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# Street-food Vending: Training Directed at Better Food Handling and Associated Environmental Issues

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ABSTRACT Street vending provides a means of economic development and provides jobs which help alleviate poverty. An advantage of street-food vending is that it may be a source of inexpensive nutritional food while it is also a source of income for the poor. However, if this enterprise is not handled correctly it may have dire consequences in terms of health and hygiene. For instance, without proper guidance to food vendors this may result in food poisoning for the consumers. This study was intended to recommend ways in which street-food vendors could be assisted in order to understand the health aspects of handling food as well as business issues. To accomplish this, focus group interviews were conducted amongst 29 respondents of whom 26 were Black female and 3 Black males. The results revealed that mainly women use street-food vending as a means to earn a living to alleviate poverty. Also, the street-food vendors identified issues related to health and hygiene, customer care as well as skills for developing a business as important to them. It is recommended that the training of street-food vendors be a priority for city officials. Furthermore, it is recommended that street-food vendors be trained on customer care. Finally, it is recommended that street-food vendors wanagement.

### INTRODUCTION

As the twenty-first century progresses into its second decade, the winds of social, economic and political change are evident throughout the world. Global environmental change is apparent and, daily, consumers and waste producers need to act with greater responsibility. Ernstzen (1993) is of the view that human poverty and deprivation in the world are intertwined with the worsening environmental conditions - in other words, poverty has become a self-fulfilling cycle. In poor countries sustainable development means first and foremost addressing these intertwined problems of human poverty, deprivation and worsening environmental challenges which may be different to those faced by modern economies. In poor countries the urgent priorities focus on basic human necessities that need to be addressed. Accordingly, economic development that can alleviate poverty has to be stimulated, while simultaneously conserving natural resources essential for economic growth. South Africa is not immune to environmental and political change. An emerging environmental consciousness is evident as people become aware of the consequences of unchecked populations, uncontrolled waste disposal, and the over-consumption of resources. Government and city planners in South Africa should therefore attend to sustainable development issues. To this end, the education of citizens on environmental matters is important. Referring to this very matter, Jai Prabhakar and Gangadhar (2011: 159) pointed out that a "... healthy population can lead the nation better in all the frontiers."

According to the mid-2011 estimates from Statistics South Africa, the country's population stands at 50.5 million, up from the census 2001 whose count was 44.8 million. About 62% of the South Africa's population are currently living in urban areas and it is estimated that by 2050 as much as 80% of the population will be living in urban areas. This estimate takes into account the fact that the HIV/AIDS pandemic is still gaining momentum and might reduce the South African population by a significant margin. In South Africa, most poor people live in areas with no electricity supply (Capricorn District Integrated Development Plan 2004). These people are forced to use other energy sources, often coal, for both cooking and heating in a city like Polokwane (Mukhola 2006). Street vendors often burn coal, which is an environmental pollutant, as carbon dioxide, one of the by-products, contributes to global warming when preparing food. Thus, it is argued that air pollution may be associated with poverty, and the problem is made worse by street vendors who use coal as fuel to prepare

food for their customers. The South African constitution states that all citizens shall have the right to an environment that is not harmful to their health or wellbeing, and the right to have the environment protected and economically balanced (Republic of South Africa 1996). Proper legislation which promotes co-operation between local people, the government, and other agencies is needed. The success of legislation can only become a reality if financial *penalties*, linked to appropriate forms of *reparations* by offenders, are in place for the damage caused to the environment.

Harrison (1994) argues that there is a strong relationship between people and their environment, and that this affects their personal health and lifestyles. Education is an important means to inform people of their rights and obligations towards the environment. It is, therefore, important, to educate the public, particularly streetfood vendors, to make them aware of the factors that might lead to environmental degradation. Sutton (1994) believes that environmental problems have an adverse effect on the standard of living and quality of life and may, in fact, threaten the lives and livelihoods of people. In the light of this, street vendors should be assisted in gaining an understanding of ways in which their industry can have an impact on both the environment and the economy of the city. It is important that they understand the causes of environmental abuse, and how problems affecting the environment can be tackled. Educating street vendors will assist them to realise the importance of protecting the environment they work in. In a related study about environmental education, staff of the Kruger National Transfrontier Park's Environmental Education Unit describe the importance and impact of offering environmental education to children in local schools. In this regard, the Environmental Education Unit identifies children as appropriate agents for communicating about environmental issues to their parents and the local communities (Mukhola 2006). In essence, educational intervention is critical in order to make people aware of the importance of the environment. A spin-off of educating communities is that their attitudes and commitment towards solving environmental issues change.

