## Food for the Cities

Food supply and distribution policies to reduce urban food insecurity

A briefing guide for Mayors, City Executives and Urban Planners in Developing Countries and Countries in Transition

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Abbreviations
CLAs City and local authorities
FSD Food supply and distribution
FSDSs Food supply and distribution systems
NGOs Non governmental organizations
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## Bibliography

This guide is based on the following publications:

- Aragrande, M. and Argenti, O. 1999. Studying Food Supply and Distribution Systems to Cities in Developing Countries. Methodological and Operational Guide. Food into Cities Collection, DT/36-01E. Rome, FAO;
- Argenti, O. 1999. Urban Food Security and Food Marketing. A Challenge to Cities and Local Authorities. Food into Cities Collection, DT/4099E. Rome, FAO;
- Balbo, M., Visser, C. and Argenti, O. 2000. Food Supply and Distribution to Cities in Developing Countries. A Guide for Urban Planners and Managers. Food into Cities Collection, DT/44ooE. Rome, FAO;
- Onumah, G.E. and Hubbard, M. 1999. Urban Food Supply and Distribution: Policies Addressing Urban Poverty. Serie «Alimentos en las ciudades», DT/41-99E. Roma, FAO.

The text of each of these publications can be freely downloaded from the Web site:

> HTTP://WWW.FAO.ORG/AG/SADA.HTM

Responsibility for the use of the material in this guide rests solely with the author.

The conduct of agriculture, fisheries, forestry and water management within urban, periurban and rural boundaries - while important components of food supply to cities - is outlined in this publication. Further reading is suggested on p. 34. FAO plans to release similar guides treating certain aspects of this discussion in detail.

Urban households consume more vegetables, meat and dairy products than rural households. They spend, at least, 30 percent more on food.

Low-income urban households spend 60 to 80 percent of their budget on food.

# ${ }^{\text {to }}$ Mayors, City Executives <br> and 

## Urban Planners

You govern or plan cities that have expanded in size. Many count millions of inhabitants. Cities particularly in Africa, the Near East and Asia exhibit high rates of growth (see Table 1). The residents you serve need jobs, food, roads, shelter, hospitals, schools, security and services. They look to you for healthy, sanitary living conditions and hope for the future.

Some cities (e.g. Lagos, Dhaka, Freetown, La Paz, Kinshasa, Guatemala City) face poverty rates of 50 percent or more. Poor residents often live in suburbs or slums with little, if any, infrastructure and facilities.
The poor are challenged to feed themselves in your cities. These difficulties trigger rising levels of street begging and street vendors. Even the threat of food riots stems from the food access dilemma.

Significant food production takes place in certain cities (urban food production) or the periphery (periurban food production). These local producers often lack suitable land, safe water and adequate inputs.

Following recent market liberalization programmes, commercial food activities are now performed by the private sector. But roads, markets, slaughterhouses, licensing, dispute procedures, regulations and credit facilities have not kept pace.

Unhygienic conditions and practices at each point in the food chain may introduce a major source of food contamination. Increasingly, consumers' health is endangered by meat and meat products that have not been inspected. Air, water and soil are infected by improper use of chemicals and city waste disposal. Vehicle effluents and emissions compound this hazard.
Some governments still intervene in the food economy following unclear and often arbitrary rules.

In consequence, food production and distribution costs, borne by the private sector, may often be higher than necessary and private investment may not be forthcoming.
There is continuing urban expansion in many of your countries with implications for future urban food security.
More and more food is being produced, transported and distributed throughout urban areas (see Table 2 and 3). The demand for land, housing, industry and infrastructure competes with agricultural production in your cities and surroundings. Unless ample investments are undertaken to increase food production, subsequent food supplies are likely to originate from greater distances. Food may reach consumers at an even higher cost. Accessibility to food could be limited for a multiplying number of city dwellers.

## Cities need More and More Food

Increasing quantities and varieties of fresh and processed food are required to meet the needs of urban dwellers (see Tables 2 and 3). Other requirements are:

- land-use management to keep suitable land in urban and periurban areas for efficient and sustainable food production;
- measures to protect human health and environment from contamination;
- water supply commensurate in quantity and quality for food production, processing and drinking;
- sufficient supply of fuelwood for food processing and cooking;
- enough parking, loading and unloading facilities for a growing number of food trucks;
- additional wholesale markets and slaughterhouses with plenty of facilities and professional management, away from city centres;
- retail outlets easily accessible, adequately equipped and well managed, particularly in low-income areas;
- facilities for spontaneous markets;
- food producer markets, itinerant traders and retailer associations in low-income districts;
- private investment in food shops, market improvement, transport facilities, etc.;
- appropriate arrangements to manage escalating quantities of waste from markets and slaughterhouses;
- market information for better production and marketing decisions;
- better packaging and handling methods to reduce food losses;
- simple, coherent and well understood food production, processing and marketing regulations.


Cities need more and more food which has to be produced and/or imported, transported and
distributed throughout the urban areas.


Table 1
Estimated Annual Urban Population Increase in Selected Countries

| Kenya | 475000 |
| :--- | ---: |
| Nigeria | 2163000 |
| Bangladesh | 1153000 |
| Mexico | 1233000 |
| Brazil | 2087000 |
| China | 11165000 |
| India | 8991000 |

Source: Habitat (1998) data, elaborated by the author.

