

# World Vision

## *A Hungry World: Understanding the Global Food Crisis*

World Vision



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# A Hungry World

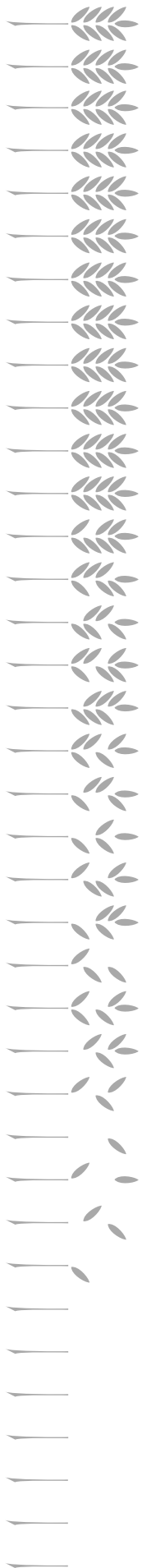
Understanding the  
Global Food Crisis

An educational resource about  
the causes and impacts of  
global food insecurity

Supports curricula in grades 9 to 12  
geography, world issues, civics, family  
studies, economics, or humanities classes







# Acknowledgements

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# A Hungry World

## Understanding the Global Food Crisis

Global food insecurity has been making news headlines. However, worldwide hunger and malnutrition are nothing new. Long before this “crisis”, more than 850 million people worldwide were already undernourished, meaning their food intake does not include sufficient calories to meet the minimum needs of an active life. In addition, hunger and malnutrition cause 3.5 million child deaths every year.<sup>1</sup>

What is new is the rapid and sustained deterioration in people’s access to food. Record high fuel and food prices could push another 100 million people further into poverty and hunger, raising their numbers to almost one billion.<sup>2</sup> The causes of rising food costs and diminishing food supplies are complex, but the reality for families affected by shortages of staple foods is simple and harsh. As food prices increase, standards of living decrease. Malnourishment and starvation become real possibilities, and families are forced to make difficult choices. With less access to food, already vulnerable children are in even more danger, as they may be pulled out of school and sent to scavenge or work for food, subjecting them to lost education, early forced marriage, damaged health, sexual and labour abuse, and loss of basic rights.

### Using this Study Guide

*A Hungry World* provides background information, statistics, case studies, classroom activities, and action ideas for teaching about global food insecurity. The resource fits best with secondary-level geography, civics, and family studies curricula, but can be used creatively in other social sciences and humanities courses, including economics, history, art, sociology, and English.

In this resource students explore the global scale of the food crisis. They analyze some of the many causes and impacts of the problem, such as supply and demand issues, and consider the complex ways in which causes and impacts are interrelated. Students examine their own food consumption, read case studies about affected children and families, and consider the difficult choices families are sometimes forced to make when their food supply diminishes. The final section of the resource engages students in brainstorming ways they can take action—both locally and globally—to address issues related to global hunger.

Suggested classroom activities accompany each section of the guide. Teachers can adapt these activities to the specific needs of their classrooms by applying their own instructional and evaluation strategies.

If you have any comments or suggestions about this resource, please contact [global\\_ed@worldvision.ca](mailto:global_ed@worldvision.ca)

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<sup>1</sup> Food and Agriculture Organization of the United Nations (FAO), *The State of Food Insecurity in the World*, 2006.

<sup>2</sup> World Bank, *Rising Food and Fuel Prices*, <http://siteresources.worldbank.org/DEVCOMMEXT/Resources/Food-Fuel.pdf?resourceurlname=Food-Fuel.pdf> (2008).



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### List of Acronyms Used in this Guide

IDPs	Internally Displaced Persons
IDRC	International Development Research Centre
IMF	International Monetary Fund
FAO	Food and Agriculture Organization of the United Nations
FFPI	FAO Food Price Index
NAFTA	North American Free Trade Agreement
NGO	Non-Governmental Organization
SAPs	Structural Adjustment Programmes
UN	United Nations
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
WFP	World Food Programme

# Introduction

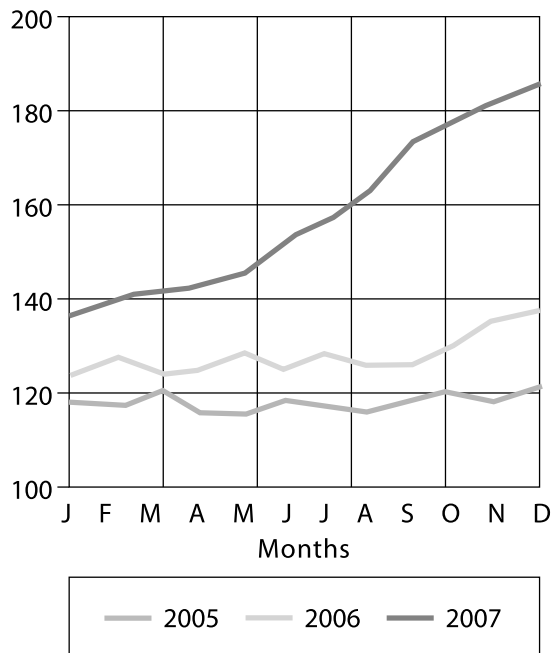
## The Global Food Crisis: An Overview

While the media uses the term “crisis” it is important to understand that global food insecurity has existed for a long time. It is only now that a perfect storm of factors has increased the scope and intensity of the issue as well as public awareness of it. The rise in food and fuel prices on the global market threatens devastation for millions of people around the world. An estimated 100 million people, 35 million of them children, have been pushed into poverty and hunger over the past two years.<sup>3</sup>

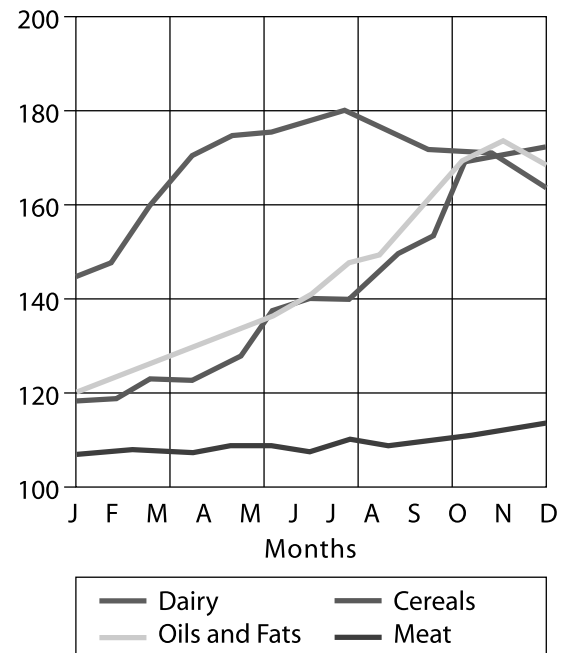
According to the Food and Agriculture Organization of the United Nations (FAO), world food prices have been rising steadily since 2002, with a dramatic upturn in 2007. Food prices have risen 83 per cent since 2005, and jumped 47 per cent between January 2007 and January 2008 alone.<sup>4</sup> Sharp increases in prices of cereals, dairy, rice, soybeans, and vegetable oils, and to a lesser extent, meat and sugar, have had a direct impact on the prices of food products on grocery shelves and in small marketplaces around the world. The graphs below illustrate the rise in food prices during each of the past three years, and the rise in particular commodities in 2007.

### Food Price Graphs

**RISING FOOD PRICES, 2005–2007**  
1998–2000=100\*



**PRICE RISES BY FOOD TYPE, 2007**  
1998–2000=100\*



\*CHANGES IN PRICE ARE INDEXED AGAINST COSTS DATED FROM 1998–2000

SOURCE: FAO, 2007. Cited in [http://www.ciat.cgiar.org/training/pdf/2008\\_06\\_18\\_G\\_Hawtin\\_eng.pdf](http://www.ciat.cgiar.org/training/pdf/2008_06_18_G_Hawtin_eng.pdf)

<sup>3</sup> Ibid.

<sup>4</sup> World Bank, *Rising food prices, policy options and World Bank response*, [http://siteresources.worldbank.org/NEWS/Resources/risingfoodprices\\_backgroundnote\\_apr08.pdf](http://siteresources.worldbank.org/NEWS/Resources/risingfoodprices_backgroundnote_apr08.pdf) (2008) and FAO, *Soaring food prices*, [www.fao.org/fileadmin/user\\_upload/foodclimate/HLCdocs/HLC08-inf-1-E.pdf](http://www.fao.org/fileadmin/user_upload/foodclimate/HLCdocs/HLC08-inf-1-E.pdf) (2008).



# 1 Introduction

## The Global Food Crisis: An Overview

Adverse weather conditions have played a role, but drought is only one of many factors causing food prices to soar. The rising price of oil, diversion of land to biofuel production, declining agricultural productivity, and income growth, along with various other social, economic, and political factors, have all contributed to changes in food production, availability, and prices (see “Causes of Global Food Insecurity”, page 12).

The current food crisis is different from food emergencies in the past in a number of ways. In the past, food crises have largely been weather or environment related. Drought, storms, floods, or insects destroyed crops and resulted in regional famines. The impact of these emergencies was felt by rural food producers first, and while devastating for affected populations, tended to subside when environmental conditions improved enough for harvests to return to normal yields.

However, experts predict that the effects of the current crisis will be felt for many years to come. Rising fuel prices and long-term climate change, two main factors now causing food insecurity, are not likely to see significant improvements in the near future.

Another unique feature of the current food crisis is its scope. Because of the global nature of markets and trade in food commodities, as many as 37 countries are in desperate need around the world: 21 in Africa, 10 in Asia, five in Latin America, and one (Moldova) in Europe<sup>5</sup> (see “Appendix A: Food Insecurity—37 Countries in Crisis”). In addition, it is the urban poor, who are generally non-food producers, who often suffer most from the first wave of impact in this crisis.

Food insecurity is having dire effects on nations, families, and children. Food riots and other forms of social unrest have erupted in Haiti, Mexico, Bangladesh, and even in developed countries, such as Italy. Families have limited their consumption of staple foods, such as rice, and eliminated more expensive foods, such as meat, from their diets. In some cases they have reduced the number of meals eaten in a day. Children suffer most from diminished access to food: immediate effects on their health due to under-nutrition and malnutrition; loss of education if they are pulled out of school to work; and the many protection issues that arise when they are not in school (see “Global Food Insecurity: Impacts”, page 30).

In Canada, the effects of rising food prices, while far less critical, are also being felt. Some companies have announced an increase in the price of bread to compensate for rising wheat prices. Higher fuel prices are expected to push up the prices of fruits and vegetables that are transported long distances to markets. Food banks across the country are receiving fewer donations of certain surplus food items from grocery chains, such as cheese, yogurt, eggs, and meat. At the same time, they anticipate an increase in demand as low-income Canadians struggle to pay higher grocery bills (see “Appendix F: Impact in Canada—Food News”).

The global food crisis has no easy solutions. In the short term, food aid is needed for the millions of people who have been thrust into poverty and hunger. In the long term, investment in agriculture and measures to improve food security are needed to ensure that every family and every child has access to the food they need to survive and thrive.

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<sup>5</sup> FAO, *Crop Prospects and Food Situation*, [www.fao.org/docrep/010/ai465e/ai465e02.htm](http://www.fao.org/docrep/010/ai465e/ai465e02.htm) (April, 2008).



# 1 Introduction

## The Global Food Crisis: Lesson Openers

<b>Use to:</b>	introduce a unit or lesson on the global food crisis; facilitate critical thinking on the topic and bridge to further studies
<b>Students will:</b>	engage in critical thinking, group decision-making, analysis, and synthesis
<b>Subjects:</b>	economics, family studies, food and nutrition, civics, geography, art, drama, or writing

### A. Quotation Mix-and-Match

Use “Appendix B: Food Quotations” for this exercise. Copy and cut the quotations so there is a matching pair for each pair of students in the class. Distribute the halved quotations and ask students to move around the room to find their missing halves. When they have verified a match, have them write their quotation on the board. Pairs can then consult and write a comment or reaction under their own quotation or under one or two others. Use these comments as a springboard for whole class discussion.

### B. Graffiti Wall

Write a provocative question or statement about the food crisis on the blackboard before students enter the classroom. As students enter the room, ask them to write a word, phrase, or response under the statement. Use the responses to discuss perceptions about hunger and food and to introduce facts and statistics about global food insecurity.

#### *Suggestions:*

1. “If my family could no longer afford food, I would ...”
2. Select a quotation from “Appendix B: Food Quotations”. Or choose two quotations that present contradictory viewpoints.
3. Select a statistic from “Appendix C: Fast Facts About the Global Food Crisis”.

### C. The Price of Rice

Bring a sample bag of rice (or some other grain) into the classroom. Tell students what you paid for it. Ask the class to brainstorm factors that determine food costs. Responses might include: costs of farming such as labour, machinery, fertilizer, irrigation, and seeds; costs of transporting food to market; supermarket profit margins; retail overhead costs such as employees and storage; and supply and demand. Create a mind map of the responses on the board, starting with the food commodity (i.e. rice) and its corresponding price in the centre of the map. Ask students to speculate on what percentage or portion of the retail price is affected by the factors they have isolated. Use this activity to bridge to the “Causes” and “Impacts” sections of this guide.



# 1 Introduction

## The Global Food Crisis: Lesson Openers

### **D. Riddle Activity: Factors in Food Insecurity**

Distribute copies of “Appendix D: Riddle Activity: Factors in Food Insecurity” for students to solve alone, in pairs, or in small groups. Each riddle represents a major cause or factor contributing to the current state of global food insecurity. Alternatively, form six groups in the class and give each one a single riddle. Once they have guessed the riddles and verified the correct answers, each group presents its riddle in a creative format for the rest of the class to guess (e.g. skit, mime, choral reading, song lyric, or charade). Use this activity to bridge to the “Causes” and “Impacts” sections of this guide.

### **E. A Hungry Planet Slide Show**

Access photos from *A Hungry Planet* (see bibliography) and create a slide show for the class. These photos provide a wealth of information about the food ethics and circumstances of different cultures and countries around the world, as well as the central importance of food and eating rituals in family life. Ask students to form small groups and provide a list of questions and activities to help them analyze each photo. Share responses as a large group. Use this activity to bridge to the “Impacts” section of this guide.

#### ***Suggested questions and activities:***

1. Record observations on family size and economic status; modernity of cooking methods; amount and nutritional quality of food eaten; food you do or do not recognize; and food that appears store bought, homemade, or locally produced.
2. Create a chart comparing nutritional quality, diversity of food consumption, and costs of food in wealthy countries/families versus poor ones.
3. Compare various diets to that of your own family. Which foods are similar? Which ones are missing?
4. Using clues from the photos, speculate on reasons why diets differ between various countries.
5. What does each family’s food supply and costs reveal about their standard of living, social and economic circumstances, and cultural traditions?

#### ***The photos can also be used to synthesize more creative responses:***

1. Design a dinner menu for one of the families.
2. Dramatize the dinnertime conversations of a family from one of the photos. Contrast with a scene from a different family. Interesting comparisons can be made between families in developed and developing countries.
3. Develop a set of interview questions a journalist might ask one of the families.
4. Imagine you are a professional nutritionist. Using *Canada’s Food Guide* (see bibliography) analyze the diet of one family, looking at nutritional content and overall healthiness. Write a report of your findings, making recommendations if necessary.
5. Choose one or more of the countries depicted and research its population, life expectancy, poverty levels, daily caloric intakes per capita, obesity rates, and health care expenditures. Represent findings in line, bar, or pie graphs to compare and analyze statistics.

# 2

## Causes of Global Food Insecurity

### It's Not So Simple

At the most basic level, the recent food crisis has been caused by rising food prices around the globe. Here are a number of the underlying factors that have led to the soaring food prices of corn, soybeans, wheat, rice, and other crops throughout the past year.

**Rising price of oil:** A large amount of oil is needed to produce fertilizers, to run industrial farm machinery, and to transport food. Oil prices have risen six-fold since 2002, directly affecting the cost of food production and transportation.

