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INFORMAL FOOD DISTRIBUTION SECTOR IN AFRICA
(Street foods): Importance and challenges
(Paper prepared by Zimbabwe)

1.   Introduction

Street-vended foods are defined as those foods prepared on the street and ready to eat, or prepared at home and consumed on the street without further preparation[1]. Due to faltering economic development as a result of various factors, street food vending has become increasingly important in the economies of many African countries. The street food vending business is thought to contribute significant income inflows for households involved in selling these foods. Furthermore, street foods are a source of inexpensive, nutritious meals[2].

The types of street foods sold vary greatly between countries (Table 1). However, most meals consist of the staple food served in various forms and in combination with side dishes such as stews, gravies and spices[3]. In addition, snacks such as dried meat, fish and cereal based ready to eat foods are also prepared and served. Street food vending is therefore a source of a wide range of foods that may be nutritionally important for various groups of the population.

There is a general perception that street-vended foods are unsafe, mainly because of the environment under which they are prepared and consumed, which exposes the food to numerous potential contaminants. Street food vendors usually take their products to their customers and therefore operate from such places as bus terminals, industrial sites, market places and other street corners where there are ready and numerous clientele. Unfortunately, these locations usually do not meet all food safety requirements. For example, large amounts of garbage accumulate and provide harbourage for insects and animal pests[4]. The utensils used are also of a nature that may lead to contamination, especially through leaching of toxic heavy metals or simply due to unsanitary exposure to the environment. Some studies, however, have shown that food prepared on the street can also be safe, thereby providing alternative outlets for consumers[5]. The business of street food vending, therefore, needs to be addressed carefully and in an innovative way in order to derive maximum benefits from it.

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[1]   Martins and Anelich, 2000.
[2]   Mosupye and von Holy, 1999.
[3]   Tomlins et al., 2004.
[4]   Bryan et al., 1997.
[5]   Mosupye and von Holy, 1999.

Table 1: Examples of street-vended foods in some African countries

Country	Type of food
Ghana[6,7,8]	Fufu, kenkey, banku, waakye, akamu, jollof rice, moi-moi, agidi, koko, koose, boiled rice, gari, yam and plantain, fried fish, light soup, groundnut soup, okra soup, palm nut soup, tomato stew, nkontmre
Zambia[9]	Nshima, chicken/beef stew, fried vegetables, smoked sausages, buka buka fish, offals, (i.e. bovine stomach), vegetables (ifisashi - vegetable mixed with pounded groundnuts and beans)
Zimbabwe[10]	Sadza, chicken, beef stew, boiled/fried vegetables, roasted beef/chicken/sausage, offals, boiled beans
South Africa[11]	Maize porridge (pap), chicken/beef stew, gravy, salads
Kenya[12]	Sausages, meat, fish, eggs (boiled), French fries, cereals, coffee, tea, porridge, root tubers (yams, cassavas, sweet potatoes, arrow roots), maize cobs, pumpkin pieces, bananas, potatoes, peeled carrots, onions, garlic, whole milk, yoghurt, ice cream, mangoes, water melons, pineapples, pawpaws, beef stew, African sausage
Malawi[13]	Nsima, rice, sweet beer (beverage), meat, fish, eggs, fruits and vegetables, frozen foods
Benin, Togo, Senegal, Burkina Faso, Côte d'Ivoire[14]	Cereal or tuber based porridges (fermented or not), buttered bread, coffee/tea, bean purees, cowpea/cereal mixtures, maize/groundnut mixtures, pasta, salads, "monyo", potato chips, peanuts, cashew-nuts, etc.

This paper highlights the current status of the issue of street food vending in Africa, including the socio-economic impact, the safety concerns and the strategies that are needed in order to address this growing phenomenon.

