

# for HUNGER- proof CITIES

Sustainable Urban  
Food Systems



Edited by Mustafa Koc, Rod MacRae,  
Luc J.A. Mougeot, and Jennifer Welsh

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# Contents

<b>Acknowledgments</b> .....	vii
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<b>Introduction: Food Security Is a Global Concern</b> — <i>Mustafa Koc, Rod MacRae, Luc J.A. Mougeot, and Jennifer Welsh</i> .....	1
---	---

## **Part 1. The Concept of Urban Food Security**

For Self-reliant Cities: Urban Food Production in a Globalizing South — <i>Luc J.A. Mougeot</i> .....	11
Urban Food Security in Sub-Saharan Africa — <i>Daniel Maxwell</i> .....	26
Combining Social Justice and Sustainability for Food Security — <i>Elaine M. Power</i> .....	30

## **Part 2. Local Food Systems**

Promoting Sustainable Local Food Systems in the United States — <i>Kenneth A. Dahlberg</i> .....	41
Community Agriculture Initiatives in the Metropolitan Borough of Sandwell, United Kingdom — <i>Laura Davis, John Middleton, and Sue Simpson</i> .....	46
Developing an Integrated, Sustainable Urban Food System: The Case of New Jersey, United States — <i>Michael W. Hamm and Monique Baron</i> .....	54
Public Policy and the Transition to Locally Based Food Networks — <i>Ellie Perkins</i> .....	60

## **Part 3. Urban and Community Agriculture**

Urban Agriculture in the Seasonal Tropics: The Case of Lusaka, Zambia — <i>A.W. Drescher</i> .....	67
The Contribution of Urban Agriculture to Gardeners, Their Households, and Surrounding Communities: The Case of Havana, Cuba — <i>Angela Moskow</i> .....	77
Agriculture in the Metropolitan Park of Havana, Cuba — <i>Harahi Gamez Rodriguez</i> .....	84
People at the Centre of Urban Livestock Projects — <i>Alison Meares</i> .....	90
Measuring the Sustainability of Urban Agriculture — <i>Rachel A. Nugent</i> .....	95

## **Part 4. Accessibility and Urban Food Distribution**

Food Banks as Antihunger Organizations — <i>Winston Husbands</i> .....	103
Bottlenecks in the Informal Food-transportation Network of Harare, Zimbabwe — <i>Shona L. Leybourne and Miriam Grant</i> .....	110
From Staple Store to Supermarket: The Case of TANSAS in Izmir, Turkey — <i>Mustafa Koc and Hulya Koc</i> .....	115
A Nonprofit System for Fresh-produce Distribution: The Case of Toronto, Canada — <i>Kathryn Scharf</i> .....	122

**Part 5. Ecological and Health Concerns**

Urban Food, Health, and the Environment: The Case of Upper Silesia, Poland  
— *Anne C. Bellows*. . . . . 131

Reuse of Waste for Food Production in Asian Cities: Health and Economic Perspectives  
— *Christine Furedy, Virginia Maclaren, and Joseph Whitney* . . . . . 136

How Meat-centred Eating Patterns Affect Food Security and the Environment  
— *Stephen Leckie*. . . . . 145

Farming the Built Environment — *Elizabeth Graham* . . . . . 150

**Part 6. Engendering the Food System**

Gender and Sustainable Food Systems: A Feminist Critique — *Penny Van Esterik* . . . . . 157

Women Workers in the NAFTA Food Chain — *Deborah Barndt* . . . . . 162

Canadian Rural Women Reconstructing Agriculture — *Karen L. Krug*. . . . . 167

**Part 7. The Politics of Food and Food Policy**

Contemporary Food and Farm Policy in the United States — *Patricia Allen* . . . . . 177

Policy Failure in the Canadian Food System — *Rod MacRae*. . . . . 182

Urban Agriculture as Food-access Policy — *Desmond Jolly*. . . . . 195

**Part 8. Toward Food Democracy**

Reaffirming the Right to Food in Canada: The Role of Community-based Food Security  
— *Graham Riches*. . . . . 203

Youth, Urban Governance, and Sustainable Food Systems: The Cases of Hamilton  
and Victoria, Canada — *Zita Botelho* . . . . . 208

Food Policy for the 21st Century: Can It Be Both Radical and Reasonable? — *Tim Lang* . . . . . 216