**Demand for biofuels:** High demand for alternative energy sources has meant that growing crops for fuel is often more profitable than growing crops for food. It is estimated that 30 per cent of US corn production in 2008 will be used to produce ethanol.<sup>6</sup>

**Drought and climate change:** Adverse weather conditions have reduced harvests in major grain producing countries. For example Australian wheat production in 2007-2008 was down 52 per cent from production in 2006 - 2007.<sup>7</sup>

**Declining agricultural productivity:** In many rural areas, where 70 per cent of the world's poorest 1.2 billion people live and work, agricultural productivity is sharply declining. Much of this is a result of land degradation, which affects up to two-thirds of the world's agricultural land.<sup>8</sup> Constraints on water supplies, higher oil prices, and reduced government investment in agriculture have also had an impact.

**Low grain reserves:** Government and private wheat reserves are at an all-time low. The world has consumed more grain than it has produced for the past eight years and is only one to two months short of the next harvest from running out of food.<sup>9</sup>

**Market speculation:** In 2007, market speculators began investing more heavily in food and industrial commodities markets to take advantage of rising prices. The full impact of these investments is not clear, but they may contribute to short-run price fluctuations and immediate price inflations.

**Changes in incomes:** Rapid economic growth in China, India, and other developing countries means that greater numbers of the world's population can now afford to eat more of what they traditionally eat, as well as more meat. Increased demand for meat in particular puts pressure on resources such as water supplies and grain needed to feed livestock.

<sup>6</sup> International Food Policy Research Institute, *Rising Food Prices: What Should Be Done?* [www.globalpolicy.org/socecon/hunger/general/2008/04should.pdf](http://www.globalpolicy.org/socecon/hunger/general/2008/04should.pdf) (April, 2008).

<sup>7</sup> United States Department of Agriculture Foreign Agricultural Service (USDA FAS), [www.fas.usda.gov/psdonline/psdreport.aspx?hidReportRetrievalName=BVS&hidReportRetrievalID=750&hidReportRetrievalTemplateID=7](http://www.fas.usda.gov/psdonline/psdreport.aspx?hidReportRetrievalName=BVS&hidReportRetrievalID=750&hidReportRetrievalTemplateID=7) (October, 2008).

<sup>8</sup> United Nations World Summit on Sustainable Development, 2002.

<sup>9</sup> Eric Reguly, "What crisis? Worst is yet to come", *Globe and Mail*, June 2, 2008.

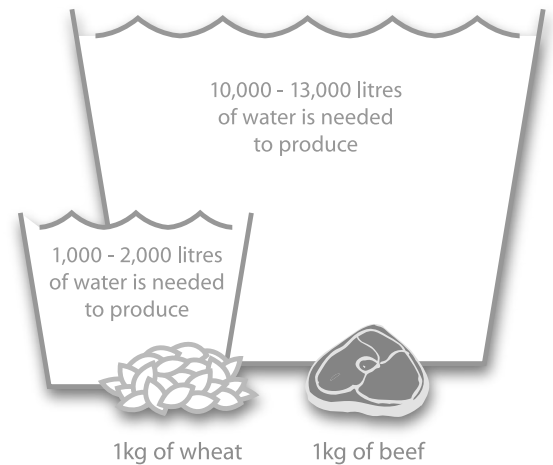
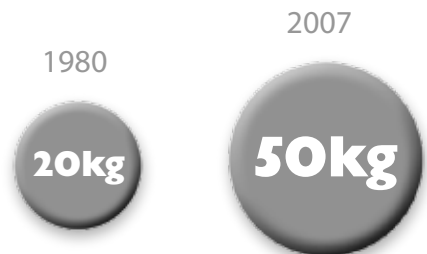
## 2 Causes of Global Food Insecurity

It's Not So Simple

### Pressure on Resources Changing

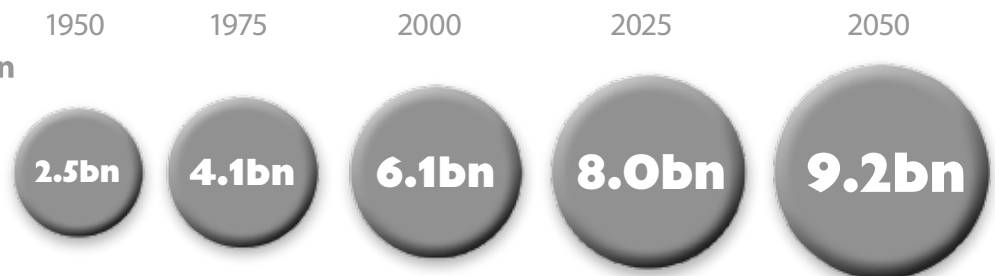
#### Eating Habits

Meat consumption in China per capita



**Population growth:** The global population has been growing steadily for the past 50 years to a current estimated size of 6.7 billion people. At the current rate of growth, there will be billions more mouths to feed in the year 2050, putting additional pressures on long-term food supplies.

#### World Population Growth



Source: UN, [http://www.un.org/esa/population/publications/wpp2006/WPP2006\\_Highlights\\_rev.pdf](http://www.un.org/esa/population/publications/wpp2006/WPP2006_Highlights_rev.pdf)

**Urbanization:** It is estimated that for the first time in history more than half of the world's population, about 3.4 billion, now live in urban areas. This long-term trend has placed more demand on farmers to produce enough food to feed city dwellers.

**Export restrictions:** In an attempt to mitigate the effects of the food crisis on their own populations, some countries have partially or completely restricted the exports of various foodstuffs.<sup>10</sup> These bans have resulted in an even more precarious situation for countries that are net food importers.

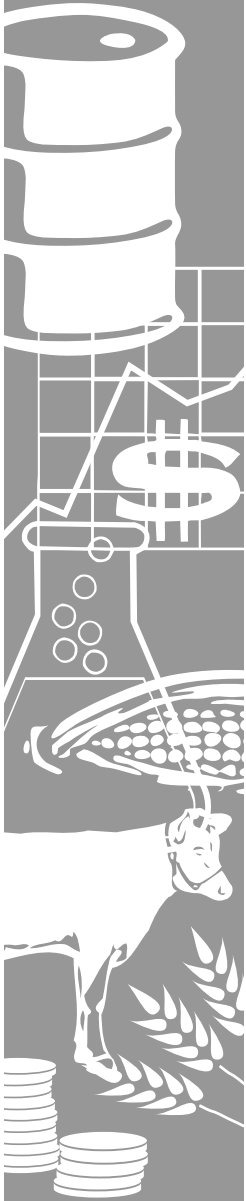
**Liberalization of markets:** In the second half of the twentieth century, developing countries were strongly encouraged to open their markets to free trade. Loans from the International Monetary Fund (IMF) and the World Bank tended to be conditional on Structural Adjustment Programmes, or SAPs. The SAPs introduced policies requiring a reduction in price security for farmers, little or no government subsidies for farmers, and a reduction of tariffs on imported goods. The legacy of this market liberalization in the food system is that the urban and rural poor became more vulnerable to the shocks of global market forces.

<sup>10</sup> Countries that have banned exports include Argentina, Bolivia, China, Egypt, Ethiopia, India, Kazakhstan, Malaysia, Pakistan, Russia, Tanzania, Vietnam, Indonesia, Malawi, and Zambia. Ukraine and Cambodia imposed bans but have since lifted them.

# Close-up on Six Food Insecurity Factors:

Oil, Ethanol, Climate Change, Meat Production, Grain Stocks, and Money Markets

The following fact sheets are for use as handouts for class discussions or small group work, or as a starting point for more detailed research.





# Fact Sheet #1: Oil

## Facts About Oil

- Oil is a non-renewable resource and the basis of modern industrial economies
- Scientists estimate that within the next few decades the demand for oil will exceed production and reserves will run out
- Countries with the largest oil reserves are: Saudi Arabia, Canada, Iran, Iraq, Kuwait, United Arab Emirates, Venezuela, Russia, Libya, and Nigeria
- Wars over oil have been fought in Kuwait, Iraq, Nigeria, and Sudan; as oil reserves are depleted, wars over this resource could increase
- Increased worldwide consumption of oil and gas results in emissions of greenhouse gases, which cause climate change

## Links Between Oil and Food Insecurity

- Oil prices have risen six-fold since 2002; they are predicted to double again by 2012, sending gas prices to \$2.25 CAD a litre<sup>11</sup>
- Improving economies in China and India have increased their demand for oil to support manufacturing and production; improved living standards in these countries have created more demand for personal vehicles and fuel
- Production of crop fertilizers requires large amounts of oil and natural gas; the rise in the price of oil has resulted in the cost of fertilizer doubling between fall 2007 and spring 2008<sup>12</sup>
- Oil provides most of the energy to run farm machinery, so the rising cost of oil is increasing production costs for farmers
- In our current global food system, food is mass produced in a few countries and exported to other countries around the world, requiring large amounts of oil for transportation; many people have adopted the 100-Mile Diet, which encourages buying and consuming food grown and produced within 100 miles of their homes as a way to reduce the use of oil in food transportation
- Diminishing oil supplies, combined with growing awareness of the environmental impact of burning oil, has led to interest in the use of biofuels, such as ethanol, as alternatives; however, biofuels are produced using food sources such as corn and sugar cane, so diverting food crops for fuel contributes to smaller food reserves worldwide

<sup>11</sup> Paul Waldie, "Why grocery bills will soar", *Globe and Mail*, April 25, 2008.

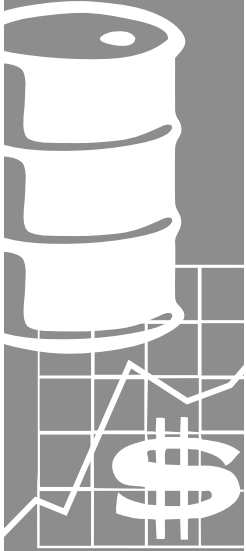
<sup>12</sup> Ibid.

# Fact Sheet #1: Oil

(cont'd)

## For Discussion

1. List the ways rising oil prices contribute to global food insecurity.
2. What are the benefits and drawbacks of oil use?
3. Countries in the West developed their economies with an almost unlimited use of global oil reserves. Should countries with emerging economies, such as China and India, restrict their consumption of oil in the face of diminishing supplies and environmental concerns? Why or why not?
4. What are the implications of a future oil crisis (i.e. diminishing supplies and rising prices) for the global economy? For Canada? What impact would an oil crisis have on you and your family?
5. What could be done to avert a future oil crisis?



# Fact Sheet #2: Ethanol

## Facts About Ethanol

- Ethanol, or ethyl alcohol, is a volatile, flammable, and colourless liquid that burns with a blue flame
- It is found in alcoholic beverages and thermometers, but its single largest use is as fuel or a fuel additive
- Ethanol is commonly blended with gasoline and used as a source of automobile fuel nicknamed “gasohol” (90 per cent gasoline and 10 per cent ethanol)
- The ethanol industry in Brazil is based on sugar cane; the US and Canada’s ethanol industries are based on corn
- Ethanol is a cleaner burning fuel source than oil, so it reduces greenhouse gas emissions that contribute to climate change
- Ethanol is expensive to produce and requires intensive energy inputs; some scientists argue that the production of ethanol requires more energy than it ultimately yields

## Links Between Ethanol and Food Insecurity

- Ethanol is the source of much controversy: some people want to increase its production as a more efficient fuel additive (to cut greenhouse gases) and others argue that using crops for fuel rather than food has decreased the global food supply and contributed to rising food prices
- In Canada, refiners are required to ensure five per cent ethanol content in their gasoline by 2010; the five per cent ethanol content regulation would reduce greenhouse gas emissions by 4.2 million tonnes annually, the equivalent of taking one million cars off the road<sup>13</sup>
- Ontario is reconsidering its plan to require 10 per cent ethanol content in gasoline by 2010<sup>14</sup> due to concerns the corn-based fuel is boosting food prices<sup>15</sup>
- Some analysts have blamed biofuels for pushing up food prices as much as 30 to 60 per cent, while others argue biofuels have only increased food prices two to three per cent<sup>16</sup>
- Brazil’s ethanol industry is based on using alcohol from sugar cane, which is not a food staple and is a more efficient source of ethanol than corn
- Eco-agricultural specialists argue that other plant-based and non-food sources of ethanol production (such as switchgrass) are better alternatives
- One person could be fed for a year on the corn needed to fill an ethanol-fueled SUV<sup>17</sup>
- Farmers in some developed countries receive government subsidies to grow corn for ethanol; \$11 to \$12 billion US a year in subsidies and tariffs has diverted 100 million tonnes of cereals from human consumption<sup>18</sup>

<sup>13</sup> Estimate by Natural Resources Canada, cited in Shawn McCarthy, “A lobby machine that runs on ethanol”, *Globe and Mail*, May 30, 2008.

<sup>14</sup> “Canada’s hypocrisy on hunger”, *Globe and Mail*, June 2, 2008.

<sup>15</sup> Robert Benzie, “McGuinty has second thoughts on ethanol plan”, *Toronto Star*, July 10, 2008.

<sup>16</sup> Eric Reguly, “Biofuels come under fire at UN food summit”, *Globe and Mail*, June 4, 2008.

<sup>17</sup> Oxfam report, cited in Eric Reguly, “Biofuels come under fire at UN food summit”, *Globe and Mail*, June 4, 2008.

<sup>18</sup> Jacques Diouf, cited in Eric Reguly, “Biofuels come under fire at UN food summit”, *Globe and Mail*, June 4, 2008.



# Fact Sheet #2: Ethanol

(cont'd)

## For Discussion

1. List the ways increased use of ethanol contributes to global food insecurity.
2. What are the benefits and drawbacks of ethanol use?
3. Debate whether the benefits of producing and using ethanol outweigh the costs to the global food supply.
4. Suggest ways for moving forward in ethanol production. Is it possible to balance the needs for transportation fuel with environmental sustainability and global food security?





# Fact Sheet #3: Climate Change

## Facts About Climate Change

- Average temperatures have climbed 1.4 degrees Fahrenheit (0.8 degree Celsius) around the world since 1880, much of this in recent decades, according to NASA's Goddard Institute for Space Studies<sup>19</sup>
- The twentieth century's last two decades were the hottest in 400 years and possibly the warmest for several millennia, according to a number of climate studies; the United Nations' Intergovernmental Panel on Climate Change reports that 11 of the past 12 years are among the dozen warmest since 1850<sup>20</sup>
- Average temperatures in Alaska, western Canada, and eastern Russia have risen at twice the global average, according to the Arctic Climate Impact Assessment report compiled between 2000 and 2004; Arctic ice is rapidly disappearing, and the region may have its first completely ice-free summer by 2040 or earlier<sup>21</sup>
- Nine planet Earths would be required to absorb all the world's carbon if every poor person had the same energy-rich lifestyle as an American or a Canadian<sup>22</sup>
- On average, one person out of 19 in a developing country will be hit by a climate disaster, compared to one out of 1,500 in a developed country<sup>23</sup>
- In Niger, a child born during a drought is 72 per cent more likely to be stunted than a child born during a normal season<sup>24</sup>

## Links Between Climate Change and Food Insecurity

- Several distinct weather incidents in recent years have resulted in reduced wheat and rice harvests; scientists have linked these weather patterns to the effects of climate change; examples:
  - An extended drought in Australia's Murray-Darling Basin in 2006–2007 reduced Australian wheat production by 58 per cent from the previous year<sup>25</sup>
  - A 2006 heat wave in California's San Joaquin Valley killed large numbers of livestock
  - In 2008, rains in Kerala, India, destroyed large swaths of grain
  - In May 2008, cyclone Nargis in Myanmar (Burma) destroyed much of the country's rice crop

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<sup>19</sup> National Geographic News, *Global warming fast facts*, [http://news.nationalgeographic.com/news/2004/12/1206\\_041206\\_global\\_warming.html](http://news.nationalgeographic.com/news/2004/12/1206_041206_global_warming.html) (June 14, 2007).

<sup>20</sup> Ibid.

<sup>21</sup> Ibid.

<sup>22</sup> United Nations Development Programme Fast Facts, *UNDP and Climate Change*, [www.undp.or.id/factsheets/2007/UNDP%20and%20Climate%20Change%20-%20Bali.pdf](http://www.undp.or.id/factsheets/2007/UNDP%20and%20Climate%20Change%20-%20Bali.pdf) (December, 2007).

