, possibly because street food vending is illegal. Inspecting the vendors could then be misconstrued as legalising street food vending. However, the fact that they are not being forcefully removed from the markets and other open spaces suggests that the authorities recognise their contribution to the community. The WHO [1996] recommends that government intervention in street food vending is necessary to ensure that the general public access wholesome, safe and nutritious food. It may be cheaper to buy street food than to cook, as observed by Omemu and Aderoja, 2008]. Yasmeen [2001] also suggested that it makes more sense to regulate and manage the street food sector than try to eliminate it. Therefore, there is need to continuously review the laws governing street food vending in Lesotho.

Food preparation and types of food

All the vendors prepared most food at the market stall. A few vendors [4%] prepared some foods at home, which were then transported to the vending site. Twenty four [24] different types of foods were recorded [Figure 1]. The majority [89%] of the vendors sold papa served with vegetables [100%], chicken [69%], beef stew [40%] or roasted pork meat [46%]. The papa could also be served with minced meat, offal [i.e. beef offal, and chicken gizzards], chicken legs, sausages [boerwors, Russian and Vienna] and various vegetable salads. *Motoho* [a traditional non-alcoholic fermented beverage], home-made ginger beer and fizzy drinks were the beverages served with the food. Street foods are fairly cheap [US$1-2/dish of papa and beef stew] such that many people from different walks of life can afford to buy them. The range of foods recorded in this study is similar to what was observed in Botswana and South Africa. In Botswana, for example, the commonly traded street foods were fat cakes [*magwinya*], doughnuts, corn on the cob, extruded products, roasted beef and chicken, fruits and vegetables, dried mopane worms and soft drinks [Ohiokpehai, 2003]. Martins [2006] reported that the commonly traded street foods in South Africa were pap and meat. Tea, bread and vetkoeks [fat cakes] were also sold. In addition, the vendors obtained their raw materials mainly from supermarkets [51%]. A high number of vendors obtained their raw materials, especially meat, from non-formal sources.

Cooking methods

Vendors used various methods for cooking the food. The most commonly used methods were frying [46%], stewing [31%] and boiling [24%]. The papa was boiled and served with fried beef, chicken or pork or the stewed meat. The meat was also often roasted and served with the papa. The FAO [2001] report on street foods also noted that street foods are different from fast foods because street vendors specialise in fewer foods and use frying as a main food preparation method. The diversity of preparation methods used impacts differently on the nutritional value of the food. The street foods are generally well accepted by consumers.

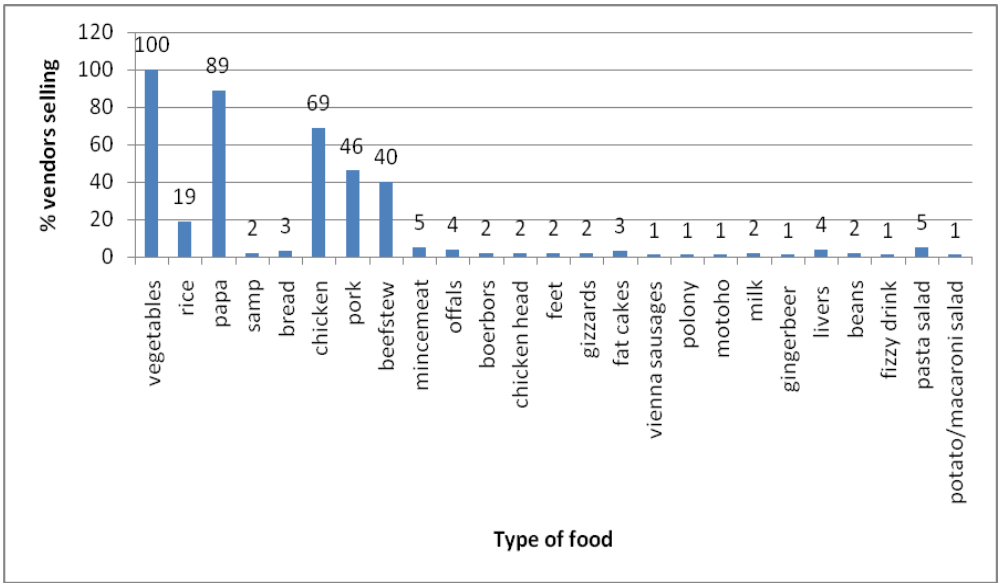

Figure 1. The different types of food items sold by street food vendors in Maseru, Lestho.

