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Introduction:
Food Security Is
a Global Concern

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In recent decades, demographic and economic growth have challenged the limits of economic, social, and ecological sustainability, giving rise to questions about food security at the global level. Despite technological advances that have modernized the conditions of production and distribution of food, hunger and malnutrition still threaten the health and well-being of millions of people around the world.

Access to food is still perceived by many as a privilege, rather than a basic human right, and it is estimated that about 35 000 people around the world die each day from hunger. An even larger number of people (mainly women, children, and the elderly) suffer from malnutrition. Far from disappearing, hunger and malnutrition are on the increase, even in advanced industrialized countries like Canada, where each year an estimated 2.5 million people depend on food banks. About 30 million people in the United States are reported to be unable to buy enough food to maintain good health. The continuing reality of hunger and the unsustainability of current practices, both locally and globally, make food security an essential concern.

According to the United Nations Food and Agriculture Organization's (FAO's) widely accepted definition,

> *"Food security" means that food is available at all times; that all persons have means of access to it; that it is nutritionally adequate in terms of quantity, quality and variety; and that it is acceptable within the given culture. Only when all these conditions are in place can a population be considered "food secure."*

To achieve lasting self-reliance at the national and household levels, initiatives must be founded on the principles of economic feasibility, equity, broad participation, and the sustainable use of natural resources.

In recent years, most of the research initiatives for food security have focused on four key components of the FAO's definition:

- *Availability* — Providing a sufficient supply of food for all people at all times has historically been a major challenge. Although technical and scientific innovations have made important contributions focused on quantity and economies of scale, little attention has been paid to the sustainability of such practices.

- *Accessibility* — The equality of access to food is a dimension of food security. Within and between societies, inequities have resulted in serious entitlement problems, reflecting class, gender, ethnic, racial, and age differentials, as well as national and regional gaps in development. Most measures to provide emergency food aid have attempted to help the disadvantaged but have had limited success in overcoming the structural conditions that perpetuate such inequities.

1

- *Acceptability* — As essential ingredients in human health and well-being, food and food practices reflect the social and cultural diversity of humanity. Efforts to provide food without paying attention to the symbolic role of food in people's lives have failed to solve food-security problems. This dimension of food security is also important in determining whether information and food-system innovations will be accepted in a country, given the social and ecological concerns of its citizens.

- *Adequacy* — Food security also requires that adequate measures are in place at all levels of the food system to guarantee the sustainability of production, distribution, consumption, and waste management. A sustainable food system should help to satisfy basic human needs, without compromising the ability of future generations to meet their needs. It must therefore maintain ecological integrity and integrate conservation and development.

Unfortunately, a number of global economic and ecological problems continue to limit the prospect of global food security. World per capita cereal production (62% of least-developed countries' [LDCs'] food consumption), for example, has been increasing only marginally in recent years. In fact, it has even been on the decline in sub-Saharan Africa and in Latin America and the Caribbean, particularly in low-income countries struck by economic reforms, natural and other disasters, and other factors. The LDCs' dependence on net food imports has been growing and is set to continue to grow; currently, 104 of 132 LDCs are net importers, although imports have brought little relief overall (Singer 1997). In sub-Saharan Africa, the number of chronically undernourished people more than doubled in 1970–91, notwithstanding that this region depended on food aid for half its total food imports. The population of this region is expected to more than double by 2020 (de Haen and Lindland 1997).

Regional and global economic crises and chronic problems of underdevelopment make the situation particularly bad in the developing world. The overall mean per capita income of so-called Black Africa, for example, is, at its best, no higher than it was in 1960, and the region has less weight in the global economy today than it did in the 1960s (Brandt 1997). Economic informalization clearly accompanies an economy's disintegration. Real prices in domestic food markets have increased over the last few years and are set to increase further. To improve food security and global food supplies, policy scenarios of the 2020 Vision Initiative require increased exports of staple foods from industrialized countries to the LDCs (von Braun 1997). But insufficient purchasing power among the world's poorest 800 million people remains a primary obstacle to such strategies.