<sup>23</sup> Ibid.

<sup>24</sup> Ibid.

<sup>25</sup> USDA FAS, 2007.



# Fact Sheet #3: Climate Change

(cont'd)

- It is estimated that by 2080, agricultural output in developing countries could decline by 20 per cent and yields could decrease by 15 per cent on average due to climate change leading to water scarcity<sup>26</sup>
- Agricultural practices are a major contributor to greenhouse gas emissions (17 to 32 per cent of greenhouse gas emissions are a result of agriculture or land use changes)<sup>27</sup>
- The production and use of synthetic fertilizers emit nitrous oxides, methane gas, and carbon dioxide into the atmosphere
- Intensification of farming practices has resulted in a huge increase in fertilizer use
- Other farm operations (e.g. tillage, seeding, application of agrochemicals, and harvesting) also emit carbon dioxide
- Livestock production generates nearly one-fifth of the world's greenhouse gases, more than transportation<sup>28</sup>; 1 kilogram of beef produces the same amount of carbon dioxide emitted by the average European car every 250 kilometres<sup>29</sup>

## For Discussion

1. Explain how changing weather patterns contribute to global food insecurity.
2. How do agricultural practices contribute to climate change? What can be done to lessen their impact?
3. Why do we continue to use fertilizers on a large scale to increase crop yields, when using more sustainable farming practices will be better for the environment in the long-run?
4. Suggest ways that the needs for an increased global food supply and environmental sustainability might both be met. Will trade offs be necessary? If so, which side do you favour and why?

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<sup>26</sup> Martin Khor, *Food Crisis, Climate Change and Sustainable Agriculture* (presented at the Food Security Summit in Rome, June 2008).

<sup>27</sup> Greenpeace, *Agriculture's climate change role demands urgent action*, [www.greenpeace.org/canada/en/recent/agriculture-and-climate-change](http://www.greenpeace.org/canada/en/recent/agriculture-and-climate-change) (January, 2008).

<sup>28</sup> Mark Bittman, "The staggering cost of rising world meat production", *International Herald Tribune*, January 28, 2008.

<sup>29</sup> Ibid.

# Fact Sheet #4: Meat Production

## Facts About Meat Production

- Livestock can be raised in different ways, but the majority of meat production in North America is done through factory farming rather than smaller-scale animal husbandry practices
- The aim of factory farming is to produce as much meat as possible for the lowest financial cost; unfortunately, this often includes a high cost to the environment
- On a global scale, the wealthy eat the most meat, often at the expense of poorer people who depend on staple food grains that are diverted to feed livestock
- Developed countries have consumed more than their share of the global meat supply for many decades; the average daily meat consumption of Americans is eight ounces—roughly twice the global average<sup>30</sup>

## Links Between Meat Production and Food Insecurity

- As economies in developing countries are growing, demand for meat is also growing; demand for meat in China has doubled in the last two decades<sup>31</sup>
- The majority of the corn and soybeans grown in the world is used to feed livestock rather than people—an increased demand for meat means an increased demand for grain
- Producing one kilogram of chicken meat requires 3.4 kilograms of feed; one kilogram of pork requires 8.4 kilograms of feed<sup>32</sup>
- Livestock production generates nearly one-fifth of the world's greenhouse gases, more than transportation<sup>33</sup>; one kilogram of beef produces the same amount of carbon dioxide emitted by the average European car every 250 kilometres<sup>34</sup>
- An estimated 30 per cent of the earth's ice-free land is used for livestock production<sup>35</sup>
- Although a person can live on food grown on 0.2 hectares (0.5 acres) of land or less, it takes four football fields, or 1.6 hectares of land to feed one Canadian<sup>36</sup>
- Animal waste contributes to nitrate, phosphorus, and nitrogen pollution in rivers and groundwater
- Overgrazing of land contributes to soil erosion, deforestation, and greenhouse gases
- Most of the world's rangelands are currently grazed at or beyond capacity; since the 1960s, one-third of the forests in Central America have been cut down for cattle grazing<sup>37</sup>

<sup>30</sup> Ibid.

<sup>31</sup> Ibid.

<sup>32</sup> USDA, 1997, cited in Stephen Leckie, *How Meat-Centred Eating Patterns Affect Food Security and the Environment*, International Development Research Centre (IDRC), 1999.

<sup>33</sup> Mark Bittman, "The staggering cost of rising world meat production", *International Herald Tribune*, January 28, 2008.

<sup>34</sup> Ibid.

<sup>35</sup> Ibid.

<sup>36</sup> Agriculture Canada, 1992, cited in Stephen Leckie, *How Meat-Centred Eating Patterns Affect Food Security and the Environment*, IDRC, 1999.

# Fact Sheet #4: Meat Production

(cont'd)

## For Discussion

1. How does increased meat production and consumption contribute to global food insecurity?
2. What are the benefits and drawbacks of livestock production?
3. Consumption of meat in rich countries has reached an unsustainable level while at the same time people in the developing world are increasing both their income and their meat consumption. What can be done about this pressure on food supplies?
4. Overproduction of meat has resulted in two major global problems: reduction in food security for the world's poor and environmental degradation. What solutions would you propose for these problems?



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<sup>37</sup> FAO, 1990, cited in Stephen Leckie, *How Meat-Centred Eating Patterns Affect Food Security and the Environment*, IDRC, 1999.



# Fact Sheet #5: Grain Stocks

## Facts About Grain Stocks

- Grains, also called cereal crops, include maize or corn, rice, wheat, oats, barley, sorghum, and rye
- Grains are grown in greater quantities than any other crop worldwide and provide more energy for the world's population than any other crop group
- In developing countries, grain—in the form of corn or rice—comprises the majority of the population's diet
- The United States, Australia, Canada, China, India, Russia, France, and Argentina are leading wheat exporters
- Thailand, India, Vietnam, the United States, and Pakistan are leading rice exporters
- The amount of grain exported each year depends on a number of factors, including weather conditions, harvests, and export controls placed by governments concerned about domestic supplies

## Links Between Grain Stocks and Food Insecurity

- Increasing demand for grain as livestock feed, extreme weather conditions, water scarcity, and low stockpiles have all resulted in rising grain prices
- In January 2008, the FAO Food Price Index (FFPI) jumped by 47 per cent from the year before, led by increases in cereals (62 per cent), dairy (69 per cent), and vegetable oils (85 per cent)<sup>38</sup>
- Prices of nearly all food commodities have risen since the beginning of 2008 supported by a persistent supply and demand situation; rice prices gained the most, corn prices also made gains, and because of low stocks, wheat prices are well above 2007 levels<sup>39</sup>
- An extended drought in Australia's Murray-Darling Basin in 2006–2007 reduced Australia's wheat production by 58 per cent from the previous year<sup>40</sup>
- In May 2008, cyclone Nargis in Burma destroyed much of Burma's rice crop; the effects of the storm may mean that Burma will be forced to import rice for the first time
- Grain stockpiles have been declining as a “just-in-time” inventory method—producing without storing large surpluses—has become the norm; in times of crisis this means fewer grain reserves to draw upon

<sup>38</sup> FAO, *Twenty-ninth FAO Regional Conference for the Near East*, <ftp://ftp.fao.org/docrep/fao/meeting/014/k2369e2.pdf> (March, 2008).

<sup>39</sup> FAO, *Crop Prospects and Food Situation*, 2008.

<sup>40</sup> USDA FAS, 2007.

# Fact Sheet #5: Grain Stocks

(cont'd)

- Government and private wheat reserves are at an all-time low; the world consumed more grain than it produced for the past eight years and grain stockpiles are only 40 days short of the next harvest from running out of food<sup>41</sup> (in 1998 and 1999, it was 116 days)<sup>42</sup>
- In order to feed their own populations, some governments have partially or completely restricted the exports of various foodstuffs (e.g. Argentina, Bolivia, Cambodia, China, and Vietnam)
- Prices for grain products have risen more than eight per cent in Canadian stores; Maple Leaf Foods Inc. raised the price of a loaf of bread by 40 cents<sup>43</sup>

## For Discussion

1. Why is the demand for grain increasing?
2. Why is the global supply of grain decreasing?
3. In order to prevent a worse situation of world hunger, global grain reserves need to be built up. However, stockpiling grain when prices are volatile leads to higher food prices and hoarding. What role should governments play in this situation?
4. Is it right for governments of grain-exporting countries to partially or completely ban exports in order to feed their own populations first? Or should they make the food needs of the global population their main priority?
5. Propose possible solutions to ensure global grain supplies are adequate both now and in the future.

<sup>41</sup> Eric Reguly, "What crisis? Worst is yet to come", *Globe and Mail*, June 2, 2008.

<sup>42</sup> James Randerson, "Food crisis will take hold before climate change, warns chief scientist", *The Guardian*, March 7, 2008.

<sup>43</sup> Paul Waldie, "Why grocery bills will soar", *Globe and Mail*, April 25, 2008.

# Fact Sheet #6: Money Markets

## Facts About Money Markets

- Capitalist economies are driven by money and making profits
- One way people make money in capitalist systems is by playing the stock market and speculating that the price of a good or service will increase in the future—in other words, buying stocks while the price is low and selling when the price is high
- The process of buying and selling stocks, bonds, currencies, real estate, commodities, or any other valuable financial instrument is called “financial speculation”
- Recent financial speculation in food commodities such as corn, wheat, soybeans, and rice has caused prices of these commodities to rise

## Links Between Money Markets and Food Insecurity

- Due to the downturn in the US economy and the weakening US dollar, investors have recently removed money from equities and mortgage bonds and invested in food and raw materials, contributing to a sharp increase in prices of food commodities
- The amount of money invested in food commodities has grown from \$13 billion US in 2003 to \$260 billion US in March 2008<sup>44</sup>
- Speculators are betting on food scarcity in the future due to increasing corn production for ethanol, the effects of severe weather patterns, and the rising price of oil
- Importing countries are being hit by higher food prices, which benefit large farming conglomerates in exporting countries; smaller scale farming operations producing for domestic markets benefit very little from food price increases
- Mexico used to produce enough maize to supply its domestic market plus export a surplus, however with pressure from the North American Free Trade Agreement (NAFTA) to open its market to imports, Mexico now imports 30 per cent of its maize; meanwhile, speculation has driven up the cost of maize in the US, which has led to higher costs for Mexicans, causing a “tortilla crisis” for the Mexican poor<sup>45</sup>

<sup>44</sup> Sinclair Stewart and Paul Waldie, “Feeding Frenzy”, *Globe and Mail*, May 31, 2008.

<sup>45</sup> La Via Campesina, *An Answer to the Global Food Crisis: Peasants and Small Farmers can Feed the World!*, [www.viacampesina.org](http://www.viacampesina.org) (July, 2008).



# Fact Sheet #6: Money Markets

(cont'd)

For Discussion

1. How does financial speculation contribute to global food insecurity?
2. Who profits from rising food commodity prices? Who suffers?
3. The buying and selling of food commodities turns food into a profit-making instrument for investors; however, food is also a basic human right that should be universally available to all. Debate the ethical and social implications of this situation.
4. Propose possible approaches to reduce the impact of financial speculation and global markets on global food shortages now and in the future.



## 2 Causes of Global Food Insecurity

### Suggested Classroom Activities

#### A. A Web of Causes

<b>Use to:</b>	visually demonstrate the interconnected nature of factors contributing to the global food crisis; review terms and facts learned about causes of food insecurity
<b>Students will:</b>	engage in critical thinking; verbal communication; small group discussion; and synthesis
<b>Subjects:</b>	geography, food and nutrition, world issues, or economics

Use the six fact sheets on food insecurity factors (pages 15–26) and “Appendix E: A Web of Causes” for this assignment. Divide the class into six “expert” groups, numbered one through six, one for each factor. (Note: adapt the number of groups to suit class size.) In groups, read and discuss the fact sheets, and answer the discussion questions. Each “expert” in the group takes point-form notes during the discussion. Students number themselves off within their groups and form new breakout groups that include one member from each of the six expert groups (all the number ones gather, all the twos, etc.). In the new groups, the “experts” share information about each food insecurity factor. The members of the breakout group then complete the blank mind map to illustrate all the possible connections between the six food insecurity factors as they contribute to global food insecurity.

#### B. The Way Forward: Research Assignment

<b>Use to:</b>	explore innovative approaches that address problems related to world hunger and future trends in food production and consumption
<b>Students will:</b>	research a topic of personal interest; communicate their findings in written and/or oral formats
<b>Subjects:</b>	family studies, food and nutrition, economics, or science

A number of innovative and creative approaches exist to address global hunger. Get students to research—independently, in pairs, or in small groups—one innovation that addresses food insecurity or world hunger. Findings can be presented in essay format as well as oral presentations, panel discussions, or group seminars. Consider using the researched information to formulate debate topics for the “Oxford Style Debates” activity on page 28.



## 2 Causes of Global Food Insecurity

### Suggested Classroom Activities

#### ***The Way Forward: Suggested research topics:***

1. Eco-agricultural farming techniques
2. African Moringa trees (used to combat extreme hunger)
3. 100-Mile Diet
4. Slow Food movement
5. Converting animal waste to energy (Israel and Korea)
6. Meat Without Feet (in vitro meat production)
7. Alternative sources of ethanol (e.g. switchgrass)
8. Organic gardening and farming practices
9. Consumer and producer food co-operatives (e.g. Amul, a milk producing co-operative in India)
10. Urban rooftop gardens
11. Bees for Development (beekeeping to create sustainable livelihoods in developing countries)
12. Vegetarian and vegan food choices

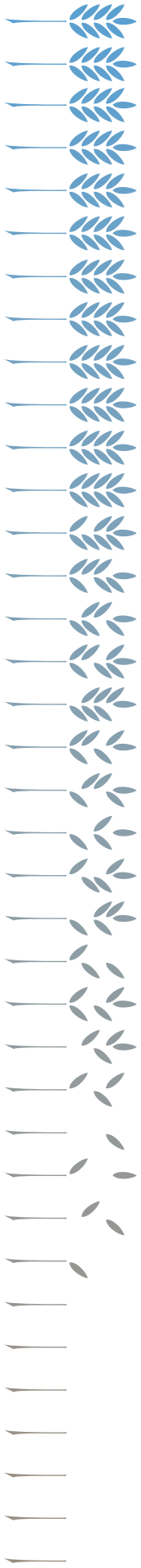
#### **C. Oxford Style Debates**

<b><i>Use to:</i></b>	deepen students' understanding of some central issues in global food insecurity
<b><i>Students will:</i></b>	engage in critical thinking; develop research and oral debating skills
<b><i>Subjects:</i></b>	English, economics, world issues, civics, politics, or business

Based on student research, develop a set of debatable statements about the causes of global food insecurity. Create debate teams composed of three members on each side who will argue either for or against the statements. Present the debates in an adapted Oxford style.

The Oxford style of debate allows audience members to pose questions from the floor to the debating teams once the opening statements have been made. At the end of the debate the presiding judge (the teacher or another student) asks the audience, by means of a simple hand count, which side won. Audience members base their decisions on which team offered the most convincing arguments and support materials. The judge makes the final decision as to the winner of the debate, and shares the rationale for the decision. A variation to audience participation is allowing observers to physically move from one side of the debate to the other when a persuasive and convincing argument is presented. Debates also offer evaluation opportunities at the research and presentation stages.

For more detailed information on the Oxford style of debating go to:  
[www.uscourts.gov/outreach/topics/habeascorpus\\_oxford.htm](http://www.uscourts.gov/outreach/topics/habeascorpus_oxford.htm)



## 2 Causes of Global Food Insecurity

### Suggested Classroom Activities

#### *Oxford Style Debates: Sample debate statements*

1. The benefits of producing and using ethanol outweigh its costs to the global food supply.
2. Purchasing and consuming locally produced foods will not have a significant impact on global food security.
3. Countries with emerging economies, such as China and India, should restrict their consumption of meat products in the face of diminishing supplies and environmental concerns.
4. We should return to small-scale farming approaches using eco-agricultural techniques, instead of relying on high-yield, large-scale farming operations.
5. It is unethical for governments to partially or completely ban grain exports in order to protect their own supplies, when there is a global shortage of food grains.
6. The buying and selling of food commodities as a profit-making vehicle for investors compromises basic human rights.