A large percentage of vendors [88%] kept the food at ambient temperature before serving. More than half of the vendors [59%] did not reheat food prior to serving. About 7% sold leftover food after warming it. Some even keep the food for up to 2 hours at ambient temperatures [danger zone] while waiting for customers, posing a serious risk for food poisoning [WHO, 1989]. There is need to sensitise the vendors on safe food handling practices.

Storage and serving of food

The vendors [26%] had storage containers for raw materials. In particular, vendors [31%], stored raw food in cooler boxes although many of them also indicated that some food items were stored in the cooking pots as well as in plastic buckets and lunch boxes Fifteen percent of the vendors had access to a refrigerator at home.

The vendors [91%] reported that cooked food was kept in the cooking pots before serving. However, some usually transferred the food into plastic [4%] and glass serving dishes [1%], and other utensils [4%]. Serving dishes included plastic plates [14%], glassware [79%], and disposable plates [1%]. Muinde and Kuria [2005] found that in Nairobi, street food vendors used utensils made from plastic, metal, enamel or disposable polythene bags. Plastic plates are difficult to clean. It is more hygienic to use disposable plastic plates, which should be used only once [FAO, 1997]. Some vendors [68%] reported holding times of between 0 and 30 minutes before serving, whereas 12% reported a time lapse of 1 to 2 hours. About 20% kept the food for more than 2 hours before serving. This is similar to observations in Port Harcourt, Nigeria, where food vendors recorded holding periods of 1-2 hours [Mepba *et al*., 2007]. Improper storage or holding of food at ambient temperature for prolonged periods are well known risk factors contributing to foodborne illnesses [Benny-Ollivierra and Badrie, 2007].

Handling of left-over food

Seven percent [7%] of the vendors threw away any left-over food, whereas 20% recycled, and 51% took/ carried the food home for own consumption. Twelve percent [12%] gave left-over food to their workers. One vendor disposed of the food or gave to street kids. In Nairobi, 32.1% of street vendors studied reportedly consumed any left over food, and the rest [67.9%] stored the food for next day's use. In the current study, among the vendors who recycled food, only one vendor indicated that the left over food was mixed with fresh food, and then cooked thoroughly on the following day. The rest of the vendors simply warmed and

served the food. Re-use or recycling of food has to be done carefully. Importantly, the cooked food should not be mixed with raw food items to avoid cross contamination, and the food should be heated to at least 70^{o}C to kill any pathogenic microorganisms that may have contaminated the food [WHO, 1996].

Hygienic practices

Only one of the vendors reported to have trained in food hygiene. Training of the vendors in hygiene would contribute to improved quality of food. However, 56% had heard or received information on food hygiene. Vendors had received information about personal cleanliness [60%], use of clean equipment and utensils [12%], cross contamination [1.39%] and food handling [1.39%]. The main source of information was the radio or television [92%]. Others obtained food hygiene information from magazines, books or friends [5%] or at workshops [3%].

The main source of water for the vendors [74%] was public water taps. Only 2% of the vendors had a tap inside the store. However, 24% obtained water from a stand pipe just outside the shop, whereas 39% had to walk about 500m. Thirty three percent [33%] indicated that the distance to the water point was between 500m and 1km. Four percent [4%] fetched water more than a 1km away. Majority of the vendors [99%] washed their dishes in one container, with only 1 washing under running water. For those who had employees, 57% reported that employees washed hands in the same container used for washing dishes and 12% poured from a jug. Majority of the vendors [97%] used public toilets whereas 3% indicated the use of private toilets. This is similar to observations in a study in Trinidad where none of the vendors had a supply of piped water at the point of operation [Benny-Ollivierra and Badrie, 2007]. The need to save time spent in fetching water or unavailability of convenient wash basins and sinks may explain the practice of using water in buckets to wash utensils and hands by both the vendors and consumers, even after using the toilet. This creates a potential hazard of cross-contamination. The vendors used public toilets located away from the vending site, thereby casting doubt on the effectiveness of hand washing. In Abeokuta, Nigeria, 76% of street vendors reportedly washed their hands after using the toilet [Omemu and Aderoja, 2008].

A great number [43%] of the employees did not use soap to wash hands, which is necessary for effective hand washing [WHO, 1984]. Van Kampen *et al*., 1998] observed that there was a poor correlation between lack of appropriate facilities and good food handling practices. In another related study in Guwahati City, India, Choudhury *et al*. [2010] reported that only 30-37% of vendors were aware of hygienic practices for food handling. In our study, there was no significant difference [$P>0.05$] in hygienic practices [i.e. washing hands with soap or washing in the same bucket] between those who were aware of food safety laws and those who were not. This suggests that further training of the vendors is necessary.