In this case study, the citizens referred to are street-food vendors specifically operating in the city of Polokwane, the capital of Limpopo Province in South Africa. Street vending provides a means of economic development and provides jobs which alleviate poverty. An advantage of street-food vending is that it may be a source of inexpensive nutritional food (Bryan et al. 1998). The objective of this study was two-fold. First, to gather information regarding street-food vending from the people engaged in this enterprise. Secondly to provide recommendations on how they could be assisted in order for their businesses to be sustainable. In particular, the study was intended to recommend ways in which streetfood vendors could be assisted for them to understand the health aspects of handling food as well as business issues. The researcher felt that an investigation of the subject itself and activities of street vendors is important in order to contribute to the knowledge base related to this enterprise.

#### **METHODS**

This study, first and foremost, examined the knowledge gap about environmental issues amongst street-food vendors. Investigating the knowledge gap is consistent with the view that "... in order to design effective training for food handlers there is need to fully understand all the factors underlying food hygiene behaviour in the workplace" (Seaman and Eves 2010: 983). The study focused on gaining insight that would guide the researcher in drawing up guidelines for vendors' environmental education. In this descriptive study the qualitative approach was used. Initially it had been planned to conduct individual interviews. Instead, the researcher conducted focus group interviews because street vendors indicated that they were more comfortable and preferred to share their experiences collectively. As a result of their request, focus group interviews with street-food vendors as well as municipal health officials were conducted. Additionally, observations of street vendors' surroundings, disposal of waste and cleanliness were conducted and recorded in the researcher's journal. Specifically, data was collected from the 29 street vendors. The focus group discussions were conducted with groups of 5 participants. In asking questions researchers followed the guidelines that stipulate that what is asked should stimulate responses (Merium 1998).

Participants were purposively selected as they arrived at the selling points and only willing participants were interviewed. This voluntary participation is in line with sample selection procedures recommended by Leedy (2001). Focus group interviews were conducted in Northern Sotho - a language spoken by the street vendors in the study area. This was found to be ideal because it allowed the participants to provide their own understanding of the industry and its relationship to environmental matters more freely. Secondly, the researcher made use of an audio tape recorder in combination with a video tape recorder as all participants gave their consent to the use of technology (Mukhola and Mji 2008). The use of these taped recordings as datacollection methods ensured the capturing of as much of what was discussed as possible. This method also gave the researchers an opportunity to seek clarification on issues they did not understand themselves.

Typical questions in the focus group interviews assumed a format such as 'Talk to me about your experience in this business of street food vending' were included. Twenty-four (24) questions in 9 categories were included. Categories were, for example, personal details of street vendors, academic qualifications of street-food vendors, involvement in street-food vending, involvement in street-food handling, facilities used by street-food vendors, views of street-food selling by vendors, training in street-food handling, ideas of a successful business venture, and lastly use of a picture of a person handling food properly/badly. Furthermore, in order to validate what the vendors indicated three (3) city officials from Polokwane (one) and the city of Durban (two) were also interviewed. These municipal officials are environmental health practitioners working for the cities' respective environmental health services divisions and were included in the research because of their involvement with city street vendors. These officials were asked questions regarding the experiences and challenges of street-food control. All these activities were carried out in order to give a voice to street vendors and, based on that, to recommend training programmes that would help improve their situation.

## **Data Analysis**

Discussions were conducted in the language of the interviewees. This was done because it

was convenient to quickly verify with the participants whether what was recorded indeed represented their opinions. This also allowed for the researcher to internally validate the process by ensuring that the information provided was accurately captured, and correct. All the recordings were translated into English. The validity of this process was ensured by asking a Language Practitioner to transcribe and translate the recorded information. A constant comparative method of data analysis developed by Glazer and Strauss in 1967, further developed and refined by Lincoln and Guba in 1995 was used to facilitate the data analysis process (USAID 1996). The different responses were initially sorted, coded and analysed for relevant and compatible themes (Maykut and Morehouse 1994).