# 3

## Impacts of Global Food Insecurity

### What is Food Security?

*Food security, at the individual, household, national, regional and global levels, is achieved when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life.*

—World Food Summit, Overseas Development Institute, 1997

Food security is comprised of four components:

1. **Food availability:** efficient food production and processing, and functioning systems of trade
2. **Food accessibility:** sufficient purchasing power to acquire food
3. **Food utilization:** nutritional food choices are made, food safety and quality is ensured, and clean water and sanitation exists for safe food preparation
4. **Food stability:** availability, accessibility, and utilization of food is maintained in the face of natural, economic, social, or policy shocks and stresses

### The Big Picture: Broad Impacts

*With 100 million people on the brink of abject poverty, the cost of food will not be measured in the price of wheat and rice, but in the rising number of infant and child deaths across Africa.*

—Kofi Annan, Former UN Secretary-General

The effects of the global food crisis are still unfolding. However, some social, political, economic, and humanitarian effects are already acutely felt:

- 850 million people in the world experience hunger on a daily basis; this crisis could push another 100 million people into poverty<sup>46</sup>
- The physical and intellectual development of children and adults will be stunted by lack of nutritious food; 35 million children are at increased risk of malnutrition<sup>47</sup>

<sup>46</sup> FAO, *Soaring Food Prices*, 2008.

<sup>47</sup> World Bank, *How Serious is Malnutrition and Why Does it Happen?*

<http://siteresources.worldbank.org/NUTRITION/Resources/281846-1131636806329/NutritionStrategyCh2.pdf> (2005).



### 3 Impacts of Global Food Insecurity

- Food riots have erupted in Haiti, Indonesia, Mexico, Bangladesh, Burkina Faso, Egypt, Senegal, Cameroon, Morocco, Yemen, Somalia, Ethiopia, Italy, and the Philippines
- Other forms of social unrest have occurred, such as theft of livestock, tools, aid rations, and aid vehicles
- Many economies have taken a downturn as rising food prices feed inflation and slow down economic growth, reducing job opportunities for the poor
- It has become more expensive for humanitarian agencies to distribute food aid; for example, the World Food Programme (WFP) needs an additional \$750 million US from donor governments to distribute the same amount of food aid in 2008 as it did in 2007<sup>48</sup>
- Children become more vulnerable as parents migrate and spend more time in search of work or food

#### Impacts on Families

*I'm so scared ... I don't know what we'll do now. We can't live without rice. For poor people, a grain of rice is like a pearl.*

—Nguyen Thi Bich Hoang, small-scale fruit seller in Vietnam

In times of crisis, the poor suffer most. Families that must spend a large portion of their income on food are more vulnerable to food price increases. In Canada, roughly 10 per cent of household income is spent on food.<sup>49</sup> In contrast, the bottom billion of the world's poor spends approximately 60 per cent of its income on food.<sup>50</sup>

#### Percentage of household income spent on food

Canada - 10%



Developing countries - 60%



<sup>48</sup> World Food Programme (WFP), [www.undispatch.com/archives/2008/04/world\\_food\\_prog\\_1.php](http://www.undispatch.com/archives/2008/04/world_food_prog_1.php) (April, 2008).

<sup>49</sup> Statistics Canada, <http://www40.statcan.gc.ca/l01/cst01/famil16a-eng.htm> (2006).

<sup>50</sup> FAO, *Soaring Food Prices*, 2008.

### 3 Impacts of Global Food Insecurity

Families respond to food insecurity differently depending on their levels of income. For example:

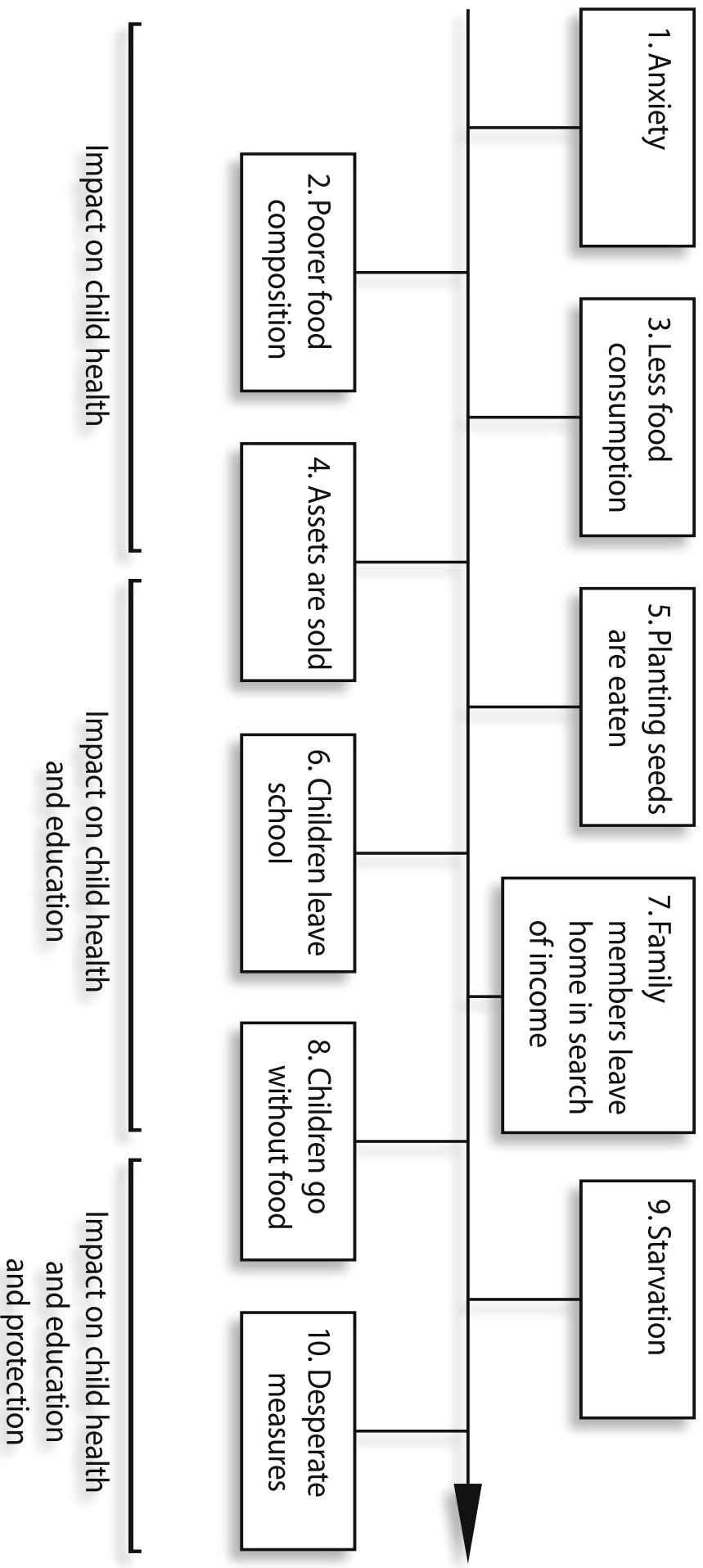
- middle-class families might give up routine health care and reduce their meat consumption;
- the middling poor—the 2.5 billion people who live on \$2 a day—might pull their children out of school and send them to work, or cut out meat and vegetables so they can afford rice;
- the poor—the one billion people who live on \$1 a day—might eliminate meat, vegetables, and one or two meals a day so they can afford one bowl of food; and
- the desperate—over 150 million people who live on 50 cents a day—face disaster.

The continuum below shows how families might move through a series of worsening stages when food security is threatened. Food shocks, such as the recent food and fuel price increases, can push families further along the continuum with devastating consequences. The long-term solution—moving back to greater food security—rests in families having improved access to food supplies and reliable family incomes.



# Impacts of Global Food Insecurity

## Food Insecurity Continuum





## 3 Impacts of Global Food Insecurity

### Stages Along the Continuum

1. **Anxiety:** stress arises from not knowing where food will come from in the days, weeks, and months ahead
2. **Poorer food composition:** changes occur in types of foods consumed (less meat, fewer vegetables, more carbohydrates), diminishing the nutritional quality of the diet although food quantity may not yet be affected
3. **Less food consumption:** the amount of food eaten lessens and parents (usually mothers) sacrifice their food for the children; sometimes boys get more than girls; three meals a day are often reduced to one or two
4. **Assets are sold:** families sell livestock or farm equipment for money to purchase food, making them more vulnerable in the long term
5. **Planting seeds are eaten:** families sacrifice seeds for next year's harvest to meet their immediate hunger needs
6. **Children leave school:** children drop out of school to work, sometimes in dangerous or abusive conditions
7. **Family members leave home in search of income:** when one or both parents are gone, children are more vulnerable
8. **Children go without food:** in most cases, this is a sign of extreme food insecurity, since parents will often give up their own food first to ensure their children eat
9. **Starvation:** children under age of five are most vulnerable to death by starvation
10. **Desperate measures:** this includes parents forcing young daughters into early marriage, selling children into prostitution, or putting them in orphanages to ensure they are fed, measures which compromise the protection and well-being of children

### Impacts on Children

*Even temporarily depriving children of the nutrients they need to grow and thrive can leave permanent scars in terms of stunting their physical growth and intellectual potential.*

—Andrew Thorne-Lyman, WFP nutritionist

Children are particularly vulnerable to the effects of the food crisis. Every human being has the right to adequate food and the fundamental right to be free from hunger. Every child has a right to health, education, and protection. The impact of the global food crisis on millions of children is a loss of the realization of all these rights.

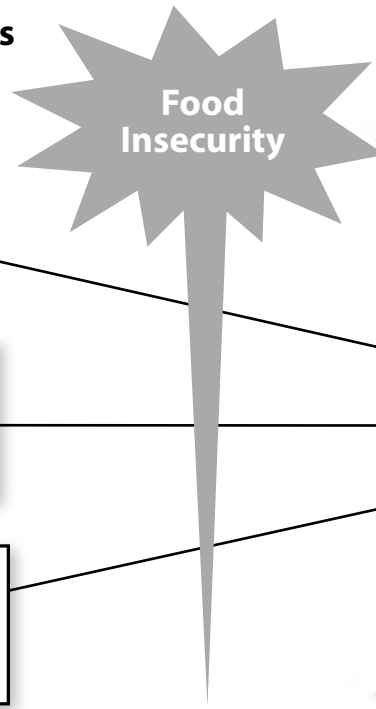
### 3 Impacts of Global Food Insecurity

#### Food Insecurity and Child Rights

1. The Right to Health  
—access to nutritious food,  
health services, and other needs  
for healthy development

2. The Right to Education  
—access to free education that  
develops a child as a whole person

3. The Right to Protection  
—from abuse, neglect, child labour,  
and all forms of exploitation



Most immediately, food insecurity affects the **health** of children without access to sufficient amounts of nutritious foods. Malnutrition leads to stunted growth and development, vulnerability to disease, and in its most severe form, starvation. A child's health also suffers when her family cannot afford access to medical care or life-saving medicines.

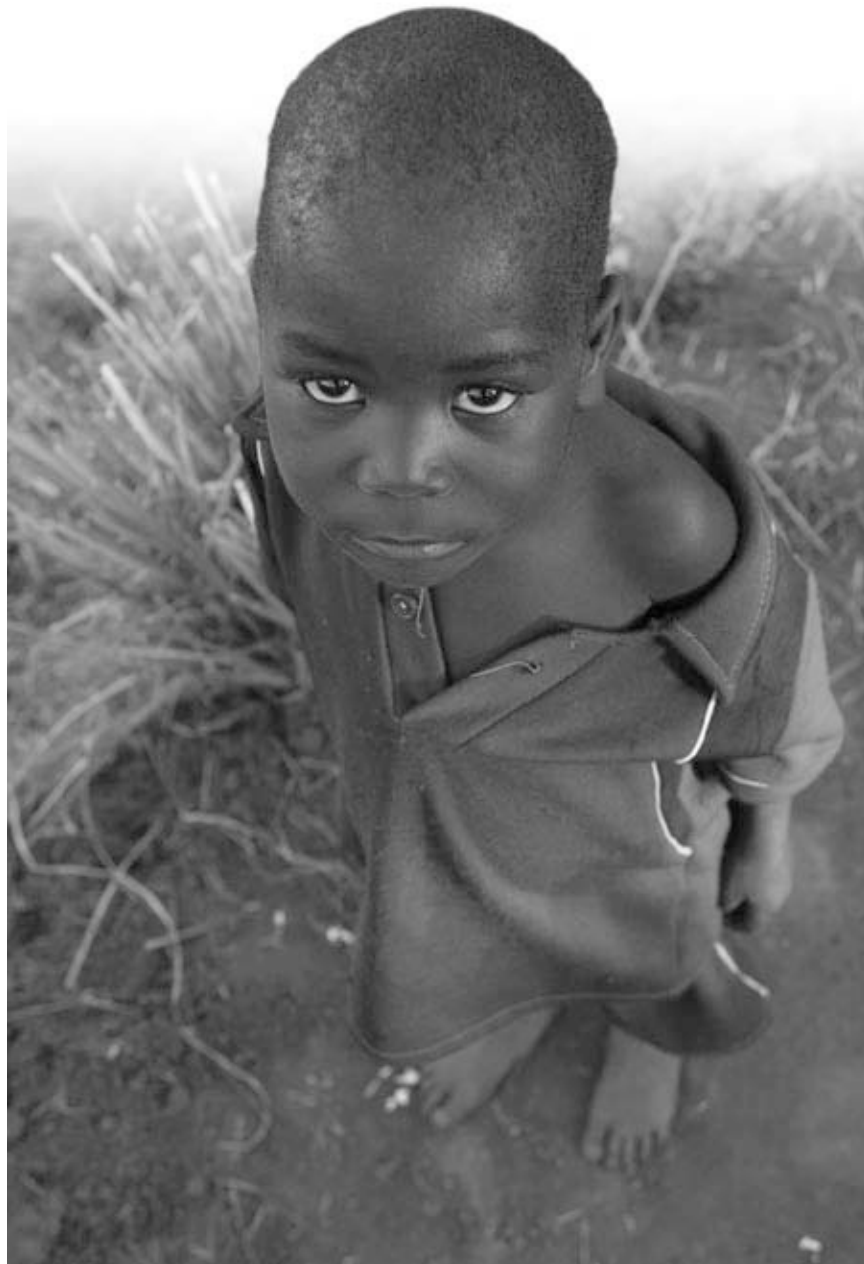
As food insecurity persists, children's **education** can be increasingly compromised. Hungry children have trouble concentrating in school because of lethargy and poor attention spans. If a family is struggling to feed itself, a child may be forced to drop out of school in order to work for food money. Girls in particular may be expected to sacrifice their education to earn an income, or to take over family responsibilities while parents work.

Food insecurity affects the **protection** of children. To earn extra income for their families, children may be forced to work in factories, in mines, or on farms. They might perform heavy labour, use unsafe equipment, or be exposed to chemicals. Girls who work as domestic help may be subject to poor treatment by their employers and even sexual abuse. In countries in conflict, poor children are more vulnerable to recruitment into armed groups as child soldiers. Some children may be forced to beg for food or money on the streets, leaving them vulnerable to abuse and exploitation. In some cases, desperate parents have even left their children at orphanages, where they may be better fed than at home. Young girls may be forced to become child brides in exchange for money, food, or animals, so they are less of a burden to feed (see "Case Studies for Class Discussion").

# Children at Risk:

## Case Studies for Class Discussion

The following four stories are of real children and families supported by World Vision, who struggle with the impacts of rising food prices, drought, or diminished family income, and the tough choices they are forced to make in order to survive. Students can work individually or in small groups on the discussion questions. The second question in each set poses a dilemma, the responses to which can be shared in large group discussions.



# Afghanistan:

## Child Brides

The main staple for most Afghans is wheat flour, used in making bread. In 2007, the price of an eight kilogram bag of wheat flour was 80 Afghani (\$1.60 US). Today it's 400 Afghani, or about eight dollars. This represents a 500 per cent increase. As wheat prices skyrocket, precious livestock is sold to subsidize family incomes.