**Appendix 1.** Abstracts. . . . . 225

**Appendix 2.** Contributing Authors . . . . . 235

**Appendix 3.** Acronyms and Abbreviations. . . . . 238



# **Canadian Rural Women Reconstructing Agriculture**

Karen L. Krug

## **Introduction**

If we are to develop a sustainable urban food system, we must first address the broader issues of sustainability in agriculture. Urban and rural people must work together to establish a strong enough constituency to resist the dominant system and build an alternative one. For example, local food production — which surely is a prerequisite for any sustainable urban food system — requires sufficient support from all sympathetic sectors to resist control by global conglomerates. Furthermore, structural changes are required, not just personal changes or isolated solutions to local problems. Trying to prevent short-term economic interests from influencing the consumption decisions of millions of consumers is less effective than altering the economic or agricultural system to change which kinds of products are cheapest. Urban and rural food systems must be both linked and mutually reinforcing to build a strong enough constituency to effect these structural changes.

In this paper, I examine agriculture from the vantage point of Canadian farm women seeking ways to construct a sustainable food system for the rural and urban areas of Canada. Farm and rural women have themselves documented a variety of ways in which they are less advantaged than their male counterparts. Gender stereotypes, which persist in agricultural settings, devalue farm women's work and, ironically, lead to farm women's doing a disproportionately greater amount of work. This same gender stereotyping also leads to the following structural inequalities:

- Women's unequal participation in farm organizations;
- Women's limited impact on farm policy;
- Unjust legislation;
- Restrictions on women's ownership and control of resources; and
- Farm women's lower socioeconomic status and increased vulnerability to poverty and economic insecurity (Ireland 1983; Watkins 1985; Wiebe 1987; Keet 1988; Smith 1988; Haley 1991; Miles 1991; Krug 1995).

As farm women are more vulnerable than farmers generally, they have insights that farm men may not have. Furthermore, because they are less likely to benefit from the current agricultural system, farm women have less of a stake in defending it and are therefore more likely to be critical of it (Krug 1997). Thus, farm and rural women can play a significant role in envisioning the changes required to build a sustainable food system.



Farm women face some problems that their male counterparts do not. They also suffer more acutely from many of the problems that affect both women and men. None of these problems can be adequately addressed until the system is transformed to build more feasible rural communities and secure the livelihood of family farmers. Farmers are a small minority, 4–5%, of the Canadian population, and the proportion of women farmers is even lower. On their own, farmers (especially those who benefit least from the existing system, such as small family farmers and farm women) cannot exert enough political influence to ensure change. Furthermore, the problems of rural and urban dwellers are intertwined. Thus, a secure food system that provides everyone with healthy food will only emerge with the cooperation among those aware of how the existing system is failing and how it might be restructured. Farm women's insights can contribute to the needed restructuring of the food system.

## Barriers to sustainable agriculture

In discussing the problems that plague agriculture, farm women identified issues related to the economic system, declining rural communities, environmental degradation, health, and stress. In addition, they observed that some issues, such as the feminization of poverty, domestic violence, and inadequate day-care programs, affect farm women more than they do farm men. A fundamental problem in the economic system is that farmers lack control over the costs of inputs and over the prices received for their products. A few large corporations exert substantial control over what is grown, how and where it is grown, the price paid for it, and who receives it. Centralization, which is largely a result of the consolidation of power among the corporations controlling food production and distribution, contributes to the decline of rural communities. This is particularly evident in the prairies as farming there becomes less economically sustainable for small units. The style of farming supported in the highly competitive climate created by the controlling corporate interests leads to environmental degradation, primarily as a result of the use of large equipment, intensive chemical applications, and monocropping. Health problems result from stress and from the release of chemicals and other pollutants into the environment. As it becomes increasingly more difficult to earn a living from farming, the pressure to compete increases. Stress-related illnesses, heightened levels of violence, and increased suicide rates are the result. Farm and rural families feel the direct effects of these interconnected factors (Krug 1995).

## Farm and rural women's alternative vision for agriculture

*I want to feed people locally [grown] nutritious food. I want off this chemical fix. I want to teach my daughters how to be stewards of the land instead of how to be obedient slaves to this insane economic system.*

*It is time for us farm women to heal ourselves. ... It is the women who will have to draw the line and say enough is enough. We will have to make our vision for self-sufficiency, of clean air and water, of nutritious food, and of healthy families and rural communities a reality for us all. We have the analysis. We have the abilities. And most importantly, we have the faith to make our vision a reality.*

— Ruby Reske Naurochi<sup>1</sup>

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<sup>1</sup> Ruby Reske Naurochi, a Manitoba farmer and author passionately involved in the transformation of agriculture, responding to a questionnaire sent by the author to selected Canadian farm women, 1993.