Will satisfactory supplies of water in quantity and in quality be available for food production, processing and drinking?
Will today's slaughterhouses, transportation, market and infrastructure handle well enough the processing and distribution of ever expanding amounts of food? Who will provide the additional capacity, facilities and necessary services if present conditions are not conducive to private investment?
What additional constraints can be expected from the impact on the environment? Badly planned and managed food supply and distribution activities may interfere with water, soil and forests.
This should be your concern!
But many of you may assign relatively low priority to overcoming food supply and distribution problems. Blurred lines of responsibility between government agencies and insufficient consultation with market users are responsible for many such problems. However, the main cause has been the inadequate understanding of:

- urban consumers' food habits and purchasing behaviour as well as local food supply and distribution systems;
- the relevance of municipal budgeting, tax policies, public service delivery, trade and market regulations, public-private partnership frameworks for urban services, land-use planning and regulation, etc. for urban food supply and distribution;

Tahle 2
Estimated Food Consumption in Selected Cities
[Thousands of Tonnes]

|  | Year <br> 2000 | Year <br> 2010 |
| :--- | ---: | ---: |
| Yaoundé | 670 | $\mathbf{1 0 4 0}$ |
| Nairobi | 686 | 1140 |
| Isfahan | 1417 | $\mathbf{2 2 4 7}$ |
| Karachi | 2944 | 4536 |
| Lima | 3015 | 3760 |
| Port-au-Prince | 441 | 685 |
| Managua | 309 | 453 |

Source: FAO (2000) data on national food consumption averages, elaborated by the author.

- the need to incorporate food supply and distribution aspects into planning at the regional, metropolitan and urban levels. This is particularly true for technically sound urban food supply and distribution policies and programmes.
There is a growing awareness of the need for city and local authorities - i.e. regional, metropolitan, municipal and other local government institutions directly concerned with urban development - to play a proactive and coordinating role in alleviating urban food insecurity, as confirmed by the declarations (see p. 6).
Your mandate is the focus of this guide. The content aims to assist you as well as public health, environment, water and agroforestry specialists, to formulate urban food supply and distribution policies. The goal is to facilitate the right to adequate food for all. You can achieve this goal with little, if any, additional resources. It is a matter of city and local authorities doing what they already do in a better way.
The need exists for a proper understanding of local conditions combined with a perspective of your cities. You are urged to apply an interdisciplinary, multisectoral and participatory approach to find sustainable solutions. The direct involvement of the private sector in planning decisions and their implementation is an essential requirement for sustainable impact.
FAO is ready to provide you with the required technical assistance.

Table 3
Estimated Increase in 2010 in Traffic to Selected Cities because of Food Transport

10-tonne truck loads

| Abidjan | 124600 |
| :--- | ---: |
| Lagos | 500000 |
| Bombay | 313400 |
| Teheran | 147900 |
| Guatemala City | 22900 |
| Maracaibo | 27600 |
| Santiago de los Caballeros | 13100 |

Source: FAO (2000) data on national food consumption averages, elaborated by the author. Base year: 2000.

## Urhan and Periurban Food Production

Food production in urban and periurban areas can contribute to (see Annex 5):

- local supply of fresh, nutritious food such as poultry, small ruminant meat, fruits, vegetables and dairy products;
- alleviating poverty and improving food security through consumption of self-grown products, employment and income generation;
- cost-effective environmental management through productive use of organic waste for fertilizer;
- productive use of suitable and unused open space, contributing to biodiversity and watershed management.

Health in cities starts in the food chain


Urban gardens provide cheap fresh food for household consumption. But crops may be a source of health risks.

## Public Health and Environmental Issues

The disadvantages that emerge when good planning, management, inspection and information are absent include:

- contamination of food, land and water by incorrect application of wastewater, solid waste and chemicals for food production;
- traffic congestion, air pollution and noise around markets will increase due to infrastructure shortcomings;
- growing quantities of waste from processing plants, markets and slaughterhouses together with dumping of plastic packaging and wasteburning boost health risks and pollution of water, soil and air;
- contaminated food can be caused by meagre market facilities for water supply, drainage, toilets and sewage as well as incorrect handling and storage techniques;
- progressive depletion of forests because of need for fuelwood for cooking and processing.


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The vulnerable urban groups are: the unemployed, new migrants, single mothers with dependent children, pensioners, disabled or old people lacking family support, indigenous people, ethnic minorities, formal sector workers with declining or unstable incomes and those dependent on "crowded" informal sector activities.

## Socio-economic Profile of Slums in Ahmedabad, India

- The population living in slums rose from 23 percent (1976) to 41 percent (1997);
- sixteen percent of households are headed by women;
- average family size of seven persons;
- only 5 percent of households have more than three earning members;
- seventy five percent of working adults earned less than the minimum wage;
- eighty seven percent of working women take children to workplaces such as construction sites and markets (these children are unable to attend school);
- high levels of illiteracy;
- most live in the open or in temporary shelters such as tin sheds;
- eighty percent of households have no water connection, 93 percent are without toilets and only 50 percent have electricity;
- two thirds have to travel more than 1 km to the nearest bus stop, school, post office and clinic.

The above conditions are typical of many cities in developing countries and countries in transition.
Source: Onumah, E.G. and Hubbard, M., 1999.


Fuelwood is widely used for cooking, small-scale food processing, fish and meat smoking, etc. Periurban land can be used for fuelwood plantations.


Food marketing is a source of employment and income for the poor, particularly women and youth.

