

Selling street and snack foods

FAO Diversification booklet 18



Diversification booklet number 18

Selling street and snack foods

Peter Fellows and Martin Hilmi

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Preface

The purpose of the FAO Diversification booklets is to raise awareness and provide decision support information about opportunities at farm and local community level to increase the incomes of small-scale farmers.

Each booklet focuses on a farm or non-farm enterprise that can be integrated into small farms to increase incomes and enhance livelihoods. The enterprises profiled in the FAO Diversification booklets are suitable for smallholder farmers in terms of resource requirements, additional costs, exposure to risk and complexity. The products or services generated by the enterprises are suitable for meeting demand on a growing, or already strong, local market and are not dependent on an export market. However in this booklet for snack foods import and export markets will need to be considered seeing the globalized market for such products.

The main target audience for these booklets are people and organizations that provide advisory, business and technical support services to resource-poor small-scale farmers and local communities in low- and middle-income countries. It is hoped that enough information is given to help these support service providers to consider new income-generating opportunities and how these might enable small-scale farmers to take action. What are the potential benefits? What are farmer requirements and constraints? What are critical ‘success factors’?

The FAO Diversification booklets are also targeted to policy-makers and programme managers in government and non-governmental organizations. What actions might policy-makers take to create enabling environments for small-scale farmers to diversify into new income-generating activities?

The FAO Diversification booklets are not intended to be technical ‘how to do it’ guidelines. Readers will need to seek more information or technical support, so as to provide farmer advisory and support activities relating to the introduction of new income-generating activities. To assist in this

respect, each booklet identifies additional sources of information, technical support and website addresses.

A CD has been prepared with a full series of FAO Diversification booklets and FAO technical guides, together with complementary guides on market research, financing, business planning, etc. Copies of the CD are available on request from FAO. FAO Diversification booklets can also be downloaded from the FAO Internet site.

If you find this booklet of value, we would like to hear from you. Tell your colleagues and friends about it. FAO would welcome suggestions about possible changes for enhancing our next edition or regarding relevant topics for other booklets. By sharing your views and ideas with us we can provide better services to you.

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Acknowledgements for the series

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Introduction

Street and snack foods can be found in nearly every corner of the world and have been on sale for thousands of years. Such foods are inexpensive, provide a nutritional source based on traditional knowledge, mostly follow the seasonality of farm production and thus allow for variation in consumer diets, and are widely distributed and available in both urban and rural settings.

They provide food distribution activities at the smallest scale, but with intensive coverage. Any location with ‘people traffic’, be it constant or intermittent, provides an excellent selling ground for vendors of street and snack foods. Many people who are poor and cannot afford food from retail stores depend on food that street vendors provide (see Case Study 1).

CASE STUDY 1 The importance of street foods for the poor in Bangkok, Thailand

In a survey conducted in poorer households in Bangkok it was observed that 67 percent of households cooked only once a day and bought one to two meals of ready-to-eat food from street food vendors. The households interviewed explained that street food was more economical than home cooking, was readily available with a large number of vendors at their doorsteps and was convenient as time for cooking was scarce. The survey also showed that street foods provide economic opportunities for low and middle-income people, especially for women. This becomes true especially in economic recessions where people become street food vendors in addition to other jobs they may have. In Bangkok most of the enterprises, 82 percent, employ fewer than four people and interestingly are owned and operated by women. This gender-based employment creates a dual benefit in that women have access to income as well as regular access to food for their families.

Source: Adapted from Chung, C., Ritoper, S. & Takemoto, S. 2010. Bangkok and access to food for low-income residents, Massachusetts Institute of Technology, Boston

The definition of street foods provided by the Food and Agriculture Organization (FAO)¹ is: ‘Street foods are ready-to-eat foods and beverages prepared and/or sold by vendors and hawkers especially in streets and other similar public places’. This definition emphasises the retail location ‘on the street’, with foods sold from pushcarts, bicycles, baskets or balance poles, or from stalls that do not have four permanent walls. This distinguishes street food vendors from more formal food service operations, such as cafés, ‘takeaways’, ‘chop-bars’ and restaurants. Another definition highlights the diversity of street food production: ‘Street foods are minimally processed to highly processed foods that are sold on streets and other public places, consumed on the spot and/or ready to take home or delivered to the work place, including catering activities that can serve celebrations such as weddings’.

Snack foods are commonly foods that are eaten between main meals or in the words of Webster’s definition provided in the year 1757: ‘a light meal eaten between regular meals’.

¹This definition of street foods was agreed by an FAO Regional Workshop on Street Foods in Asia, held in Jogjakarta, Indonesia in 1986.

Snack foods have a tendency to have a lower nutritional value than street food and are commonly viewed by many in this way. However snacks come in a variety of types, ranging from raw to cooked foods, and some for example beans and nuts, provide significant amounts of protein and fat. Those snack foods prepared from fruits and vegetables also provide important vitamins and minerals. Beverages can also be considered an integral part of street and snack foods, but are dealt more in detail in the FAO Diversification booklet No. 21 *Traditional food and beverages for improved livelihoods*.

Street food enterprises are commonly family or one-person businesses and the majority work without licensing, i.e. in the informal sector (see Case Study 2). Vendors can be mobile vendors, for example on foot and bicycles, semi-mobile, for example using push carts, or stationary vendors that sell from a stall. In Brazil and Mexico it is estimated that about one million people are directly involved in street foods and in India over three million. The contribution of street and snack foods to the economies of countries is considerable, but is vastly underestimated and neglected.



FIGURE 1 *Street foods being prepared in Thailand*
(Photo by O. Argenti)

CASE STUDY 2 **Street food enterprises and business in Accra, Ghana**

As the Ghanaian economy started to take off more and more people began to work away from home. This led to the rise of street and snack food enterprises preparing cooked food and snacks in Accra. Accra has a resident population of about 3.5 million people and an additional 1.5 million during the daytime. In this regard the street food sector has grown rapidly and is intensive in its distribution coverage. Street food vendors can be found near offices, factories, schools, markets, construction sites, beaches, lorry and bus stations, commercial centres and along almost every street in Accra. Setting up a street food enterprise needs little investment and requires no special training other than the domestic experience in preparing food. It is estimated that the sector employs over 60 000 people and has an annual turnover of US\$100 million, with annual profits in the order of US\$24 million. Most often the enterprises involve the entire family in the preparation and cooking as well as in the procurement of ingredients.

Source: Adapted from Tomlins, K. & Johnson, P. 2010. Fufu for thought- Ghana, Practical Action

Street and snack foods also have a large impact on agricultural production and marketing as well as on agrifood processing business operations. Small-scale farmers can find street and snack foods to be an excellent way to diversify their income sources and especially to develop marketing skills.

Rural farmers can be directly involved in the preparation and sale of street and snack foods in rural areas, villages and small towns as well as providing catering services for festivities and weddings. Such farmers can also supply raw materials to urban processors and entrepreneurs engaged in the preparation and sale of street foods in large towns and cities.

Intermediaries, such as traders and wholesalers may have key

functions of ensuring that farm produce reaches urban markets, either in raw or part-processed forms, particularly when large urban centres are too distant for farmers to access. However such linkages tend to be complex in nature as they rely on relationships and networks between vendors and the suppliers of ingredients and ready-made foods. Development of these relationships can be assisted by support services.

Peri-urban and urban farmers, who have large towns and cities on their door step, can furnish street and snack foods directly to city dwellers as well as supply ingredients generated from farm produce to other street and snack vendors.



*FIGURE 2 Hawking food in the streets of Phnom Pen, Cambodia
(Photo: FAO/19697/ G. Bizzarri)*

■ ***Street and snack foods: traditional knowledge***

Food and snacks that are consumed in a particular area are related mainly to culture and climate. Cultural, ethnic and religious differences influence the variety and nature of such food and snacks. Commonly these food and snacks are prepared and consumed based on local knowledge and tradition. This can be very location specific as foods can change from locality to locality within the same country, but they can also have common connotations across localities; for example *falafel* is common among many Middle Eastern and North African countries. Some examples of street and snack foods found in Africa, Asia, the Middle East, the Caribbean and Latin America are shown in the section on *Popular street and snack foods*.

The know-how to make such foods is easily accessible as it is commonly passed down from generation to generation and is easily assimilated. The highly competitive nature of street and snack food markets, with many vendors in one location selling common dishes and snacks, provides opportunities for entrepreneurial skills to make product variations, which can provide advantage and favour among consumers.

Street and snack foods show great variation in terms of their ingredients, how they are prepared, and how they are sold and consumed. The nutritional value of street and snack foods depends on the ingredients used and how the street food or snack is prepared. It can provide important daily nutritional requirements, as long as appropriate ingredients and methods of preparation have been observed.

CASE STUDY 3 Local foods and their consumption in Cameroon

In contrast to forecasts and estimates of the disappearance of local food consumption the often informal food processing sector has demonstrated a capacity for innovation. In a survey conducted in Garoua in North Cameroon it was found that out of a total of 1 647 micro and small commercial agro-enterprises, 781 were devoted to street foods and catering, serving mainly local traditional foods. Of the street food and catering enterprises, 288 were devoted to sweet snacks (doughnuts), 129 to prepared meat, 108 to 'tournedos' (beef filets), 150 were small restaurants and 80 were cafeteria style.

Source: Adapted from Sautier, D., Vermeulen, H., Fok, M. & Biénabe, E. 2006. Case studies of agri-processing and contract agriculture in Africa, Rimisp



*FIGURE 3 A women selling wheat cakes at a market in Sudan
(Photo: FAO/21447/ X. Van der Stappen)*

BOX 1 Street foods, market potential and nutritional value

Studies in developing countries have shown that 20 to 25 percent of household food expenditure is incurred outside the home, and some segments of the population depend entirely on street foods. There are millions of single workers without families and a large floating population who move in and out of main rural and urban centres for work, and these people largely depend upon street foods for their daily sustenance. Thanks to its low cost and convenience, street food is consumed each day by an estimated 2.5 billion people world-wide. In Latin America, street food purchases account for up to 30 percent of urban household spending. In Bangkok, 20 000 street food vendors provide city residents with an estimated 40 percent of their overall food intake. As well as being cheap, street foods can also be nutritious. A study in Calcutta, India, found that an average meal contained about 30 grams of protein, 15 grams of fat and 180 grams of carbohydrates

Source: Adapted from: i) FAO. 2007b. Promises and challenges of the informal food sector in developing countries, by S. Simon, Rome; ii) FAO. 2003. The informal food sector: a briefing guide for mayors, city executives and urban planners in developing countries and countries in transition, by O. Argenti, Food into Cities Collection No. 4, Rome

■ **Market potential**

With the rise of urban centres and growing urban populations demand for ready-to-eat affordable food is increasing. In many large cities ready-to-eat food is a necessity for many as they have little time for food preparation while at work or do not have the time to travel back home for their meals. According to FAO about 2.5 billion people eat street food every day (see Box 1). Many of the ingredients required by street food vendors are sourced in small quantities from local suppliers, which in turn source from local farmers.

Commonly street and snack food enterprises are family businesses that source from various suppliers,

but the potential of such enterprises sourcing from farms and thus creating a small-scale integrated supply chain is a viable option. However and in such circumstances emphasis will need to be placed on farmers ensuring reliability of supply or else they will not be able to compete with city markets, retail shops and ingredient traders. This will entail support activities to help small-scale farmers in developing such a supply chain.

Rural small-scale farmers can also sell directly to consumers in villages and small towns by street hawking and/or setting up stalls along streets. Farmers can also produce snack foods that are packaged and sell them to other



*FIGURE 4 A stationary street food vendor serving lunch in Kolkata, India
(Photo: FAO/19596/ G. Bizzarri)*

street vendors. In addition to a street food enterprise, they can also set up catering services for offices, festivities and weddings. These options not only enable a profitable outlet for farmers' commodities, but increase and diversify income sources for the farmer.

On the consumer side, street foods are easily accessible, cheap and particularly apt for the rural, peri-urban and urban poor. Consumers most often see street and snack food as 'home cooked food', which is usually the case. The food is commonly available in

close vicinity to work places and/or is delivered directly to the place of work. Consumers often choose street and snack foods based on cost and convenience, the type of food available, and its appeal in view of the consumer's own taste. For the poor, street foods offer a viable means of obtaining food in small quantities, on a regular basis, conveniently located and at reasonable prices. Food distribution via street food vendors is intensive and in many instances does a better job of food distribution than more formal retail stores.

■ *Opportunities for improved livelihoods*

Decision-makers should recognize that street and snack foods provide a large number of opportunities for small-scale farmers, are a viable option for increasing agricultural production and marketing, and also enable the use of agricultural by-products that may be otherwise wasted or sold at lower prices.

Street and snack foods can potentially create employment for many farm family members and can provide for many other stakeholders involved in the supply chain. Street vending alone accounts for the employment of millions of people who are poor, unskilled and have limited formal education. It supports local farmers and encourages household and small-scale processing and also provides an additional outlet for products from more formal large-scale processing operations.