Combining the concerns raised by some farm women with the visions articulated by others points the way to effective solutions. Certain farm and rural women — among them unionists, social-change activists, critical journalists, and family farmers — articulate strong visions for sustainable rural areas, agriculture, and society.

Sandra Sorenson, who grew up in a small town in Saskatchewan and has been the director of the Canadian Centre for Policy Alternatives, insists that resistance to the dominant system and meaningful change is possible only with a clear alternative vision. Sorenson (1991) did the groundwork for this alternative vision by articulating basic principles of sustainability from the vantage point of humans. She pointed to the importance of universal access to clean water and air, nourishing food, adequate shelter, fulfilling work, good quality education and health care, and a good transportation system. In addition to these physical needs, she emphasized the need for cultural and spiritual stimulation, the right to speak and participate in society, and hope. Sorenson concluded that these standards and rights must be universal and that they must form the foundation for creative alternatives to failing systems.

In recalling the rural community of her youth, Sorenson (1991) provided a concrete picture of rural sustainability that integrates the values articulated in her vision of sustainability in general. The elements of this picture include self-reliant communities, with most services and goods provided locally; meaningful, productive work for all who can do it; local culture, with opportunities for intelligence to flourish; healthy people; a strong sense of community; willingness to share with those in need; diversity; local businesses; and a reliable transportation system. In the past, these elements were part of rural communities, and Sorenson suggests that it is necessary to recover them.

Lois Ross, a journalist in rural Saskatchewan, has also written about an alternative vision for rural and agricultural communities. Ross (1991) argued that we must link all parts of the food chain — from production to consumption — and that sustainable food production depends on sustainable rural communities. She recommended several ways to make food sustainability possible, including increasing the number of farmers on the land base, increasing the population of rural communities, decreasing farm sizes, using smaller equipment and more labour, growing food for local food consumption rather than solely for export, locally producing specialized equipment for local use, and processing crops locally. She argued that stable food systems can be maintained, for example, by planting a variety of crops, preserving the soil and habitat, and decentralizing the food industry. Ross's vision for agricultural communities incorporates and expands on elements of Sorenson's (1991) vision of sustainability.

Betty Kehler, a farm woman who married late in life and recognizes that she has more choices than many farm women, as she has no children, explains how she seeks to live out her vision of sustainability for agriculture:<sup>2</sup>

*We decided right from the start that we wanted to farm as sustainably as possible, so our use of artificial inputs has been limited to soaps and other biological control methods and we spend considerable time and energy educating the people that visit our farm on how it is possible and preferable to grow food that is healthy by "treading lightly on the earth."*

*We concentrate on creating our farm in the vision we have for agriculture and whoever comes by, whether they're a strawberry picker, an El Salvador refugee, an agriculture diploma student or a busload of elementary school kids on a school trip, we try to explain how we "actualize" the dream and challenge them to find what is*

<sup>2</sup> Response to a questionnaire sent by the author to selected Canadian farm women, 1993.

*inside them that they can "realize" so we can live in a world where we can drink the water, breathe the air and live off the land together with all of God's creatures. My hope is that if enough of us start acting like we really make a difference, we will.*

Although she attributed her personal understanding of sustainability to her experience as a farmer, Kehler optimistically affirmed that everyone can and should contribute to the well-being of the planet.

Several solutions to the problems faced by farmers and rural communities revolve around the theme of living personally responsible lives. For Shirley Sarvas and her farm family, this involves a holistic lifestyle, taking responsibility for education, the soil, the quality of products they sell, and their own health (Ross 1984). In modeling and providing these alternatives, the Sarvas family has, as a social unit, tried to have an impact on the broader culture. According to organic farmer Arlette Gaudet, part of the solution to the problem of the environmental degradation resulting from current agricultural practices lies with education. She believes that if children are taught to respect the basic elements of life as they grow up, they learn to respect all of life; thus, she chooses to raise her children on a farm so that she can model healthy ways of relating to the Earth (Ross 1984). Harkin (1987) urged farmers to use caution in their handling of farm chemicals. She also encouraged farmers to consider the negative health and environmental effects of pesticides and to question the profit-motivated propaganda of chemical companies when making decisions about their own farm practices. Miller (1990) pointed to the importance of shopping locally. Giangrande (1985) recommended that people grow as much of their own food as possible and be socially responsible, rather than passive, consumers. She pointed to the ways individuals' lifestyle decisions influence the lives of others. For example, buying locally produced food supports local producers and short-circuits the loop of exploitation of labourers by multinationals. Although personal-lifestyle choices can contribute to resolving some of the problems Canadian farmers face, in isolation from concerted political action, such choices are bound to remain ineffective.