## Dakar Declaration

recognize the important role which African city and local authorities can play in ensuring urban food security. We stand ready to undertake, in partnership with all concerned stakeholders:

- the identification of institutional responsibilities to facilitate stable food access to urban households;
- the promotion of required research to improve the efficiency of food supply and distribution systems;
- the adequate maintenance of market infrastructure;
- the promotion of cooperation and partnerships with rural and periurban areas;
- the availability of market information."

Declaration by the African Mayors participating at the FAO-ISRA Subregional Seminar
"Food Supply and Distribution to Francophone African Cities".

Dakar, Senegal,
14-17 ApriL, 1997

## Medellín Declaration

"The need to increase access of all consumers, and low-income consumers in particular, to healthy food through participatory and intersectorial programmes designed to strengthen the efficiency of private systems for the supply and distribution of low-cost food and employment creation."

Declaration of the Mayors and Municipal Health Officers at the 3rd Congress of The Americas of Municipalities and Healthy Communities. Medellin, Colombia, 8-12 MARCH, 1999

## Barcelona Declaration

"We recognize the importance of ensuring access to food by low-income constituencies in low-income countries as a main objective of local development policies and programmes, following the recommendations of the World Food Summit, held in Rome in 1996."

Declaration by the Mayors, City Executives and Representatives of City and Local Governments at the 34th World Congress of the International Union of Local Authorities. Barcelona, Spain, 20-24 March, 1999

Your institutions do not usually have a direct role in national policies (food security, agriculture, public health, etc.). You can, however, take the lead in improving access to food by low-income urban households because:

- national policies may not sufficiently respond to local needs and conditions;
- you are in closer contact with the local community than central government institutions;
- your key functions already include the development, operation and management of food market and processing infrastructure and regulations, the control of urban and periurban agriculture, etc.;
- you can develop collaborative partnerships with the private sector to replace, improve and manage urban food market and processing infrastructure despite reduced investment budgets;
- you are being assigned greater responsibilities by the central government. Your institutions can play five major roles in alleviating the food insecurity of low-income constituencies.


## Promote supportive attitudes and policies towards food producers, processors, traders, shopkeepers, street vendors, transporters and consumers

This requires:

- the awareness of all policy-makers to the needs of those involved in food supply and distribution activities;
- the understanding by all decision-makers of how to improve the performance of food supply and distribution systems;
- regular interactions with producers, transporters, traders, shopkeepers, street vendors and consumers; the promotion of their associations (see p. 8) and their involvement in policy formulation and implementation;
- the strengthening and encouragement of representation of private associations on planning committees and in policy implementation;
- the dissemination of policy goals, objectives and related information among everyone involved in food supply and distribution activities;
- that your institution clearly states and pursues its mission to serve the consumers, traders, shopkeepers, street vendors, transporters and producers and adopts an open, communicative and efficient behaviour.


## Promote private investment

The development of food supply and distribution systems requires augmenting the investment in food production, marketing and processing. This may be beyond the ability of the public sector to afford.
For private investment to emerge, there is the need for an economic and political environment conducive to private sector risktaking accompanied by credible assurances by the state that the "rules of the game" will be honoured.
You can stimulate private investments by:

- promoting rules governing public and private sector responsibilities and interventions in food supply and distribution activities;
- ensuring that norms, licensing, procedures and standards are in line with investors' expectations and capacity;
- adequately enforcing laws and regulations, particularly those concerning contracts;
- providing basic food production, market, transport and processing infrastructure, facilities and services;
- ensuring adequate management of utilities companies;
- ensuring active, efficient land and real estate markets as well as land tenure security.


Markets need to be planned because they require space, parking, infrastructure and services (water, toilets, waste collection, etc.).


Electrical systems in markets often generate fires.

## Role of Civil Society Organizations in Improving Food Supply and Distribution Systems

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- Facilitate the training by city and local authorities of their members;
- explain rules and regulations to members;
- promote respect by members of agreed rules and quality standards;
- diffuse market information to their members;
- collaborate in the design and implementation of local development initiatives;
- filter the needs of individual members and air the views of the group;
- provide advice to city and local authorities on specific issues;
- assist members to run and manage their businesses better;
- identify common problems and solutions;
- negotiate lower prices and purchase conditions for inputs and services;
- negotiate better prices for own products and lower marketing costs;
- exchange technical assistance among members and between associations.
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## Intervene in food supply

 and distributionYou may intervene in the following ways (see also Annexes 1 to 5):

## Planning

- Forecast needs for the city food and water and production potential over the next ten years;
- identify poor urban households and map their location;
- prepare plans governing land use and occupancy;
- provide suitable public land, land-tenure security, safe water, etc. for urban and periurban agriculture;
- prepare rural-urban and intra-urban transport development plans;
- design urban food market and processing infrastructure plans, etc.


## Information

- Provide food transporters, traders, shopkeepers, street food vendors, processors and consumers with basic information about food hygiene, health and nutrition together with their rights and obligations;
- inform producers on proper use of agricultural inputs and chemicals, safe solid waste and/or composting facilities, etc.

> New market facilities are often badly designed and inappropriately located. They thus remain underutilized and the forced relocation of traders may cause unrest.

