

# Possible Food Futures

**Pillar(s): Healthy Eating and Positive Social Environments**

**Division IV**

**Grade Level: 10**

**Core Curriculum Connections: Social Studies 10**

- SOCIAL STUDIES 10-1: Perspectives on Globalization
- SOCIAL STUDIES 10-2: Living in a Globalizing World

**I. Rationale:** Globalization, the process by which the world's citizens are becoming increasingly connected and interdependent, demands that students explore responsibilities associated with local and global citizenship and formulate individual responses to emergent issues related to globalization. Recognizing and appreciating the influence of globalization will lead students to develop individual and collective responses to emergent issues. In this lesson, students will identify food issues of global concern, international mechanisms that exist to address these, and potential solutions to these global concerns. They will produce brief, multi-media presentations on an issue.

## II. Activity Objectives:

*The students will be able to:*

- identify food production and distribution issues of common global concern.
- recognize that solutions to global concerns often require international dialogue.
- recognize potential solutions to global concerns involving food distribution.

## Curriculum Outcomes: Social 10-1 and 10-2

- Students will explore the impacts of globalization on their lives.
- Students will assess economic, environmental and other contemporary impacts of globalization.
- Students will assess their roles and responsibilities in a globalizing world.

## III. Materials:

- newspapers or news magazines
- student task sheets included in this lesson

## IV. Procedure:

- see activity descriptions and instructions on the following pages.

# BACKGROUND -- For the Teacher

Many of the issues of major global concern involve food: famine, trade wars, food distribution, energy use, international grazing disputes and so on. Most issues that have existed for any significant time are addressed by government, United Nations or non-governmental organizations.

In this activity your students are asked for two things. In phase one, they gather news stories, magazine articles and broadcast information on as many of these issues as they can. In phase two, they select a topic and develop a short (5 to 10 minute) multi-media presentation on it for presentation to the class.

Through this two-step process your students should improve both their research skills and their ability to make interesting and involving presentations. They should also become more aware of what information sources surround them and what major issues are occurring in the world.

## PROCEDURE

### Part 1

#### Preparation

1. Decide how long students will have for information gathering and make a note of it in the space on Task Sheet One. Choose a presentation date and fill in the appropriate space on Task Sheet Two.
2. You will need one copy of Task Sheet One for each student and one copy of Task Sheet Two for every 3 or 4 students. Two or three copies of the data sheets should suffice to show students examples of what to collect.

### Part 2

#### Introduction

3. With about 15 minutes left in a class, distribute Task Sheet One to the students.
4. Set out copies of the data sheets at two or three locations.
5. Survey the class on what newspapers and magazines they have access to at home. Suggest resources they might use from the school or public library, and radio or television programs they might find relevant.

### Part 3

#### Activity

(Day 1)

6. Using the chalkboard, and acting as recorder, have the students contribute the issues, agencies and proposals they have identified.
7. As you record each item, determine how many people found it during their investigations.
8. Once all contributions have been recorded, have students choose a topic for further work and form groups of three to work on their choice. (Allow only one group per topic; the first to organize being first to choose.)
9. As soon as the groups are established and topics chosen (allow 15 minutes for this), distribute Task Sheet Two to the groups. Make certain that students know when presentation day is.

## ONE WEEK SLIPS AWAY

### Part 4

#### Conclusion

10. Assign or arrange a schedule for the presentations.
11. For each issue, ask students to answer orally the question "What does this issue mean to us, today?"

## DISCUSSION QUESTIONS

1. Which issues were found in the largest variety of sources?
2. Do any of the sources used present issues in ways that are strikingly different from others?
3. Are there themes or approaches that are constant within a medium regardless of subject?

## RELATED ACTIVITIES

1. Invite a representative from one of the agencies identified in phase one to address the class.
2. On a world map, locate sites where each issue is described as being significant. See whether any of the issues cluster in particular areas of the world.
3. Select nations from the list of United Nations members and investigate what are the critical food, distribution and related issues there.



## STUDENT RESOURCE

### TASK SHEET ONE --

### Gathering Information

Over the next \_\_\_\_\_ days you are to gather newspaper and magazine articles, radio or TV documentary summaries and any other information you can find on global food, food distribution and related issues.



Your information search should include material on three aspects:

1. What problems and disagreements exist around the world on food matters?
2. What organizations deal with various issues; how do they work; what are they like?
3. What innovations in food production, trade, transportation, food preservation, etc., are being proposed to address world problems?



## STUDENT RESOURCE



### TASK SHEET TWO --

#### Presentation

From the information you have gathered, choose one topic — an issue, an agency, a proposed solution or a related set of these.

Over the next week you are to produce a 5-10 minute multi-media presentation on your chosen topic.

Presentation day will be \_\_\_\_\_.