Several other solutions proposed by farm and rural women revolve around the theme of cooperation. Miller (1990) advocated "letter-writing bees to government agencies, requesting continued or developing services" in rural areas. Giangrande (1985) argued that through alliances with the labour movement and organizations such as the Nutrition Policy Institute in Nova Scotia, the United Church of Canada's Committee on Agriculture and Food Resources, and the Saskatchewan Women's Agricultural Network, Canadian farmers can "build a national constituency of concerned citizens whom they see as political allies and not just as consumers of the products they sell." In this way, rural-urban dialogue can be encouraged. Such cooperative efforts can begin to address some of the major difficulties faced by farmers.

Clearly, such initiatives are necessary to bring about the radical changes that rural and farm women envisage making to the food system, as these changes would require sustained cooperation among various sectors of the food system. For example, Wiebe (1991) recommended removing food from the realm of global commodities. An interviewee in Ross (1984) called for an end to the speculation on land prices that makes them escalate to a point at which they no longer reflect the productive value of land. The interviewee maintained that regaining security of land tenure is needed to give control to agricultural producers over what and how they produce. She added that Canadian farmers should concentrate on meeting our domestic needs, rather than export quotas, seeking to produce only what is good for the land and for people.

Giangrande (1985) advocated increasing urban agriculture as a way to “exercise control over a food supply normally run by multinational corporations,” enable hungry people to feed themselves, interest urban people in agriculture, and provide a practical education program for youth. Giangrande argued that to support such activities it would be necessary to create an alternative agricultural system, with increased demand for locally grown food and the development of regional markets and distribution systems. All these suggestions involve radical changes to the current food system and require support from a wide cross-section of society.

Farm and rural women have suggested numerous ways for individuals and groups to implement changes to contribute to a more sustainable food system. Not only must the proposed changes be linked together, if they are to contribute to system-wide change, but they must be supported by both urban and rural people. As a farmer active in the National Farmers Union, Wiebe (1991) acknowledged that significant change must happen at the community level:

*The problems in agriculture are global in nature, but we do not have to turn around the global situation. How change will happen in terms of both cultural and agricultural sustainability will be at the local community level. That's where it has to start and where we as local farming people are the experts. ...*

*We won't be able to make change as individuals, but change can happen with groups of people who are committed to a healthier, more sustainable way of living together and of using the land.*

Similarly, Ross (1991) maintained that transforming agriculture into a sustainable system requires “the participation of rural people and the implementation of programs to ease the transition toward ecological labour and lifestyles.” Although she was convinced that the initial focus must be on rural people, she was also clear that “if we make the country a better place to work and live, then people in urban areas will benefit as well” (Ross 1991). Building a sustainable food system ultimately requires urban-rural cooperation at the individual and community levels.

## Urban-rural cooperation

Many of the solutions proposed by farm and rural women to the problems affecting agriculture point to the importance of connecting rural and urban initiatives to build a strong food system. Ultimately, the success of the urban food system depends on the health of the rural food system, as the latter will always have the greatest potential to provide food security to Canadians. However, the two are interdependent: the success of urban agriculture contributes to that of rural agriculture; and the well-being of rural communities contributes to that of urban communities.

Urban agriculture, as a food-system initiative, is designed to benefit urbanites directly, but it has a positive impact on rural people as well. If urban people grow their own food, they are more likely to appreciate what rural farmers do for them. If they become used to the taste and quality of homegrown, organic foods, their expectations of purchased foods are likely to rise, and they are therefore more likely to demand more locally grown, pesticide-free food and be willing to pay more for such products. By taking food production and distribution out of the hands of large corporations, urban agriculture directly subverts the control wielded by transnationals. Indirectly, urban agriculture is likely to sensitize consumers to the value of food security and to create a

broad base of support for local control over food production and distribution in rural areas.