2.   Socio-economic status of street food vendors

Street foods play an important socio-economic role in African economies in terms of employment potential. Although street food vendors come from diverse backgrounds, the majority are female heads of households. For example, a 2003 census of street vendors in Harare, Zimbabwe showed that about 8 631 people were involved in the business of street food vending[15], of which 81% were women. Most of these vendors employ other people to assist with the business and thus consider themselves as employers. A similar census conducted in Lusaka, Zambia in 2003 recorded 5 355 food vendors with a further 16 000 people employed by the business owners. It is estimated that the Lusaka food vendors sell about 81 million meals per annum[16], and make profits ranging from US$ 0.20 to US$31 per day. Such income is significant

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6	Tomlinset al, 2004
7	Ehiri et al., 2001.
8	Mensah et al., 2002
9	Graffham et al., 2005
10	Graffham et al., 2005
11	Kubheka et al., 2001
12	Mwangi, 2005
13	Masuku, 2005
14	Nago, 2005
15	Graffham et al., 2005
16	Graffham et al., 2005

considering that a large proportion of the African population survives on less than US$1 per day. A separate study in Ghana[17] also revealed similar trends in terms of the participation of the different groups of people, with women constituting the majority of vendors. However, men are now playing an increasingly prominent role in this lucrative business.

Street food vendors operate from various places including municipal markets, cooperative markets, industrial sites, vacant bus shelters and other undesignated sites. Food vending takes place alongside other activities such as the sale of haberdashery and clothes, commuter omnibus ranking, push cart operations, cleaning of commuter omnibuses and the hawking of other items including sweets, tobacco and cigarettes, thereby exposing the food to multiple sources of contamination. In addition, uncontrolled street food vending could result in serious environmental hygiene problems and possible deterioration in law and order in the event of unscrupulous practices by the vendors.

## 3.	Consumers of street food

All age groups consume street foods in Africa. However, there may be differences in the type of clientele depending on locality. While it is often thought that children under 5 are fed from home, Mensah et al., (2002) observed that many mothers working at the markets in Accra also bought some food items from vendors to feed their babies. This has serious implications on the health of the children.

The majority of consumers of street foods in West Africa were found to be male[18] (more than 65% of the consumers in Benin, Senegal, Togo and Côte d'Ivoire). While most of the consumers are from the low or middle income group, a significant number are professionals and represent the diverse ethnic groups in the countries concerned. The consumers also include the illiterate and people who have achieved a variety of educational levels.

## 4.	Safety of street foods

The hygienic aspects of street food vending are a major concern for food control officers[19]. Vending stands are often crude structures, and running water, washing facilities and toilettes may not be available. Improved safety of street foods can be achieved through awareness raising programmes involving several partners such as local authorities, the food vendors, government departments, consumer organizations, standard setting bodies and some non-governmental organizations. In some instances, the vendors are keen to participate in programmes that provide basic facilities that make it possible for them to work in clean environments. For example, in a survey of street food vendors in Lusaka and Harare, the vendors indicated that they would be willing to pay for basic facilities such as running water and electricity, but would want the local authorities to provide the water points, refuse receptacles and washing facilities[20]. A viable partnership involving local authorities, vendors and policy makers is therefore encouraged as this should lead to the improvement of business conditions and allow for the improvement of the livelihoods of vendors and their families.

### 4.1	Microbiological safety

The major concern with street foods is their microbiological safety, mainly because vending is done in places that may have poor sanitation. Street foods in some African countries have been tested for various microorganisms of public health concern, including feacal coliforms, *Escherichia coli*, *Staphylococcus aureus*, *Salmonella* spp and *Bacillus cereus*. *E. coli* and *S. aureus* were recovered in a significant proportion

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17	Tomlins et al., 2004.
18	Nago, 2005.
19	Mensah et al. 2002.
20	Graffham et al., 2005.