# DATA SHEET ONE -- Sample Issues

GLOBE & MAIL — SEPTEMBER 1993

**SLIM PICKINGS** / *By the time officials find out food is unsafe, it's probably on your plate*

## Imported produce eaten first, tested for toxins later

BY WALLACE IMMEN  
Consumer Affairs Reporter  
Toronto

**I**F some of the food you buy at your local market contains unsafe amounts of chemicals, you'll probably finish eating it before anyone finds out. Because fresh fruit and vegetables can spoil in the two to five days it takes for a laboratory analysis, Canadian officials responsible for food safety allow shipments of food to go on to market after random samples are taken for testing. If any chemical above the limits does show up in the lab tests, it is usually too late to catch the food in the store before it has been sold.

Imported apples, peaches, berries, broccoli, green beans are top the list, says a spokesman for the Agriculture Department.

are among Canada's most common fresh food imports from the United States in the winter.

Fortunately, Canada's screening process will keep future batches of chemically risky food off shelves, says Dr. Saschenbreider, who has one of the screening pens in the world, he says. Canada does year to year to check for such risks, he says.

Loiselle indicated Sunday that Canada would be willing to compromise on the issue of marketing boards if it became a sticking point in the overall trade talks.

"If compromise is needed, it will be there," he said. Canadian marketing boards manage the supply of such products as milk, poultry and eggs. There have been worries some countries might protest the supply management system, which doesn't subsidize Canadian products but limits foreign sales in the domestic market.

Prime Minister Kim Campbell and leaders of the U.S., Japan, Germany, Britain, France and Italy proclaimed a breakthrough during this year's Group of Seven economic summit in Tokyo with agreement on major cuts in manufacturing tariffs.

The package was expected to provide momentum, but the talks in Geneva have faltered again over the U.S.-EC impasse in agriculture.

**Farm subsidies threaten accord**  
GATT TALKS  
Washington (CP-AP) — U.S. and European negotiators reported no progress Monday as efforts to resolve a dispute over reductions in farm subsidies reached last year.  
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## Rainy weather pushes prices higher

By CHARLES HOUSE  
Foodstuffs Staff Editor

Rain and more rain drove grain prices higher still last week.

While profit-taking briefly stalled the bulls, extensive flooding, forecasts of more rain and numerous related problems pushed most markets up.

Soybean meal again led the parade. After backing off, futures prices rallied late last week. Cash prices in some markets have soared \$50 per ton — about 25% — in less than a month. Many grain and ingredient prices went along for the ride.

In some regions, the rain refused to relent. After eight consecutive months of above-normal precipitation, Iowa experienced its wettest week ever. The state

was awash with problems. Floodwaters broke levees in Illinois and Missouri and damaged thousands of acres of crops.

Hundreds of farmers in southern Minnesota, South Dakota and Wisconsin face a summer without any crops. Either the crops have been washed away or fields have been too wet to plant. Now, it's too late.

Meanwhile, parts of the Southeast are losing ground to an increasingly serious drought.

In several midwestern states, crops continued to falter, although the wetter of disaster declarations may have been misleading.

For instance, the entire state of Iowa was officially declared a disaster area, but

its ag department said last week that 79% of its soybean crop was in either fair or good condition. Iowa's corn was in similar shape.

In Wisconsin, 37 counties were declared disaster areas. Yet, 75% of the corn and 89% of the soybeans were rated fair to excellent.

One feed dealer in the state said he was surprised to learn that his county had been declared a disaster area.

"There's been some lowland flooding around here, but in most of these fields there's very little damage," he said. "Maybe 10-15%."

Minnesota's crops remained in rough shape. Fifty-two percent of the corn and 53% of the soybeans were rated poor or fair. *Rain/p. 3*

CALGARY HERALD — SEPTEMBER 1993

## STUDENT RESOURCE

FARM & COUNTRY — AUGUST, 1993

# Bold farmers tackle urban prejudices

Here's a guy who earns his money: the Ontario Veal Association's Keith Emiry, who fielded questions at The Farm exhibit at Toronto's Canadian National Exhibition last month.

"It's the most controversial booth," says Emiry, information officer with the association. Co-ordinated by the Ontario Farm Animal Council, The Farm exhibit has been at the CNE for four years.

Emiry says he's constantly getting off-hand remarks such as "Veal is so cruel", or "I could never eat veal," or "I saw a Fox TV show on that."



Layer exhibit draws negative reaction



Visitors say young animals shouldn't be slaughtered

ple think broiler chickens are in cages and pumped full of hormones. The Farm is "the best idea that's come along," says Emiry. "I don't mind my pro-

CALGARY HERALD — SEPTEMBER, 1993

## Rural lifestyle not enough

□ Rising debt, low prices and drought driving young people away from farming

By Phillip Day  
The Canadian Press

OTTAWA — Farming is at risk of falling behind in an increasingly high-tech world because fewer young people are getting involved, Statistics Canada said Monday.