### **FINDINGS**

The study included 29 respondents all of whom were vendors of street food in Polokwane City. The demographic data obtained from the respondents revealed the following information: there were 26 (90%) Black females and 3 (10%) Black males. Their ages ranged between 16 years and 52 years (M = 34.5 years; SD = 10.9).

# **Environmental Education Programme for Vendors**

The majority of participants (street vendors) liked the notion of training for street-food vendors. They indicated the need for training on the following aspects: food preparation; customer care; pricing and financial skills; stock control; purchasing dynamics; budgeting; food catering and the completion of tenders documents related to such catering; health and security measures in relation to food. Participants were asked to indicate the ideal time they would avail themselves for training. They identified Wednesday afternoons and Saturdays as being the most feasible times. This was also confirmed by the three officials. About training, the officials felt that the priority was for vendors to undergo training in observing health, hygiene and sanitary measures. They also felt that the municipality should intervene with the introduction of courses that will assist vendors to understand the importance of selling food in the closed sheds that were provided within the city streets. For instance, Official 1 from Durban indicated:

The cultural way of respecting food and the people who must eat the food has somehow been lost. I think the respect for healthy food should be cultivated in those who are ready to continue in selling street food.

## Grievances of Street-Food Vendors, and Assistance Required

In addition to the concerns that participants raised, they further indicated that they were always being harassed with evictions by owners of the premises in which they conduct their businesses. These owners (landlords) insist on rentals despite the lack of facilities. In this regard, one participant's view was more succinct when she stated the following:

... these White people want to terminate our contracts for renting and for no reason. They always walk tall and talk proudly that they are the landlords. They always send us letters to chase us away from these spots.

In some instances, landlords took the vendors to court. According to vendors when a court ruling was in their (vendors) favour that for instance, the landlords should not evict vendors, landlords tended to retaliate by increasing rental amounts as a means of 'revenge'. Thus rental increments were meant as a way of kicking the vendors out of the trading premises 'officially' because vendors could not afford such increases. A further bone of contention was the fact that vendors discovered that they were not paying the municipality the licence fee. In certain instances some vendors were not paying anything at all. One participant noted that in the event of vendors not paying the municipality their dues, they are victimised; where fines of up to R500.00 (approximately US\$69) are imposed on them, and their goods confiscated without anyone ever informing them later of their goods' whereabouts. This participant further pointed out that this happened regardless of whether they had paid or not. Essentially the vendors indicated that there did not appear to be a structured system of payment from the municipality's side.

Some participants also indicated that the municipality wanted them to move away from areas where they were operating in. Their main concern was that these decisions were not negotiated with them. In fact, it turns out from the interviewed officials, that the municipality wanted vendors to relocate to another area where they

had built market shelters for them outside the city centre. However, the participants felt that for their trade to survive they should be where their customers were. In essence, the vendors were arguing that for them to move, the taxi rank should then also be relocated adjacent to them. The vendors' argument was that business must go to the people; it should not be the other way round – a notion they claim the municipality subscribes to. Participants also indicated that the municipality has to demarcate the sites from which they operate equally so as to quell confusion among vendors, and that they have to establish a flat rate for rentals.

It was felt that criminal activities had declined since street vendors started to operate in Polokwane centre. The presence of the street vendors became a deterrent to petty criminals as the vendors could report untoward activities to the police. Another view was that the municipality should not deter people from coming to the centre for vending purposes. In fact the prevailing view was that food vending should thrive. It was indicated, however, that more conducive conditions would prevail if mutual understanding and cooperation existed among street vendors and the municipality. In this regard one participant who expressed this viewpoint motivated his opinion thus.

... Our street vendors ... are adamant in the sense that they do not want the municipality to introduce any change whatsoever. They want certain things from the municipality but, do not expect the municipality to demand anything from them ... Even if the municipality wants to assist them they see that as a challenge and start to rebuke whatever comes from the municipality.

Officials felt that if vendors could embrace the municipality's advice, more opportunities could be created for them. Participants elaborated further in this regard by indicating that the municipality could create schemes for funding people who want to start their own businesses. These can potentially be secured at reasonable rates of return.