Food insecurity, combined with serious drought, is driving some families in Afghanistan to desperate measures. When selling livestock does not provide enough income to survive, they will marry off daughters as young as seven years of age to ease their debt and pay for food and household expenses. Afghan law states that a girl must be 16 years of age and give consent to marry, but in the face of increasing hunger and debt, these laws are not being enforced.

### Fatima's Story

*Fatima\* is 11 years old. She is in grade three. Her favourite class is Dari language, her mother tongue. She loves her teacher, Miss Saleya. In the presence of guests, she is a shy and quiet child. Grasping her headscarf to her mouth, she lowers her eyes whenever she is addressed.*

"I like school," she says softly, almost in a whisper. "I am a good student. One day, I would like to be a doctor."

But it's not certain Fatima will realize her dream. Recently, her father engaged her to a local man in exchange for 300,000 Afghanis, the equivalent of \$6,300 US.

Her mother, a frail 35-year-old named Sausan\*, is seated in a far corner of the room. "We had to do this," she says with little emotion, her placid expression a sign of weariness. Earlier in the week, she gave birth to her seventh child and she suffers from anemia, a result of both nutritional deficiency and blood loss during labour.

"We have no money," she explains. "How can nine of us eat on two, maybe three dollars a day, with all the other expenses? We had to sell Fatima in order to pay all the people we owed."

"These days the high price of food is affecting us in a bad way," Sausan continues. "In the past, my husband's work as a daily labourer covered our expenses. But now, we are borrowing money just to buy food. We are in a very bad situation."

They survive on very little—tea and bread, dried yogurt soup, some potatoes, lentils, and chickpeas. It has been a long time since they tasted meat.

Fatima and two other siblings receive monthly food rations through World Vision's Food for Education program. This feeding program draws some 75,000 students to schools throughout Badghis and Ghor Provinces. But for many families, it is not enough.





# Afghanistan:

## Child Brides (cont'd)

Fatima's family does not have land or livestock to sell. Each month, half of the family's income covers rent for their small two-room mud house. What remains is not enough for wheat flour. Fatima is among the last of their "assets".

While her mother lists reasons for "selling" her daughter, Fatima sits quietly by the one window that sheds light into the dark room, and listens to children playing in a mud compound nearby. Every few minutes she looks out the window, an open space without glass, framed by two wooden shutters. She is as expressionless as her mother.

Sausan says that Fatima won't be forced to marry immediately. She can live at home and continue school for four more years. "In the agreement, we said she must."

But this family has seen hard times before, and two older sisters have not fared so well. The eldest daughter, Riala, 16, was forced into marriage at 11. Today she is the mother of two. The second daughter, Halima, 14, is also married with an 18-month-old daughter. Fatima will be fortunate if she is permitted to continue her schooling.

Sausan describes her situation in factual terms. This is not what she wanted for her family. "All I ever dreamed of having was a good house, enough food and a healthy family—a peaceful country, too, where my children could get an education." Fatima shares her mother's dream. "I wish we had a developed country. One that was peaceful and green." Then she adds, "And democratic."

Outside, the dry wind whips dust-like silt into the air. It settles into drifts that collect against the side of the house.

"We didn't want to sell her," her mother says. "We wanted to wait until she was 20. But we were forced to ..." Sausan's voice grows softer and trails off. "There was no other way."

\*names have been changed to protect identities

*Adapted from a story by Mary Kate MacIsaac, World Vision staff, June 2, 2008.*

### Child Brides: For Discussion

1. What is your reaction to this story?
2. What would you do in Sausan's position, faced with the choice between feeding your family and marrying off your daughter?
3. What are the best-case and worst-case scenarios for Fatima's future?
4. List the short-term and long-term impacts of food insecurity on Fatima's family.
5. What could be done to help improve life for Fatima and her family? Consider actions taken by the family, the community, the Afghanistan government, or non-governmental organizations (NGOs).



# Senegal:

## Children and Education

Senegal is one of the poorest countries in the world, ranking 156 out of 177 countries on the United Nations Development Programme's (UNDP) Human Development Index. More than half the population of Senegal lives on less than \$2 a day.<sup>51</sup>

The recent food crisis has made it increasingly difficult for Senegalese families to access the cereal crops on which their families depend: corn, millet, rice, and sorghum. Prices on these products have risen sharply in the past three years. Between February 2007 and February 2008 alone, prices on these cereal crops rose 16 to 22 per cent.<sup>52</sup>

The combination of stagnating family income and rising food prices is having a disastrous impact on households. Food is essential for people's physical and mental health and energy, especially for children in school. In many cases, limited access to food has resulted in children dropping out of school to help support their families.

### Ndiouck's Story

*Ndiouck Faye is a 12-year-old girl who lives with her family in Senegal, a country in West Africa. This is her story.*

"I live with my mother, Dibe Tine, who is 42 years old, and my siblings, Lamine Faye, who is 15, and Moulaye Faye, who is 10. Until recently I was in school, in grade four. My father died four years ago and since then we have gone through many difficulties mainly related to food security. As we have no donkey or horse to work with on the farm, my mother partners with neighbours to till our land. Since my father's death, we have not had a good harvest, which makes life more difficult for us.



Things got worse this year as our food stock was used up by early January. It is very difficult to cover our food needs. On top of that my mother fell sick and could no longer find food for the family. Finally I was obliged to leave school to help in the house as I am the only girl that my mother has.

My half-brother, Doudou Thiaw, is 26 years old. He has gone to Dakar to find work. He tries to support us, but it's on an irregular basis. My mother struggles everyday to maintain her family. Thinking about her daily efforts meant I lost the motivation to go to school. We used to have three meals a day; but now we have come to two or one a day. Prices of rice, oil, millet, and maize have become so expensive that there is no way for us to afford a bag of 50 kilos of rice or millet.

<sup>51</sup> World Bank, *World Development Report*, 2007.

<sup>52</sup> WFP, *Rising Food Prices*, 2008.

# Senegal:

## Children and Education (cont'd)

Moreover, my mother had seven goats, but unfortunately a thief stole five of them. This is common in these hard times, mainly in families whose head is a woman like ours. So now my mother has no livestock to sell in order to address our needs, and often borrows by kilograms from neighbors or shopkeepers to provide at least for lunch or dinner, even if it is not always enough for us to eat our fill.

When my father was alive, we did not face these problems, but now that my mother is alone with her children, it is very difficult for her. I could no longer stand going to school, leaving her in such difficulties ...”

*Adapted from a story written by a World Vision staff person in Senegal, May 21, 2008.*

### Children and Education: For Discussion

1. What is your reaction to this story?
2. What would you have done if you were Ndiouck and had to make a decision between your education and helping your family survive?
3. What are the best-case and worst-case scenarios for Ndiouck's future?
4. List the short-term and long-term impacts of food insecurity on Ndiouck's family.
5. What could be done to help improve the lives of Ndiouck and her family? Consider actions taken by the family, the community, the Senegalese government, or non-governmental organizations (NGOs).

# Georgia:

## Divided Families

Georgia is a country in central Asia bordering Russia, Turkey, Armenia, and Azerbaijan. It is a low-income country, with 39 per cent of its 4.4 million people living below the official poverty line. Approximately one-third of the population does not receive adequate dietary caloric intake.<sup>53</sup>

Inflation and rising global food and energy prices are hitting already vulnerable Georgian families the hardest. The prices of bread and wheat flour have risen 33 and 32 per cent and the price of maize flour has risen 50 per cent.

Milk and cheese prices are rising and even aligning, whereas in the past cheese was always more expensive. Sunflower oil, used widely by Georgians, has also increased by 65 per cent.

Today a Georgian family with six children needs about 350 GEL (about \$250 US) a month to survive. In 2004, the figure was 226 GEL.

Georgia is presently using only a small percentage of its agricultural potential due to lack of modern production and storage technologies, and lack of information available to farmers about markets and market prices, making production and trade decisions difficult and risky.

In the face of a rising cost of living and lowered agricultural output, children in Georgia are paying the price. Out of desperation to feed their children, some parents are making the difficult decision to send their children to institutions where they will receive regular meals. But for many children in this situation, the social and emotional costs of being removed from their homes are high.

### Marina's story

*Marina is a 41-year-old woman who lives with her husband and six children in Georgia, a country in central Asia. This is her story.*

"I dream of the day when I don't have to worry how I will feed my six children," says Marina, who laments that no one in her eight-member family has a job. The rising cost of living and increased food prices are threatening to drive her family apart.

Marina, her husband Badri, and their children live in a suburb of Tbilisi, the capital of Georgia, in a two-room flat with five beds. Inside, a stark lack of furniture and signs of poverty are the first things you notice as you enter the room.

There isn't enough space to hold the children's clothes and not enough beds and chairs to go around, yet the family is together and they are grateful for this small haven, which they rent with the support of World Vision and a small government allowance of 280 GEL (about \$200 US).



<sup>53</sup>WFP, [www.wfp.org/country\\_brief/indexcountry.asp?country=268](http://www.wfp.org/country_brief/indexcountry.asp?country=268)



# Georgia:

## Divided Families

The future looks bleak, but times have been even tougher in the past. Now the rising cost of living and increased food prices are threatening to drive the family apart again.

Two years ago, before receiving help from World Vision, the family struggled to find rent money every month, and to feed their growing children.

Marina's husband worked as a security guard, earning a monthly income of 150 GEL (about \$100 US). They would spend 90 GEL (\$60 US) of that income on bread alone and the rest had to cover rent. Their meager diet consisted of bread and tea.

"Sometimes we could not buy bread and the children went hungry all day," recalls Marina.

When the money ran out, Marina and Badri felt the only way they could provide for their children's basic needs was to place them in a children's institution. In Georgia, 90 per cent of children in institutions have parents.

"I made the hardest decision of my life—taking my children to the orphanage was the only solution for us, otherwise they would die of hunger," says Marina.

"I lived there a year. I hate thinking of that time. I thought my parents left us there and we would never see them again. I cried all the time," says 13-year-old Giorgi.

Living in their own place has eased the situation, but the income is still not enough for the family.

"We manage to feed our children twice a day, but sometimes they go to bed on an empty stomach," says Badri.

Marina's family is presently coping with the help of neighbours, the government allowance, and World Vision. However, the threat of having to abandon their children to an institution still looms fiercely, for this family and for thousands like it across Georgia and Eastern Europe.

*Adapted from a story by Ana Chkaidze, World Vision staff, May 8, 2008.*

### Divided Families: For Discussion

1. What is your reaction to this story?
2. What would you do if you were Marina or her husband, and were forced to decide between keeping all of your children at home for the sake of their social and emotional health, and sending them to live at an institution where they would receive food?
3. What are the best-case and worst-case scenarios for the future of Marina's family?
4. List the short-term and long-term impacts of food insecurity on Marina's family.
5. What could help improve the lives of Marina and her family? Consider actions taken by the family, the community, the Georgian government, or non-governmental organizations (NGOs).

# Angola:

## Children and Land Mines

Cuito Cuanavale is a forgotten place. The area held one of the most important battles of the southern Africa region. The battle played a major role in terminating the apartheid regime in South Africa and helped Namibia to achieve independence.

While history keeps unfolding, Cuito Cuanavale seems to have stagnated. The town has barely any essential infrastructure. Covered with land mines and explosive ordinance, the population is constrained to just a few areas. In addition, the Angolan media estimates that the southeast part of the country, including the Cuito Cuanavale region, has over 30,000 families hit by droughts and unexpected heavy rains resulting in floods.

Driven by hunger, people scour the bush for anything to eat, even though it is riddled with land mines. According to government officials, mine accidents are commonplace since the village is surrounded with a barrier of them.

The roads linking the province are not accessible. The only way for humanitarian agencies to bring in food aid is to fly across the province in an attempt to reach the most isolated communities of the region.

### Joana's Story

*Joana, her husband, and their six children live in extreme poverty in the Baixo Longa village in Angola, a country in southern Africa. She is one of the survivors of the historic "Cuito Cuanavale Battle". This is her story.*

"As a young girl, my family got divided. I only stayed together with my older sister. We used to dig up holes and hide," Joana says, as she recounts her day-to-day life during the war.

Hiding in holes did not save her sister. She was hit by a bomb and died immediately. Joana had more luck and managed to survive one of the heaviest battles in Angola.

Nowadays, life is not any easier. Instead of fleeing from bullets, Joana fights for her family against hunger and poverty.

"Since October we do not have food. First was the drought, and now the floods. Our maize, beans, and vegetables have all been destroyed. All our crops were devastated by lack of rain and then too much rain. How are we meant to grow any food to eat?" Joana asks herself.

Joana's six children go days without food and must drink contaminated river water. She says they complain constantly of "belly pain".





# Angola:

## Children and Land Mines

Her youngest daughter, two years old, cries all day long. Her oldest son walks around looking for fruit and tries to hunt small animals. Children in her community have never received any vaccinations. They have been living like this for months.

“My only option is to walk all around the bush and look for fruit and mushrooms. I am afraid because I know there are many land mines in this area, leftover from the war, but I have to take the risk to find some food for my children,” she says.

“I feel weak and I am afraid for my children. If we continue like this, I think we will all die,” says Joana, swallowing her tears.

There are thousands of Joanas in Cuito Cuanavale. These families who live in extreme poverty are most vulnerable to the devastating effects of droughts and floods on their crops. Searching for food in an area littered with land mines is just one of the many risks they must take in a desperate attempt to survive.

*Adapted from a story by Tatiana Resk Gomes, April 2, 2008.*

### Children and Land Mines: For Discussion

1. What is your reaction to this story?
2. What would you do if you were Joana and had to decide between risking your life to scavenge a small amount of food in a bush filled with land mines, and watching your children starve?
3. What are the best-case and worst-case scenarios for Joana and her family's future?
4. List the short-term and long-term impacts of food insecurity on Joana's family.
5. What could be done to help improve life for Joana and her family? Consider actions taken by the family, the community, the Angolan government or non-governmental organizations (NGOs).



## 3 Impacts of Global Food Insecurity

### Suggested Classroom Activities

#### A. Impacts and Interventions Chart

<b>Use to:</b>	visually represent the ripple effect of food insecurity on families; consider interventions that might mitigate these impacts or effects at family, community, government, and international levels
<b>Students will:</b>	analyze; formulate hypotheses; engage in group decision making; organize information graphically
<b>Subjects:</b>	civics, politics, or family studies

Using the case studies of children and families on pages 37 to 44, ask students working in small groups to choose one case study, brainstorm the impacts of food insecurity, and formulate possible intervention activities at each level of family, community, government, and NGO/international bodies. Distribute different coloured Post-it notes to the groups to record their ideas, one colour for each of the four levels. Instruct them to brainstorm freely and record all ideas, describing both the problem (impact) and the solution (intervention) without judgment or editing. Distribute copies of the chart from “Appendix G: Impacts and Interventions”. Ask groups to choose their best ideas, placing the Post-its on the appropriate level of the chart. Groups then share their best ideas with the class. Reflect on the feasibility of the ideas and what persons or groups would need to advocate for action at each level.

#### B. No More Bread: A Food Journal Comparison

<b>Use to:</b>	encourage conscious reflection on personal eating habits and the differences between food consumption in developed and developing countries
<b>Students will:</b>	reflect; record observations; compare and contrast information; draw conclusions
<b>Subjects:</b>	food and nutrition, civics, or geography

Ask students to create and complete personal food journals using the first section of “Appendix H: No More Bread: A Food Journal Comparison” to record their food consumption over a few days or a week. They should record: when they eat; what they eat; where they are and whom they are with; and, if possible, the cost of the food consumed.

When students have completed the journal, give them copies of “A Swazi Food Journal” from the second half of Appendix H. Explain that this is a hypothetical situation, but based on a real family and child, Simphiwe Dlanini, in Swaziland. Ask students to complete the discussion and reflection questions, comparing their personal food journals with Simphiwe’s journal.



## 3 Impacts of Global Food Insecurity

### Suggested Classroom Activities

#### C. What About Canada?

<b>Use to:</b>	investigate the impact of rising food prices on Canadians
<b>Students will:</b>	research various media sources; gather information; communicate findings; prepare a research bibliography
<b>Subjects:</b>	civics, economics, or family studies

Get students to research news stories on the impacts of rising food and fuel prices on Canadians. Encourage them to use a variety of sources such as Internet, print and online newspapers, magazines, books, radio, television, and documentaries. Have them compose an annotated bibliography of their findings. To extend the activity, students can work in small groups to develop discussion questions on a selection of news items. The news items and questions can be exchanged with other groups.