Multilateral agreements in trade and investment further threaten the availability and accessibility of food for large segments of the world's population. Many experts agree that the reduction in world surpluses and the increase in international prices encouraged by the Uruguay Round of the General Agreement on Tariffs and Trade pose an immediate threat to regions already suffering severe food insecurity. The duration of this threat is unknown.

Global prospects for improving food security are further threatened by environmental limitations on production increases, even in Green Revolution countries, and by growing poverty. In Asia, a large share of the population will soon be without access to adequate food supplies (Zarges 1997). So, despite the technical

modernization of food production and distribution, hunger and malnutrition still undermine the health and well-being of millions of people and actually seem to be worsening, particularly among low-income urban residents. This led Dr Uwe Werblow (1997) of the European Commission in Brussels to recommend favouring production of more traditional food crops in rural areas and developing non-land-using production in peri-urban and urban areas.

Food security and urban populations

Although the consequences can be visible, the causes and the scope of food-security problems for urban populations may not be apparent. From production to consumption, the food system comprises complex interrelated and interdependent parts: social and economic elements, agencies, processes, and structures. Their interdependent relationship requires a structural and systemic analysis focusing on global as well as local linkages. The rural–urban and local–global interrelationships make it impossible to study urban food-security issues in isolation. Yet, it is also clear that the extraordinary urban growth in the 20th century and increasing threats to food security for millions of urban dwellers merits particular attention. The scope and urgency of the problems require analyses of food-security questions for urban areas and new policies and practices to encourage the adoption of sustainable urban food systems.

Food security has become an increasing concern of urban populations. We identify four major challenges to focus our analysis. First, urban centres have expanded enormously, in population and in size. In the 20th century, urban growth has reached unprecedented levels in most parts of the world. In three recent decades alone, the urban population in developed countries doubled, from 448 million in 1950 to 875 million in 1990. In the same period the urban population in developing countries more than quintupled, from 280 million to 1.6 billion. In 1990, 33% of the world's urban population was living in cities with 1 million or more inhabitants. By the end of this century, six of the largest cities will be found in the developing world. Having urban settlements approaching 30 million people will likely strain already overburdened services in countries with limited resources and extreme income inequalities. Urban expansion has converted a significant portion of green space and good-quality, often scarce, agricultural land. It has already increased water and air pollution and created serious waste-disposal problems. Also, zoning bylaws, speculative land markets, and soil and water contamination have created obstacles to effective local food systems and urban agriculture.

A second challenge has been the unevenness of access to food. Historically, poverty has been predominantly a rural phenomenon. Yet, as the majority of the world's population moves to urban areas, we are seeing a reversal in the regional distribution of poverty. World Bank (1990) figures indicated that in 1988 about 25% of the poorest segments of the developing world were living in urban areas. The World Bank also estimated that by 2000 this will reach 50% (World Bank 1990). In developing countries, the ranks of the urban poor have swelled as a result of such factors as the continuous migration of the rural poor into the cities, the limited ability of the urban informal sector to absorb the unemployed, the limited employment opportunities in formal labour markets, negative impacts of the global economic crisis, and the austerity measures adopted to deal with foreign debt. In Eastern Europe and the industrialized West the situation is not much better. A decline in full-time, secure, well-paid employment (the

result of economic downsizing), the dismantling of the welfare state and social pro-
grams, and the feminization of poverty have turned urban poverty into a truly global
phenomenon. Most observers agree that the increase in poverty has been the biggest
threat to food security. Unfortunately, most of the solutions have been limited to patch-
work remedies, such as food banks, food aid, and similar emergency responses.

The third challenge is overcoming the inability of the existing market and ser-
vice agencies to respond to the highly diverse social and cultural mosaic of the urban
population. The complexity of cities — the diversity of their class, gender, ethnic, and
demographic characteristics and their corresponding needs and access problems —
creates new challenges in the attempt to ensure urban food security. Although the mar-
kets and traditional service agencies target certain "consumers," thousands of others
are marginalized. Food retail chains often ignore poor neighbourhoods in the North and
South alike, and the location of bulk-produce stores in suburbs limits the access of
smaller families, elderly people, people with disabilities, and those who depend on pub-
lic transit. The diversity of food practices arising from most cities' complex ethnic com-
position also creates distinct access problems. Unfortunately, most retailers, food
banks, and public-service agencies fail to respond to the unique traditions of cultural
minorities and thereby pressure people into making significant dietary changes to con-
form to what the dominant food system provides.