Low initial start-up costs and flexible hours make it a good option, especially for women and those who have disabilities. For women, entering such an enterprise may not only mean a source of income but a means of feeding the farm family at a lower cost. However women may require additional support as often they are more likely to operate in

insecure or illegal spaces, trade in less lucrative foods and generate a lower volume of trade.

■ *Purpose of the booklet*

The main purpose of this booklet is to create awareness about the multitude of opportunities that street and snack foods can provide for small-scale farmers in rural, peri-urban and urban areas. Moreover street and snack foods have positive effects on other members of the supply chain as well as poor consumers in rural, peri-urban and urban communities. It is hoped that policy-makers and development personnel recognize such opportunities and provide a supporting and enabling environment for such a livelihood strategy to be pursued.

Benefits of a street and snack food enterprise

■ *Street and snack foods at household level*

At household level, crops and livestock grown for markets can be easily integrated into a street and snack food enterprise and provide a reliable source of ingredients for processing. Processed food products, in some circumstances, may gain higher prices than farm crops or livestock. Also, crop and livestock by-products can be effectively used for the enterprise: for example by-products of an animal that are not usually consumed can be minced and/or boiled to make stews.

Small-scale farmers have four livelihood strategies they can pursue: the first one is a street and snack food enterprise that has low barriers to entry as it requires minimal capital and can be started as a 'kitchen operation'. This type of enterprise involves low input costs but may not generate high returns, and simply aims to earn extra income to meet family expenses, for example school fees.

The second livelihood strategy small-scale farmers can pursue,

if a part-time kitchen enterprise turns out to be successful, is a more specialised micro-scale processing enterprise. This could prepare street and snack foods and also ingredients for re-sale to street vendors (see FAO Diversification booklet No. 4 *Value from village processing*), but first farmers should ensure that there is a market for the intended output and then build on this to create a more formal enterprise.

Moving up the ladder from household processing to micro-scale processing requires additional knowledge and skills because small-scale farmers will be competing with other processors and will require training in business management, with quality also being of primary concern. Obtaining the type of utensils, equipment and facilities as well as the required packaging may be a challenge for a small-scale farmer. For example see Box 2 on the next page for the implements needed for processing bananas into chips either by frying or by drying

BOX 2 Banana chips and equipment needed

Banana chips can be made by simply drying or by frying. Frying involves putting thin slices of banana into hot oil. Drying involves placing banana chips in the sun or using an artificial dryer. The equipment needed for these two processing operations includes: knives or small fruit slicer, plastic buckets or bowls for soaking fruit, a sieve for draining washed fruits, drying trays (for solar drying), a heated drying cabinet (for fuel-assisted drying), a large frying pan, polythene bags and a bag sealer.

Source: Adapted from Practical Action.2010. Banana chips, Practical Action, Rugby, United Kingdom

BOX 3 Making snacks from a home garden in Africa

Women commonly cultivate and look after home gardens. These gardens not only provide a good source of nutritious snacks for their children, but snack foods can be made in larger quantities and marketed to other children, for example at schools. Certain snacks like bean cakes, roasted cassava and groundnuts, oilseeds and grain legumes are commonly sold as snack foods in Africa. A home garden containing a variety of crops can provide such snack foods that not only contribute to child nutrition and health, but also to the finances of the farm family. (See FAO Diversification booklet No. 2 *Livelihoods grow in gardens.*)

If the market responds to the micro-processing initiative and the sales are sufficient, then further investment by the farmer may be feasible and the enterprise can become a more formal small-scale processing enterprise (see FAO Diversification booklet No.5 *Processing for prosperity*). This may require higher investment in a separate building on the farm, larger equipment and employing family members on a more full-time basis.

The fourth livelihood strategy is based on small-scale farmers and their families preparing and processing food directly on the street from a

mobile cart, or a stationary unit (a vending stall) using ingredients sourced directly from the farm. Street hawking and street stalls not only offer more family employment, but also provide off-farm employment opportunities. This enables women as well as the disabled to become more actively involved and earn an income. Street retailing creates interactions with customers and other retailers and this can lead to building and nurturing social networks outside of the farmer's community. Further the enterprise can be worked on at times when farm work is not required or is

not a major part of the working day as a result of the season.

■ *Adding value*

Small-scale farmers who start a street and snack food enterprise add value to their farm products. Processing slows down the deterioration process of commodities and allows preservation over a longer time (i.e. a longer shelf-life). For example making dried salted meat extends the availability of valuable nutrients well after slaughter time, and potentially increases the selling price and income to the farmer, compared to the sale of fresh meat. A street and snack food enterprise enables farm commodities to become food products and avert the common pattern of low prices at harvest time. This value addition is also relatively easy in a kitchen-scale enterprise because the processing technologies are not too complex and are within the reach of many small-scale farmers, and use a stove, kitchen utensils and other equipment that farm families know well.

Importantly, such an enterprise involves the farmer moving further down the food supply chain into the retailing sector, and capturing value by processing and marketing farm products, possibly with their own brand name. Depending on how conservative people's food preferences

are, there may be opportunities to produce a particular type of food that is not known in an area, making it more competitive in terms of consumer preference.

■ *Gender development*

A street and snack food enterprise allows easy entry for women as it has low start-up costs (see Case Study 4) and women are generally knowledgeable of food preparation, as it is commonly passed down from mother to daughter. It is common in many African countries for street food enterprises to be inherited by the female members of a family, for example. Such an enterprise is also an attractive option for women as it has flexible hours, and enables women to leave the homestead to earn an income. This income makes women more self-reliant, more confident and less dependent. It also gives them more status and a greater say in a family, as well as improved status in the community. For some, it can provide a safety net in case of abandonment.

Leaving the farm and meeting others also gives women an opportunity to create relationships that can be important for both business and socialisation reasons. These relationships may be particularly important in cases of abandonment, where women may need to rely on

‘social capital’ (connections within and between social networks). This can also play a part in addressing the need for childcare while mothers work. It also introduces women to new knowledge from interactions with different types of people, including customers, other vendors and suppliers, especially in large urban centres. Operating a street food enterprise also places an emphasis on the need for literacy and numeracy for managing the enterprise. The requirement for better skills may make participation in training programmes more palatable to women’s families and provide more

incentives as it may be seen as a way to increase family income. More generally, such an enterprise is an opportunity for farm women to learn about trade and to enter the economy and actively participate in it.

In some countries, women find difficulty in leaving the homestead for social or religious reasons and street hawking is left entirely to men. In these instances, women can still be part of the enterprise preparing food in the homestead. However in most countries in Africa, Asia and Latin America, women work as street food vendors and it is socially accepted.

CASE STUDY 4 Value added cowpea street foods in Niger and Ghana

In a study carried out in the cities of Niamey, Niger and Kumasi in Ghana, it was found that almost all individuals consume street foods, regardless of their age, ethnic or socio-economic status. Cowpea, also known as black-eyed pea, is an important crop in West Africa. Referred to as the ‘meat’ of the poor man, cowpea provides an inexpensive source of protein and complements the high carbohydrate content of most diets. Cowpeas play a major role in street foods of Niamey and Kumasi.

Women entrepreneurs use traditional skills and small amounts of capital to start their enterprises and earn money to feed their families. The activity was found to have important implications for economic development, poverty reduction and in supporting local agriculture. Women-based street enterprises provided employment not only for themselves but also for others. Their incomes were found to be substantially higher than the official minimum wages in the cities of Niamey and Kumasi. The incomes earned from their enterprises were spent directly on their families for food, clothes, health care and education for their children.

Source: Adapted from Otoo, M., Fulton, J., Ibro, G. & Lowenberg-DeBoer, J. 2008. Women entrepreneurship in West Africa: Value added cowpea-based foods in Niger and Ghana, Purdue University

In some countries, downsizing in the public and private sector has brought more men into the industry and women require support as they tend to operate in more insecure locations, trade in less lucrative goods, and generate lower volumes of trade. This has caused pressure on earnings, with the weakest exiting the industry.

Gender-sensitization activities in the community are required to ensure that people understand why it is important that women be rewarded for their efforts, as well as providing support to encourage women associations for food street hawking

and vending, and provide training in group savings, literacy, numeracy, business management, etc.

■ *Financial rewards*

With a street and snack food enterprise financial rewards for small-scale farmers are more regular and do not rely on the common harvest-sale cycle. Moving closer to consumers and becoming ‘retailers’ enables small-scale farmers to have a greater share in every consumer’s ‘food dollar’. Under certain circumstances, in rural areas, it also reduces ‘costs’ as intermediaries are not involved,



FIGURE 5 A woman in Pakistan and her street food enterprise
(Photo by O. Argenti)

and hence gives both higher profits for small-scale farmers and lower prices for consumers.

The initial entry costs for starting the enterprise on a 'kitchen-scale' are minimal and will not affect to a great extent family savings or available cash. A study by Sautier *et al.*, (2006) reveals that in Garoua, a city in Cameroon, of the 781 street food enterprises present, all were set up and operated without any financial intervention either from the public sector or from donors.

Reports from a number of countries have shown that income from street food vending can be very good. For example, as shown previously in Case Study 2, the income benefits of street food generate in Ghana a turnover of US\$100 million with profits in the range of US\$24 million.

The level of income is commensurate with the level of investment: a kitchen-scale enterprise investment is small and consequently so will be the income. However for some farmers, starting with a 'kitchen enterprise' can be thought of as a 'stepping stone' initiative, and by re-investing some of the income in the enterprise, it can then grow to become a micro-scale processing enterprise. This clearly means that along the way more money needs

to be invested, but also more money will be made.

The increased income from such an enterprise can be used to buy more diverse foods, providing a more varied diet for the farm family. It can also be used to provide health care when needed, pay school fees and other expenses. The street and snack food enterprise also allows a more constant flow of cash into the farm household as snacks and meals are not only sold at harvest time.

The more options that are available to sell farm produce the greater is the reduction in marketing risks and potentially the greater the increase in income. Diversified and increased income sources enable a greater sense of security, a safety net in hard times, a good source of money for savings or re-investment in the enterprise, as well as more purchasing power for the farm family.

Feasibility of the enterprise

Too often small-scale farmers base their investments on ‘guess work’ and this can be fatal for the enterprise: for example, buying equipment using a loan, which is under-utilized because of low market demand, may erode any profit that is made because of the loan interest and repayments. For these and many other reasons, it is strongly advised

that a feasibility study be conducted before any investments are made in the proposed enterprise. A feasibility study is not difficult to carry out and is not expensive, but it needs to address the most important aspects of the enterprise (see Box 4). It is important to note that conducting a feasibility study does not eliminate business risks, but will reduce them.

BOX 4 Important issues in conducting a feasibility study for a street and snack food enterprise

Market feasibility

- Types of street and snack foods sold
- Selling prices of street and snack foods
- Types of customers (families, children, office workers, etc.)
- Customers' buying frequency
- Quantities sold
- Competition
- Quality and safety required by customers

Technical feasibility

- Processing and preparation methods required to provide quantities desired
- Hygiene and safety requirements for processing
- Law requirements on hygiene and safety
- Farm produce required to supply ingredients
- Equipment needed
- Labour needed
- Skills required

Financial feasibility

- Start-up costs
- Operating costs
- Cash flow
- Profit potential
- Loans

Source: Adapted from FAO. 1997. Guidelines for small-scale fruit and vegetable processors, by P. Fellows, FAO Agricultural Services Bulletin No. 127, Rome



*FIGURE 6 A farm family in Ecuador selling food that has been prepared in the homestead and then sold from a stall
(Photo: FAO/16319/ G. Bizzarri)*

The individual circumstances of small-scale farmers vary so much it is impossible to generalise about the level of investment that may be most appropriate. Advisors can support small-scale farmers in this process by providing, for example, information about markets, equipment and packaging suppliers. Ultimately though, it must be the small-scale farmer who decides whether or not to enter the activity based on his or her evaluation of the livelihood activity.

■ **Market research**

Small-scale farmers need a clear picture of what opportunities there are. Market research provides small-scale farmers with knowledge about possible opportunities. At minimum the research is used to gather information on:

- What street and snack foods are in demand and which are most popular?
- What prices can be obtained?



FIGURE 7 Processing food in the homestead (kitchen enterprise) for street vending
(Photo: FAO/22075/ G. Bizzarri)

- What quality and safety of foods is expected?
- Who are the likely competitors?
- What level of sales can be made and where are the best selling locations?
- What are the travelling distances and time from the farm to the selling location?
- How are foods to be sold (for example by street hawking or setting up a street stall)?

The most important piece of information is that on potential sales that can be made. Once small-scale farmers have this piece of information, it then allows them to work backwards to make other estimates: for example, what type and size of equipment to

use to reach the level of production required to meet market demand; how many people need to be employed; what quantities of ingredients are needed; marketing requirements; costs that may be incurred; the possible profit margin; and how much money is required to start the enterprise

■ ***Estimating processing and preparation activities***

Production planning involves a detailed assessment of all activities required to process products. The production processes required for each product are different: for example, preparing popcorn requires a different process to preparing banana chips. Mapping

out each process allows the farmer to see all the related activities required for each product. This includes for example, the types of raw materials and the amount of preparation required for each one; the types of processing and the equipment required for each; whether the equipment can be manual or mechanized in order to produce enough food to meet the market demand. In a kitchen-level enterprise, simple hand-operated equipment, such as a fruit slicer for making banana chips is likely to be sufficient. At a larger scale of operation it may be better to have an electric slicing machine because of the amounts required to be processed and time constraints.