# 4

## Taking Action Against Food Insecurity

*This pricing crisis is likely to take at least two years to stabilize. That is far too long for the millions of children under five who need sufficient levels of nutrition now to develop properly.*

—Dave Toycen, President, World Vision Canada

### World Vision's Response

World Vision is working to address global food insecurity through **emergency measures** and **longer-term development solutions**. As one of the WFP's largest distributors of food aid, World Vision uses food commodities towards immediate relief but also for transition to sustainable development programming.

World Vision's **emergency measures** include:

- continuing to provide food aid to millions of people worldwide while avoiding uses of food resources that would discourage local agricultural production;
- using conflict-sensitive programming in light of food riots and socio-political tensions;
- calling on governments to expand their safety nets and social protection programs; and
- in Canada, calling on the government to increase its aid commitments to the WFP.

As part of **longer-term development solutions**, World Vision is:

- increasing nutrition programming in our ongoing development work;
- using Therapeutic Feeding Centres to work with mothers and replenish nutrients in malnourished children;
- addressing food insecurity for orphaned and vulnerable children through local community support groups that establish communal food gardens, contribute food, and raise cash for food insecure households;
- supporting local agricultural programs and food production through agricultural inputs such as livestock, appropriate seeds, farming equipment, and training; and
- supporting economic development programs such as micro-enterprise initiatives that help families earn a decent living wage, diversify their sources of income, and reduce their vulnerability to external food supply shocks.



## 4 Taking Action Against Food Insecurity

### International Response

The international community has recently awakened to the magnitude of the global effects of rising food and fuel prices. Existing policies related to food (e.g. biofuel production, agricultural support, trade subsidies) are under new scrutiny and there is recognition amongst international bodies that this is not “business as usual” and a collaborative, holistic approach is needed.

Some international responses to date include:

- the United Nations (UN) calling for an emergency \$75 million US of food aid in the spring of 2008;
- the WFP increasing support to assistance programs in 62 countries by \$1.2 billion US;
- the United Nations Children’s Fund (UNICEF) allocating an additional \$50 million US to enhanced nutrition assessments and interventions in 41 developing countries facing nutrition insecurity amongst children and other vulnerable groups;
- the FAO instituting a Soaring Food Prices initiative in 54 countries for procurement and distribution of seeds, fertilizers, and other agricultural inputs;
- major pledges of support for agriculture being made by the African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development, the Islamic Development Bank, and many NGOs and other donors;
- NGOs such as World Vision, Oxfam, CARE, Save the Children UK, ActionAid, and La Via Campesina centering their actions on both emergency response and advocacy measures; and
- Canada donating an additional \$50 million on top of the \$180 million allocated for food aid, and “untying” this aid; this means recipient countries are no longer required to spend 50 per cent of their aid money purchasing food from Canada and can, in theory, purchase it locally, get it more quickly, and spend less on transporting it.



## 4 Taking Action Against Food Insecurity

### Taking Local Action: What Students Can Do

While the magnitude of the global food crisis may seem daunting, students can take a stance on the issue and engage in actions that have local impact in the areas of nutrition, agriculture, and economy. Teachers can try the following suggested activities with entire classes, small groups, or individual students. Consider these activities for: independent study projects, research assignments, field trips, school awareness events, or extracurricular groups.

#### A. Become Food Conscious

1. *100-Mile Diet, Part I*: Many working farms offer tours for student groups (see bibliography for websites). Visit a local vegetable, meat, dairy, and/or organic farm and interview the farmers for a research paper on local food production and food markets. Students can also use the research to write an article for the school newspaper. Coincide the field trip and assignment with World Food Day (October 16).
2. *Food Bank Field Trip*: Organize a field trip and volunteer experience at a local food bank. Collect data on types and amounts of foodstuffs that are collected and distributed, and where they come from. Visually represent the data in graphs or posters that can be displayed in school. The Daily Bread Food Bank's "Hungry City" website offers a number of classroom tools for discussing hunger in urban Canada ([www.hungrycity.ca/educators/tools.cfm](http://www.hungrycity.ca/educators/tools.cfm)). Canada's first vegetarian food bank receives fresh food from a local Sikh-run farm, grown for the sole purpose of donating to charities and food banks (read [www.thestar.com/article/510738](http://www.thestar.com/article/510738)). Contact the Canadian Association of Food Banks for a member list of food banks across Canada ([www.cafb-acba.ca/main.cfm](http://www.cafb-acba.ca/main.cfm)) or see the bibliography for food bank websites.
3. *Play With Food*: Use web-based educational games, such as Food Force and FreeRice (see bibliography) as classroom tools to increase student knowledge about the challenges of delivering food aid to people in need, and issues of hunger and malnutrition in the developing world. The games address learning outcomes in language, math, science, geography, and art.
4. *Food Fight*: Start a school group to raise awareness about issues of food and global hunger. *Food Fight*, World Vision's youth action guide on hunger, is a tool to help students facilitate peer-to-peer learning about the issues and how to take action. Download a copy from [worldvision.ca/youth](http://worldvision.ca/youth)

#### B. Build a Food Conscience

*The Everyday Activist* by Michael Norton (see bibliography) outlines a number of creative ways students can easily engage in food issues. Assign students to complete a specific "food action" as a class assignment or independent study unit.



## 4 Taking Action Against Food Insecurity

### Taking Local Action: What Students Can Do

Ideas from the book include:

- starting a Grow-A-Row project to donate homegrown produce to local shelters or food banks ([www.growarow.org](http://www.growarow.org));
- supporting beekeeping in the developing world ([www.planbee.org.uk](http://www.planbee.org.uk));
- joining the Slow Food movement and hosting a slow food dinner ([www.slowfood.com](http://www.slowfood.com));
- buying and selling fair-trade tea from Just Change, a barter trading project between poor communities in India ([www.justchangeindia.com](http://www.justchangeindia.com));
- staging a Hunger Banquet; see the Global Citizen Corps website for instructions and a script ([www.globalcitizencorps.org/takeaction.htm?page=takeaction\\_hunger](http://www.globalcitizencorps.org/takeaction.htm?page=takeaction_hunger)); or
- starting a Food Not Bombs group (downloadable handbook at [www.foodnotbombs.net](http://www.foodnotbombs.net)).

#### C. Be Food “Proactive”

1. *100-Mile Diet, Part II*: Not Far From the Tree, a Toronto-based group, and the LifeCycles Fruit Tree Project in Victoria, harvest urban residential fruit trees that would otherwise go unpicked. The organizations match volunteer pickers with fruit tree owners who don't have time to harvest their bounty. The fruit is distributed among the owners, the volunteers, and local community organizations, such as food banks and shelters. Volunteer with them, or start a group in the school or local community. For ideas, visit [www.notfarfromthetree.org](http://www.notfarfromthetree.org) or [www.lifecyclesproject.ca](http://www.lifecyclesproject.ca)
2. *Global Ideas Bank*: Develop ideas for social innovation and change, and devise solutions to real-world problems of hunger, malnutrition, child health, and food insecurity. Contribute these ideas to the Global Ideas Bank, an on-line community that promotes and disseminates creative ideas for improving society. Go to [www.globalideasbank.org](http://www.globalideasbank.org)
3. *Seeds Without Frontiers*: Promote awareness of heritage seed varieties by building a school garden in biology or food studies classes. Grow tomatoes, carrots, and peppers, harvest the seeds, and join an organic farming seed share program, such as the Seeds of Diversity Canadian Tomato Project ([www.seeds.ca/proj/tomato/](http://www.seeds.ca/proj/tomato/)). Seeds of Change ([www.seedsofchange.com](http://www.seedsofchange.com)) runs a school fundraising program that donates 25 packages of free seed for starting a school garden. The website offers information on: organic gardening; harvesting and cleaning seeds; and the controversy of genetically modified (GMO) foods and F1 hybrids, industrialized crop varieties that produce high yields but no viable seeds. Renee's Garden ([www.reneesgarden.com/articles/donations-08.html](http://www.reneesgarden.com/articles/donations-08.html)) donates seeds to non-profit organizations and educational programmes worldwide that address local community health through organic gardening projects.
4. *Write for Rights*: Letter writing is an effective way to raise awareness about an issue, influence decision makers, and practice effective communication techniques. Get students to brainstorm and research key issues around global food insecurity and identify key decision makers, such as local members of Parliament, to receive letters advocating for action. For specific lesson activities, download Working for Change, World Vision's study guide on global citizenship at [worldvision.ca/resources](http://worldvision.ca/resources)



# Glossary of Terms

**100-Mile Diet:** a social movement that advocates eating locally grown food within a 100 mile radius of one's community; based on the book *The 100-Mile Diet: A Year of Local Eating*.

**Crisis:** an event or series of events that represents a critical threat to the health, safety, security, or well-being of a community or other large group of people, usually over a wide area

**Food accessibility:** physical and economic access, including purchasing power

**Food availability:** efficient food production and processing, trade (import/export) systems

**Food bank:** a place where food is contributed and made freely available to those in need

**Food price index:** a measure of the average prices of a group of goods (in this case, food commodities) relative to a base year

**Food stability:** maintaining the availability, accessibility, and utilization of food in the face of natural, economic, social, and policy shocks and stresses

**Food utilization:** making nutritional food choices, ensuring food safety and quality, and accessing clean water and sanitation

**Genetically modified foods:** food items that have had their DNA changed through genetic engineering

**International Monetary Fund:** an international organization established to promote monetary cooperation, exchange stability, and economic growth; the IMF also works to lower unemployment and help countries in debt manage their finances

**Malnutrition:** a state of bad or poor nutrition that may be due to inadequate food intake, imbalance of nutrients, malabsorption of nutrients, or improper distribution of nutrients

**Net food importers:** countries that import more food than they produce or export

**Staple food:** the main food eaten and the main source of energy in the diet; forms the basis of a traditional diet and is typically starchy, and high in energy and carbohydrates

**Supply and demand:** the economic theory of market value where price is determined by the interaction of sellers and buyers to reach a price equilibrium that both are willing to accept

**United Nations:** an international organization formed after World War II to preserve peace; has 192 member countries

**World Bank:** an international institution set up to promote general economic development in the world's poorer nations

**World Food Programme:** the food aid branch of the United Nations, and the world's largest humanitarian agency; provides food, on average, to 90 million people per year, 58 million of whom are children

# Appendix A: Food Insecurity

37 Countries in Crisis

## AFRICA (21 countries)

<b>Exceptional shortfall in aggregate food production/supplies</b>	
Lesotho	Multiple year droughts until last season
Somalia	Conflict, adverse weather
Swaziland	Multiple year droughts until last season
Zimbabwe	Deepening economic crisis, drought last season, recent floods
<b>Widespread lack of access</b>	
Eritrea	Internally displaced persons (IDPs), economic constraints
Liberia	Post-conflict recovery period
Mauritania	Several years of drought
Sierra Leone	Post-conflict recovery period
<b>Severe localized food insecurity</b>	
Burundi	Civil strife, IDPs, and returnees
Central African Republic	Refugees, insecurity in parts
Chad	Refugees, conflict
Congo, Democratic Republic of	Civil strife, returnees
Congo, Republic of	IDPs
Côte d'Ivoire	Civil strife
Ethiopia	Insecurity in parts, localized crop failure
Ghana	Drought and floods
Guinea	Refugees
Guinea-Bissau	Localized insecurity
Kenya	Civil strife, adverse weather
Sudan	Civil strife
Uganda	Civil strife in the north, localized crop failure

# Appendix A: Food Insecurity

37 Countries in Crisis

## ASIA (10 countries)

<b>Exceptional shortfall in aggregate food production/supplies</b>	
Iraq	Conflict and insecurity
<b>Widespread lack of access</b>	
Afghanistan	Conflict and insecurity
Korea, Democratic People's Republic of	Economic constraints, effects of past floods
<b>Severe localized food insecurity</b>	
Bangladesh	Past floods, cyclone, avian influenza
China	Disastrous cold, ice, and snow in the south
Nepal	Poor market access, conflict, past floods
Sri Lanka	Conflict and floods
Tajikistan	Severe cold, floods/landslides, poor market access
Timor-Leste	IDPs, past drought, floods
Vietnam	Cold spell in the north

## LATIN AMERICA (5 countries)

<b>Severe localized food insecurity</b>	
Bolivia	Floods
Dominican Republic	Past floods
Ecuador	Floods
Haiti	Past floods
Nicaragua	Past floods

## EUROPE (1 country)

<b>Exceptional shortfall in aggregate food production/supplies</b>	
Moldova	Drought, limited access to inputs for winter cropping

# Appendix B: Food Quotations

<b>The biggest threat we face is a global food crisis ...</b>	<b>... milk is the new oil.</b> —Don Coxe, Global Portfolio Specialist
<b>With soaring food and fuel prices ...</b>	<b>... hunger is on the march and we must act now.</b> —Josette Sheeran, World Food Programme
<b>With one child dying every five seconds from hunger-related causes ...</b>	<b>... the time to act is now.</b> —Gordon Brown, British Prime Minister
<b>When people were hungry, Jesus didn't say, "now is that political, or social?" ...</b>	<b>... He said, "I feed you."</b> —Archbishop Desmond Tutu
<b>We know that a peaceful world cannot long exist ...</b>	<b>... one-third rich and two-thirds hungry.</b> —Jimmy Carter, former US President
<b>If you want to eliminate hunger ...</b>	<b>... everybody has to be involved.</b> —Bono, singer
<b>If we can conquer space ...</b>	<b>... we can conquer childhood hunger.</b> —Buzz Aldrin, former US astronaut
<b>Those who wish for a more peaceful, just and sustainable world ...</b>	<b>... are helping to make ending world hunger a major priority.</b> —Don Coxe, Global Portfolio Specialist
<b>There are people in the world so hungry ...</b>	<b>... that God cannot appear to them except in the form of bread.</b> —Indira Gandhi, former Indian Prime Minister
<b>If you can't feed a hundred people ...</b>	<b>... then just feed one.</b> —Mother Teresa, humanitarian
<b>Hunger knows no friend ...</b>	<b>... but its feeder.</b> —Aristophanes, ancient Greek playwright
<b>The threats are obvious to us all. Yet this crisis also ...</b>	<b>... presents us with an opportunity.</b> —Ban Ki-moon, UN Secretary-General
<b>Genuine food security should be global ...</b>	<b>... and achieved through cooperation.</b> —Luiz Inacio Lula, Brazilian President
<b>We estimate that the effect of this food crisis on poverty reduction worldwide ...</b>	<b>... is on the order of seven lost years.</b> —Robert Zoellick, President of the World Bank
<b>The war of the stomach will ...</b>	<b>... rage on. People want something on their plates.</b> —Betty Malconi, Zimbabwean rights activist
<b>An empty belly ...</b>	<b>... has no ears</b> —Senegalese saying
<b>Our harvest is the same size, but our costs have almost doubled ...</b>	<b>... Our difficulties have doubled too.</b> —Nguyen Thi Van, Vietnamese rice farmer
<b>When I'm hungry I eat. When I'm thirsty ...</b>	<b>... I drink. When I feel like saying something, I say it.</b> —Madonna, singer





# Appendix C: Fast Facts About the Global Food Crisis

## Hunger and Poverty

- Before the current crisis, 850 million people in developing countries experienced hunger daily —more than the populations of Canada, the US, and the European Union combined. As of September 2008, rising food prices have pushed this number to over 900 million and growing.<sup>54</sup>
- In 2007, 923 million people worldwide were undernourished, of which 907 million lived in developing countries<sup>55</sup>
- The global food crisis could push another 100 million people into poverty, of which 35 million will be children; preliminary estimates show that in 2007 the number of undernourished people increased by 75 million<sup>56</sup>
- Almost one billion people (one in six of the global population) live on less than \$1 a day; 2.5 billion people live on less than \$2 a day<sup>57</sup>
- One in every four children under the age of five in the developing world is underweight, one of every three is stunted, and one child under the age of five dies every seven seconds from a hunger-related cause<sup>58</sup>
- Under-nutrition was a cause of more than one-third of the estimated 9.2 million children under the age of five who died in 2007; as many as 148 million children in poor countries remain undernourished<sup>59</sup>

## Global Food Insecurity

- In April 2008, the FFPI was 54 per cent higher than the year before, led by increases in cereals (92 per cent) and vegetable oils (98 per cent).<sup>60</sup> While the FFPI has declined since then, in October 2008 it was still up 51 per cent over September 2006.<sup>61</sup>
- Of the 37 countries in the grip of a food security crisis, 21 are in Africa, 10 in Asia, five in Latin America, and one (Moldova) in Europe<sup>62</sup>
- The bottom billion of the world's poor spend about 60 per cent of their income on food<sup>63</sup>
- Canadians spend about 10 per cent of income on food<sup>64</sup>
- The World Bank adjusted the recognized yardstick for measuring global poverty from \$1 US a day to \$1.25 US a day<sup>65</sup>
- The WFP needs an additional \$750 million from donor governments, including Canada, to distribute the same amount of food aid in 2008 as it did in 2007
- World Vision is one of the WFP's largest food distribution partners, and estimates that because of staple food shortages, it is unable to feed 1.5 million of its food aid beneficiaries in 2008

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<sup>54</sup> FAO, *Hunger on the rise*, [www.fao.org/newsroom/en/news/2008/1000923/](http://www.fao.org/newsroom/en/news/2008/1000923/) (September 18, 2008).