## Infrastructure, facilities and services

- Define present and future needs for specific market and slaughterhouse infrastructure, facilities and services, with respect to what (type), where (location) and how (standards), taking into account the ecological conditions of the city;
- define land allocation modalities;
- successfully design, locate, construct and manage urban markets and slaughterhouses;
- maintain and upgrade public infrastructure including water, toilets, drainage and lighting;
- suitably dispose of solid and liquid waste;
- provide specific training to producers, traders, shopkeepers, etc.;
- levy municipal taxes and market fees;
- provide public transport to and from urban markets and slaughterhouses, etc.


Wholesale activities are often dispersed over the urban area, limiting the potential benefits to be derived from organized wholesale markets.

> Regulations affecting food supply and distribution activities may become so complex and contradictory that the same city and local authorities have difficulties understanding and implementing them. This prompts illegal taxation and bribery.

## Coordinate public interventions

 and private initiativesConflicts in the implementation, by different institutions and non-governmental organizations, of their programmes limit the impact of development initiatives. Effective coordination is required to avoid this condition. You are in the best position to coordinate the area under your jurisdiction. You need to:

- actively seek legal reforms that clarify the role of various public agencies;
- identify institutional and departmental responsibilities concerning food supply and distribution systems;
- ensure, through training, motivation and monitoring, that personnel are technically equipped to meet the growing demand for efficiency and accountability.


Good market management, maintenance and upgrading are as important as raising revenues.


The lack of adequate food containers can encumber the development of micro and small food processing enterprises in hygienic conditions.

Intermediate between central government and the private food sector

You can frame interinstitutional dialogue by:

- ensuring that the needs of food producers, processors, transporters, traders, shopkeepers and consumers are voiced within central government;
- complementing efforts by farmers' associations, non-governmental organizations and local authorities in rural and periurban areas to lobby the central government. This mediation can prioritize programmes and projects that will reduce production constraints and strengthen rural-urban linkages (e.g. improved road, food assembly and transport facilities, provide market information and marketing extension assistance).


Cities located in mountain areas, slums or slopes, may be prone to landslide and floods which can affect food and water availability, quality and price. Trees can be used to stabilize slopes and riverbanks.


Auction sales promote competition in wholesale markets.


Non motorized transport helps keep food prices low, provides employment for young and poor people and does not pollute but contributes to traffic congestion in and around markets.

## Trees in and around Cities can Improve Food Supply and Distribution

- Fuelwood is widely used for cooking, small-scale food processing, fish and meat smoking, etc. Periurban land can be used for fuelwood plantations.
- Markets are frequently exposed to the weather. Trees provide shade and protection from the wind, dust and rain, thus reducing losses and contamination of food.
- Water may be scarce and/or expensive in cities. Encourage the use of treated wastewater for irrigating parks and tree plantations for non-food products and fuelwood. Wastewater use should meet the standards set by the World Health Organization.


# Urban <br> Food Supply and Distributiono Policies, Strategies <br> and <br> Programmes 



An urban food supply and distribution policy is a set of goals, objectives, strategies and programmes spanning regional, metropolitan, urban and local areas. It is set within a precise timeframe and is formulated in close collaboration with all concerned stakeholders. It guides city and local authorities in the use of resources under their control and through private sector investment, to improve access by urban households to stable supplies of good quality food, through efficient, hygienic, healthy and environmentally sound food supply and distribution systems.


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## Three Key Areas for Concern for Urban Food Supply and Distribution Policies

## 1 Food supply to cities

Projections for urban food and water needs; development of efficient and sustainable production, fishing, processing and storage in rural, periurban and urban areas; infrastructure, facilities and services for food assembly, handling, packaging and transport to cities; efficiency, transparency and dynamism of production and marketing systems; effectiveness of services (information, extension, etc.) to producers, processors and traders; food import logistics and procedures; promotion of private sector organizations and private investment; planning, development and management of slaughterhouses; legislation and regulations.


Food production in urban, periurban and rural areas must take place in hygienic and environmentally sound conditions.

## 2 Urban food distribution

Planning, development and management of wholesale and retail markets and food shops; planning and organization of specific lowcost food distribution arrangements; street food and informal activities; modern distribution; intra-urban transport; services to urban market users; promotion of market trader, shopkeeper and consumer associations and organizations; promotion of private investment in urban markets and shops; efficiency, transparency and dynamism of urban food distribution systems; legislation and regulations.


Poor urban areas need retail markets, itinerant markets and shops.

## 3 Health and environment

## Health

Food safety problems and contamination due to incorrect use of fertilizers, pesticides and wastewater, lack of hygiene in food supply and distribution activities and pollutants; legislation and regulations.
Environment
Management of waste from markets and slaughterhouses; air, water and soil pollution caused by food supply and distribution activities; forest depletion because of fuelwood use; legislation and regulations.


Waste from markets and slaughterhouses threatens health and contaminates food, soil, water and air.

## Goals of <br> Urban Food Supply and Distribution Policies

## Economic goal

Efficient food supply and distribution systems to achieve:

- stable supplies of low-cost food to low-income urban consumers;
- food production incentives through equitable marketing opportunities for farmers.


## Social goal

Minimize food insecurity in poor urban households to achieve:

- improved equity from lower food prices;
- reduced social disruption, because supplies and prices are more stable;
- increased employment and income opportunities in the food sector.


The design, location and management of wholesale and retail markets are important determinants of investment profitability and the cost of access to food by low-income households.


Spontaneous markets cause hygiene, security and traffic problems but provide food where it is needed and create employment.


The solution to the problems caused by increasing quantities of waste from markets and slaughterhouses is in the hands of every market user.