# DISCUSSION

This article has outlined how mainly women use street-food vending as a means to earn a living to alleviate poverty. This finding is consistent with those reported in other African countries. For instance it is reported in Uganda too that "... street food vending generates income to households and majorly dominated by women" (Muyanja et al. 2011: 1511-1558). Importantly, the street-food vendors identified issues related to health and hygiene, customer care as well as skills for developing a business as important to them. The issue of health and hygiene is critical because it has been shown that nutrition education is useful in modulating "... the perception of the factors that influence the participants' food choices" (Anetor et al. 2013: 188). The self-assessment by participants is important because it highlights the vendors' willingness to change. About this issue, it is pointed out that "... willingness to change behaviour is determined by perceptions and beliefs ... people have to perceive that their current behaviour endangers their health and that action has a strong likelihood of reducing their risk" (Wilcock et al. 2004: 61). Training related to health and hygiene was also identified by the interviewed officials. The officials felt that training in respect of hygiene and sanitary measures should be a priority for street-food vendors. A healthy environment promotes good health and so an environmental education programme for street vendors should strive to promote the protection of the environment in which they operate. People involved in teaching environmental issues consider experiential learning and behavioural change to be directly related to teaching about the environment.

What is clear is the fact that "Food safety is a global issue" and "Governments all over the world are working to decrease foodborne diseases and illnesses" (Arendt et al. 2012: 125). Ensuring that a clean healthy environment prevails at all times where food is sold to the public is critical. It is critical because if food is handled in unhygienic conditions and is sold to the public, this may result in an outbreak of food poisoning for instance. This is extremely important because food poisoning is common in South Africa and many people die unnecessarily (Draper 1996). It is important therefore that the streetfood vendors should be trained about basic cleanliness such as regularly washing their hands. Regarding hygienic conditions, Seaman and Eves (2010: 983) argue that it "... may be critical for food handler to regularly carry out different food safety actions, such as cleaning

correct food storage, and hand washing." The introduction of environmental education in a programme for street vendors should emphasise the relationship between social justice and a healthy environment (Huan 2004). Crafting teaching resources should be done with sensitivity and consideration of the levels of education of most street-food vendors. This is partly because street-food vendors are largely illiterate (Mukhola 2000). For instance in the study area, the last investigation in 2004 involving street food vendors found that most were illiterate and about 33.4% had some form of primary education (Capricorn District Integrated Development Plan 2004). The issue of illiteracy is similar to that reported in India too where educational levels of street vendors were reported to be low and 21% of them illiterate (Chakravarty and Canet 1996).

The training of street-food vendors must integrate environmental protection into various activities in each programme. Integrating environmental education into courses would raise the awareness of the learner (Huan 2004), and high priority should be placed on maximising environmental education opportunities, as well as increasing the opportunities for street vendors to be involved in environmental management and the pursuit of sustainability. People involved in the teaching of environmental education must be aware and knowledgeable of the importance of environmental protection. People should also be familiar with environmental protection laws and the regulations and bylaws of the city in which they operate. In this way, people to whom assistance is being offered, such as street vendors, will gain knowledge from the officers guiding them. Environmental education needs to address the needs of street vendors within their local context, the way they live and the impact they have on the environment.

Effective environmental protection will benefit street vendors financially, as customers will prefer to buy their wares in a clean environment. Mukhola (2000) found in his study in Polokwane that consumers were able to influence the streetfood vending community by challenging the vendors to provide healthy food. Environmental education, according to the Environmental Education and Training Partnership (1997), is a continuous learning process that evolves according to human experiences and is informed by life experience. As its ultimate goal, environmental education envisages a change in human behav-

iour as a result of the incorporation of experiential learning. Furthermore it is argued that education is an inherently value-laden endeavour (Jickling 2003). This author also states that environmental educators convey important implicit messages in the educational setting and the content of the training programme, as well as what they leave out of their instruction (Jickling 2003). When environmental educators do not pay attention to all messages related to the environment, they create situations that may negate their declared intentions. For example, if a desired outcome is to have street vendors participate effectively in protecting the environment, yet the trainers harass them as they go about their daily business, implicitly the training programme works against its aims, and much about real values is revealed. It is hard to imagine how anyone can be made aware of a lack of environmental awareness in such a hostile environment. Similarly, if it is believed that an environmental ethos is grounded in qualities such as concerned and understanding care of the environment, then it is necessary to create a context that incorporates these qualities. By educating street vendors in environmental education issues, the programme should focus on adding a sustainable and environmentally friendly quality to life.