The percentage of young people in farming was decreasing while the percentage of farmers aged 60 and older was up in 1991, the agency said.

Drought, low commodity prices and increasing debt have led to hard times on the farm.

"This has fostered the view that younger people do not perceive agriculture as a desirable career," writes Chris O'Toole, analyzing data from Revenue Canada and the 1991 census of agriculture.

"The loss of young farmers could impede the application of new agricultural technologies and have a negative impact on rural development."

The agency says 26 per cent of all farmers were over 60 in 1991, up from

19 per cent in 1981. At the same time, the percentage of farmers under 35 decreased to 16 per cent in 1991 from 21 per cent in 1981.

Jennifer Kilbourne, 22, grew up on a farm southwest of London, Ont. Like grounds, Kilbourne loves the lifestyle it provides.

"It's practically genetically inclined," she says.

Kilbourne is now in her fourth year of animal studies at the Ontario Agricultural College at the University of Guelph. She says many of her classmates also grew up on farms.

"We've been brought up with it, we've enjoyed it. We've seen the good times and we've seen the bad times on the farm, and we all hope that when we take over the farm that there'll be more good times and fewer bad times."

But about six months ago, Kilbourne decided that she probably won't be working on a farm when she finishes school. She thinks that her options will be better as a farm consultant.

Farming may be a great lifestyle but "it all comes down to money in the end," she says.

"Even though you may love doing the farm work and being on the farm

(and) the freedoms that are associated with it, you still have to feed yourself and your family at the end of the day."

O'Toole says most young farmers begin their careers with the advantage of information gained at school on the latest agricultural methods and technologies.

While older farmers can keep up with advances, younger farmers start with a base of up-to-date information.

"It's one of more important things you have to keep up with the things... that make you a more efficient farmer."

The data on farming trends also show a larger percentage of women were farming, although O'Toole says the numbers probably reflect what has always been the case.

He said more women are now listed as partners in farming operations. In the past, men were often listed as the sole operator.

"They've always contributed to the farm, becoming a partner on the tax roles is just making it legally recognized."

Revenue Canada says women represented 19 per cent of people who reported farming as their major source of income in 1990, up from six per cent in 1963.

**DATA SHEET TWO -- Sample Agencies**

**Canadian International  
Development Agency (CIDA)**

**International Development  
Research Center (IDRC)**

**Tools for Peace**

**International Monetary Fund**

**International Food Policy  
Research Institute**

**Organization for Economic  
Cooperation and Development  
(OECD)**

**STUDENT RESOURCE**



**Soil and Water  
Conservation Society**

**North-South Institute**

**Sustainable Agriculture  
Association of Alberta**

**General Agreement on Tariffs  
and Trade (GATT)**

**Food and Agriculture  
Organization (FAO)**

**World Food Programme**

## DATA SHEET THREE -- Sample Solutions

CALGARY HERALD -- SEPTEMBER, 1993

### TWO-YEAR EXPERIMENT

# Biosphere crew saw 'paradise'

From Reuter-AP

ORACLE, Ariz. -- The eight crew members of Biosphere 2, the ambitious but controversial experiment to build a prototype Martian colony, re-entered Earth's atmosphere Sunday after two years in their sealed environment.

They left behind more than a thousand species of insects, birds, animals and fish in the world's largest test tube, set in the scrub and sagebrush of the Arizona desert.

"It's a different atmosphere. A truly different atmosphere," said marine biologist Abigail Alling as she breathed fresh air after sphere's airlock.

"This has experience. I said botanist."

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grown th... to "green slime" and would be forced to leave their sy... world.

While that didn't happen, the biosphere was not a completely sealed environment. Airlock doors were opened more than two dozen times and air was pumped in once to replace seepage.

Dr. Roy Walford, the biosphere physician, said he and his fellow biospherians lost 10-18 per cent of their body weight while inside. But he added they were coming out much healthier

### ACHIEVEMENTS, SETBACKS

■ Operators claim to have set a record for living in an essentially closed system, breaking a Soviet record of six months in a closed environment and Soviet one-year stay

## Green issues to get billing at trade talks

FARM & COUNTRY -- AUGUST, 1993

The next round of GATT is being billed as "the green round".

Canadian Federation of Agriculture president Jack Wilkinson recently returned from a meeting of the International Federation of Agriculture Producers (IFAP) in Denmark.

He says IFAP, representing more than 70 grassroots farmer organizations in 54 countries,

is prepared to present a paper on how world agricultural trade will affect the environment.