Initiatives to address rural and farm problems likewise benefit urban dwellers. For example, stable, revitalized rural communities require broad-based support for smaller farm sizes, as well as incomes that cover farmers' costs of production while providing reasonable wages. Such support for rural communities can result in lower unemployment in cities and a healthier economy overall. Curbing the negative effect of speculation can also stabilize agricultural economies. Speculation in urban contexts, which is not beneficial to the average citizen, has led to speculation in rural areas. As a result, the prices of farm land, especially of that immediately surrounding cities, exceeds the productive value of the land, and this makes farming an unfeasible enterprise. Introducing legislation to reduce or halt speculation, like other initiatives noted above, would benefit both urban and rural citizens. Such initiatives require a national constituency that is committed to solidarity between rural and urban people and recognizes that their needs are connected in ways that go beyond consumer-producer relations. A sustainable food system can only emerge with strong bridges between urban and rural settings, thereby connecting the people who live in those settings.

## Conclusion

Farm women in Canada have been involved in clarifying the problems in agriculture and identifying solutions aimed at transforming the system. They have advocated growing as much food as possible on one's own and have sought increased demand for locally grown and distributed food, rather than food produced primarily for export — both are initiatives that directly support urban agriculture. They have called for an end to speculation on land prices and emphasized the importance of secure land tenure. They have supported fostering alliances between labour, church, and food and agriculture groups to build a national constituency that improves rural-urban relations. They have advocated locally supported, smaller scale, labour-intensive styles of agriculture to increase rural populations, and they have requested government support to help rebuild programs and infrastructure to re-create strong rural communities. Each of these strategies is imperative if a sustainable food system is to emerge, and they each require increased cooperation between rural and urban people. Farm women's own analyses confirm that the well-being of Canadian rural and farm women is closely tied to the welfare of people in both urban and rural settings and that a sustainable urban food system requires a sustainable rural one.

## References

- Giangrande, C. 1985. *Down to Earth: the crisis in Canadian farming*. Anansi, Toronto, ON, Canada.
- Haley, E. 1991. Getting our act together: the Ontario farm women's movement. In Wine, J.D.; Ristock, J.L., ed., *Women and social change: feminist activism in Canada*. James Lorimer, Toronto, ON, Canada. pp. 169–183.
- Harkin, D. 1987. *Agriculture chemicals poisoning our soil, and human water supply*. The Farmgate, ON, Canada.
- Ireland, G. 1983. *The farmer takes a wife: a study by Concerned Farm Women*. Concerned Farm Women, ON, Canada.

- Keet, J.E. 1988. Matrimonial property legislation: are farm women equal partners? *In* Basran, G.S.; Hay, D.A., ed., *The political economy of agriculture in western Canada*. Garamond Press, Toronto, ON, Canada. pp. 175–184.
- Krug, K. 1995. Farm women's perspectives on the agricultural crisis, ecological issues, and United Church of Canada social teaching. Emmanuel College of Victoria University and the University of Toronto, Toronto, ON, Canada. PhD thesis. 298 pp.
- 1997. Farm women and the ecosystem: allies in agriculture. *In* Wellington, A., et al., ed., *Canadian issues in applied environmental ethics*. Broadview Press, Peterborough, ON, Canada. pp. 352–362.
- Miles, A. 1991. Reflections on integrative feminism and rural women: the case of Antigonish town and country. *In* Wine, J.D.; Ristock, J.L., ed., *Women and social change: feminist activism in Canada*. James Lorimer, Toronto, ON, Canada. pp. 57–74.
- Miller, O. 1990. Sowing circles of hope: support groups for older farm women in Saskatchewan. Women's Inter-Church Council of Canada, Toronto. ON, Canada.
- Ross, L. 1984. *Prairie lives: the changing face of farming*. Between the Lines, Toronto, ON, Canada.
- 1991. Rural development. *Briarpatch*, 20(2), 22–23.
- Smith, P. 1988. Murdock, Becker's and Sorochan's challenge: thinking again about the roles of women in primary agriculture. *In* Basran, G.S.; Hay, D.A., ed., *The political economy of agriculture in western Canada*. Garamond Press, Toronto, ON, Canada.
- Sorenson, S. 1991. Creating alternatives. *Briarpatch*, 20(8), 19–21.
- Watkins, S. 1985. *What are you worth? A study of the economic contribution of eastern Ontario farm women to the family farm enterprise*. Women for the Survival of Agriculture, ON, Canada.
- Wiebe, N. 1987. *Weaving new ways: farm women organizing*. National Farmers Union, Saskatoon, SK, Canada.
- 1991. Cultivating hope. *Briarpatch*, 20(2), 20–21.