<sup>55</sup> Ibid.

<sup>56</sup> World Bank, *Rising Food and Fuel Prices*, 2008.

<sup>57</sup> Ibid.

<sup>58</sup> UNICEF, *Progress for Children: A Report Card on Nutrition*, May, 2006.

<sup>59</sup> UNICEF Press Release, [www.unicef.org/media/media\\_45607.html](http://www.unicef.org/media/media_45607.html) (September, 2008).

<sup>60</sup> FAO, [www.fao.org/docrep/010/ai466e/ai466e16.htm](http://www.fao.org/docrep/010/ai466e/ai466e16.htm) (June, 2008).

<sup>61</sup> FAO, [www.fao.org/worldfoodsituation/FoodPricesIndex/](http://www.fao.org/worldfoodsituation/FoodPricesIndex/) (October, 2008).

<sup>62</sup> FAO, [www.fao.org/docrep/010/ai465e/ai465e02.htm](http://www.fao.org/docrep/010/ai465e/ai465e02.htm) (April, 2008).

<sup>63</sup> FAO, *Soaring Food Prices*, 2008.

<sup>64</sup> Statistics Canada, 2006.

<sup>65</sup> Reuters, [www.stuff.co.nz/4670702a27162.html](http://www.stuff.co.nz/4670702a27162.html) (August 27, 2008).

# Appendix D: Riddle Activity

## Factors in Food Insecurity

### Instructions

Students work alone, in pairs, or small groups to solve the following “What am I?” riddles. If needed, provide a possible list of answers to choose from (see below).

Choose answers from this list: Meat, Population, Grain, Money, Water, Ethanol, Air, Temperature, Climate, Drought, Oil.

### Correct Answers:

- 1) Oil
- 2) Ethanol
- 3) Climate
- 4) Meat
- 5) Grain
- 6) Money





# Appendix D: Riddle Activity

## Riddle #1

I exist, but I can't be made.  
China is using more of me than ever before.  
Canada is wondering how to replace me.  
Pineapples and bananas need me to get to you.  
Apples and tomatoes? Not so much.  
The food on your table is there thanks to me,  
but I'm a hidden ingredient in the farm-to-table link.

**What am I?**

## Riddle #2

I'm found in vodka and Volvos,  
and I help show the heat rise.  
Brazil is one of my largest producers,  
using sweetness to make their cars go.  
Canada wants to produce more of me,  
turning solid yellow into liquid blue.  
Some say I am the answer to a global problem,  
others say I am a cause.

**What am I?**

## Riddle #3

I can be hot, cold, wet, or dry,  
and lately I've gone to extremes.  
Humans didn't create me,  
yet they have a way of making me change.  
Usually I'm harmless,  
but depending on my mood, I can be deadly.  
Some people don't give me much thought,  
others worry I will wreak havoc in their lives.

**What am I?**

# Appendix D: Riddle Activity

## Riddle #4

Some people avoid me altogether,  
Others consume a lot of me everyday.  
Some people can't bear to think  
of what I used to be.  
I can be the first thing off the list  
when money is tight.  
A lot of resources are needed,  
to produce just a little bit of me.

**What am I?**

## Riddle #5

In the summer you might see great piles of me,  
but now my reserves are shrinking.  
Most people take me for granted,  
because I've been around longer than sliced bread.  
You can consume me,  
or consume something that consumed me first.  
I come in many forms,  
and I travel with thousands like me.

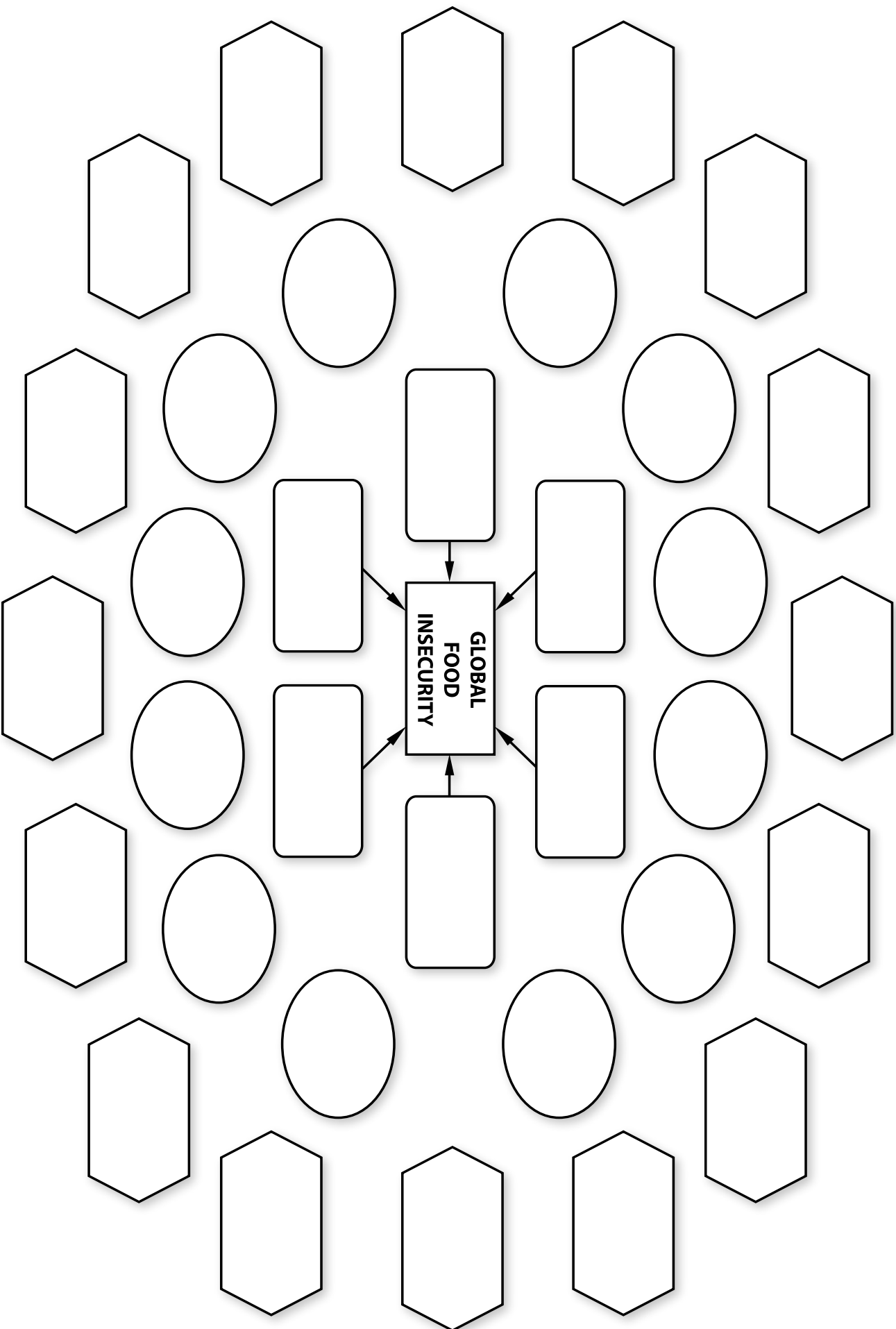
**What am I?**

## Riddle #6

You can't eat me, but it's hard to eat without me.  
I talk without saying a word.  
I can grow but I'm not alive.  
I make people smile, but I have no personality.  
Most people are happy to hold me,  
but I don't feel a thing.  
Some make lots of me with only a little to start,  
but be warned: I go as easy as I come.

**What am I?**

# Appendix E: A Web of Causes





# Appendix F: Impact in Canada

## Food News

### **Overtaxed food banks feel crunch as higher grocery costs squeeze needy (excerpted)**

Max Harrold, *The Gazette*

March 7, 2008

[www.canada.com/montrealgazette/news/story.html?id=560e7900-3368-478b-929f-2368d9ebc583&k=90756](http://www.canada.com/montrealgazette/news/story.html?id=560e7900-3368-478b-929f-2368d9ebc583&k=90756)

“It’s such a help to me. I have a mental handicap,” [the 50-year-old woman] said, tapping her head. “I don’t work.” For \$3 each, she and the food bank’s 600 members can get twice-weekly baskets bulging with goodies like apple sauce, lettuce, strawberries, mini-yogurts, broccoli and chocolate snacks.

That is part of the 50 to 60 tonnes of surplus food donated daily by grocery chains and food manufacturers to feed 130,000 needy Montrealers every month.

The bounty now faces intense pressure as soaring grain and oil prices push up the cost of food. Will companies continue donating as much? Will higher prices in stores force low-income earners into stressed food banks? Wheat alone has doubled in price since a year ago.

Jacqueline Drouin, a volunteer at Info Alimentaire since 1992, said higher costs mean the food bank can’t always offer a balanced range of foods. “This is the first time we’ve had yogurt and cheese in two weeks,” she said, as an example.

“The stores have fewer surpluses, so they’re giving us less. We rarely have fresh eggs. We get a special donation at Christmas and then we buy chicken. Meat is hard to come by.”

Marc Brûlé, liaison director for the 204 community groups served by Moisson Montréal/Montreal Harvest, the regional food bank, said local grocery stores already reflect the rising price of wheat.

“Couscous, for example, has doubled in price,” he said. “Some loaves of bread have gone up from about \$3 a loaf to \$4.

“In the short term (within three months), we expect these price hikes will cause low-income people to turn to food banks because they can’t afford going to grocery stores.

“This can’t go on. We are already feeding 130,000 people every month in Montreal,” Brûlé added, noting that local food banks are at or near capacity. He called on the provincial and federal governments to devise strategies, like tax credits, to encourage more corporate donations of food stocks.



# Appendix F: Impact in Canada

## Food News

### **Food banks warn of ‘growing storm’ (excerpted)**

Laurie Monsebraaten, *The Toronto Star*

June 26, 2008

[www.thestar.com/article/449491](http://www.thestar.com/article/449491)

Ontario’s weakening economy coupled with the rising cost of food, fuel and energy should be a “wake-up call” to action on poverty reduction in both Ottawa and at Queen’s Park, say the province’s food banks.

The federal government must increase employment insurance benefits and expand eligibility for Ontarians, where currently just 27 per cent of unemployed workers qualify, says a report to be released today by the Ontario Association of Food Banks.

“We are at the leading edge of a gathering storm which may either pass us or bear the full brunt of its force upon hundreds of thousands of Ontarians,” it says. “Without support, we will not be able to weather the coming storm and any social and economic progress for low-income Ontarians that has been built over the past decade may be washed away.”

The report, based largely on Statistics Canada data and a survey of more than 100 food banks across the province, found that prices for half of the food items on the retail price index are increasing faster than the rate of inflation.

Healthy food such as bread, milk and eggs are rising at a much faster rate than less healthy food such as processed cheese and fruit-flavoured crystals. And the cost of food in remote, fly-in communities in Northern Ontario are an average 86 per cent higher than the Canadian average, the report says.

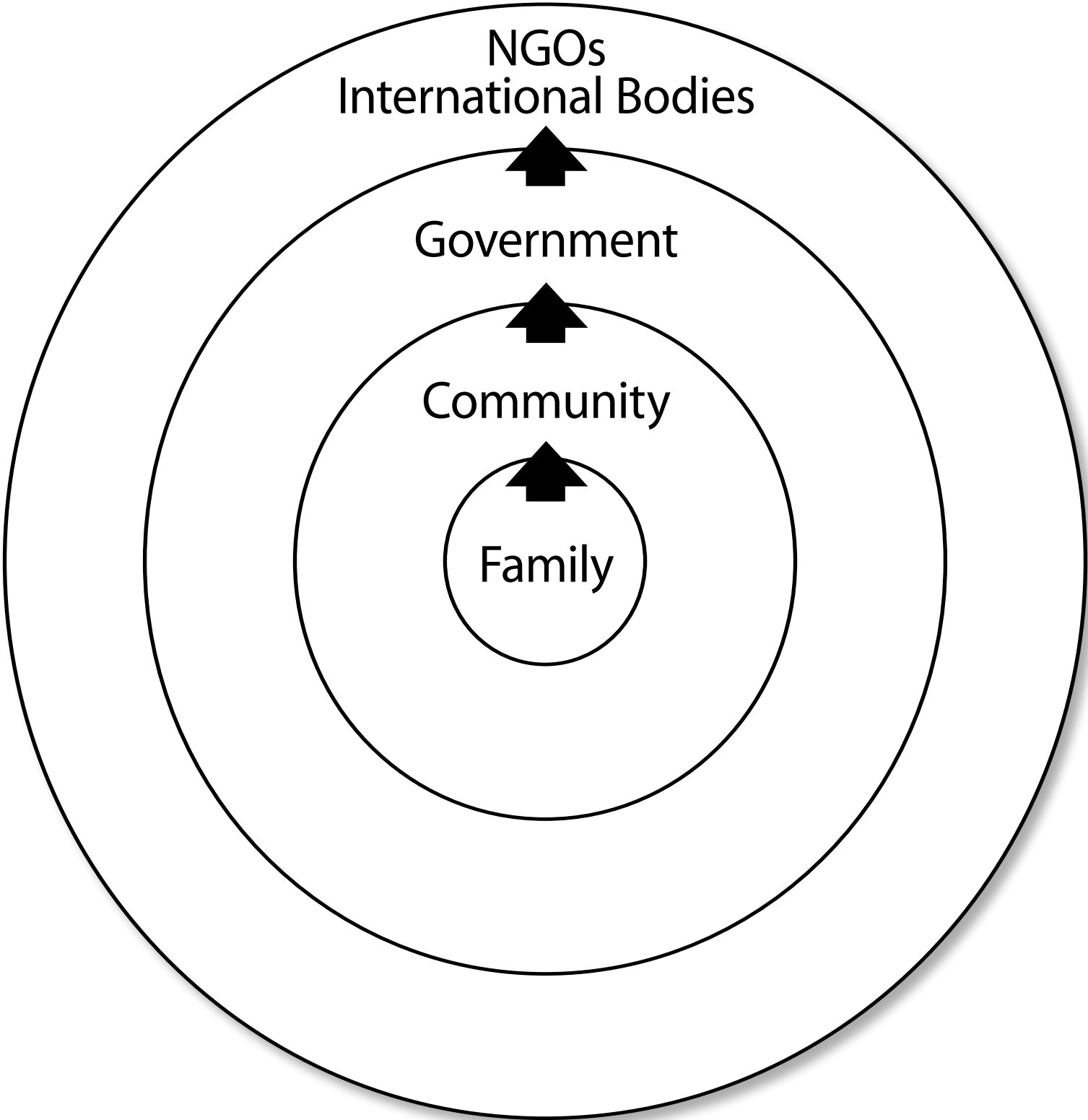
Meanwhile, gasoline has increased by 62 per cent since 2003, adding an extra \$800 per year to the average cost of driving a car. “The cumulative effect of rising food, gasoline and energy bills is reducing or eliminating income gains, or placing some households deeper into poverty,” says the report.