Many vendors [55%] rated the general cleanliness in the market as very poor. Five percent [5%] rated it as good. Ninety five percent of the vendors had refuse storage receptacles at or near their premises. Communal refuse receptacles were used for waste storage [65%]. Some used dustbins without a lid [15%], dustbin with a lid [5%], while others used plastic or paper boxes. The refuse containers were emptied daily [27%], weekly [26%], or monthly [6%]. About 41% did not know when the containers were disposed. The vendors disposed their liquid waste in pits [78%]. About 18% reported that they threw the water around the vending site. Solid waste management was to some extent satisfactory, whereas there is need to improve handling of liquid waste.

The vendors were also assessed for knowledge about diseases transmitted through food. Forty eight percent were aware of diseases associated with poor handling of food. The diseases mentioned included diarrhoea [53% vendors] and cholera [14%]. Others also mentioned allergies, typhoid, TB and fever. Unfortunately, some believed that HIV/AIDS and malaria were food-borne diseases.

Consumers of street vended foods

A large percentage of the customers of the street food vendors were travellers and shoppers [50%, both men and women], and taxi drivers [30%]. They consumed the meals on-site or as take-away depending on individual choice. Some of the vendors also reported that school children [2.6%] and office workers [10.4%] were some of their customers. This is similar to observations by Ohiokpehai [2003] that students and the homeless in Botswana were reliant on street foods. The street food consumers in Botswana included both the working class and professionals [Ohiokpehai, 2003].

Challenges and opportunities for street food vendors

The survey also looked at both the challenges and opportunities surrounding street food vending in Maseru. Numerous vendors [90%] reported that the major constraint faced was low business [lack of customers] [49%] [Figure 2]. This could reflect strong competition and/or overtrading. Perhaps the vendors had an expectation of brisk business when they joined the trade, which has not been realised. However, the vendors make a profit, which suggests that with a little more organisation and investment in infrastructure, this problem can be overcome. The crowding of vendors in one place is a common phenomenon of street food vending [FAO/WHO, 2006]. The vendors usually locate themselves at vantage points where customers can have easy access. Places such as markets and bus termini are the major targets for street vendors. However this level of competition may be beneficial to the customers as this may force vendors to sell quality food at competitive prices. Iyenda [2001] reported that high level of competition was beneficial to both vendors and customers in Kinshasa as it resulted into increased efficiency.

The vendors also reported frequent food spoilage [13%] due to lack of appropriate storage facilities like fridges since they were operating from makeshift structures. Some of the vendors [12%] had problems of repaying loans. Some vendors [11%] had obtained small loans from banks and credit unions, but most [59%] had borrowed start-up capital from their relatives and colleagues.

Several vendors noted that poor infrastructure [37%], unavailability of clean water [14%], electricity [11%] and inadequate start up funds [18%] were the impediments to their businesses. The vendors suggested the need for government intervention in providing basic infrastructure such as toilets, running water and electricity near their vending sites. This would enhance their business operations especially by improving the positive perception about the quality of the street foods. However, government intervention may be difficult to obtain unless there is legal recognition of street food vending. The national laws and local bye-laws would have to be changed to formalise street food vending.

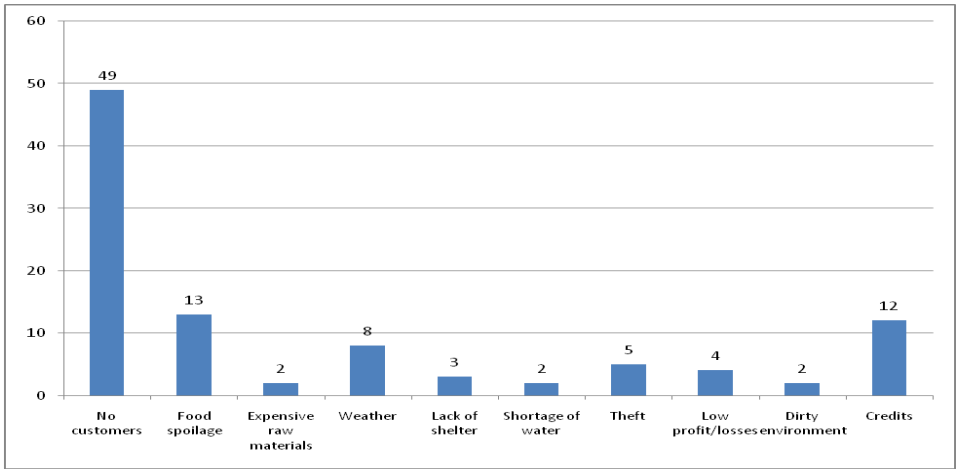

Figure 2. The major constraints to sustainable business faced by street vendors in Maseru, Lesotho.