## Policy objectives

Policy objectives identify what you need to achieve policy goals (see p. 14).
Objectives are usually linked to one or more operational units and are typically short term, tied to annual budgets (see an example in Annex 6). They need to be amended as your institutions respond to changes in their resources and environment.

When designing food supply and distribution policies, you need to ensure that:

- policy goals are clear, credible and reflect the vision of citizens and policy-makers;
- policy objectives are attainable, feasible, credible, technically sound, consistent with central government priorities and socially as well as politically acceptable.


## Complementarity between policies

A well-functioning food supply and distribution system facilitates access to food. Alone it does not guarantee that those without the means to buy food can do so. Public action is required to generate incomes through employment creation or food distribution using food subsidies and food stamps among other remedies. Nutrition, hygiene and health education is also important for the most vulnerable consumers. Therefore food supply and distribution policy supports and is supported by other policies, programmes and initiatives (see Figure 1).

Figure 1
Some of the Policies, Programmes and Initiatives which are Required to Improve Urban Food Security


## Conflicts between policies

Conflicts may arise between the general macro-economic policies and specific food supply and distribution policies. It will be necessary to assess the impact of national policies on various areas, among which:

## Legislative and regulatory

In what ways do current food legislation and regulations hinder the development of food supply and distribution systems? How do existing statutes discriminate against small food producers, processors, traders, shopkeepers and street food vendors?
Are there unnecessary restrictions on the use of water for crop production which may impede the development of urban and periurban food production?

## Tax and tariffs

Do measures to control inflation and public sector budgetary requirements obstruct private investments in food supply and distribution?

## Budget

Are budget allocations to city and local authorities in line with increasing responsibilities, especially for transport and market infrastructure development?

## Structural reforms

Are measures to dismantle state-run food distribution chains likely to create private oligopolies?
Are incentives for promoting the development of low-cost forms of food distribution consistent with current strict public fund management?

Are there practices biased against credit access by small food producers, processors traders and shopkeepers?

## Food trade development

Will plans to make the food sector more professional harm micro- and small-scale food production, marketing and processing initiatives?

## Institution strengthening

Are prospective reductions in government budgets likely to stifle re-training of staff required by changes in policy orientation and decentralization programmes?


Markets need drainage systems to maintain hygienic conditions, prevent food contamination and ease traffic.

## Strategies

Strategies describe how policy objectives and goals can be achieved.

Food supply and distribution development strategies must be seen in the context of policies and customs governing different aspects of economic and social life. Economic life concerns structural adjustment, economic liberalization and decentralization. Social life encompasses religious and ethnic rules.

A particularly important strategic consideration is the extent of public versus private responsibility (see Annex 7).


Market users need security afforded by fences and police patrols.


The Success of your Urban Food Supply and Distribution Policy will Depend upon:

- your institutions' understanding of consumers' food habits, purchasing behaviour, local food supply and distribution systems;
- the degree of participation of concerned private sector groups and public institutions in policy formulation and implementation;
- clear responsibilities among public agencies;
- effective monitoring of policy implementation;
- informed and credible leadership by your institutions.


## Basic Principles for <br> Food Supply and Distribution Strategies

Principle 1 Right Approach
Adopt an approach which is consultative, participatory, open-minded, alliance seeking and technically sound.


Private sector associations and organizations must be promoted and encouraged to play an active ole in planning decisions to address constraints faced by members.

Principle 2 Competition

Promote competition and reduce the influence of large intermediaries.


The use of weighing scales promotes fair practices in markets.

## Principle 3 No Fashions

Resist fashions for
"modernization" or "preserving tradition". Encourage developments which lower the cost of living and stimulate employment growth in the city.


Farmer and
itinerant markets
provide low-cost
food in poor urban districts

Principle 4 Go Private

Facilities and services that can be run as businesses are best left to the private sector.


Market
infrastructure must be properly maintained, managed and developed to accomodate increasing food quantities coming to cities.

## Programmes

Once solutions, policies and strategies have been agreed upon among all concerned stakeholders, you need to design intervention PROGRAMMES spanning regional, metropolitan, urban and local areas for improving the food supply and distribution system to your city (see Annex 2).
Each programme should address food supply to cities - urban food distribution - health and environment issues in the form of SUBPROGRAMMES, each containing specific aCTION PLANS addressing well-defined aspects (see Figure 2).

Action plans should comprise clearly identified expected results (see the example in Annex 8) and related INTERVENTIONS.
Programmes must be designed to facilitate action in the:

- immediate term (less than six months);
- short term (from six months to three years);
- medium term (from three to six years) and
- long term (over six years).

This approach - based on a consensus vision of the city - facilitates the assignment of institutional responsibilities.

Programmes for supplying and distributing food to cities are sets of coherent and logically structured interventions and expected results. They are set within a timeframe with welldefined implementation tasks. Their specific objectives are linked to the achievement of food supply and distribution policy goals and objectives. This occurs in the urban area in conjunction with periurban and rural areas from where the city gets its food supply, or through which the food consumed in the city transits.

Figure 2
Programmes, Sulhprogrammes and Action Plans


## Coordinating and monitoring policy implementation

Food supply and distribution programmes usually need to be implemented by several different authorities and departments (e.g. transport, market infrastructure, health and environment). Each executing unit should have agreed TARGETS and INDICATORS against which its performance can be assessed (see Figure 3).