of the food, water, hand and surface swabs tested in Harare. Samples of fufu, kenkey and waakye tested in Accra, Ghana also had positive counts for *E. coli* and *Staphylococcus aureus*[21]. Mensah et al. (2002) reported that of 511 street food items examined in Accra, 69.7% contained mesophilic bacteria, 5.5% contained *Bacillus cereus*, 31.9% contained *S. aureus* and 33.7% contained Enterobacteriaceae. *Shigella sonnei* was isolated from macaroni, *Salmonella arizonae* from meat-based soup and enteroaggregative *E. coli* from macaroni, tomato stew and rice[22]. Although the microbiological quality of most of the foods tested in Accra was within the acceptable limits, samples of salads, macaroni, fufu, omo tuo and red pepper had unacceptable levels of contamination[23]. However, kenkey had low microbial counts and is considered a low risk food because of the low pH, which protects against pathogenic organisms. In a separate study, it was observed that over 26% of street food samples analyzed in Nigeria contained *B. cereus,* while 16% contained *S. aureus*[24]. These observations indicate that although street foods are a major source of nutritious food, they are also a possible source of food poisoning microorganisms.

4.2   Heavy metals and pesticide residues

Due to the conditions under which street foods are sold, there is concern that food may be contaminated by heavy metals and pesticide residues. These contaminants may come from the utensils, raw materials, or transport methods used and may also occur due to the lack of appropriate storage facilities.

A study carried out in Accra revealed that street food vendors source their pots and other utensils from both formal and informal manufacturers/retailers. Some of the street food samples had higher levels of lead, cadmium, arsenic, mercury and copper than average food samples[25], suggesting possible leaching from the utensils. Further tests showed that lead from the pots obtained from informal manufacturers could leach into the food. These pots are manufactured using scrap metal that could come from diverse sources such as derelict cars, car batteries and industrial machinery, which are obviously not suitable for use with foods. Their continued use must be discouraged.

Interviews with vendors in Harare also showed that some of their utensils come from informal sources. This was attributed to the fact that when police raid these vendors, they usually confiscate their wares, including the pots and utensils. For fear of losing their more expensive pots, the vendors resort to using informally fabricated pots, thereby exposing consumers to the possibility of food contamination by heavy metals. Further work must be done in order to reduce the exposure of consumers to heavy metals and pesticide residues through street-vended food.

4.3   Personal hygiene

Purchasing ready-to-eat foods and ingredients from street/market vendors poses a considerable risk to public health, especially due to the observed poor hygienic practices[26]. In most cases where studies of street food vending have been done, the vendors do not have adequate washing facilities, and some vendors started their duties without taking a proper bath. Some of the vendors sleep at the vending sites in order to protect their wares. Foods and ingredients are also subjected to repeated contamination from unwashed hands and the materials used for wrapping, such as leaves, old newspapers and reusable polyethylene bags.

However, many vendors are aware of the need to wear clean and appropriate clothes. Some of the female vendors wear headgear and aprons. After a few awareness-raising meetings for vendors at the

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[21]   Tomlins et al., 2004.
[22]   Mensah et al.*,* 2001.
[23]   Mensah et al., 2002.
[24]   Umoh and Odoba, 1999.
[25]   Tomlins et al., 2004.
[26]   Ehiri et al., 2001.

Soweto market in Lusaka, most of them heeded the need to have clean clothes and utensils. However, the vendors felt let down by the poor drainage facilities and the absence of water points near their work places. Some food handlers at markets in Accra, Harare, Lilongwe and Lusaka washed their hands in the same bucket used for cleaning utensils, which may lead to the contamination of food with faecal matter. An additional concern is that most food vendors operate without health certificates or licenses that indicate that the vendors have gone through a training programme on food handling techniques.

Street food vendors find it cheaper to use bar soap than liquid soap, which may be more effective, to clean their utensils. They also use cold water, resulting in inefficient cleaning. Washed plates are often stored in an unclean corner, plastic bowl or cardboard box, leading to re-contamination of the plates.

4.4   Environmental hygiene

Inadequate refuse disposal facilities lead to the accumulation of refuse at food vending sites. This leads to an increased pest population and will result in an increased risk of food contamination. In many instances, the vending sites are not included within the city or town plans, and therefore amenities such as refuse collection are not available. City authorities are often faced with the dilemma that if they provide services to illegal operations, this will imply recognition of these operations. At the same time, because the vending operations are illegal, vendors do not contribute anything towards the maintenance of infrastructure or provision of public services. This contributes to further deterioration of the hygienic condition of the area where the foods are vended.