The vendors indicated the need for assistance from Government and its development partners to improve their businesses. In particular, vendors cited shelter [37.5%] as a major need for their businesses to move forward. Some needed running water [14.2%], electricity [11.7%] and financial support [18.3%].

CONCLUSIONS AND RECOMMENDATIONS

The majority of the vendors were women. The study showed that street food vendors in Maseru made some profits which helped them take care of their families and therefore contributed to their livelihoods. Hygienic practices were not satisfactory, which may compromise the health of consumers. In order to improve the quality and safety of street food sold in Maseru, the following activities are recommended:

1. There is need to train the vendors on good hygienic practices and provide basic infrastructure such as piped water near their places of operation.
2. The local authority, together with other food control authorities, needs to come up with a viable legal framework for the vendors to operate in.
3. A detailed study on the actual incomes and profits is needed so that a comparison with other vendors in other countries can be made. The street food vendors in Maseru can potentially improve their businesses if given the necessary support. This will in turn improve their contribution to the national economy.

ACKNOWLEDGEMENTS

The authors thank the National University of Lesotho Research Committee for funding this research. We also thank Lieangoane Shakane and 'Mamachobane Lephoto for helping with data collection. Our special thanks also to the street food vendors and the market committees in Maseru for their support during data collection.

LITERATURE CITED

Acho-chi, C. [2002]. The mobile street food service practice in the urban economy of Kumba, Cameroon. *Singapore Journal of Tropical Geography* 23: 2002, 131-148.

Barro, N., Bello, A.R., Savadogo, A., Outtara, C.A.T, Ilboudo, A.J. and Traore, A.S. [2006]. Hygienic status assessment of dish washing waters, utensils, hands and pieces of money from street food processing sites in Ouagadougou [Burkina Faso]. *African Journal of Biotechnology* 5: 1107-1112.

Benny-Ollivierra, C., and Badrie, N. [2007]. Hygienic practices by vendors of street food "doubles" and public perception of vending practices in Trinidad, West Indies. *Journal of Food Safety* 27: 68-81.

Bryan, F. L., Jermini, M., Schmitt, R., Chilufya, E. N., Mwanza, M., Matoba, A., Mfume, E., and Chibiya, H. [1997]. Hazards associated with holding and reheating foods at vending sites in a small town in Zambia. *Journal of Food Protection* 60: 391-398.

Bryan, F. L., Michanie, S., Alvarez, P., and Paniaywa, A. [1988]. Critical control points of street-vended foods. *Journal of Food Protection* 51: 373-383.

Bryan, F. L., Teufel, P., Riaz, S., Roohi, S., Qadar, F., and Malik, Z. [1992]. Hazards and critical control points of vending operations at a railway station and bus station in Pakistan. *Journal of Food Protection* 55: 534-541.

Chakravarty, I. & Carnet, C. [1996]. Street Foods in Calcutta. *Food, Nutrition and Agriculture*, Issue 17/18, 7. http://www.fao.org/docrep/W3699T/w3699t06.htm. 30/01/12.

Choudhury, M., Mahanta, L., Goswami, J., Mazumder, M., and Pegoo, B. [2010]. Socio-economic profile and food safety knowledge and practice of street food vendors in the city of Guwahati, Assam, India. *Food Control* 22: 196-203.

Chukuezi, C.O. [2010]. Entrepreneurs of the streets: Socio-economic features of street food vending in Owerri, Nigeria. *European Journal of Social Sciences* 14: 183-188.

Codjia, G. [2000]. FAO technical support for improvements within the street food sector. http://www.doh.gov.za/department/food_control/streetfood/12.pdf. 11/03/11.

Ekanem, E.O. [1998]. The street food trade in Africa: Safety and socio-environmental issues. *Food Control* 9: 211-215.

FAO. [1991]. Street foods in Nigeria. Comparative study of the socio-economic characteristics of food vendors and consumers in Ibadan, Lagos and Kaduna, Nigeria. Rome and Ibadan, FAO and Food Basket Foundation International.

FAO. [1997]. Guidelines for the design of control measures for street vended foods in Africa. CAC/GL 22-1997. www.fao.org/docrep/w6419E, Rome, Italy. Accessed 8 November, 2012.

FAO. [2001]. To bring about coordination in the street food sector and consumer advocacy programmes: A strategy document. TCP/SAF/8924 [A], Rome, Italy.

FAO/WHO. [2006]. Practical Actions to promote food safety. Regional conference on food safety for Africa, 3-6 October 2005, Harare, Zimbabwe.