A common mistake is to invest in any equipment that may be available locally without considering its suitability for the operation. Estimates of the type and size of equipment need to be based on the production rate required to meet market demand. Suppliers of equipment that can be found locally or in national and foreign markets, should be able to supply details of the maintenance and spare parts required, the complexity of operating the equipment and possible training required, in addition to the price of the equipment. An important consideration for rural farmers is the source of energy for any mechanized processing equipment, the continuity of supply and its cost. For example there may be down-times in electricity supply or



*FIGURE 8 A supplier in Myanmar selling fuel efficient cooking stoves
(Photo: FAO/19777/ G. Bizzarri)*

petrol needed to fuel generators may not be available regularly.

In terms of ingredient inputs to the enterprise, the seasonality of farm production needs to be considered as well as the need to put ingredients into storage to supply the street and snack food enterprise throughout the year. Consideration also needs to be given to sourcing supplies from other farms and/or external suppliers. The amounts and frequency of orders for ingredients need to be estimated, taking into account the likely storage capabilities. For example fresh fish, meat and milk cannot be stored for long periods, whereas crops such as onions, have good storage capabilities. This may not be a difficulty for a kitchen-scale enterprise because storage requirements may be negligible, but as the enterprise becomes larger, storage space and control over stored crops becomes more important. If food preparation is intended to take place on the street, the type and time of storage on a street location as well as the quantities of ingredients required to be held in street storage also need to be estimated.

Packaging is required for pre-packaged snack foods that are sold by mobile vendors or from stalls as well as serving materials, such as

paper wraps or napkins for street meals. Farmers need to know where these materials can be sourced, at what prices, what are the minimum amounts that need to be bought and so forth. They also need to know what types of materials they will use to serve street foods to customers (for example, cups, plates, cutlery, skewers, etc). Here also decisions need to be made of where they can be sourced, what prices, and what quantities need to be bought per order.

■ *Marketing cost estimates*

Street and snack foods can have considerable costs in terms of money and time spent retailing. Travel time and transport types and costs need to be considered between the homestead and location of either the food stall and/or street hawking area. Secondly there may be different transport vehicles required to sell the foods. Street hawking may require expenditure on something as simple as a basket or balance pole, but in other circumstances it may require expenditure to buy or rent a bicycle or a mobile stall. In the case of a stall, the costs involved may also include cooking facilities, market fees, materials to set up the stall and a licence.



*FIGURE 9 Preparing falafel on the street in Egypt and serving it with paper napkins
(Photo: FAO/21807/ R. Messori)*



*FIGURE 10 Snack food being sold from a bicycle and street food being sold from a stall in Viet Nam
(Photo by O. Argenti)*

Labour may be required for long hours from early morning breakfast for travelling workers, mid-morning snacks for school children, lunch for office workers and so on until the last meal of the day. This means that the labour used for selling cannot be used for farm work. However, some street sellers specialise in foods that are only sold at lunch times or evenings, which reduces the labour requirement, provided that sales are high enough to justify this strategy. The cost of labour needs to be estimated, especially during harvest times, as the farm may need to either use more family labour if it is available, and if not hire labour to help out with the harvest or with the retailing of street and snack foods.

■ *Credit*

The feasibility study of the enterprise should assess farmers' ability to access credit, its availability, the terms on which credit is given, interest rates charged and the payback period. Clearly the smaller the operation, the less credit is likely to be needed. Credit is most likely to be needed to start the business (investment capital) and then to keep it running (working capital) in the early stages before sales pick up. Estimates of cash

flow (money in versus money out of the enterprise) need to be carried out for the period of the intended start up and initial operation to verify where cash shortfalls may occur and where financing may be needed.

Short-term loans may be required to buy cooking utensils whereas setting up a street stall with cooking facilities may require more money and hence a longer term loan. Typically short term loans are easier to obtain and are more expensive, whereas long term loans are less expensive, but more difficult to obtain. Farmers should be advised to exercise caution when taking out a loan because the burden of repayments of a long-term loan may undermine the business if it is not planned properly. Thus it is necessary to carefully estimate the nature and type of any loan that may be required.

■ *Legal aspects*

Although many countries do not have laws governing street food preparation or selling, other countries do and others are considering introducing new laws. There may also be local municipal authority byelaws that control where street selling can take place, and the issuing of street sellers'

licences. Others require an enterprise to be registered as a business, and nearly all countries have laws relating to food safety, hygiene and adulteration in food processing and preparation. Pre-packaged snack foods are likely to be covered by laws enforcing such aspects as labelling of ingredients, the name of the producer, weight of food in the package, etc. The requirements of each of these laws need to be identified and fully understood as part of the feasibility study.

■ *Costs and profits*

Once estimates have been made about production planning and marketing it will be possible to add up the main costs of the enterprise. It is important that all costs are included: investment, start-up, operating, and marketing/selling costs. This gives the small-scale farmer an idea of the money that may be needed for the enterprise and if a loan is necessary. If the income at the start of the enterprise does not exceed the outgoings, and



*FIGURE 11 A woman preparing food directly on the street in Thailand with ingredients sourced from the family's farm
(Photo: FAO/15771/ P. Johnson)*

the farmer does not have family reserves to call upon, it is likely that a loan will be required. Costing estimates also enable farmers to understand what profits may be earned by comparing estimated sales prices and volumes with the estimated costs.

■ *Evaluation of the activity*

Whatever level of investment is chosen for a street food or snack food enterprise, from a kitchen scale to small-scale, it has to be economically viable. This means that income earned needs to be greater than the costs, not only in the short term but especially in the long term. It is important that the overall evaluation of a potential street food enterprise and the final decision whether to go ahead or not rests with the small-scale farmer's family. Advisers need to provide support and information in this process but not take decisions for farmers. The final decision on starting an enterprise will of course be influenced by the potential profit estimates, but the farmer and his or her family may also include other factors in their decision, including: the extra labour requirements imposed on the farm family; the willingness to spend long hours working away from the homestead;

their confidence about entering unknown new markets; willingness to learn new skills that may be required; as well as many other social and cultural factors.

The livelihood activity

■ Popular street and snack foods

There are huge numbers of different street and snack foods that are produced around the world; so many that in a booklet of this size, it is not possible to even produce a list of foods, let alone a description of each one. For example, a summary of Turkish street foods has 42 different foods, a similar list of street foods in the Philippines contains 87 different dishes, and there are many hundreds of different street foods, particularly in countries of South and Southeast Asia.

Despite their large numbers, street and snack foods can be grouped into various categories. These categories are 1) by country

and region; 2) by type of street food (meals, drinks or snacks) and the ingredients used; and 3) by the method of processing.

1. Country and region

Each country has characteristic types of traditional street foods that are popular locally and which reflect the cuisine of the country (see Table 1). Some larger countries, such as the People's Republic of China and in particular India, have distinctive types of street foods that are preferred in different regions, which reflect the local culinary traditions in these areas (see Table 2 in the later pages).

TABLE 1 Street and snack foods from around the world

Continent	Country	Food	Description
Africa	Ethiopia	Injera and Wot	Tef bread with spicy stew made from beef, lamb, chicken, goat, lentils or chickpeas, with spicy berbere
	Ghana	Fufu, banku kenkey,	Steamed cassava/plantain pulp with fried yams and bushmeat or chicken

TABLE 1 Street and snack foods from around the world (Cont.)

Continent	Country	Food	Description
Africa	Kenya	Nyama choma with ugali	Grilled beef, veal, sheep, lamb, goat with steamed maize /cassava dough
		Mandazi	Fried doughnuts made using coconut milk groundnut paste or almonds for flavour
	Morocco	Merguez	Lamb or beef sausage with red spices (paprika, Cayenne pepper or chilli eaten with couscous
	Nigeria	Chin Chin	Doughnut made from wheat flour or cowpeas and eggs
		Suya	Barbecued spiced meat, with roasted plantain and maize, fried yam and fish
		Akara	Fried bean cake
		Moin-moin	Steamed cake made of ground dried beans and fish
	South Africa	Bunny chow	A scooped out loaf of bread with curry or pickles inside
		Gatsby	A long bread roll filled with meat, salad, cheese and chips
	Tanzania	Ugali	Steamed cassava, maize, millet or sorghum dough with sauce containing meat, fish, beans or cooked vegetables.
		Ndizi Kaanga	Fried bananas or plantains
	Uganda	Matoke	Mashed plantain steamed in plantain leaves, with groundnut sauce

TABLE 1 Street and snack foods from around the world (Cont.)

Continent	Country	Food	Description
Asia	China	Chuanr	Lamb, pork, beef, chicken roasted or deep-fried on skewers
		Tang Hu Lu	Fruit on skewers garnished with sugar syrup
		Rice	Served with scallions, bean sprouts, cabbage and ginger root, soybean curd (tofu), pork or chicken
		Peking duck	Roast duck with strips of crisp duck skin wrapped in thin pancakes
	India	Chaat	Tangy, spicy mix with varied ingredients (lemon, pomegranate seeds, salt, tamarind), and different chutneys
		Aaloo tikki	Mashed potatoes patties and masala, deep-fried in oil, served with chick pea curry
		Pakodas	Various vegetables fried in chickpea batter
		Panipuri	Unleavened Indian bread fried crisp and filled with tamarind, chilli, potato, onion and chickpeas Various vegetables fried in chickpea batter
	Indonesia	Nasi putih	Fried long-grain rice with stewed chicken, pork dog meat, goat, or beef in coconut milk.
	Pakistan	Pahata roll	Beef or chicken in fried oil bread with onions, tomato and raita (cucumber yoghurt)
Philippines	Kikiam	Fried squid balls, fish balls, chicken on a stick with a variety of dipping sauces	

TABLE 1 Street and snack foods from around the world (Cont.)

Continent	Country	Food	Description
	Philippines	Taho	Soft beancurd served with syrup and tapioca balls
	South Korea	Gimdap	Rice with meat or fish rolled in seaweed
		Mandu	Dumplings filled with meat
	Thailand	Pad Thai	Fried rice noodles with eggs, fish sauce, tamarind juice and red chilli pepper, plus bean sprouts, shrimp, chicken, or tofu, garnished with crushed peanuts
Caribbean	Barbados	Fishcakes	Made with saltfish, flour, seasoned and deep fried, eaten with thick, round saltbread as a sandwich
	Haiti	Calalou	Crabmeat, salted pork, spinach, onion, okra, and peppers with sweetened potato
		Mayi moulén with pikliz	Rice and beans, cornmeal mush, kidney beans, coconut, and peppers with spicy pickled carrots and cabbage.
	Jamaica	Jerk	Barbecued chicken or pork in marinade of scotch bonnet peppers, onions, scallions, thyme and allspice, with breadfruit and/or festival, a sweetened fried dough
	Puerto Rico	Papa rellena	Fried potato balls stuffed with meat or cheese
		Pasteles	Mashed potato, plantains or bananas filled with pork, wrapped in banana leaves and boiled
Sorullos		Sweet or savoury fried maize meal batter shaped into fingers and stuffed with cheese	

TABLE 1 Street and snack foods from around the world (Cont.)

Continent	Country	Food	Description
Caribbean	Trinidad and Tobago	Doubles	Two flat breads filled with chick peas and topped with pepper, and cucumber, mango or coconut chutney, eaten either open or wrapped
		Roti	Thin flat bread stuffed with curried chicken, pork or beef
South America	Argentina	Choripan	Barbequed sausage wrapped in French bread
		Empanadas	Deep-fried patties filled with beef, fish, ham, vegetables or cheese.
	Brazil	Pão de queijo	Cheese bread
		Biscoitos de polvilho	Sour manioc flour puffs
		Acarajé	Deep fried black-eyed pea bun filled with salted dried shrimp
	Chile	Sopaipillas	Deep-fried flour and pumpkin dough
	Dominica	Yaniqueques	Round cakes, fried and eaten with salt and/or ketchup
		Anticuchos	Pieces of grilled skewered meat, especially beef heart, marinated in vinegar cumin and garlic
	Mexico	Taco	Corn or wheat tortilla folded or rolled around a filling
	Peru	Tamales	Maize dumplings filled with suckling pig, guinea pig, deep-fried pork or chicken.
Venezuela	Arepa	Flattened maize meal bun, stuffed with soft cheese	

TABLE 1 Street and snack foods from around the world (Cont.)