Poor sanitary conditions in the area where foods are vended also contribute to poor food storage and transport conditions. Street food vendors in Lusaka, Harare and Johannesburg (Gauteng), obtain their vegetables, maize meal and other condiments from licensed shops, and therefore there is less concern regarding the safety of these raw materials. However, most of the vendors have no fixed stalls where they can store their raw materials on site. They usually store their goods at home overnight and transport them the following day, often improperly covered, to their operating sites. Thus, the food becomes prone to contamination during transportation.

5.   Food control systems

Food control refers to the systematic set of activities carried out by food producers, processors, retailers and national or local authorities in an effort to provide consumers protection against food poisoning and unscrupulous food traders. Food control ensures that all foods produced in or imported into the country conform to national food safety requirements. The food control system therefore consists of food legislation, a food inspection department, food analysis facilities (laboratories), and information dissemination and management[27].

In many African countries, the informal food distribution sector often escapes formal inspection by regulatory authorities, mainly because most vendors operate without licenses and from un-designated places. Many of the vendors are itinerant, moving from one site to another. In some countries, such as Kenya, Malawi, Mozambique, Zambia and Zimbabwe, vendors operating from undesignated places are forcefully removed from the vending sites, mainly because their activities violate existing laws governing the sale of food. However, in many African countries, food control programmes still need to be strengthened.

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[27]   FAO/WHO, 2003.

5.1 Challenges to food control activities in Africa

A number of studies have revealed that food control activities, including control of street-vended foods, in African countries have been hampered by a number of factors, including:

- Inadequate or out of date food legislation,
- Ill-equipped food inspectorates,
- Inadequate laboratory facilities,
- Poor management, and
- Lack of coordination and cooperation among government food control agencies.

Recently, the food control authorities in Zimbabwe noted that their duties were being hampered by fragmentation of food laws and lack of coordination between food control departments. In addition, some of the laws and regulations are outdated and do not effectively address new trends, especially street food vending. Therefore, efforts to create a Food Control Authority that would administer the Zimbabwe Food Control Act are at an advanced stage. Similar fragmentation was observed in South Africa and the creation of a food control agency has been investigated as a way of addressing such fragmentation.

Although the street food vendors in Uganda are recognized as an important part of the food supply system, there is no comprehensive law governing street food vending. A comprehensive Food Safety Bill is currently being considered by parliament. A number of pieces of legislation, however, are available to ensure safety of the consumers, including;

- Public Health Act, CAP 269, Sec 109 – Laws of Uganda, 2000
- Food & Drugs Act, CAP 271 – Laws of Uganda, 2000, and
- By-laws made by local authorities

The Uganda Public Health Act, Section 109, (The Eating Houses Rules) establishes the minimum requirements for and practices in public eating places. It also empowers authorized officer(s) to license eating places and to revoke the license where a violation has taken place. On the other hand, the Food & Drug Act requires that every food vendor be registered and that food sold to the public is fit for human consumption. It also empowers the authorized officer to inspect premises and sample foods for analysis.

In West Africa, the situation regarding regulation and control of street foods is not satisfactory[28]. In countries such as Benin and Senegal, legislation and various regulations have been adopted to regulate the production and sale of street foods. These regulations establish official requirements for an operator to be licensed, conditions and practices required for the production and sale of street foods, penalties for fraud and other infractions, and institutions and staff in charge of food control. However, quality and safety standards required for street foods have not been specifically defined in these regulations. In Togo, the food regulations and by -laws/ordinances do not include any specific provisions on street foods.