The steps from constraint analysis to policy implementation are summarized in Annex 9.

An URBAN FOOD SUPPLY AND DISTRIBUTION POLICY UNIT can assist you in coordinating and monitoring implementation of your food supply and distribution policy (see Annex 10).

Figure 3
Example of Targets and Indicators


Organized livestock markets in cities help reduce the nuisance to cities from free-ranging animals.


Slaughterhouses need equipment, facilities and services to facilitate the respect of hygiene regulations to avoid meat contamination.


Everyone has the right to a standard of living adequate for the well-being of him(her)self and his(her) family, including food, clothing, housing, medical care...

From the "Universal Declaration of Human Rights", Article 25

## Why City Managers Face Growing Food Supply and Distribution Problems

## Annex 1

Insufficient concern and focus
Most city and local authorities believe that food supply and distribution issues are not their responsibility. Their emphasis is on public health, education, housing, environment, sanitation and traffic control. However, the most typical functions of city and local authorities affect food supply and distribution systems directly or indirectly. Food supply and distribution aspects are not successfully taken into account in planning at regional, metropolitan, urban and local level.

Fragmented houndaries
Jurisdiction over cities is often fragmented between a number of city and local authorities varying in size and legal status. This limits their capacity to regulate physical development of urban settlements and ensure provision of essential market infrastructure, facilities and services.

Fragmented responsibilities
Responsibility for providing market and transport infrastructure as well as facilities and services for food suppliers and distributors is often fragmented between a number of agencies controlled at various levels of government. Functions often overlap at the city level. Policy coordination and accountability are often weak.

## Uninformed decision-makers

City and local authorities tend to see urban food producers and traders as a nuisance because of the negative implications of their activities for public health, environment and traffic. Decisions may also be taken on the basis of political considerations rather than sound planning principles.

## Weak city and local authorities

City and local authorities lack legal authority and resources to perform their statutory functions. They are dependent on central government for legislative authority to raise revenue, acquire land and control development.

Inadequate resources and expertise
City and local authorities' direct interventions are constrained by scarce financial resources, technical and managerial expertise and limited understanding of food supply and distribution systems.

## Examples of Interventions at Regional Metropolitan, Urban and Local Level

## Annex 2

## Regional Ievel

Food supply to cities

- Promote and regulate rural food production.
- Rehabilitate, locate and construct rural assembly markets.
- Improve rural-urban transport infrastructure and services.
- Develop market information and marketing extension services.
- Facilitate access to credit for farmers, traders and transporters.

Health and environment

- Assistance in correctly using fertilizers and pesticides.


## Urban Ievel

Food supply to cities

- Promote and regulate urban food production.

Urban food distribution

- Rehabilitate, relocate and construct, maintain and manage retail markets.
- Relocate and develop shopping centres.
- Facilitate access by vehicles to parking facilities around markets.
- Provide and improve facilities and services for informal retail activities.
- Improve intra-urban transport facilities.

Health and environment

- Design adequate waste collection and management systems and infrastructure.
- Provide appropriate water, sanitation and infrastructure.


## Metropolitan Ievel

## Food supply to cities

- Promote and regulate periurban food production.
- Improve food transport flow to the city.
- Facilitate access to credit for farmers, traders and transporters.
- Rehabilitate, locate and construct slaughterhouses.


## Urban food distribution

- Rehabilitate, locate, construct, maintain and manage wholesale markets.


## Health and environment

- Locate and regulate market and slaughterhouse waste disposal.
- Provide appropriate water and sanitation infrastructure.


[^1]
## Needs of Food Supply and Distribution Agents

## Annex 3

## Producers

- Land tenure security.
- Advice on the proper use of improved seeds and chemical products.
- Safe water for irrigation.
- Facilities for disposing of environmentally hazardous farm waste.
- Information about the appropriate use of city waste as fertilizer.
- Appropriate skills for handling, packing, transporting, etc.
- Credit for farm investments, production and marketing campaigns.
- Assembly markets.
- Transport facilities.
- Direct sales to consumers.
- Opportunities to supply supermarkets direct on contract.


## Transporters

- Improved state of roads decreasing the need to repair vehicles.
- Affordable and reliable vehicle spare parts.
- Credit to buy and/or maintain vehicles in satisfactory condition.
- Adequate space and facilities for parking and produce (un)loading, allowing flow of produce into and out of markets to decrease the cost of using trucks.
- Simplified document requirements and procedures.
- Lower burden of local taxes imposed along transport routes.
- Well-managed markets.
- No harassment by police and other security agencies causing costly delays and payment of bribes at official and unofficial road checkpoints.
- Proper sleeping and eating facilities.
- Clean toilets.
- Adequate water.
- Pertinent market regulations.
- Garbage disposal facilities.
- Ample lighting.
- Security for vehicles and cargo.
- First-aid, post offices, telephones, faxes and loudspeakers.
- Suitable skills for handling, packing, transporting, management, etc.


Transport costs often represent the bulk of marketing costs. Food transporters need roads, parking, loading, unloading, resting facilities, vehicle and cargo security.