Continent	Country	Food	Description
South America	Venezuela	Carne mechada	Shredded brisket cooked with onions, red bell peppers and tomatoes or pickled octopus
Middle East	Egypt	Falafel	A fried ball or patty made from ground chickpeas and/or fava beans.
	Palestine, Syria	Madlu'e	Sweet cheese curds on a rich biscuit in syrup A fried ball or patty made from ground chickpeas and/or fava beans.
	Israel	Sadikh	Boiled egg, eggplant, tahini and mango pickle rolled in pita bread

TABLE 2 Regional variations in cuisine within India that result in different types of street foods

Examples of local cuisine	Examples of local cuisine
Nothern India	Based on lentils (dahl), vegetables, and many flat breads (e.g. roti and paratha), or breads that are deep-fried (puri and bhatoora). Goat or lamb meats eaten as kebabs, chicken cooked in a tandoor. Sweets made from dairy products (gulab jamun, jalebi, peda, gulkand, laddu, barfi) and halwa. Samosas with fillings of boiled, fried or mashed potato, minced meat, cheese, mushroom and chick peas. Many types of pickles.
North Eastern India	Based on fish, fermented and dried fish, rice, lentils, fermented soybeans. Iromba is popular fermented food made from fish, vegetables and bamboo shoots. A variety of fried foods (e.g. Jadoh - a spicy dish of rice and pork).

TABLE 2 Regional variations in cuisine within India that result in different types of street foods (Cont.)

Examples of local cuisine	Examples of local cuisine
Eastern India	Delicately spiced foods (with mustard, cumin, nigella, green chillies and poppy seeds). The spice pastes, curd (yoghurt), nuts and cashew paste are cooked in mustard oil to make curries, eaten with plain boiled rice or spiced rice. Sweet desserts, often made from dairy products, (e.g. rasagolla, chumchum, sandesh, chhena poda). Puffed rice or pressed rice with milk and fruits. Fish and shellfish with rice and shallow-fried and mashed vegetables.
Southern India	Rice is the staple, often served with curd and vegetable curries. Distinctive flavours due to tamarind, coconut, lentils, and vegetables prepared with herbs, curry leaves, turmeric, tomato, coconut oil or ghee, eaten with pappadams and a variety of pickles. Savoury pancakes, such as dosa, poori, idli, bonda and bajji, and biryani, ghee rice with meat curry or seafood (prawns, mussels, mackerel).
Western India	Maharashtra: rice, coconut and fish in coastal regions; inland groundnut instead of coconut and sorghum and millet instead of rice. Sweet street foods include pooran poli, shrikhand and modak (steamed rice flour dumplings filled with a mixture of jaggery and coconut). Pav Bhaji is spicy vegetables in tomato gravy served with white bread that is cooked with butter. Gujarat: cuisine mostly vegetarian, with sweetness due to brown sugar (or gur or jaggery).

The most successful street and snack foods are likely to be those that are based on or reflect the

traditional cuisine in a particular area. However, in many large cities in Asia, Africa and Latin America, there

is an increasing willingness to ‘try something new’ and foods from other regions are being introduced and are proving to be popular. Small-scale farmers should therefore assess the degree of conservatism in people’s food preferences when deciding which types of street and snack food to make.

2. Type of food and ingredients

Street foods can also be differentiated by type of food and the number and type of ingredients, ranging from simple snack foods that have one or two ingredients up to complex meals that contain many ingredients, some of which require their own separate processing (see Table 3).

TABLE 3 Grouping street foods by type and complexity

Type of street food	Simple	More complex	Complex
Meals	Boiled rice and beans. Fried rice and fish. Sandwiches with various fillings.	Stir-fried vegetables, shrimps, meats with rice or noodles. Injera with spicy stews. Soups and curries eaten with chutneys and rice.	Peking duck. Dim sum. Steamed cassava/plantain doughs with meat stew and/or groundnut sauce
Snack foods	Fresh peeled, sliced fruit. Fried banana chips. Roasted nuts maize cobs or plantains. Roasted spiced meat/kebabs. Popcorn.	Deep-fried patties or samosas with meat/fish/vegetable fillings. Flat breads, buns, loaves or pancakes with different fillings.	Dairy confectionery (e.g. gulab jamum, peda, rasagolla, sandesh). Ice cream. Fried fermented soybean snacks (tempeh), tofu.
Drinks	Tea, spiced tea, coffee	Fruit juices, yoghurt drink (lassi).	None

Street food ingredients are often specific to particular regions or countries (see Table 4), and in some they may vary widely in different areas of a country. Each area has its own favourites that arise from customs, tradition, and religion, and

also vary with the seasons. There may be particularly noticeable differences between coastal and inland areas or between mountainous and tropical areas (see for example Peru and the United Republic of Tanzania in Table 1 and different areas of India in Table 2).

TABLE 4 Typical ingredients used in different regions

Region	Typical ingredients
Africa - east / south	Maize, plantains/bananas, cassava, sorghum, millet, sweet potato, groundnut or sunflower oil, onions, tomatoes, avocados, sesame, groundnuts, chicken, fish, beef, goat, lamb, limes/lemons, spices (chilli, Cayenne pepper, cinnamon, cloves, cumin), pineapples, coconuts, groundnuts, cashews, almonds.
Africa - west	Cassava, yams, plantains, maize, sorghum, millet, palm oil, rice, lamb, goat, beef, chicken, snails, fish, leafy vegetables, beans, onions, tomatoes, guava, mangoes, pineapples, okra, beans, cowpeas, spices (e.g. chilli, nutmeg)
Africa - north	Tef, wheat/couscous, maize, snails, lamb, goat, chicken, fish/seafood, sesame, potatoes, dates, almonds, olives, spices (e.g. paprika, Cayenne pepper, chilli, saffron, nutmeg, cinnamon, ginger, cloves, cumin, ginger, paprika, peppermint, parsley, coriander).

TABLE 4 Typical ingredients used in different regions (Cont.)

Region	Typical ingredients
Asia - south	Rice, wheat flour, sorghum flour, milk, eggs, ghee, mustard oil, yoghurt, guava, bananas, apples, limes, lemons, melons, coconuts, avocados, cucumber, tomatoes, eggplant, potatoes, chickpeas, lentils, onions, beetroots, herbs and spices (e.g. tamarind, cumin, coriander, parsley, black pepper, mustard, saffron, nutmeg, cinnamon, ginger, cloves, paprika, peppermint).
Asia - south east/China	Rice, rice flour, bean sprouts, soybeans, onions, peppers, cabbage, duck, pork, chicken/quails, snails, goat, beef, squid, oysters, shrimps, scallops, octopus, eggs, coconuts, groundnuts, mangoes, spices (e.g. ginger, garlic, cumin, chilli, black pepper, saffron, cloves, paprika).
Caribbean	Fish, wheat flour, maize, plantains, pork, chicken, fish, crab, shrimps, rice, beans, lentils, spinach, chickpeas, onions, pumpkins, okra, carrots, cabbage, green and red peppers, cucumber, potatoes, sweet potato, guava, breadfruit, bananas, mangoes, cheese, coconuts, capers, olives, spices (e.g. scotch bonnet, chilli, thyme, allspice, garlic, saffron, black pepper)
Latin America	Maize, beef, guinea pig, pork, chicken, fish, shrimps, scallops, octopus, squid, cheese, potatoes, cassava (yucca or manioc) flour, rice, beans, peas, onions, eggs, coconuts, palm oil, nuts (cashews, groundnuts), pumpkin, limes, bananas/plantains, avocados, spices (e.g. garlic, cumin)

TABLE 4 Typical ingredients used in different regions (Cont.)

Region	Typical ingredients
Middle East	Wheat flour/couscous, lamb, chicken, fish, sesame, chickpeas, fava beans, rice, spinach, prickly rears, okra, green peppers, onions, olives, tomatoes, eggplants, lentils, lemons, dates, apricots, pomegranates, cucumber, cheese, yoghurt, almonds, pistachios, spices (e.g. chilli, cardamom, cinnamon, ginger, mint)
Pacific	Fish, seafood, sago palm, pork, sweet potatoes, rice, coconuts, bananas, green vegetables, chicken, beef, lobster, conch, mangoes, cassava, maize, taro, breadfruit,

The types and amounts of ingredients used for particular street foods also vary from vendor to vendor. This variation produces a distinctive range of foods in an area, and offers potential competitive advantages to vendors who produce particularly attractive combinations of flavours and textures in their products.

3. Method of processing

A few street foods, such as fruits, are eaten raw and have minimal processing (just washing, peeling and slicing), whereas most street foods are processed to some extent.

The most common methods are frying, roasting/toasting, boiling/steaming, and to a lesser extent baking. The preparation of street food meals is too complex and varied to summarise in this booklet, but a summary of methods used to prepare snack foods is shown in Table 5. Most vendors use traditional processing methods to produce the majority of foods that are sold on the street. However, foods that are processed by larger-scale food manufacturers can be important as ingredients, or for some vendors they are the final products that are sold.

TABLE 5 Summary of methods used to process snack foods

Processing method	Cereals / legumes		Nuts	Root crops		Vegetables	Fruits	Meat / Fish
	Grain	Flours/ doughs		Chips	Flours/ doughs			
Baking	—	Biscuits, breads, cakes	—	Potato, sweet potato	Cassava cake, bread	—	—	—
Coating / battering	—	Batter coating from rice, wheat flour for fried vegetables (e.g. cauliflower)	Salt coated roasted groundnuts, macadamia and cashew nuts	—	Batter coating of cassava flour for fried vegetables (e.g. cauliflower)	Batter-coated vegetables	—	—
Drying / crystallising	Dried grains and legumes	—	Dried nuts	—	—	Crystallised carrot and palmyrah slices, carrot halva	Dried/crystallised papaya, mango, pineapple. Fruit leathers	Dried meats (Biltong, kilishi), game meat

TABLE 5 Summary of methods used to process snack foods (Cont.)

Processing method	Cereals / legumes		Nuts	Root crops		Vegetables	Fruits	Meat / Fish
	Grain	Flours/ doughs		Chips	Flours/ doughs			
Fermentation	Tempeh, soy sauce.	Bread dough	—	—	Cassava (kenkey and fufu),	Pickles from various vegetables	—	—
Frying Deep-frying	—	Doughnuts, pastries, fritters, patties, dough balls, casings for samosas, empanadas made from wheat, maize, rice, lentils, beans, cowpeas, lentils, bambara nuts, chickpeas	Fried groundnuts	Potato, yam, cassava, sweet potato chips, uncoated or battered	Doughnuts, pastries, fritters, patties, casings for samosas, empanadas made from cassava, potato (e.g. Bhaji, bonda), Potato and sweet potato crisps. Fried yam cake	Carrot, eggplant, vegetable bhajis, crisps made from beetroot, carrot and turnip.	Banana, plantain, breadfruit, pumpkin, cashew fruit crisps and chips	Pork, chicken, sausages

TABLE 5 Summary of methods used to process snack foods (Cont.)

Processing method	Cereals / legumes		Nuts	Root crops		Vegetables	Fruits	Meat / Fish
	Grain	Flours/ doughs		Chips	Flours/ doughs			
Frying Shallow frying/ stir frying/ sautéing	Fried rice, maize	Fritters, pancakes, noodles, tofu, casings for samosas, empanadas from wheat, maize, rice, beans, chickpeas	—	—	Fritters, pancakes, casings for samosas, empanadas made from cassava, potato	Stir-fried vegetables. Fillings for patties, samosas, empanadas.	—	Shallow- or stir-fried beef, pork, chicken, sausages, meatballs. Fillings for patties, samosas, empanadas
Roasting/ toasting	Maize on the cob/ popcorn, sorghum, barley, millet, guinea corn, chickpea, beans	Scones, flat breads, toasted sandwiches, pancakes, from wheat, tamales, tortillas, tacos from maize,	Roasted groundnuts, cashew and macadamia nuts	Roasted cassava	Cassava scones and cakes	—	Roasted plantain	Grilled/ barbequed beef, lamb, goat, pork, chicken kebabs, suya, snails, fish cakes.

TABLE 5 Summary of methods used to process snack foods (Cont.)

Processing method	Cereals / legumes		Nuts	Root crops		Vegetables	Fruits	Meat / Fish
	Grain	Flours/ doughs		Chips	Flours/ doughs			
Roasting/ toasting		papads, pakodas from rice and chickpeas. Grilled rice balls.						
Steaming/ boiling	Boiled rice, maize, chickpeas. Steamed puddings from rice or maize	Steamed dumplings, moin moin and ekuru from beans. Boiled confectionery from rice (e.g. aggala, kalu dodol) or wheat (e.g. Muscat, chirama laddu)	Boiled groundnuts, groundnut sauce.	Boiled cassava, yam, potato, sweet potato.	Steamed/ boiled cassava for ugali. Kenkey, and fufu	Steamed or boiled vegetables	Steamed/ boiled plantains/ bananas for matoke, kenkey, fufu. Preparation of fruit chutneys	Boiled lamb and other meats for stews and soups. Boiled snails

■ *Essential elements of processing for street and snack foods*

As described in the previous section, the term ‘street foods’ encompasses an extremely diverse variety of foods within the categories of meals, snack foods and drinks. There is also great diversity in the ingredients used, methods of processing, and ways of selling and consumption. Snack foods also include products that are made on the spot or away from the street by vendors, their families, or by small-scale and larger scale processors, which are then sold by street vendors.