In many African countries, the lack of resources does not allow some institutions to carry out their control, education and enforcement tasks efficiently[29]. This constraint has been cited in Benin, Burkina Faso and Togo. A similar situation has been reported in Malawi and Mozambique[30]. In some countries such as Senegal and South Africa (Ethekwini Municipality), achievements in food control activities in the street food sector have been significant. These achievements have been attributed to good organization, availability of well trained staff and consumer awareness.

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[28]   Nago, 2005.

[29]   Nago, 2005.

[30]   Franco, 2005.

5.2   Codex Guidelines on Street Food Vending

The Standards Association of Zimbabwe has formulated guidelines for the design of control measures for street-vended foods. The guidelines are based on the Codex Guidelines for the Design of Control Measures for Street-Vended Foods in Africa (CAC/GL-22-Rev.1 (1999)). These guidelines emphasize the need for local authorities to provide structures and hygienic facilities, as well as training for vendors. The Codex guidelines also outline general requirements for legislation, vendor health status, and food preparation, including cooking, handling, serving, transportation and storage. African countries were consulted in the development of the Codex guidelines; however, there are two main problems in implementing them. First, African countries do not have adequate resources to provide a suitable infrastructure for the vendors. Second, where facilities are provided, vendors shun the premises, either because they are far away from their clientele or are conceived to be unaffordable.

5.3   Initiatives to improve the safety of street foods in Africa

Because street food vending is a relatively recent phenomenon, many African countries have realized that their existing food legislation does not adequately address the new challenges brought about by street food vending. Some food control authorities have tried to deal with this issue by forcefully removing vendors from the streets, which has been met with a lot of resistance. As many African economies falter against the background of a growing population and an increasing HIV/AIDS pandemic, more and more people find their way into street food vending. A number of initiatives aimed at developing innovative ways of improving the safety of street foods and improving the livelihood of vendors in African countries have been commissioned, including the following:

- FAO's Food and Nutrition Division and the WHO Regional Office for Africa support numerous activities to improve the safety and quality of street food, including:

    – Development of information materials and training of public health and food safety officials.
    – Training to help street food vendors comply with regulations and implement safer food handling practices.
    – Improvements to equipment and materials used by vendors to prepare, store or serve street food.
    – Education campaigns to increase consumer awareness about nutrition and safety of street foods.
    – Updating codes of hygienic practice and other food safety recommendations.
    – Supporting the development of street food vendors associations to: i) improve access to credit; and ii) enable vendors to influence decision-making processes that affect their work and take appropriate corrective measures.

- FAO, through its Technical Cooperation Programme (TCP), supports a number of initiatives to improve the safety of street foods in Africa, including;

    – Workshops at national and regional level for exchanging information and experiences on street foods.
    – Multidisciplinary studies and research activities in different countries in order to accomplish the following:
        ▪ determine the characteristics and implications of the street food sector;
        ▪ evaluate the problems in the sector;

- identify practices, technologies and actions which could ensure food safety and quality and improve the situation of the sector; and
- elaborate proper regulations.

- Multi-sectoral field projects in some countries, including:

  - diagnosis studies (socio-economic, judicial, institutional and technical aspects),
  - pilot interventions (training operators, educating consumers, improving food legislation and control systems, developing technologies, improving infrastructures).

- WHO/AFRO has also initiated a number of similar programmes to improve the safety of street-vended foods.

- The United Kingdom Department for International Development (DFID) funded Crop Post Harvest Programme (CPHP) implements projects in various countries to improve the safety of street-vended foods.

- Other bi-lateral projects.

- Consumers International (CI) conducted a preliminary survey of street food vendors in 14 African countries, namely: Benin, Burundi, Cameroon, Malawi, Mali, Morocco, Mozambique, Nigeria, Senegal, Seychelles, Togo, Uganda, Zambia, and Zimbabwe in order to:

  - develop a database of legal provisions, government and NGO programmes for street foods and
  - draft recommendations and guidelines to improve the sector.