Some participants also indicated that the municipality wanted them to move away from certain areas where they were operating. While the vendors may not see things on the same light, municipalities are usually force by circumstances to relocate vendors. For example municipalities are forced to relocate vendors because of lack of suitable facilities for the handling and vending of food. For instance, the issue of facilities may involve the accumulation of rubbish which leads to an infestation of flies and dogs, which will render a site unhygienic (Bryan et al. 1997). On the other hand, municipalities relocate vendors because they place a strain on services too. About this, it is pointed out that just by where vendors want to be, may affect city plans, and resources like water and sewerage (Canet and N'diaye 1996).

Regarding harassment by local police and owners of business premises where vendors operate illustrates the prejudicial views that still exist between people from diverse backgrounds. In this case vendors' grievances against harassment need to be looked at from the government side. Such government intervention may assist

the different parties to reach common understanding and work together. It is important therefore that a solution be found, which will be acceptable to both street vendors, business premises owners and health officials. It is important to create funding schemes for people who want to start their business. This will open opportunities for upcoming traders who may require capital for starting the business. The success of any business depends on start-up fund. Investing in this industry will sustain the operation as food is an important commodity for the survival of men and women.

### CONCLUSION

This paper has outlined the importance of street-food vending in Polokwane City and further provides evidence of the importance of trading in the city as a means of survival for women in order to earn a living. Principally the importance of the training of street-food vendors on health and hygiene, customer care as well as skills for developing a business plan was also indicated. An overriding principle is that in training street-food vendors the aim should be to foster a clear awareness of the interdependence of, and concern about, economic, social, political and ecological issues. In addition, it should seek to provide opportunities to individuals to acquire the knowledge, values, attitudes, commitments and skills needed to protect and improve the environment in which they work. Furthermore, food safety practices of educated and knowledgeable street vendors will improve and the food that is sold will effectively be reliable. Finally, overcoming the problems of street vendors and the ill-treatment imposed on them needs joint cooperation of government, consumers and vendors themselves in order to improve and sustain their economic activities.

### RECOMMENDATIONS

Street-food vendors have a serious impact on an environment in which they work. They may affect the planning of a city, together with its resources. It is recommended then that the training of street-food vendors be a priority for city officials. This is because if vendors are untrained in food hygiene and sanitation operate and sell their wares then they may cause untold harm to others. For instance they may cause outbreaks of food poisoning that may result in the hospitalisation of large numbers of people. The purpose of educational programmes should be to make street-food vendors, and all concerned with informally vended food, more aware of food hygiene and sanitation, as well as technological aspects of street-food vending and consumption. It is only through training and the subsequent monitoring of the situation that street-food vendors can be integrated into and considered a responsible part of a city's food-supply system.

Customer care within street-food vending remains a problem and multi-pronged strategies are needed to address it. The potential of street food customers to remain loyal to a particular vendor has not yet been fully investigated. However it was established in this study that there is a potential to maintain and retain loyal customers. For instance, taxi drivers were reported to be come back repeatedly for the same service. It is therefore recommended that street-food vendors be trained on customer care, in the sense that 'the customer is always right.' Furthermore, the vendors need to be trained in interpersonal relations as well as in recognising their loyal customers. An important aspect of knowing loyal customers is that sometimes they may be enticed to remain through discounts and specials at different times. So in essence, the implementation of strategies such as these will require an integrated approach to address the needs of both customers and street food vendors.

It is further recommended that street-food vendor should be trained in money management. Among the requirements here would be the need for skills related to business planning. Given the lack of information on this specific aspect, it is recommended that (a) research be conducted into all aspects of street food trade with regards to skills for development of business plans. Such studies may include investigating the impact street-food vending makes into the socio-economy of the city; (b) a method should be found to make sure that business principles and skills for the vendors are enhanced. This is also critical because it will ensure that food vending is a sustainable enterprise for those who practice it.

# REFERENCES

Anetor GO, Ogundele BO, Oyewole OE 2013. Effect of nutrition education on factors influencing food choices in relation to prevention of stomach cancer