Although vendors are defined by their place of selling foods, they may adopt a number of different methods of producing their foods:

- Small-scale farmers may process all ingredients on their farms, cook them, making street and/or snack foods and then selling them, for example, via street hawking as well as selling them to other vendors.
 - They may part-process some of the food ingredients on their farms before combining them to make the final product on the street. For example, plantains, yams and cassava are pre-processed to make flours or pulps for foods such as fufu in West Africa or matoke and ugali in East Africa;
- salad ingredients may be pre-washed, sliced or chopped and stored in containers for later use; components such as spicy sauces and meat marinades may be prepared at home each morning for use during the day; or flat breads, loaves or buns may be made overnight by the vendor.
- They may carry all ingredients, cooking utensils and fuel with them and produce the food freshly cooked to order on the street. This is particularly the case with fried and roasted foods that are relatively simple to prepare (see Table 3), such as roasted maize cobs and plantains, fried banana chips or grilled/roasted spiced meat kebabs.
 - The main component of the food, such as bread, may be bought from another processor and the vendor then makes fillings or other components on the street at the time of sale.
 - The vendor may not make the products, but buy them from food processors or retailers before selling them in packages on the street (for example, fruit juices and some snack foods such as roasted nuts or popcorn). Other examples include cold carbonated beverages in bottles or cans and ice cream bought in bulk - both dispensed

from insulated containers mounted on bicycles or carts; or pre-packaged sugar confectionery, dried fruit or fried potato crisps, each sold from a tray or display case by a mobile vendor.

Most street food enterprises are small in size, require relatively simple skills, basic facilities and small amounts of capital. They often involve the entire family in the procurement of raw materials, preparation and cooking of ingredients and the sale of the food(s).

Other issues to consider in street and snack food processing

Where some or all of the food is prepared on the street, rather than selling pre-packaged foods that are produced elsewhere, there are a number of factors that should be addressed to ensure that the food is made safely and to a high quality. These include: reliable supplies of high-quality ingredients; adequate heating to make foods safe, using appropriate equipment and types of fuel/power; adequate clean water supplies, good hygiene and adequate waste disposal.

Ingredient supplies

Of the ingredients described in Table 4, vegetables, fruits, meats and fish

are likely to be either produced on farm or can be bought fresh each day. They may also be sourced from other farmers, from fishermen, or more commonly from local wholesale or retail markets. Fresh milk that is used for tea or as a minor ingredient in a street food can be sourced from the farm or bought from milk sellers, but milk that is used to make yoghurt, butter, ghee, cheese, or the large number of dairy confectionery products is more often sourced from the farm or bought directly from dairy farmers.

Depending on the profitability of the street food business, dried cereals, legumes, root crops, nuts and flours may be bought by the sack-full from wholesale markets and stored at the vendor's house or farm as they are used. For small-scale farmers who have a lower turnover or less cash available, they are forced to buy smaller quantities for a day's production at a higher unit cost from retail markets. Ingredients such as herbs, spices, sugar, salt and any colourings or flavourings that are used are most often bought in small amounts from retail suppliers.

Street food vending therefore not only contributes to small-scale farmers and their farms, but also to the local economy by buying ingredients from other local farmers and markets.

Although their businesses are usually owned and operated by individuals or families, benefits from their trade extend throughout the local area by the linkages that are created with small-scale farms.

Equipment requirements

The most popular methods of preparing street foods and snack foods are frying, roasting and boiling or steaming (see Table 5). There are several different types of frying: deep-fat frying involves submerging the food in hot oil, either in a deep pan or at a larger scale and higher level of investment, using a thermostatically-controlled electric deep-fat fryer. However, in almost all situations, street vendors do not have access to electricity, and therefore the fuel used to heat fryers is either charcoal or portable liquid petroleum gas (LPG) cylinders in countries where these are available and where the additional investment is affordable. Shallow frying and sautéing are done using a frying pan or hotplate, and stir-frying most commonly uses a wok. Each of these methods requires the vendor to have a fixed location, or less commonly, to mount the equipment on a handcart. Similarly, roasting meats, plantains or maize is most commonly done using a charcoal fire, with roasters often constructed

from old vehicle wheels or home-made metal frameworks. Toasted maize and chick peas are mixed with sand on a hot plate and then sifted out. Where additional investment is possible, there are commercially available charcoal grills, barbeques and griddles.

Boiling is carried out in a pan over a gas burner or wood/coal/charcoal fire, depending on the cost and availability of these fuels. Steaming uses the same equipment but with a wire basket suspended over the boiling water in the pan. In all of these types of processing, the equipment is portable so that if necessary it can be taken home each day and costs little, which allows entry to this type of vending by even the most resource-poor small-scale farmers. Coating foods with sugar or salt, or coating meat, fish or vegetables with batter are each done by hand before the food is cooked and require only a pan to contain the coating material.

Other types of processing, including drying (grains, nuts, root crops), baking and fermentation of root crops or soybeans, are not usually carried out on the street. This is either because of the longer time required to process the foods (for drying, crystallising and fermentation), the larger amount of space required (for

drying) or the larger, immobile and more expensive equipment required (bakery ovens). Dried foods are prepared either on the farm or at the farmer's household by family members. In most countries, sun drying is used because it does not require investment in equipment and fuels. Crystallising fruits and some types of root crops are dried by soaking them in sugar solutions of increasing concentrations that removes the water. This requires plastic or metal pans, buckets or tanks, depending on the scale of operation. Baking may take place in

the home using a domestic oven, or using a dedicated home-made oven constructed from bricks, concrete, oil drums or similar containers that are heated by wood, coal or charcoal fires. Fermentation of soybeans to make tempeh and cassava to make kenkey or other foods either takes place at the homestead in domestic equipment, including metal trays and pans, or the fermented foods are bought from other processors (see FAO Diversification booklet No. 21 *Traditional fermented food and beverages for improved livelihoods*).

Strategies for marketing

■ *Market appraisal*

Conducting regular market appraisals is an integral part of making an enterprise less risky and less prone to failure. Market appraisals enable small-scale farmers to be aware of aspects of the street and snack food enterprise, including their important customers, the types of foods people prefer and the prices they are willing to pay, the activities of competitors and regulatory authorities, and so forth.

Being in contact with customers enables farmers to be proactive and not reactive to changes in markets and consumers' preferences. They can observe and ask questions regarding, for example, the quality of food being served, whether the service meets their needs (sitting down to eat/take away), how the food is served, the quantities sold in a snack food portion or meal, which foods and snacks sell the most, and how the quality and price compare to competition. Moreover new products can be tested by allowing customers to taste them and asking what they think about them and what price they might be willing to pay. Appraisals also enable farmers to

find out who else could be targeted as potential new customers that could be served. This could include, for example, serving meals directly to people in offices that are close by, to workers on building sites, providing catering services for weddings, funerals, birthday celebrations and ceremonies, or whether door-to-door delivery of food is required.

Market knowledge enables farmers to plan their requirements better, for example in terms of the types and amounts of crops or animals that need to be planted or raised for street and snack food ingredients compared to the amounts for sale by normal channels, when they are needed, and what are the labour requirements. This knowledge supports the enterprise and helps to improve decision-making related to both farm production and processing and marketing of street and snack foods. However market appraisals cannot guarantee success as they cannot fully eliminate risk and uncertainties in decision-making. Regular market appraisals can reduce risks, but not eliminate them.

Small-scale farmers should be trained in simple market research

methods. Advisors can provide such training and/or refer them to appropriate extension services. They can also provide supplementary market information, particularly relevant statistics from governments, local authorities and studies that will support small-scale farmers in their street and snack food endeavours.

■ ***Location: stationary and mobile vending***

Location is very important for street and snack food enterprises. Locations vary considerably from remote rural villages where street foods are sold on roadsides to passing road traffic, to road junctions in congested urban

centres, train and bus stations - in fact anywhere that has sufficient pass-through traffic, in other words the daily numbers of potential customers. Small-scale farmers need to carefully evaluate different locations to find the most suitable one for them in terms of ease of access; the type of sales outlet (permanent, semi-mobile, fully mobile) that are permitted in the particular area; water availability; sanitary conditions; visibility to passing traffic or pedestrians; products that are in demand; prices of products compared to those of other vendors in the area; any informal taxes that may exist and licensing and permits required.



FIGURE 12 Street food vending on the side of the road may be good as a sales location, but can congest traffic

(Photo: FAO/24518/ D. White)

Small-scale farmers are likely to know their own areas or local towns and are therefore able to judge for themselves which are the best locations for street sales. However, they may

require assistance from advisers if they expand the enterprise to cover more locations, or in getting information, for example regarding health certificates and licences or permits.



*FIGURE 13 Street food vendor located in a market in Bangkok, Thailand
(Photo: FAO/24521/ D. White)*

■ **Products: deciding what to sell**

Consumer demand at a particular location defines which street food products should be sold, the variety of products and the possible combinations of products to compliment each other. For example, sales of kebabs, cut onions, tomatoes, salad leaves and sauces may be complemented with

falafel. This mix of various products can be sold as one ‘packaged product’, and deciding a ‘menu’ is an important task. It is not always the case that the more foods on offer the greater the sales. It is more important to understand the correct combination of foods that are most popular and that complement each other.

■ ***Products: safety, hygiene and quality***

Foods that are acidic (for example fruit juices, pickles, chutneys, fermented dairy products) are unlikely to carry a risk of food poisoning because pathogenic bacteria are unable to grow in them. Similarly street foods that are correctly heated to a sufficiently high temperature for long enough and then consumed while hot are unlikely to cause food poisoning.

The main dangers are from low-acid foods (for example dumplings, rice, porridges and steamed doughs, raw vegetables), especially if these are not heated sufficiently, or are kept on display for a long period after they are cooked before they are consumed. Similarly low-acid fish, meat and milk may become contaminated before they are prepared into foods and cooked. In these products, bacteria may release poisons into the food that are not destroyed by cooking and can result in food poisoning. Finally, any product that uses water as an ingredient has the potential to cause food poisoning if the quality of the local water supplies is unsatisfactory.

Given the locations of many street food vendors in markets, bus stations or industrial or residential areas, the water quality may often be suspect. Foods can also become contaminated if the vendor has poor personal

hygiene or does not practice hygienic food production. Again the location is a significant contributory factor, and places that have accumulations of rubbish that attract insects, rodents or birds, the lack of clean water for washing hands and equipment, and insufficient facilities to regularly dispose of waste food in a hygienic way, each contribute to increased risk of contamination of the street foods.

In some countries street food vendors have been found to use unauthorized additives such as the colouring agents rhodamine B and methanal yellow, or synthetic sweeteners are used to adulterate drinks sold on the street (see Box 5). Contamination of street foods by lead is another problem, but this is declining with the introduction of lead-free vehicle fuels. There is a more widespread problem with street foods that contain groundnuts (peanuts), as a result of contamination with aflatoxins at levels above 30 µg/kg (ppb), the safety margin set by FAO/WHO guidelines. Pesticide residues above authorized levels have also been detected in street foods, particularly in vegetable-based products. However, this is not an exclusive problem for street foods, and home-cooked meals in these areas are likely to contain similar concentrations of aflatoxins and pesticide residues.

An important element for a marketing strategy for this livelihood activity is quality. All products, whether they are prepared and served on the street or sold as pre-packaged foods, must be safe to eat, and not risk poisoning consumers. They should also have the quality that meets consumer expectations and standards. This means that everything, from growing the food following appropriate Good Agricultural Practices (GAP), through handling and transport, to storage of ingredients, preparation and processing of the foods, and packaging or serving it, should have an emphasis on maintaining the

quality and safety of the product - from farm to fork.

Hygiene and safety at the point of sale means that vendors should be aware of the characteristics of the food being served or sold (see Table 6), good personal hygiene by the vendor (see Box 6), how to wash utensils properly using clean and potable water, not allowing garbage to accumulate nearby to prevent proliferation of insects, birds and rodents, as well as protecting the food from environmental pollution. All this contributes to higher quality foods and provides a competitive advantage that may differentiate the products from those of other sellers.

TABLE 6 Risk of foodborne diseases from different types of foods

High	Medium/Low
Cooked food to be eaten cold	Boiled vegetables
Dairy creams, milk	Cooked food for immediate consumption
Leafy salad vegetables (e.g. lettuce)	Dried foods
Mayonnaise	Fried food
Pastries/pies filled with meat, fish or vegetables, especially when eaten cold	Fruits and fruit products (but not fruit drinks that may be adulterated with water or have added ice)
Raw meat and fish	Pickles and chutneys
Reheated food, especially rice	Salty foods
	Soups

Source: Adapted from FAO & WHO. 1997. *Codex Alimentarius. General requirements (food hygiene)*, Rome

BOX 5 Street food products and safety

The risk of food poisoning from street food remains a threat in many parts of the world, especially because of microbiological contamination. Food-borne pathogens pose a serious health hazard, essentially determined by type of food and method of preparation and preservation. One clear factor of risk is the lack of vendor knowledge on the causes of food-borne diseases. The risks to public health are exacerbated by poor hygiene, inadequate access to clean water and waste disposal, and unhealthy surroundings (proximity of drains and public discharge sites). The improper use of additives (often unauthorized colouring agents), mycotoxins, heavy metals and other contaminants (pesticide residues) are additional street food hazards. Experience has shown, however, that with proper training and control of street vending, the potential health hazards of street foods are minimized.