This “growing storm” puts even more pressure on the province, which has promised to come up with a poverty reduction strategy by year’s end, to address these issues, he added.

### **Food News: For Discussion**

1. List ways that food banks in Canada are affected by the global food crisis.
2. Describe the impact of rising food prices on lower income families in Canada.
3. What could be done at local, provincial, and federal levels to alleviate the effects of the food crisis on Canadians living in poverty?
4. Research the Ontario government’s new poverty reduction strategy. What interventions does it propose?

# Appendix G: Impacts and Interventions







# Appendix H: No More Bread

## A Food Journal Comparison

### Food Journal

In the chart below, record all the food you consume in one week. Include food eaten at home or brought from home, food bought in the cafeteria, snacks bought from vending machines or stores, and meals eaten in restaurants. Record when and where, and even with whom, you ate. Also record any special events you attend where food is served (e.g. a special family dinner or party).

At the end of each day, provide an estimate of the cost of the food you ate that day. Be as accurate and realistic as possible.

# Appendix H: No More Bread

## A Food Journal Comparison

NAME: \_\_\_\_\_

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Morning							
Noon and afternoon							
Evening							
Cost of food eaten per day							

Cost of food eaten by me in a week

Number of people in my family

Estimated family food costs for the week

=

# Appendix H: No More Bread

## A Food Journal Comparison

### A Swazi Food Journal

The accompanying fictional food journal is based on the eating habits of a real child, Simphiwe Dlanini, a 13-year-old girl from Swaziland. Simphiwe is the eldest of four children. Her father, Mefika, is currently unemployed, and her mom, Busi, gets up at 4 a.m. to bake cakes for Simphiwe to sell at school. The family is used to eating bread for breakfast, but can no longer afford it. This food journal shows the possible early effects of food insecurity on a family in a developing country. At this point, enough food is still available for the Dlaninis, but they can no longer afford certain types of food, and anxiety about having enough for the weeks ahead has set in.

### Food Journal Comparison Questions

1. Make a list of the types of food Simphiwe eats in a week. What does she eat a lot of? What's missing from her diet?
2. How do the types of food you eat compare to the types of food eaten by Simphiwe? What are the similarities and differences?
3. How does your family's weekly food costs compare with the amount Simphiwe's family spends on food?
4. Compare your family's weekly food spending with the average amount spent by other families around the world (see chart below). What factors, in addition to family income, explain the discrepancies in the amounts spent by different families around the world?

### Families Around the World: Sample costs of food per week (US dollars)

Under \$100 a week		Over \$100 a week	
Chad:	\$25.60	Mexico:	\$189.09
Mali:	\$26.39	Kuwait:	\$221.45
Bhutan:	\$34.09	Japan:	\$317.25
Ecuador:	\$34.75	USA:	\$341.98
India:	\$39.27	Germany:	\$500.07
China:	\$59.23		
Guatemala:	\$79.82		

Source: *A Hungry Planet: What the World Eats*

[www.maaa.org/exhi\\_usa/exhibitions/hungry\\_planet/pg\\_hungryplanet.pdf](http://www.maaa.org/exhi_usa/exhibitions/hungry_planet/pg_hungryplanet.pdf)

5. Write a one-page journal entry from Simphiwe's point of view (or someone else in her family) reflecting on their food situation and how it is affecting their lives.

# Appendix H: No More Bread

## A Food Journal Comparison

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<b>Morning</b>	Ate a slice of bread	Ate a slice of bread	No bread because a loaf now costs \$1.14 US —ate nothing	No bread —ate leftover porridge	Ate leftover porridge	Checked with neighbours to see if they have work for me to earn a bit of money—they do not	Woke up tired; we are running out of maize
<b>Noon and afternoon</b>	Sold Mama's cakes at school for 7 cents each	Sold cakes again; ate a banana	Sold cakes again; ate one	No cakes today because the cost of flour went up at market	Again, no cakes to sell	Shared some roasted corn with my sister in the market	Mama and Papa talked about the rising prices of flour, sugar, and cooking oil—all ingredients she uses for her cake business
<b>Evening</b>	Helped Mama grind maize & start a fire; cooked maize porridge & vegetable stew from pumpkin leaves, sweet potatoes, & peanuts	Helped Mama cook the same meal as Monday night	Helped Mama cook the same evening meal again	Papa sold one of our family goats for extra income; ate porridge for dinner	Helped Mama cook the same evening meal again	Helped Mama cook the same evening meal again; she is worried we'll run out of maize	Helped Mama cook the same evening meal again, but this time there was not as much porridge and stew; Mama ate less, but gave us the same portions as usual
<b>Cost of food eaten per day</b>	\$0.86	\$0.86	\$0.64	\$0.70	\$0.70	\$0.70	\$0.70

Cost of food eaten by me in a week

Number of people in my family

Estimated family food costs for the week

\$ 5.16

X 6

= \$ 30.96



# Bibliography:

## Further Resources on Food

Andrews, Geoff. *Politics and Pleasure*. McGill-Queen's University Press, 2008.

Andrews argues that Slow Food is “one of the most significant global political movements of modern times” and that “gastronomes”, followers of the movement, have a more profound and holistic understanding of food in a global context.

Ettlinger, Steve. *Twinkie, Deconstructed*. New York: Hudson Street Press, 2007.

This fascinating exploration into the curious world of packaged foods goes from phosphate mines in Idaho to cornfields in Iowa, from gypsum mines in Oklahoma to oil fields in China, demystifying some of North America's most common processed food ingredients: where they come from, how they are made, how they are used, and why.

Health Canada. *Eating Well With Canada's Food Guide: A Resource for Educators and Communicators*. Ottawa: Publications Health Canada, 2007.

Also available at: [www.hc-sc.gc.ca/fn-an/alt\\_formats/hpfb-dgpsa/pdf/pubs/res-educat-eng.pdf](http://www.hc-sc.gc.ca/fn-an/alt_formats/hpfb-dgpsa/pdf/pubs/res-educat-eng.pdf)

Heron, Katrina, ed. *The Slow Food Way of Living*. New York: Rodale, 2008.

While the United States has given us McDonald's, it is also home to the largest Slow Food movement outside Italy. This book celebrates the small farmers who “keep the faith”, capturing the optimism of eco-gastronomy with a series of photographs and essays. Offers concrete suggestions for living according to the Slow Food philosophy. Includes recipes.

Menzel, Peter and Faith D'Aluisio. *A Hungry Planet*. California: Material World Books, 2005.

A photographic study of families around the world, revealing what people eat during the course of one week. Each family profile includes details of weekly food purchases, photos of the family at home and at market, and a portrait of the entire family surrounded by a week's worth of groceries. Remarkable comparisons of 24 countries and 30 families. Also available as a photo essay at the following Time.com websites:

*What the World Eats, Part I*

[www.time.com/time/photogallery/0,29307,1626519,00.html](http://www.time.com/time/photogallery/0,29307,1626519,00.html) and

*What the World Eats, Part II*

[www.time.com/time/photogallery/0,29307,1645016,00.html](http://www.time.com/time/photogallery/0,29307,1645016,00.html)

Norton, Michael. *The Everyday Activist: 365 Ways to Change the World*. Toronto: House of Anansi Press, 2006.

You want to change the world, but where do you begin? This book shows how even small actions can affect your local community and the wider world. Includes specific actions around local and global food consumption and production.



# Bibliography:

## Further Resources on Food

Roberts, Paul. *The End of Food*. Houghton Mifflin, 2008.

In this carefully researched, vividly recounted narrative, Roberts lays out the stark economic realities beneath modern food—and shows how our system for making, marketing, and moving what we eat is growing less and less compatible with the billions of consumers that system was built to serve.

Roberts, Wayne. *The No-Nonsense Guide to World Food*. Toronto: New Internationalist Publications, 2008.

With spiralling food prices and spreading social unrest, this is a timely guide to the instability of industrialized food systems. Roberts traces the history of food production and consumption and shows how real food choices are becoming harder to make.

Robin, Marie-Monique. *The World According to Monsanto*. The National Film Board of Canada and Mongrel Media, 2008.

Based on a painstaking investigation, this documentary pieces together the story of Monsanto, a century-old corporation with a controversial past. Today's leader in genetically modified crops, Monsanto claims it wants to solve world hunger and protect the environment. Can we believe it?

Smith, Alisa and J.B. Mackinnon. *The 100-Mile Diet: A Year of Local Eating*. Random House Canada, 2007.

The remarkable, amusing, and inspiring adventures of a Canadian couple who make a year-long attempt to eat foods grown and produced within a 100-mile radius of their apartment.

*The Toronto Star*. "Hungry for Answers: Parts I – VI." *The Toronto Star*. [www.thestar.com/News/World/article/451023](http://www.thestar.com/News/World/article/451023), June 28 to July 7, 2008.

This comprehensive and well-researched series covers a range of topics on the causes and impacts of the global food crisis.

World Vision Canada. *Food Fight: A Youth Action Guide on Hunger*.

This peer-to-peer manual facilitates discussion and action for young people around issues in the current global food "crisis". Available as a downloadable pdf or in a limited edition print copy at [worldvision.ca/youth](http://worldvision.ca/youth)



# Bibliography:

## Recommended Websites

### **TransFair Canada**

[www.transfair.ca/en/node](http://www.transfair.ca/en/node)

TransFair Canada is Canada's only non-profit certification and public education organization promoting Fair Trade Certified to improve the livelihood of developing world farmers and workers.

### **SPIN Farming**

[www.spinfarming.com](http://www.spinfarming.com)

Small-plot intensive – or SPIN – farming is an urban agriculture movement that started in Saskatchewan. It makes productive use of overlooked land in cities, ensures food sustainability for end-users, is environmentally progressive, and provides a source of income for prospective farmers who lack land and capital.

## Farms and Farm Tours in Canada

### **Canada:** Harvest Canada

[www.harvestcanada.com/](http://www.harvestcanada.com/)

### **Alberta:** The Lacombe Corn Maze

[www.lacombecornmaze.com/groups/](http://www.lacombecornmaze.com/groups/)

### Farms and Farm Tours

[www.discoveralberta.com/ToursActivitiesAdventures/FarmsFarmTours/](http://www.discoveralberta.com/ToursActivitiesAdventures/FarmsFarmTours/)

### **British Columbia:** The Centre for Sustainable Farm Systems at UBC Farms

[www.landfood.ubc.ca/ubcfarm/](http://www.landfood.ubc.ca/ubcfarm/)

### **Manitoba:** Farms and Farm Tours

[www.manitoba.worldweb.com/ToursActivitiesAdventures/FarmsFarmTours/](http://www.manitoba.worldweb.com/ToursActivitiesAdventures/FarmsFarmTours/)

### **New Brunswick:** Farms and Farm Tours

[www.newbrunswick.worldweb.com/ToursActivitiesAdventures/FarmsFarmTours/](http://www.newbrunswick.worldweb.com/ToursActivitiesAdventures/FarmsFarmTours/)

### **Ontario:** Harvest Ontario

[www.harvestcanada.com/index.php](http://www.harvestcanada.com/index.php)

### Farms and Farm Tours

[www.ontario.worldweb.com/ToursActivitiesAdventures/FarmsFarmTours/](http://www.ontario.worldweb.com/ToursActivitiesAdventures/FarmsFarmTours/)

### **Quebec:** Agritourism Quebec.com

[www.agritourismquebec.com/activities.html](http://www.agritourismquebec.com/activities.html)

### **Saskatchewan:** Farms and Farm Tours

[www.saskatchewan.worldweb.com/ToursActivitiesAdventures/FarmsFarmTours/](http://www.saskatchewan.worldweb.com/ToursActivitiesAdventures/FarmsFarmTours/)



# Bibliography:

## Recommended Websites

### Food Banks in Canada

**Calgary:** Calgary Inter-Faith Food Bank

[www.calgaryfoodbank.com](http://www.calgaryfoodbank.com)

**Edmonton:** Edmonton's Food Bank

[www.edmontonsfoodbank.com](http://www.edmontonsfoodbank.com)

**Montreal:** NDG Food Depot

[www.depotndg.org](http://www.depotndg.org)

**Nova Scotia:** Feed Nova Scotia

[www.feednovascotia.ca](http://www.feednovascotia.ca)

**Toronto:** Daily Bread Food Bank

[www.dailybread.ca](http://www.dailybread.ca)

Second Harvest

[www.secondharvest.ca](http://www.secondharvest.ca)

**Vancouver:** Greater Vancouver Food Bank Society

[www.foodbank.bc.ca](http://www.foodbank.bc.ca)

**Winnipeg:** Winnipeg Harvest

[www.winnipegharvest.org](http://www.winnipegharvest.org)

### World Food Programme Educational Resources

#### **Food Force**

[www.food-force.com](http://www.food-force.com)

This free educational video game teaches about the problems of hunger and the challenges of delivering food aid. There are six missions to complete in the story of a hunger crisis on the fictitious island of Sheylan. Includes a teacher site with suggestions for use in the classroom.

#### **FreeRice**

[www.freerice.com](http://www.freerice.com)

A web-based vocabulary game for use in arts, math, science, or chemistry classes. Every correct answer triggers a donation of 20 grains of rice to the World Food Programme. Students can test their knowledge of multiplication, world capitals, chemical symbols, foreign languages, and famous painters. So far, donations generated by the FreeRice site have fed hungry people in Bangladesh, Uganda, Nepal, and Myanmar.



# A Hungry World

Understanding the Global Food Crisis

Global Education, World Vision Canada

## Feedback Form

Your feedback on this study guide is important to us as we constantly strive to measure impact and improve our resources. Please take the time to fill out this feedback form and fax or mail it to us. We would also appreciate any comments or lesson suggestions.

**School:** \_\_\_\_\_ **City and Province:** \_\_\_\_\_

1. How did you learn about this resource?

\_\_\_\_\_

2. With what grade(s) and subject(s) did you use the resource?

\_\_\_\_\_

3. What was your objective in using the resource?

\_\_\_\_\_

4. Was this resource effective in helping you to meet your objectives?

\_\_\_\_\_

5. Please evaluate the resource according to the following criteria.

	(Poor)	1	2	3	4 (Excellent)
Overall quality of the resource		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clarity of instructions		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Breadth and depth of subject matter covered		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

\_\_\_\_\_  
\_\_\_\_\_

6. What component or activity did you find most useful?

\_\_\_\_\_

7. What did you find least useful?

\_\_\_\_\_

8. Please comment on the impact(s) that you perceive resulting from the use of this resource

(e.g. changed attitudes, actions taken by your group or yourself).

\_\_\_\_\_  
\_\_\_\_\_  
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**Are you a member of the World Vision Teacher Network? If not, would you like to join?**

**Email address:**

\_\_\_\_\_

Please send this form, along with any comments, by mail or fax to:

**Education and Public Engagement**

World Vision Canada

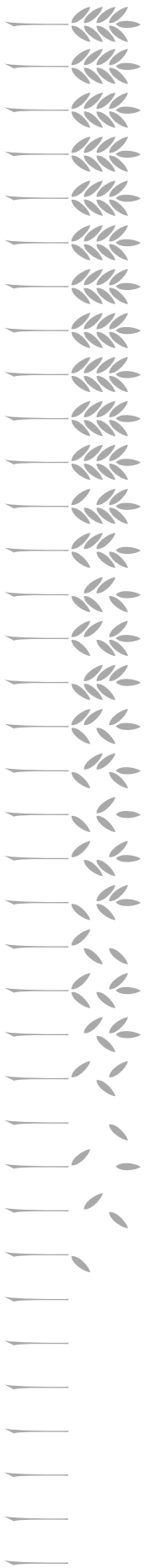
1 World Drive, Mississauga, ON L5T 2Y4

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Thank you!



**World Vision** is a Christian relief, development, and advocacy organization dedicated to working with children, families, and communities to overcome poverty and injustice. As followers of Jesus, we are motivated by God's love for all people regardless of religion, race, ethnicity, or gender.

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**World Vision**

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