## Needs of Food Supply and Distribution Agents

## -Traders and Shopkeepers

- Financial resources to widen the scale of their operations, thus reducing average operating costs.
- Sufficient parking facilities allowing easy flow of produce into and out of market.
- Clean and dry trading surroundings.
- Waste disposal facilities.
- Clean toilets.
- Adequate water supply.
- In-market storage facilities (including cold stores for butchers and fishmongers) and sorting facilities.
- Easy access to banks for deposits.
- Market information.
- Protection from, heat, moisture, dust and other pollutants.
- Appropriate skills for packing, handling, transporting, management, etc.
- Responsive and efficient market management.
- Appropriate market regulations and simplified document procedures and requirements.
- Fences and security for persons and property.
- Child day-care facilities.
- First-aid, post offices, e-mail, telephones, faxes.
- No police harassment.


## Market Managers

- Clear objectives and stable mandate.
- Thorough understanding of food market and marketing realities.
- An effective dialogue with all market users.
- Satisfactory information and skills.
- Authority to enforce market regulations.
- Enough funds to maintain market facilities and services and keep markets clean.
- Simplified document requirements and procedures.
- Qualified staff, equipment and resources.
- Ample lighting and electrical systems.
- First-aid, post offices, e-mail, telephones, faxes and loudspeakers.
- Cold store facilities for butchers and fishmongers.


## Consumers

- A variety of good quality food at reasonable prices.
- Clean, dry and hygienic market environment.
- Well-managed markets.
- Personal security when visiting markets.
- Fair trading practices and concrete action against fraud.
- Garbage disposal facilities.
- Telephone facilities.
- Parking facilities.
- Clean toilets.


When there are no toilets, market traders have no choice. Will they wash their hands if water is not available?


## Instruments

Support initiatives to improve supply of finance to micro-entrepreneurs. Encourage secure and transferable ownership of stocks.

Ensure, through policy dialogue, that rural-urban road, water transport and rail infrastructure development plans take account of the needs of food trade.

Locate markets and slaughterhouses at sites with adequate parking space. Invest in off-loading and sorting facilities at markets.

Rationalize policy on taxes and levies imposed on food products in transit to cities.

Encourage, through policy dialogue, reduction in number of checkpoints and improved standards of discipline among security personnel.

Promote private investment in warehouse and storage facilities through providing serviced sites and transport facilities. Promote warehouse-management training.

## Collaboration with:

Private financial intermediaries, government institutions and non governmental organizations.

Trader and transporter associations and central government agencies involved in urban planning, transport and communications.

Trader and transporter associations and central government agencies involved in urban planning.

City and local authorities on food supply routes and ministries of local government and finance.

Trader and transporter associations; Ministry of the Interior and security agencies.

Trader associations, Ministry of Finance, investment promotion centres and training institutions.

| Constraints |
| :--- |
| Food traders have |
| inadequate trading, |
| financial and |
| management skills. |
| Health, environment |
| and security: |
| Lack of effective food |
| quality control. |

## Instruments

Training programmes and information campaigns.

Ensure, through dialogue with relevant agencies, revision and strict enforcement of laws on food quality and consumer protection. Educate traders (especially street food sellers) and consumers through training and public information campaigns.

Provide basic shelter, drainage, sanitation, waste disposal facilities. Revise and enforce bylaws and educate traders on hygiene standards at markets. Educate consumers on food hygiene.

Provide fences and the presence of police or private guardians.


Congested urban markets cannot accommodate increasing quantities of food. Thus spontaneous markets are generated.


Consumers need concrete action against possible fraud in food markets

Role of Urban Planners in Supporting Urban and Periurban Food Production

## Scale of Intervention

Regional, metropolitan and urban.

National legislation; urban and local land regulations.

Regional, metropolitan and urban.

Urban and local.

Regional, metropolitan and urban.

Urban and local.

## Action

Stop destroying food crops and evicting food producers from public lands under cultivation.

Revise land-use and ownership legislation and regulations and improve their applicability.

Adopt simple "zoning regulations" to support urban and periurban food production and livestock activities.

Define criteria for land allocation.

Constitute land reservoirs for urban and periurban food production in future urbanized areas.

Provide safe water for irrigation and safe fertilizers using city waste.

## Role of Planner

Contribute to the formulation and adoption of policies which recognize the role of urban and periurban food production.

Identify norms, regulations and documents to be modified.

Prepare "zoning regulations".

Preparation of public-private leasehold contracts.

Elaborate strategic planning documents identifying areas to be assigned to urban and periurban food production.

Prepare plans for safe water facilities and for processing city waste into safe fertilizers. Information campaigns on health and environment consequences of unsatisfactory use of water and city waste.

Source: Balbo, M., Visser, C. and Argenti, O., 2000.


[^2]
## Relation hetween Policy Goals and Objectives: an Example

## Imnex 6

## Policy Goal

"Improved access, within ten years, by urban low-income households, to stable supplies of low-cost good quality food, through more efficient, hygienic and environmentally sound food supply and distribution systems."


## Objective 1

InCREASED CONSUMER, TRADER AND TRANSPORTER SATISFACTION WITH THE CONDITIONS OF URBAN FOOD MARKETS WITHIN THREE YEARS




Possible concerned units: Municipality: Market Infrastructure, Transport, Municipal Police and Health Departments; Ministries of Commerce, Agriculture, Transport and Health; Interior (Police Department); Chambers of Commerce and Agriculture; Transporter, Trader and Consumer Associations.


[^3] trading surroundings. Fish markets and shops need adequate facilities including water, ice, waste bins and cold stores.

## Infrastructure, Facilities and Services

Basic trading infrastructure located in major business districts: market stalls, shops and warehouses.