The fourth challenge is the growing commodification and globalization of the
agrifood system. The majority of people in urban populations have very little under-
standing of how their food is produced, transported, processed, or distributed. The
dominant structures of production, distribution, and marketing of food often ignore
local solutions for efficient and accessible production and distribution. Although the
global food system claims to offer more choice at an affordable cost for the individual
consumer, it has actually created obstacles for more sustainable local food systems. In
many places, even in-season, locally grown foods tend to be more expensive or more
difficult to find than those shipped in from thousands of miles away (Bonanno et al.
1994; McMichael 1994; Goodman and Watts 1997). Often food grown locally is exported
while thousands of local residents may be suffering hunger and malnutrition. Questions
can be raised about the long-term economic, ecological, and political sustainability of
the so-called success of the current food system, with its global division of labour, com-
modified food economy, increasing regional specialization, industrialized agriculture,
and transcontinental networks of distribution.

About this book

Most of the papers in this volume were presented at the International Conference on
Sustainable Urban Food Systems, organized by the Centre for Studies in Food Security,
at Ryerson Polytechnic University, Toronto, with the cooperation of the International
Development Research Centre, FoodShare Toronto, Oxfam Canada, and the Toronto
Food Policy Council. The conference was hosted by the university in May 1997, and the
aim was to include research papers, opinion pieces, and visionary papers to create a
forum to stimulate further discussion and generate new ideas in this field. This volume
reflects the original intention of the conference by bringing together the contributions
of a group of academics, community organizers, policymakers, practitioners, and youth
representatives. The authors are concerned about food-security issues and have been
involved in research and applied projects in the field. These projects, grounded in the

practices of everyday life, involve the work of street vendors, antihunger advocates, environmentally conscious chefs, and urban gardeners. However trivial they may be, they have generated a sense of hope in others involved in similar small-scale projects all over the world.

This book aims to develop a conceptual and practical framework for sustainable urban food systems. Several papers propose ways to improve the availability and accessibility of food for urban residents and the feasibility of various forms of more self-reliant local food systems. For instance, the book contains insights on how existing structures for marketing and distribution can improve accessibility, why and how different forms of urban food production and distribution are emerging, and how these structures can become part of local food systems that better respond to food-security needs, especially those of urban dwellers.

To reflect the global nature of the dominant food system, the conference participants were drawn from both the North and the South to share their concerns about food security and their experiences of local and global initiatives for sustainable food systems worldwide. The book covers a range of issues, such as urban food systems, local food systems, urban and community agriculture, gender roles in food-security strategies, hunger and income insecurities, and health and ecological concerns, and points out the linkages among these. The reader can learn from the rich sample of case studies.

This volume, like the conference, is more of an open invitation to scholars, practitioners, and policymakers to focus their attention on urban food-security concerns. Food is an essential part of life. Therefore, food-security concerns require public awareness. Changes in the food system require public regulation and cannot be left to the vagaries of the marketplace. Although the achievements of the dominant food system are worth acknowledging, its fairness, sustainability, and feasibility are highly questionable. Given the rising populations of megacities, the food-security needs of urban populations will require governments to develop comprehensive and participatory interventions to avoid future catastrophes. The surest ways to avoid disaster are to be prepared and to understand the nature of the problems, as well as the available opportunities. Most of the papers included in this volume identify a number of common concerns and solutions:

- Local food systems offer long-term sustainable solutions, both for the environment and for local and regional economic development. By linking the productive activities in the surrounding bioregion to the consumers in metropolitan centres, local food systems can reduce greenhouse gases and other pollutants caused by long-distance transportation and storage. They can reduce the vulnerability of food-supply systems to the impacts of weather and market-related supply problems of distant producers, offer greater choice through regional variations in biodiversity, provide fresher and more nutritious products in season, allow for more effective regional control of quality and chemical inputs, and create the potential for local development and employment opportunities. A regional or national network of local food systems does not necessarily diminish the possible advantages of the global food system for food security; rather, it would enhance these advantages.