Source: Adapted from i) FAO. 2009. Good hygienic practices in the preparation and sale of street foods in Africa, tools for training, Rome ii) FAO. 2001. Training manual for environmental health officers on safe handling practices for street foods, by A. M.A. Kidiku, Rome



FIGURE 14 A scientist carries out a test inside a mobile laboratory used for inspection of street food in Sao Paulo, Brazil

(Photo: FAO/15862/ G. Bizzarri)

Vendors who supply foods that consumers enjoy and do not make them sick build trust and confidence and hence create the possibility of repeated sales. Consumers' evaluations of quality

BOX 6 The importance of the vendor in food hygiene and safety

Street and snack foods are eaten by millions of people and these foods must be suitable for human consumption. Street vendors need to fully understand the importance of hygiene and their role and responsibilities in keeping the population healthy. Adequate quality means having the correct flavour, odour, colour and texture of a food, but it also means foods that are not contaminated by micro-organisms (bacteria, parasites, viruses) or their toxins, and foods that are free from contaminants. These can be biological (microbes, parasites, insects), chemical (insecticides, detergents, heavy metals, unauthorized additives) and physical (dust, grit, hair etc.). Food hygiene requires cleanliness at every stage of the food chain. For example microbes can be found in sewage, contaminated water, on dirty hands and under nails, on hair and dirty clothing, etc. Food becomes contaminated on the farm when irrigated with sewage, or during processing when it is washed in dirty water, or during preparation and display when it is touched by flies, handled with dirty hands, or made using dirty utensils.

Source: Adapted from FAO. 1995. Training of street food vendors: Didactic guide, Santiago

are based only on the last meal they ate and not on the history of good meals and snacks from the same vendor. This means that every sale to every consumer requires careful processing, preparation and serving standards.

Advisors can provide support with training in simplified and appropriately targeted versions of GAP, Good Handling Practices (GHP), Good Manufacturing Practices (GMP) and Hazard Analysis and Critical Control Point (HACCP) systems. There are specific training materials on safe practices for street food preparation and handling (see the *Selected further reading* section of this booklet). These ‘Good Practices’ approaches start from the farm

and end at point of sale, providing training to small-scale farmers on how to preserve product safety, hygiene and quality.

■ **Packaging**

Packaging street and snack foods is another important aspect of the livelihood activity: the types and availability of packaging varies from country to country and depends in part on the degree of protection required for a food, consumer requirements, costs of materials, access to materials and distribution systems. Packaging has six main functions:

1. handling and transport convenience;
2. protecting the product;

3. preventing loses;
4. extending the shelf/storage-life of products;
5. an aesthetic role for consumers; and
6. dividing food into convenient units for sale.

In street and snack food enterprises packaging is required for the transport of ingredients and/or food and snacks from the farm to the point of sale, for the storage of ingredients, for wrapping food to be taken away by customers or delivered to offices, as well as containers for food to be served in when customers eat it on the spot. These packaging requirements are an important aspect of a sustainable marketing strategy (see Case Study 5).

Packages to transport street and snack foods need to be sturdy, easily handled and they should prevent the food becoming contaminated or damaged by jolts and pressures during transport. Wooden, plastic or cardboard boxes are commonly used as transport containers. Snack foods may be sold to customers in plastic bags that are clean and made from a type of plastic that is appropriate for the type of snack food being sold. Food that is ready to eat also needs to have

a packaging to protect it from dust, insects and other factors that can contaminate it. Plates, cutlery and other materials used to serve food also need to be considered as packaging, and should be made from appropriate materials and can withstand usage by customers. For example plastic spoons should be heat resistant and plastic knives should be non-breakable and both should be easily cleaned if they are re-used. Street foods that are supplied to offices at lunch time need to be packaged carefully (for example in plastic or cardboard boxes, or in India in metal ‘Tiffin boxes’) to retain food quality. Also stored ingredients on the street need to be packaged properly with appropriate materials to prevent contamination by rodents and insects, or airborne dust.

Packaging can be found in a wide range of materials (wood, earthenware, glass, metal, plastic, paper and cardboard), and the choices of which materials to use depends on the properties of the foods, the availability of packaging materials at a local level and their cost. Farmers should also take account of the minimum quantities per order and the reliability of the supplier.



FIGURE 15 A street vendor packaging food into polystyrene containers for take-away lunches and food ready on plastic plates for immediate consumption
(Photo: FAO/24510/D. White)

CASE STUDY 5 Street food vendors and hygienic packaging practices in Trinidad and Tobago

Doubles are a very popular street food in Trinidad and Tobago. The double is a sandwich composed of two flat pieces of bread, filled with curried chick peas and optionally sauce with condiments and spices. Street vendors commonly prepare doubles in the morning and also late at night, as they are eaten commonly for breakfast and as a late night snack, especially on Fridays and Saturdays. In an observational study of street vendors it was found that 55 percent of vendors were clean and 99 percent were dressed appropriately using aprons and head restraints. Importantly, all vendors adequately covered their doubles to protect them from contamination. The vendors who displayed their doubles to the public used a glass case and for storage of cooked doubles vendors used Igloos (insulated containers), others used styrotex boxes, some glass cases and only very few used wooden boxes.

Soruce: Adapted from Benny-Olliviera, C. & Badrie, N. 2007. Hygienic practices by vendors of the street food doubles and public perception of vending practices in Trinidad, West Indies, Journal of Food Safety 27, pp. 66-81

Packaging can be made from locally available materials, provided that they are safe and hygienic and do not alter food quality in any way. Leaves are used frequently as wrappers for street foods because they are cheap and readily available. However, they do not protect foods from micro-organisms, or moisture loss/pickup and hence they are only suitable for short term storage. For example, banana leaves are used to wrap steamed foods in East and West Africa (for example matoke and kenkey) and palmyra palm leaves are used to weave boxes to carry cooked foods. Other locally

available materials include clay pots and bowls for yoghurt, wooden boxes for bottles, or sacks made from plant fibres such as jute or cotton. Each of these packaging materials also provides employment for local packaging manufacturers, who are themselves often small-scale businesses.

Packaging containers and plates and cutlery that are intended for repeated use should be easy to clean. Other packaging, such as plastic bags for snack foods, that are only used once, should be designed for minimal waste and recycling through municipal recycling systems to reduce



*FIGURE 16 Uganda leaves are used as a 'table cloth' for meat served on skewers
(Photo: FAO/19333/ R. Faidutti)*

BOX 7 Packaging for snack foods

Snack foods that are intended for immediate consumption do not require sophisticated packaging as they are eaten on the spot, and a paper wrap is often used. However for a longer shelf-life, the packaging needs to provide a barrier to micro-organisms, moisture, air and light. Polypropylene can be used, as opposed to polythene, as this better protects the foods.

Although sweets are often packed in banana or sugar-cane leaves, in areas of high humidity the sweets become sticky. Individual wraps made from waxed paper, aluminium foil or cellulose film protect the sweets against moisture pickup.

Source: Adapted from Fellows, P. & Hampton, A. 1992. Small scale food processing: A guide to appropriate equipment, Practical Action, Rugby, United Kingdom

environmental challenges. Each type of packaging has its advantages and disadvantages, depending on the required needs and use.

Labels need to be considered for pre-packaged foods and should display the producer's name, weight of food inside, the ingredients used, as well as expiry date of the product. This is a legal requirement in most countries.

Advisors can support small-scale farmers by providing information on appropriate materials to be used for each type of food and snack, as well as possible suppliers of packaging and any legal requirements. The advisor can also be of support by identifying producers of locally made packaging and identifying what may be appropriate or not appropriate to use as food packaging.

■ **Display**

The way in which street and snack foods are displayed is important regardless of whether the food is sold by street hawking or from a stall. The display needs to be attractive to consumers and portray cleanliness. This involves setting the foods out in an orderly way and using either white or other bright colours that are not only attractive to customers, but also portray cleanliness. The materials used to construct a stall need to be easy to clean, and in areas where food preparation takes place, surfaces should be made of a smooth and impermeable food grade material. Containers that are used to display foods need to be carefully thought out, not only in terms of aesthetics to customers, but also how they can be protected from sunlight, rain, insects, rodents and other factors that

can make the food unappealing or dangerous to health.

Vendors are also part of ‘the display’ and their appearance can be very effective in enhancing the overall display and encouraging sales. This is based not only on their physical appearance, but also on how they relate to customers: making a friendly atmosphere and being talkative, for example, can be important marketing aspects that contribute to the overall display. The personal appearance of the vendor is also another important part of the display: it reflects concern for hygiene

and hence creates more consumer appeal, confidence and trust. Vendors should have good personal hygiene (for example clean body and hands, hair short or tied back) and work in clothing that is appropriate to protect food from contaminants, such as a light coloured apron, and hair covered with a cap or scarf (see Case Study 6).

Signs are another important factor that improves a display. They can promote the name of the vendor, the dish of the day and its price. Signs should be clear and easily readable; and are used as



FIGURE 17 A street food stall in India. The stall is painted in white, has glass windows to protect the food on display and signs detail what is on offer, the various prices and the name of the enterprise

(Photo: FAO/19571/ G. Bizzarri)

advertising and hence are part of the marketing strategy. Advisors can support small-scale farmers by providing information and training

on appropriate ways to display foods as well as the personal appearance required for street vending.

CASE STUDY 6 Neatness of street vendors and vending surroundings in Kumasi, Ghana

One particular finding of the study was the much verbalized and observed emphasis on neatness in many connotations. In focus group discussions and interviews with consumers, neatness was often described and associated with aesthetic appearance of the vending site and an all inclusive state of order and correctness: “When a seller has everything correct in place” and “when there is no dirt to be seen” and “the person must be in order, everything must be in order, because if you go and buy and realize things are not neat, you won’t buy from that place again”. The observations at vending places confirmed that most vendors spent quite some time lining up pots, jars, and bottles in an artistic manner, arranging salads and other colourful foods on display, and decorating their stands to create an atmosphere of neatness. Hence, neatness and eliminating dirt were often a purpose per se for vendors and customers, without them reflecting the related health benefits. This finding suggests that hygiene is not always indicated as a health concern or motivated by health risks but rather as intuitively correct and orderly behaviour.

Both observations and interviews with vendors and consumers made it clear that there is a strong focus on the personal neatness and appearance of the vendor. Vendors are conscious of changing stained clothes to clean ones, putting on colourful dresses and jewellery, and putting on aprons before presenting themselves to customers at their vending sites. One consumer said: “You will have to be careful by being selective ... you take the hygiene of the vendor into consideration. That is, how the person looks. Her appearance is important to me”. Consumers and vendors referred to neatness as personal pureness and positive personal qualities such as neat manners, being friendly, and polite. Also, ‘cleanliness’ seemed to have a moral connotation and was associated with having a good moral attitude. Thus, neatness is composed of values of aesthetic, social, and moral pureness. Furthermore, it was clear from the participant observations that while many efforts were made to keep the vending premises neat and the appearance of the vendors neat, the food preparation sites were often disorganized and fairly dirty. Local perceptions of food safety and hygiene thus seem to be highly influenced by values of neatness and appearance among both vendors and consumers.

Source: Adapted from Rheinländer, T., Olsen, M., Abubakar Bakang, J., Takyi, H., Konradsen, F. & Samuelsen, H. 2008. Keeping up appearances: perceptions of street food safety in urban Kumasi, Ghana, Journal of Urban Health, 85(6), pp. 952–964

■ *Organization*

Good organization of the enterprise in terms of production, processing and marketing is another important element of a marketing strategy, and small-scale farmers have a number of options in joining together into an association. For associations to occur among farmers within a community a number of issues need to be considered: the first is the community's social cohesion, which may be commonly related to ethnic, tribal and religious composition; secondly, the presence of other pre-existing associations within the community; and thirdly, motivated individuals within the community also need to be considered. An association needs to be an economic undertaking that supports farming activities and generates extra income. For associations to be successful, they need to be market-oriented, proficiently and effectively managed, have a good organizational structure that clearly sets out everyone's rights and responsibilities, caters for the needs of all members, considers gender issues, and allows for freedom of speech.

In the particular case of a street and snack food enterprise, the benefits of joining together include: reductions in the costs of buying farm inputs, production, processing and marketing;

sharing and pooling of resources and skills; acquisition of new skills as a consequence of cooperation; lower transaction and transport costs; improved access to credit; improved capacity to access urban areas; more opportunities for market linkages; greater opportunities for being trained in hygiene, food preparation, business skills development, etc.; and a unified voice for obtaining licenses and permits for street vending from authorities.

Associations provide marketing capacity well beyond what a single small-scale farmer and family could do on their own. A farmers' association has the potential of being able to set up more street stalls and/or more street hawking as its labour capacity is higher. This translates into more points of sale as well as increased capacity for obtaining market information and becoming more competitive. Associations can also have more bargaining power and leverage with public authorities, other associations and donors. For example, in cities where street food vendors are organized into associations, small-scale farmers can have more leverage when approaching them if they are in a group than on their own. Small-scale farmers may also join such associations and/or form their own associations of street food vendors.