Building on the on-going efforts to address the safety of street-vended foods, FAO and CI jointly organized a sub-regional workshop in Lilongwe, Malawi from 15 to 17 June 2005, with the theme of: '*Street-vended Foods in Eastern and Southern Africa:Balancing Safety and Livelihood.*' Thirty-three participants from seven eastern and southern African countries, namely Kenya, Malawi, Mozambique, South Africa, Uganda, Zambia, and Zimbabwe attended the workshop, along with representatives of FAO and CI. This effort to ensure safe food while also improving the livelihoods of vendors brought together a variety of stakeholders to formulate a consensual plan of action to promote safer street foods and secure the livelihood of street food vendors in Eastern and Southern Africa. The presentations made at the workshop allowed the participants to exchange experiences from the region and also learn from experiences in West Africa and Asia. The workshop resulted in participants pledging to do the following activities as follow-up:

1. In countries that have not already done so, the participants will initiate surveys to determine the extent of street food vending with special emphasis on the impact of street food vending on the social, economic and health sectors of the country.
2. The participants will lead in convening stakeholders' meetings to highlight the importance and contribution of street food vending to the economies of the different countries and to emphasize the need to balance food safety and livelihood as a poverty alleviation strategy.
3. The participants will help in creating a network of relevant stakeholders in each country, which will include the FAO and CI.

A great deal of work has been undertaken in the past decade to improve the situation of the street food vendor and those who consume their products. However, in a number of countries, the efforts have not been converted to tangible actions or improvements in street food safety. Therefore, it is logical that the vendors be empowered to spearhead these efforts to achieve sustainable improvement of the sector. It is

with this in mind that the following recommendations are proposed, some of which have been cited in the various referenced initiatives, for a coordinated approach to improve the safety of street foods and improve the livelihoods of vendors.

## 6.	Recommendations

1.	The various stakeholders (national government, local government, industry, scientists, consumers and vendors) related to street food vending must work together in a coordinated manner to avoid developing conflicting legislation and regulations.

2.	Local authorities should provide the informal vendors with appropriate facilities where they can carry out their activities, including well-designed shelters, ample supply of potable water and sanitary facilities (toilets, washing facilities). All this should be done in consultation with the vendors in order to develop user-friendly sites.

3.	Food laws should be adapted to changing circumstances but should retain the ability to ensure the safety of the food. Member countries should adopt the Codex Guidelines for Street Food Vending into their food laws or national standards.

4.	Food vendors and health inspectors should understand the provisions of the laws governing street foods, and these laws should be written in all national languages.

5.	There should be minimum interference with the duties of health inspectors by other stakeholders at the vending sites who may have conflicting interests to that of the inspector.

6.	Health inspectors must be continuously trained to ensure uniform application of legal procedures and more thorough assessment during inspections.

7.	Health inspectors should be adequately equipped with the tools necessary for on site tests and measurements.

8.	The street food vendors should be trained in all issues pertaining to their business such as hygiene, food laws and financial matters. Awareness campaigns should be carried out through the radio, television, posters and billboards.

9.	The vendors should form associations that facilitate communication with other groups such as consumers and health authorities.

10.	Consumers should be informed of the requirements for healthy and safe food, especially street-vended foods.

11.	Local authorities should establish reasonable and affordable licensing fees so that vendors will be more likely to register.

12.	The vendors should be assisted to grow their operation into viable businesses, which can employ a number of people and can generate real income.

Further work must be carried out in other African countries under a common action plan. This also should be backed by concrete policy plans at the national government level.

## 7.	Conclusion

Street-vended foods have become increasingly important in most African countries. However, the vendors continue to operate in less than satisfactory environments. There is need for concerted efforts to improve the safety of street-vended foods and the livelihood of street food vendors in Africa. The food handlers need more information on food safety, which can be disseminated through various media outlets such radios, television, posters and billboards. The street food vendors themselves concede that there is need to re-emphasize the important points of the hygienic handling of food through on-site training and

regular visits from the health inspectors. Food vendors should be encouraged to operate from designated places and local authorities should provide the necessary infrastructure in order to improve the safety of street-vended foods.

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