Basic trading infrastructure located in poor suburbs/slums: market stalls and shops.


Cold storage facilities, slaughterhouses, on-site processing plants and transport.

Parking space and child day-care facilities.

Roads, public drains and sanitation facilities.

Regulations and policing including food import controls, quality control, health and food safety standards.

## Characteristics and Form of Provision

Feasible to charge economic user fees because of private good characteristics. Therefore commercial provision (by private or public-private mix) is possible.

Private investment in open markets may be inadequate by possible limited returns. Charging economic user-fees is feasible but exclusion of non payers may have wider health and environmental effects. Possibility of mixed provision. Private food shops and sales from homes need to be encouraged.

Commercial provision. Those provided by governments tend to suffer from poor management and maintenance.

Charging economic user-fees is feasible but exclusion of non-payers may have wider social and environmental effects.

Difficult to exclude non payers and negative effects of nonprovision on others. Public provision necessary.

Typical example of public good.

## Provider and Responsibilities

Planning and design: city and local authorities (CLAs). Investment: mix of CLAs and private capital (including prefinance by traders). Management: autonomous, arms-length agency with clear commercial mandate or private.

Planning and design: CLAs. Investment: mix of CLA, community and trader associations and community labour. Management: community or trader associations.

Planning guidelines and regulation: CLAs. Design, investment and management: private.

Planning, design and investment in infrastructure: CLAs (private only in major business districts). Management: private.

Planning and design: CLAs and Department of Urban Planning. Investment: central government (Ministry of Finance).

Drafting bylaws and legislative instruments on standards: CLAs, food standards agency. Gazette regulations: central government (legislature). Enforcement: police and judiciary.

## An "Urban" Programme and an "Urban Distrihution" Subprogramme Arranged by Action Plans

## Amnex 8

## Urban Market Improvement

## Action Plan

Expected results in six years:

1. Infrastructure improved in five urban markets.
2. Hygiene and safety standards defined and enforced.
3. Effective market management.


Markets and slaughterhouses need efficient waste collection systems to maintain hygienic conditions, avoid food contamination and ease traffic.

## Food Retail Outlets in Low-Income Districts

## Action Plan

Expected results in four years:

1. Four new open retail markets established.
2. Food traders and street vendors trained.
3. Appropriate regulations approved and enforced.
4. Consumers informed about fair trading practices and food hygiene.


Low-income urban areas need simple retail markets. These have to be planned and provided with protection from the sun, wind, dust and rain.

## Institution Strengthening

## Action Plan

Expected results in two years:

1. Training programmes and material prepared on food supply and distribution.
2. Municipal technical staff trained.
3. Decision-makers sensitized.


City and local authorities need trained staff capable of meeting the challenges of dynamic situations.

## From Constraint Analysis to Policy Implementation and Monitoring



## Urban Food Supply and Distribution Policy: Management Structure

## Annex 10



## Suggested Reading

General reading
Aho, G., Larivière, S. and Martin, F. 1998. Poverty Analysis Manual. With Applications in Benin. Laval. Université Laval and UNDP.
Argenti, O. 1999. Urban Food Security and Food Marketing. A Challenge to Cities and Local Authorities. "Food into Cities" Collection, DT/40-99E. Rome, FAO.
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Garrett, J. L. and Ruel, M. T. (ed.). 2000. Achieving Urban Food and Nutrition Security in the Developing World. 2020 Vision Focus 3, August 2000. Washington, D.C., IFPRI.
Wilhelm, L. 1997. Food Supply and Distribution to Francophone African Cities. Synthesis of the papers presented to the FAO-ISRA Sub-Regional Seminar, Dakar, 14-17 April 1997. "Food into Cities" Collection, DT/31-99E. Rome, FAO.

FSDS analysis, policies and programmes
Aragrande, M. and Argenti, O. 1999. Studying Food Supply and Distribution Systems to Cities in Developing Countries. Methodological and Operational Guide. "Food into Cities" Collection, DT/36-01E. Rome, FAO.
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Tracey-White, J. 2000. Market Infrastructure Planning. A Guide for Decision Makers. FAO Agricultural Services Bulletin No. 141. Rome, FAO.

Urban and periurban food production FAO. 2000. A Policy Framework for Municipal Authorities on Growing Cities, Growing Food. Rome.
Quon, S. 1999. Planning for Urban Agriculture. A Review of Tools and Strategies for Urban Planners. Cities Feeding People Series, Report No. 28. Ottawa, IDRC.

Health and environment

- 1999. Urban Challenges to Food and Nutrition Security in the Developing World. World Development, Volume 27(11). Oxford, UK, Elsevier Science Ltd.
Atkinson, A. and Allen, A. 1998. The Urban Environment in Development Cooperation. An Overview. Brussels, European Commission.
FAO. 1999. Urban and Periurban Forestry. Case Studies in Developing Countries. Rome.

Workshop reports and case studies
These documents may be freely downloaded from the SADA Web site:

- reports of workshops and seminars (AC);
- case studies (EC).


[^0]:    Well managed markets and the respect of regulations help decrease marketing costs and food contamination.

[^1]:    Source: Balbo, M., Visser, C. and Argenti, O., 2000.

[^2]:    How much would it cost to provide street vendors with information on personal hygiene and good food handling practices, simple tools and a small bench to keep food away from dust and mud?

[^3]:    Traders and shopkeepers need to follow good hygiene practices in handling and processing fish as well as keeping clean