CASE STUDY 7 Association in Lima, Peru

Since the 1960s many associations in Lima have been formed by vendors, especially by those who have a permanent point of sale and less by vendors who are semi-mobile and fully mobile (ambulatory vendors). These associations are small, usually encompassing vendors on a block or single street and members are few. However these associations are not very institutionalized in that established rules are commonly not followed, paper work is not updated regularly and loyalty between members is fairly low. Disagreements between management and members commonly lead to association dissolution. Nonetheless, these associations have an important role to play: they provide for conflict resolution among members over allocation of space on streets and side walks, they promote cohesion among vendors, and they absorb pressure from, and negotiate with, local public authorities.

Source: Roeber, S. 2006. Street trade in Latin America: Demographic trends, legal issues and vending organizations in six cities, ILO, Geneva

Such associations are recognized in many instances by local authorities and provide legal protection to members, granting them legal rights that would otherwise be ignored in unregulated informal street food sectors in many countries (see Case Study 7).

Associations also may enable settlements over disputes among its members: for example occupancy of selling location and other matters. They are also a forum where members can regularly discuss their problems

and requirements and increase the social capital that can be important in supporting members.

Advisors can play a significant role in supporting and helping small-scale farmers' associations. They can promote and encourage group formation by organizing preliminary meetings among community members and other interested parties to set up an association; they can also provide information on credit availability, legislation, training opportunities and so forth.

Support services to promote street and snack foods

■ *Access to support services*

Small-scale farmers require access to services to be able to benefit from the support they provide. Access not only requires mobility, but also and importantly proximity to such services. This means that small-scale farmers not only need mobility ‘to get to’ support services, but also support services need ‘to get to’ them.

Access needs to be facilitated with appropriate policies and considerations for local circumstances and contexts. Distance from support services, problems with road infrastructure and telecommunications, for example, can all hinder access. Particular attention also needs to be given to gender issues in regard to access to support services. Women are commonly excluded from mainstream and regular communications and thus may find difficulty in access, for example to training services on appropriate hygiene methods for food preparation. Lack of access to support services can be a major barrier in the promotion of street and snack food enterprises.

With regard to support services two important issues need to be considered: i) who will pay for such services and ii) who should deliver such services. In certain areas for example, infrastructure, there may be a need for public sector intervention, while in other areas, for example training can be provided by private and donor services. Importantly, the most appropriate organization to provide, organize and pay for a service needs to be defined, usually on a case by case basis.

■ *Knowledge, know-how and technical information*

As described in *The livelihood activity* section of the booklet the majority of popular street and snack foods are traditional to an area and small-scale farmers have the knowledge and skills to make them. They may however lack knowledge and skills to increase production to a larger scale (including organizational skills as well as knowing which equipment to buy); they may not be able to apply quality assurance techniques needed to make sure all foods are safe and have a similar quality; and they may

not have the business management skills needed to operate an enterprise (including production scheduling, staff management, marketing and financial management).

Advice must be based on sound knowledge and delivery methods that need to be adapted to the local context. Technical support services may be provided by government institutions, such as technical colleges, universities, Bureaux of Standards, departments in Ministries of Agriculture, Health or Commerce/Trade and Industry and related extension services; local NGOs and other 'third sector' organizations (for example manufacturers associations, farmers' clubs and societies); and international organizations that are working locally or in the capital city, including United Nations-based organizations such as FAO and international NGOs.

Local municipalities have a large role to play in providing advice to small-scale farmers. Local administration is knowledgeable about the particularities of the local context in which street and snack food processors operate, they are fairly accessible by small-scale farmers and importantly can provide information and advice to other organizations. With appropriate guidance and training local municipalities can

become an integral part of the public administration's coordinated efforts to support small-scale farmers.

When providing advice, building on local knowledge, culture and capacity has the greatest potential for success. For example, when training is conducted on appropriate food handling practices such training needs to build on and around traditional food preparation methods.

■ *Technical training*

Clearly providing the whole spectrum of training that may be required from a technical level for a street and snack food enterprise may initially seem daunting and new subjects to be learned by small-scale farmers may seem overwhelming. However with a practical 'learning-by-doing' approach, good organization and fine tuning of the training to local needs, necessities and capacity, the training can be made more manageable for training services, be they public, private or donor. For example, training can take place in a farm homestead and/or on the premises of a small-scale processing enterprise and/or in a farmers' association centre, rather than in a venue that is not representative of the conditions under which farmers will be working, such as a college. Further, small-scale farmers can also be taken on



FIGURE 18 Women in Uganda receiving practical training in appropriate food preparation methods

(Photo: FAO/19300/ R. Faidutti)

‘field visits’ to observe street food vendors, small-scale processing enterprises, etc. More details on aspects of training in food processing are given in the *Selected further reading* section of this booklet.

A major matter to consider is ‘who will pay’ for such training as commonly small-scale farmers have limited resources, and they may also resist taking such training as a result of local traditions, culture and social aspects. For example in the case of women in some countries, particular emphasis is required to ascertain how gender-based training can be

delivered without upsetting local traditions and norms. For payment of training, there have been many successful models that have been developed and that can be locally financed. For example, in some cases, a small percentage of income derived from products sold is appropriated to pay for the training.

■ *Access to technology*

Another important aspect of enabling street and snack food enterprises is facilitating access to technology for small-scale farmers and also supporting them in making the right choice of



FIGURE 19 Drying mango slices in Guinea. The solar drying technology has been upgraded using local materials and plastic as well as a local framework design. All this to reduce drying time, maintain quality and prevent the mango slices from being infested with insects

(Photo: FAO/15837/ R. Faidutti)

equipment. Many small-scale farmers have little choice when selecting equipment and commonly buy what is locally available. Equipment should be the correct size for the intended scale of production. The capacity of each piece of equipment in a process should be matched to the others. Advisers can assist in providing them with information about locally available technology, encourage them to survey street food and food processing enterprises and also to research suppliers to find out what equipment is available before making a decision on what to buy.

■ **Business skills training**

Small-scale farmers need to acquire sound business knowledge and skills so they can administer and manage their enterprise in an appropriate manner and reduce the risk of failure. Knowledge and skills in such areas as bookkeeping, production planning, cash flow and marketing are all necessary to sustain a business over time. Moreover the development of entrepreneurial skills is also important as competition in street and snack foods can be intensive, especially in peri-urban and urban areas.



FIGURE 20 Farmers being trained in Peru
(Photo: FAO/23287/A. Proto)

Advisers who have the appropriate knowledge and background can deliver such training, for example advisers who have a good background in farm business management, agribusiness management, marketing and economics. However private and donor services can be very effective in delivering such services and as the *Selected further reading* section of this booklet shows there are training materials widely available.

■ **Financial services**

Access to finance is an important element for a snack and street food enterprise. This is not usually the

case for a kitchen enterprise, which requires only small investment, if any investment at all, and required funds can be commonly sourced from savings. Access to credit is more often required when enterprises want to grow and investment is needed, especially in equipment and buildings. Formal banking systems can be approached, but in many areas their services are not available, or their products are not suited to small-scale farmers needs. The banks may be unwilling to loan money to small-scale farmers as they can be perceived as high-risk customers. Importantly though,

CASE STUDY 8 **Micro-leasing instead of micro-loans: food carts in Bangkok Thailand**

Lending institutions can use equipment leasing as an alternative scheme to provide credit to enterprises. Known as 'micro-leasing', it differs from micro-lending by leasing equipment instead of loaning money. In a study carried out in Bangkok, Thailand, on mobile food carts it was found that there was a need for a flexible leasing plan. This derived from i) the differing income levels of mobile food vendors that derived from the different foods sold from each cart, and ii) the different models of carts that were available and their related purchase price and value. Consequently the study recommended that when arranging a lease plan, repayment and interest rates must not only be established on the type of cart used, but also to the type of food sold on the cart.

Source: Adapted from Brown, J., Groth, A., Mendez, E. & Tsegaye, B. 2004 Economic empowerment through a food cart micro leasing program in Thailand, Worcester Polytechnic Institute, Worcester

financial institutions need to develop credit services that provide for small-scale farmers. At the same time these services need to be profitable for the financial institution and not be too onerous for the small-scale farmer in terms of interest rates and payback period.

Advisers can play a critical role in the aspects of financial access and availability by providing small-scale farmers with information and options that they may take. For example, credit may be available from microfinance initiatives run by NGOs, credit on equipment may be provided by the manufacturing firm, etc. However promoting and encouraging small-scale farmer savings schemes and providing appropriate training on such matters as group savings are also feasible and advisable options.

■ **Institutional role**

The public sector has a large and central role in supporting street and snack food enterprises, particularly to foster an enabling business environment. This encourages trade, opens up new enterprise opportunities, facilitates paper work, the registration of businesses and so forth. Providing institutional support to businesses is also another public role. For example, this may involve encouraging local municipalities to be more proactive in encouraging street food enterprises to register in the formal sector, providing licences, providing training in good hygiene practices for street food vendors, etc. Institutions at local level can be encouraged to create and foster relationships with street and snack food vendors, for example, enabling meetings between municipality and

CASE STUDY 9 Public policy on street foods and other processed foods in Africa

In a study conducted on public policy in regard to street foods and other processed foods in Africa three main recommendations emerged:

1. *Recognise the sector and support the emergence of professional organizations:*
Giving full recognition to the sector in the national economy and encouraging the emergence of professional organizations are prerequisites for the definition of public policies favourable to the development of such a sector.
2. *Improve the business environment:*
Improving or even reforming the business environment is necessary to remove the obstacles to the development of the sector. Revising legislation is a major objective in modifying relations with the state and local authorities, improving work conditions and product quality and avoiding a situation where numerous actors in the sector bypass the regulations in force. In particular, it is a question of creating the conditions for an effective and recognised contribution by micro-activities to public finances while taking into account their financial capacities and operating methods. This sector must also be given greater consideration in macroeconomic policies, especially relating to trade
3. *Develop a range of adapted services:*
One of the key elements in defining support policies for the food processing and commercial micro-activities sector is the development of a range of services. These should be adapted to the particularities and needs of such activities and be capable of overcoming the constraints that they encounter. These can be defined in five main areas: training (technical and business management), mentoring (support in terms of technical and business matters for the enterprise once training is finished), information research (information on technical, commercial, economic, fiscal and legal spheres), technology (technical innovations in product processing) and access to financial services (microfinance institutes or decentralised financial systems).

Source: Adapted from Bricas, N. & Broutin, C. 2008. Food processing and retail micro-activities and poverty reduction in sub-Saharan Africa, Geneva Trade & Development Forum

street food vendor representatives to discuss matters regarding occupation of public space, traffic congestion, licensing, registering, etc.

The passing of legislation and provision of a regulatory environment that favours and supports street and snack food

enterprises is another role that the public sector needs to be involved in. For example, legislation that looks at quality assurance methods that are affordable to small-scale farmers and their micro-processing enterprises that can be easily adapted and adopted.

Importantly, the public sector needs to provide infrastructure such as roads, clean water supplies and telecommunications that support street and snack food enterprises as well as encouraging rural and urban linkages. Moreover a more reliable and well-kept road system can encourage travel between rural and urban areas and help small-scale farmers to sell street foods in busier urban environments.

The public sector can encourage the private sector more in terms of providing support services, for example: technical, quality

and business training. The public sector can also encourage public private partnerships, for example, in providing electricity to street stalls and processing enterprises.

Institutions, especially at municipal level, can conduct regular surveys and studies of the status and outlook of street and snack food enterprises to indicate where opportunities may exist. They can also provide information and recommendations for updating and renewing legislation, as well as providing indicators of where training is needed or where more public intervention is required.



*FIGURE 21 Woman cooking tortillas in El Salvador on an energy efficient stove
(Photo: FAO/21555/ G. Bizzarri)*

CASE STUDY 10 Energy consumption in Asian cities by street food vendors

The large numbers of street food vendors and hawkers in Asian cities is well known. However little is known about their energy consumption in terms of food preparation both on site, at a street stall and on a mobile cart, as well as in the homestead or in the more formal processing enterprise. It was found that their energy consumption was considerable. This energy mainly relied on fuel wood, charcoal and kerosene, which contributed to greenhouse gas emissions, depletion of forest resources, significant air pollution both in street cities as well as in the homestead, and this contributed to health issues for vendors and their families.

If many of the vendors were to convert to improved cooking technologies the advantages would be:

- Improved fuel efficiency;
- Improved profitability of the individual street food vendor's business;
- Reduced vulnerability;
- Reduction in the use of fuel wood;
- Improved cooking technologies, especially those which remove smoke from the home and street stall. This will reduce exposure to highly toxic smoke and result in less air pollution;
- Reduce the overall consumption of energy.