Gadaga, T.H., Samende, B.K., Musuna, C., and Chibanda, D. [2008]. The microbiological quality of informally vended foods in Harare, Zimbabwe. *Food Control* 19: 829-832.

Government of Lesotho [Ministry of Trade and Industry, Cooperatives and Marketing] [2007]. Why Invest In Lesotho - Competitive Business Costs. http://www.trade.gov.ls/invest/competiveness.php. 25/03/2012.

Iyenda, G. [2001]. Street food and income generation for poor households in Kinshasa. *Environment and Urbanisation* 13: 233-241.

Korir, S.C.R. [1994]. Types and quality of street foods and vendor characteristics at selected construction sites in Nairobi. Unpublished MSc dissertation. University of Nairobi. http://www.researchkenya.org/?ID=2832&search=Quality. 30/01/12.

Martins, J.H. [2006]. Socio-economic and hygienic features of street food vending in Gauteng. *South African Journal of Clinical Nutrition* 19: 18-25.

Matsie, R. [2009]. Gender relations and women's livelihoods in the Post-Mine retrenchment era: A case study in Mafeteng, Lesotho. MSc Dissertation. University of Pretoria. http://upetd.up.ac.za/thesis/available/etd-09092010-140507/unrestricted/dissertation.pdf. 30/01/12.

Mepba, H.D., Achinewhu, S.C., Aso, S.N., and Wachukwu, C.K. [2007]. Microbiological quality of selected street foods in Port Harcourt, Nigeria. *Journal of Food Safety* 27: 208-218.

Molefe, N. [2009]. Socio-economic impacts of mine retrenchments on household livelihoods in Lesotho. M.A. Dissertation, University of Witwatersrand.
http://wiredspace.wits.ac.za/bitstream/handle/10539/7628/N.%20Molefe0418792P_Report_MA%20DevStudies__09.pdf?sequence=2. 6/05/11.

Moy, G., Hazzard, A., and Käferstein, F. [1997]. Improving the safety of street vended food. *World Health Statistics Quarterly* 50[1/2]: 124–131.

Muinde, O.K., and Kuria, E. [2005]. Hygienic and sanitary practices of vendors of street foods in Nairobi, Kenya. *African Journal of Food, Agriculture and Nutrition Development* 5: 1-13.

Muzaffar, A.T., Huq, T., & Mallik, B.A. [2009]. Entrepreneurs of the streets: an Analytical work on the street food vendors of Dhaka City. *International Journal of Business Management* 4: 80-88.

Nasinyama, G. W. [1992]. Study on street foods in Kampala, Uganda. Food and Agricultural Organisation of the United Nations, NU/43. Internal series.

Natural Resources International [NRI], [2003]. Street Food in Ghana, www.nri.org/projects/streetfoods/project2-moreinfo.pdf. Retrieved 22 March 2011

Ohiokpehai, O. [2003]. Nutritional aspects of street foods in Botswana. *Pakistan Journal of Nutrition* 2: 76-81.

Omemu, A.M. and Aderoja, S.T. [2008]. Food safety knowledge and practices of street food vendors in the city of Abeokuta, Nigeria. *Food Control* 19: 396-402.

Setsăbi, S. and Leduka, R.C. [2008]. The politics of street trading in Maseru, Lesotho. *Urban Forum* 19: 221-241.

Tambekar, D.H., Kulkarni, R.V., Shirsat, S.D. and Bhadange, D.G. [2011]. Bacteriological quality of street vended food panipuri: a case study of Amravati City [MS] India. *Bioscience Discovery* 2:350-354.

van-Kampen, J., Gross, R., Schultink, W., and Usfar, A. [1998]. The microbiological quality of street foods in Jakarta as compared to home-prepared foods and foods from tourist hotels. *International Journal of Food Science and Nutrition* 49: 17–26.

WHO. [1984]. The role of food safety in health and development. WHO Technical Report Series, No. 705: Report of a Joint FAO/WHO Expert Committee on Food Safety, Geneva, Switzerland.

WHO. [1989]. Health Surveillance and management procedures for food handling personnel. WHO Technical Report Series, 785, Geneva, Switzerland.

WHO. [1996]. Essential Food Safety Requirements for Street Vended Foods; Revised Edition, WHO/FNU/FOS/96.7, http://www.who.int/foodsafety/publications/fs_management/en/streetvend.pdf, Geneva, Switzerland. 6/05/11.
Yasmeen, G. [2001]. Workers in the urban informal food sector: innovative organising strategies. *Food, Nutrition and Agriculture* 29: 32-43.