- Cities need to encourage urban and peri-urban agriculture, aquaculture, food forestry, and animal husbandry, as well as safe waste recycling, as elements of more self-reliant local food-system initiatives. Food and nonfood production can tap idle resources and, through income and savings, improve food security, local employment, and urban resource management. From a food-democracy viewpoint, one's right to be fed needs to embrace one's right to feed oneself. Future plans for the flexible, creative, and combined use of urban space and form need to include permanent and temporary food production within metropolitan regions and to create land reserves for productive green space.

- Cities and metropolitan regions need to give priority to the availability and accessibility of food and develop their own food-security plans as part of their social and economic planning. Food-policy councils should be formed to advise local governments and planners.

- Food banks and other community assistance programs should only be relied on as emergency measures, rather than being institutionalized as permanent mechanisms for food access. Food banks often serve two goals: to assist low-income consumers and to distribute surplus food. To reduce poverty and inequities in access, structural measures need to be undertaken to provide long-term food security. At the same time, mechanisms for distribution of surplus food can be developed to respond to specific community needs, without stigmatizing the poor.

- No single solution will solve the problem of food insecurity. What is needed is a list of choices and a commitment to the principles of food security (listed above). The best recipe we can offer is to establish globally interlinked local food systems that use diverse technical, social, and economic resources to improve the availability and accessibility of sustainably produced and distributed, culturally acceptable food. Reaching this goal requires unique local solutions, as well as global cooperation to solve common problems.

- Finally, the concept of food democracy was the central theme of the conference's keynote speaker, Tim Lang. Moving beyond the notion that consumers act as rational beings who focus on their individual interests, the concept of food democracy (or food citizenship) recognizes that consumers can identify the interests of others (food workers, other consumers, future generations, and other species). As citizens, we can participate in shaping the food system and the ways consumption of food in our communities expresses the values of family and culture.

Given the complexity of the food chain and the limitations of a conference setting, it is practically impossible to include or even claim to do justice to all dimensions of urban food-security questions. Our goal was to create a forum by inviting people who share similar concerns and a similar desire to achieve a sustainable food system. We accept and respect the diversity of opinions on this issue, and we do not claim to offer all the answers. While focusing on urban food systems we recognize that cities have evolved as hubs of economic and cultural life — their success in terms of dense populations is also the source of their vulnerability — and that their survival depends on the ways they relate to their local, regional, national, and global contexts.

References

Bonanno, A.; et al., ed. 1994. From Columbus to ConAgra: the globalization of agriculture and food. University Press of Kansas, Lawrence, KS, USA.

Brandt, H. 1997. Development policy in sub-Saharan Africa after 15 years of structural adjustment. Agriculture and Rural Development, 4(2), 22–24.

de Haen, H.; Lindland, J. 1997. World cereal utilization, production and trade in year 2020. Agriculture and Rural Development, 4(2), 10–13.

Goodman, D.; Watts, M., ed. 1997. Globalising food: agrarian questions and global restructuring. Routledge, London, UK; New York, NY, USA.

McMichael, P., ed. 1994. The global restructuring of agro-food systems. Cornell University Press, Ithaca, NY, USA.

Singer, H.W. 1997. A global view of food security. Agriculture and Rural Development, 4(2), 3–6.

von Braun, J. 1997. Food security for all by the year 2020? Agriculture and Rural Development, 4(2), 14–17.

Werblow, U. 1997. A radically changing world: globalisation and food security up to the year 2020. Agriculture and Rural Development, 4(2), 7–9.

World Bank. 1990. Structural adjustment and sustainable growth: the urban agenda for the 1990s. World Bank, Washington, DC, USA.

Zarges, W. 1997. Food security for all by the year 2020? Who will meet increased import demand from developing countries? Agriculture and Rural Development, 4(2), 18–19.

for HUNGER-PROOF cities

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Contents

Part 5. Ecological and Health Concerns

Part 6. Engendering the Food System

Part 7. The Politics of Food and Food Policy

Part 8. Toward Food Democracy