- among undergraduates in South-West, Nigeria. Anthropologist, 15(2): 185-191.
- Arendt SW, Paez P, Strohbehn C 2012. Food safety practices and managers' perceptions: A qualitative study in hospitality. *International Journal of Con*temporary Hospitality Management, 25(1): 124-139
- Bryan, F L, Jermini M, Schmitt R, Chilufya EN, Mwanza M, Matoba A, Mfume, E, Chibiya, H 1997. Hazards associated with holding and reheating foods at vending sites in a small town in Zambia. *Journal of Food Protection*, 60(4): 391-398.
- Bryan, F L, Michanie SC, Alvarez P, Paniagua A 1998.
  Critical control points of street-vended foods in the Dominican Republis. *Journal of Food Protection*, 51: 373-383.
- Canet C, N'diaye C 1996. Street Foods in Africa. Foods, Nutrition and Agriculture, 17/18. Rome: Food and Agriculture Organisation.
- Capricorn District Integrated Development Plan 2004. Putting People at the Centre of Development. Polokwane: Polokwane Municipality.
- Chakravarty I, Canet C 1996. Street Foods in Calcutta. Rome: Food and Agriculture Organisation of the United Nations.
- Draper A 1996. Street Foods in Developing Countries: The Potential for Micronutrient Fortification. London: London School of Hygiene and Tropical Medicine
- Environmental Education and Training Partnership 1997. Advancing Education and Environmental Literacy, No 14. From <a href="http://eelink.net/eetap/info14">http://eelink.net/eetap/info14</a>. pdf> (Retrieved on February 25, 2011).
- Ernstzen J 1993. Environmental Education, Breaking the Cycle of Poverty and Human Deprivation in South Africa. Paper presented at the 36th Annual Meeting of the African Studies Association, Department of Sociology, University of the Western Cape, Cape Town, December 5, 1993.
- Glazer BG, Strauss AL 1967. The Discovery of Grounded Theory: Strategies for Qualitative Research. New York: Aldine Publishing Company.
- Harrison J 1994. Health education. In: S Goodall (Ed.): Developing Environmental Education in the Curriculum. London: David Fulton, pp. 14-18.
- Huan B 2004. Integrating environmental education into the elementary school curriculum: Chinese Education and Society, 37: 48-52.
- Jai Prabhakar SC, Gangadhar MR 2011. Dietary status among Jenu Kuruba and Yerava tribal children of Mysore district, Karnataka. Anthropologist, 13(2): 159-162.
- Jickling B 2003. Environmental education and environmental advocacy revisited. The Journal of Environmental Education, 34: 20-27.
- Leedy P 2001. Practical Research: Planning and Design. New York: Macmillan.
- Lincoln Y, Guba E 1995. *Naturalistic Inquiry*. New York: Sage.
- Maykut P, Morehouse R 1994. Beginning Qualitative Research: A Philosophic and Practical Guide. London: Falmer.
- Merium S 1998. Qualitative Research and Case Study Application in Education. San Francisco: Josey-Bass Publishers.

- Mukhola MS 2000. Factors Influencing the Safety and Quality of Street Foods in Rural Areas. MTech Dissertation, Unpublished. Pretoria: Technikon Pretoria.
- Mukhola MS 2006. Guidelines for an Environmental Education Training Programme For Street Food Vendors in Polokwane City. DEd Thesis, Unpublished. Johannesburg: University of Johannesburg.
- Mukhola MS, Mji A 2008. Challenges to inform consent: Proposing acceptance of alternatives. Southern African Journal for Folklore Studies, 18: 36-42.
- Muyanja C, Nayiga L, Namugumya B, Nasinyama G 2011. Practices, knowledge and risk factors of steer food vendors in Uganda. Food Control, 22: 1551-1558.
- USAID 1996. Conducting Focus Group Interviews. Performance Monitoring and Evaluation Tips. Report No. 10, New York: Center for Development Information and Evaluation.

- Republic of South Africa (RSA) 1996. The Constitution of the Republic of South Africa. Act 108 of 1996. Pretoria: RSA Government Printers.
- Seaman P, Eves A 2010. Efficacy of the theory of planned behaviour model in predicting safe food handling practices. *Food Control*, 21: 983-987.
- Sutton A 1994. Environmental education and other cross-curricular themes: Economic and industrial understanding. In: S Goodall (Ed.): Developing Environmental Education in the Curriculum. London: David Fulton, pp. 9-13.
- Statistics South Africa 2011. Mid-year Population Estimates, 27 July 2011. From <a href="http://www.statssa.gov.za/">http://www.statssa.gov.za/</a>> (Retrieved on November 03, 2011).
- Wilcock A, Pun M, Khanona J, Aung M 2004. Consumer attitudes, knowledge and behaviour: A review of food safety issues. Trends in Food Science and Technology, 15: 56-66.