Source: Adapted from Tedd, L., Liyanarachchi, S. & Saha, S.R. 2003. Energy and street food, Practical Action, Rugby, United Kingdom

■ **Organizational options**

Small-scale farmers on their own have little leverage in terms of marketing and voice with public administrations. Promoting and encouraging farmers' organizations and associations for small-scale processing and street vendors can all contribute to supporting street and snack food enterprises. Associations provide a forum where issues can be discussed with public authorities. Public authorities can more efficiently and effectively communicate with

more small-scale farmers and can more easily facilitate, for example, the distribution of information on new laws and regulations. Associations are also more effective and efficient in receiving training and more importantly, implementing such training, as peer pressure to comply with newly acquired practices is more compelling. Advisors can be instrumental in initiating and encouraging the formation of associations among small-scale farmers. Advisors can provide the

initial contacts, encourage meetings, and set down rules and legal status for the association and so forth.

■ *Role of the advisor*

Advisors supporting and promoting street and snack food enterprises to improve livelihoods is an important aspect in the overall strategy of smallholder development. In particular the advisor needs to:

- Survey the street and snack food sector, ascertain demand and supply, understand how the sector functions and provide information to smallholders and also to other interested stakeholders;
- Understand the opportunities and challenges that the sector has to offer;
- Provide information on inputs required for the sector, for example, suppliers of equipment, suppliers of mobile carts, etc.;
- Provide estimates on building facilities and layout for more formal processing operations;
- Provide information about laws and regulations, not only concerning street vending and hawking, but also on food hygiene practices to follow, quality, etc. Regularly update smallholders on changes in laws and/or the enactment of new laws;
- Provide information on the potential of the sector for smallholders;
- Advise and support small-scale farmers in their feasibility plans, costing of the business operation and estimating profitability;
- Provide support and training or provide information on who can deliver such training in appropriate food handling, packaging, storage and display of foods;
- Quality control from farm to fork; and appropriate business practices;
- Advise on how marketing can be improved;
- Actively promote smallholder associations.

Challenges

■ *Regulatory*

One of the biggest challenges for a street and snack food enterprise is regulation. For the authorities, the first challenge is recognizing that such informal street vending exists. It is not a sector devoted only to occasional vending and processing, but represents opportunities for the livelihoods of many and it can be a viable economic sector. The second challenge is to recognise that this sector is not an escape from poverty, but it is a grassroots-level economic sector that can grow and can become an integral part of the economy. The third challenge relates to unfair competition: vendors and processors who are in the informal sector commonly have fewer overheads than food retailers and processors in the formal sector. The fourth challenge is the need to regulate the occupation of public space: vendors require strategic locations versus the issues related to traffic congestion, especially in urban areas. The fifth challenge is the need to understand the diversity and requirements of the sector. There is a large diversity in terms of: vendors and processors; enterprises within the

sector; types of vending units; type of foods and snacks sold; economic performance, etc. Tied into this challenge is also the diverse needs and necessities related to access to water, energy and sanitation. The sixth challenge is to recognise that, like other sectors, it not only operates for financial reasons, but there are also important social and cultural factors at play, for example both men or women run enterprises and regulations need to consider gender vulnerability in the sector and other gender-related matters.

Interventions that are related for example to mandatory and optional training need to recognise and take into account the diversity of the sector. Training needs to be different depending on the size of the enterprise and its level of growth as a business: for example, a start-up business requires more focus on basic technical matters in appropriate food handling and preparation; if the enterprise is well established the small-scale farmer may require training in more advanced business management techniques. Other regulatory challenges relate to health and safety of vendors on the

street, informal ‘insurance’ schemes and in some countries the pressing issue of child labour.

Yet another pressing challenge is that much of the policy and regulation is left to municipal authorities to deal with, but these may lack the resources and personnel to be able to deal with the challenges appropriately.

Overall there needs to be a reduction in barriers to the legal operation of street and snack food businesses. Enabling policies require such aspects

as easier registration and licensing, where necessary introducing fees for occupation of public space, limits to traffic congestion, rights and access to water, energy and waste disposal systems, advice on introducing social schemes such as pensions, health care and attention to inappropriate labour practices such as child labour.

Table 7 provides examples of various municipalities from around the world and how they have supported street and snack food enterprises.

TABLE 7 Municipalities and their support programmes

City/country	Activity	Initiative by	Start date	Programme
Quito, Ecuador	Street food (prepared dishes)	Municipality	1999	Improve food quality, provide infrastructure to safeguard consumer health
Dar es Salaam, United Republic of Tanzania	Street foods	Municipality	1995	Integrate the informal sector into the urban infrastructure (appropriate locations for vendors)
Dakar, Senegal	Street foods (prepared dishes)	Municipality and FAO	2000	Sanitise food supply in Dakar, safeguard the urban environment and consumer health. Improve the hygiene of food prepared and sold in the street
Cebu city, Philippines	Street foods (prepared dishes)	Municipality	2000	Identify practitioners, products and practices. Promote and educate on public health and environment impact

Source: Adapted from FAO. 2003. The informal food sector: a briefing guide for mayors, city executives and urban planners in developing countries and countries in transition, by O. Argenti, Food into Cities Collection No. 4, Rome

BOX 8 Informal food trade interventions

1. Promote attitudes and policies that are favourable to informal food operators.
2. Integrate the needs and address constraints of informal operators in planning, information and training, supply and management of infrastructure, equipment and services, regulations on land occupancy and use, food quality standards, rules on hygiene, circulation of traffic and pollution.
3. Promote private investment

Source: FAO. 2003. The informal food sector: a briefing guide for mayors, city executives and urban planners in developing countries and countries in transition, by O. Argenti, Food into Cities Collection No. 4, Rome

■ **Processing: investment and technology**

At kitchen enterprise level, nearly all equipment used by street food vendors and processors is low-cost. Often the same equipment that is used domestically, for example for mixing, boiling or steaming foods, fermentation of tempeh, kenkey, yoghurt or other foods, is also used for processing and street vending purposes. However challenges set in when the enterprise needs to grow and new technologies and equipment need to be adopted at processing and vending level. Such capital investments may be onerous for small-scale farmers and can hinder enterprise expansion. Small-scale farmers need access to credit and/or equipment leasing that is affordable and fits in well with their business capacity.

If the type of equipment required for the enterprise is not available, small-scale farmers may substitute it with artisan versions that do not comply with safety or hygiene standards and regulations. Availability of equipment, appropriate information and advice on what suits the enterprise best is yet another challenge that needs to be addressed, along with know-how on how to use the equipment safely. For example, in packaging snack foods plastic bags can be sealed using an electric heat sealer. This gives a more professional finish but clearly requires users to know how to use it, the number of packs that can be sealed per hour, what maintenance and repairs it may require, where spare parts can be obtained, where it can be repaired locally, and the reliability of the equipment with an intermittent electrical supply.

BOX 9 Expensive equipment for street foods

Possibly the most expensive equipment that is likely to be needed by small-scale farmers involved in street food production is an oven. This can be either a domestic oven, or an oven constructed locally from bricks, concrete, oil drums etc., and heated by wood, coal or charcoal.

■ *Repair and maintenance*

Most equipment at a kitchen level enterprise does not require any specialised maintenance, and utensils, pans, tanks etc., last for many years before they require repairs. Equipment that is likely to require greater maintenance includes any cutting blades that should be routinely sharpened, possibly every day or every week, depending on the foods that are being cut. This can be easily done and does not require expensive external inputs.

However, an electric food mixer for example, may require external intervention for repairs and spare parts. This can be a challenge as repairers may not be available and there may not be a supply of spares, especially in rural areas. There is also a need for regular maintenance on large machinery, for example large fryers for potato or banana chips, to ensure they operate safely, and this may be a challenge as processors may be unwilling to carry it out because of high maintenance costs.

Maintenance and repairs also need to be considered at retail level: for example street stalls that use bottled gas to cook food need to be regularly checked and cookers need to be maintained as the dangers of irregular maintenance and repairs can be very high.

■ *Infrastructure*

Sources of power for processors and vendors can also represent a challenge. For example, vendors who use wood or coal to cook foods on streets in urban areas not only risk their own health as a result of the smoke, but also pollute the air and contribute to urban pollution. For processors in rural areas, a challenge may be the regular supply of electricity for their processing requirements and both urban and rural processors may lack access to a regular supply of potable water.

Inadequate infrastructure is one of the main challenges that can hinder business development, and the challenge is to provide the infrastructure that supports street

and snack foods enterprises. This ranges from public transport, roads, railways, and in some cases small docks on waterways. There is the need for access to clean and potable water supplies for processors and vendors in rural, peri-urban and urban areas. Also there is the question of an appropriate energy infrastructure that provides electricity for example and is accessible also in rural areas. A communications infrastructure is also a necessity for conducting business.

■ ***Continuity of supply: seasonal processing***

Challenges for small-scale farmers include the seasonal nature of agriculture and consequent ingredient availability, crop variety issues, chemical residues on foods, as well

as produce perishability. Harvest seasons have an important impact on ingredients that are required for street and snack foods. For example, a product such as pepper sauce may contain several ingredients that are harvested at different times of the year (see Table 8). The ingredients are not available together in any month of the year and they therefore have to be preserved to make year-round production possible. The options are preservation using brine or syrup, treatment with sulphur dioxide or other preservative chemicals, or drying. Planning the preservation requires the farmer to calculate the amount of each ingredient required for a year’s production and the additional costs of buying salt, sugar or preservative chemicals if these are used.

TABLE 8 Seasonality of ingredients for hot pepper sauce

Ingredient	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bell pepper			x	x	x							
Onion	x	x	x	x	x							
Garlic			x		x							
Papaya						x	x	x				
Mango							x	x	x			

Source: Fellows, P.J. & Axtell, B. 2008. *Opportunities in fruit and vegetable processing*, CTA,

Another problem facing farmers who wish to make street and snack foods is the large number of different varieties of a particular crop, some of which are not suitable for processing. To make the same product each time, the farmer must either select the varieties that are suitable or develop a system of blending ingredients. This is not always easy to achieve because individual farmers often grow different varieties of fruits and vegetables in small quantities.

■ *Access to financial services*

For business enterprises it is not so much the terms of credit and pay back periods that can be a problem, as much as their access to financial services themselves. A financial infrastructure commonly does not reach into remote rural areas and does not cater for small-scale farmers, even in urban areas where access is feasible. This can be a challenge, especially when small investments need to be made to enable a street and snack food enterprise to expand operations.

■ *Gender*

Women play a large role in street and snack food enterprises and their presence is seen in many countries at retail level as well as in processing operations. However their roles in running the business are often

marginalised as is their access to income from the business, training courses, credit facilities and legal recourses. On the streets, women may be more vulnerable to the informality of the sector, and this can also be the case in processing facilities. Moreover women also have family responsibilities and their limited time may hinder their ability to engage in business. In all interventions related to street and snack food enterprises and their promotion, careful consideration and attention needs to be provided to assist women, as well as passing regulations that provide for gender awareness. The implementation of such regulations also needs to be carefully monitored and upheld.

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FAO. 1997. Marketing research and information systems, by I.M. Crawford, *AGS Marketing and Agribusiness Text* Vol. 4, Rome.

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UNESCO. 1997. *Gender sensitivity: A training manual*, Paris.

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Sources of further information and support

Agribusiness

<http://www.enterpriseworks.org/display.cfm?id=3&sub=18>

Food and Agriculture Organization of the United Nations *Codex Alimentarius*

http://www.codexalimentarius.net/web/index_en.jsp

Food for the cities

<http://www.fao.org/fcit/fcit-home/en/>

Inpho: Food processing toolkits

<http://www.fao.org/inpho/content/fpt/HOME/HOME.HTM>

International Development Research Centre (IDRC)

http://www.idrc.ca/en/ev-1-201-1-DO_TOPIC.html

International Labour Organization

www.ilo.org

Natural Resources Institute (NRI)

<http://www.nri.org/>

Practical action

Crop and food processing

<http://practicalaction.org/practicalanswers/index.php?cPath=28>

A series of booklets on different aspects of small-scale processing entitled 'Food Cycle Technology Sourcebooks', UNIFEM/IT Publications, edited by B.L. Axtell, are available from Practical Action

Articles on food processing and snack food production are available in Food Chain - the international journal of small-scale food processing, from Practical Action

http://practicalaction.org/agroprocessing/food_chain

Royal Tropical Institute (KIT)

<http://www.kit.nl/>

Street food

<http://www.streetfood.org/>

Technical Centre for Agricultural and Rural Cooperation ACP-EU (CTA)

<http://www.cta.int/>

United Nations Industrial Development Organization

<http://www.unido.org/>

Women in Informal Employment: Globalizing and Organizing (WIEGO)

<http://www.wiego.org/about/>

World Health Organization


Retailing

http://www.who.int/foodsafety/fs_management/retail/en/index.html

Five keys to safer food

http://www.who.int/foodsafety/publications/consumer/en/5keys_en.pdf

Notes



This booklet is intended to create awareness and promote street and snack foods as a diversification enterprise for small-scale farmers. It looks at the advantages, benefits and income earning potential of such an enterprise as well as considering the positive spill over effects it can have on communities and others involved in the agrifood supply chain. The booklet is intended for public and private advisory institutions that provide support to local communities and in particular to small-scale farmers.

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