"It is important that environmental factors not become trade barriers," Wilkinson said during a recent tour of eastern Ontario with Ontario Federation of Agriculture president Roger George.

Wilkinson said IFAP represents farmers in developing countries who do environmen-

tal planning either because they don't have land tenure, or grow export crops, such as coffee, cotton and cocoa.

"GATT historically has been sorted out by the rich countries and the smaller countries have to go along," he said.

Co-operatives can help farmers in developing countries control their own production, he said. "How does the farm community take control of the crop past the farm gate?"

Co-operatives have a bad name in many Third World countries where they have been pseudo-government agencies without a grassroots base.

IFAP's standing committee on Co-operatives draws on the long history of expertise of farmer-owned co-ops in Europe, North America, Australia and New Zealand.

Wilkinson cited Denmark, where farmer-owned co-operatives control 98 per cent of the pork industry and 92 per cent of dairy. -- HH

than they went in, thanks to lesterol, high-fibre diet.

Biosphere 2, a huge glass structure nesting in the foothills of the Santa Catalina Mountains, cities north of Tucson, consists of seven interconnected domes, some rising five stories

## STUDENT RESOURCE



GLOBE & MAIL — SEPTEMBER, 1993

### Chicken protein used to modify immune function Oral treatment tested for rheumatoid arthritis

BY PAUL TAYLOR  
Medical Reporter

TORONTO — Chicken soup has long been a popular remedy for the common cold, but could chicken collagen ease the aches and pains of rheumatoid arthritis?

A team of U.S. researchers thinks so. In a study being published today in the journal *Science*, they report a significant reduction in pain and swelling among rheumatoid-arthritis patients fed collagen extracted from chicken cartilage.

Four of 28 patients who received the experimental treatment — given to them in their morning orange juice — improved so much that their disease appeared to be in remission. The others experienced an average 25- to 30-per-cent reduction in their symptoms.

The study was spearheaded by a Harvard University rheumatologist, Dr. David Trentham, who is also chief of rheumatology at Beth Israel Hospital in Boston.

CONTACT — A2

### Ontario seeks to improve land use planning and development system

FACETS OF GROUNDWATER — MAY, 1993

By Tom Moull

Land use planning and development practices in Ontario are largely defined by provincial legislation and policies and implemented by municipalities under the auspices of the Municipal Planning Act. The legislation along with land use planning and development policies and practices have been the subject of review by the provincial government.

The provincial government's *Review of Planning and Development* has been the subject of a broad public consultation process. The commission has published its recommendations in a report published two years ago.

The commission has published a draft report for public review. It contained several recommendations including overhauling the planning and development system. Several recommendations include:
 

- Review of the impact of water re-

geographic basis, but not necessarily be limited by municipal boundaries. In many instances, decisions should be based on a watershed or ecosystem basis. This will often require coordination with adjacent municipalities and conservation authorities, as well as the province in situations where large water bodies or groundwater systems are involved. Some development proposals may require an environmental impact statement as a condition of approval by the municipality.

Considerable discussion has taken place over the use and management of sewer disposal systems, primarily about private septic tank systems, and to a lesser extent, municipal sewer treatment plants. The commission acknowledged that conventional septic tank systems may be an effective means of disposal if correctly installed in appropriate soil conditions.

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FEEDSTUFFS — JULY, 1993

### Administration offers \$1 billion in disaster aid

By GORDON S. CARLSON  
Feedstuffs Correspondent

WASHINGTON, D.C. — The Clinton Administration plans at least \$1 billion in farmer disaster aid, \$600 million of it in new money from Congress.

President Bill Clinton has put together a package, cleared by the Office of Management & Budget, that calls for \$100 million in prior disaster aid recently released for 1993 crop losses, \$600 million in new supplemental 1993 appropriations, \$300 million in contingency funding to be used if necessary, and standby authority to use Commodity Credit Corp. funds if the full \$1 billion isn't enough.

The problem with the \$300 million, however, is that it must cover quality losses from damages prior to the current floods.

Farmers with losses due to flooding or other natural disaster prior to Aug. 1 could be certified eligible immediately, any disaster after Aug. 1 would trigger relief payments only on the declaration of the disaster by the President. In both cases, farmers would share in the \$600 million in new appropriations.

The \$600 million would cover crop losses at a rate of 50%, but, as Rep. Pat

Roberts (R., Kan.) pointed out July 14 at a House Agriculture Committee hearing on the disaster, when the formula for actual payment is applied, the rate of coverage is about 25%.

Roberts also worried about winter wheat farmers with 1992 crop losses but was assured by officials of the U.S. Department of Agriculture that the farmers would be covered by the \$300 million.

USDA deputy secretary Richard Rominger also told committee members that the aid package applies to all 1993 crop disasters, including crops that may later be damaged by drought in the Southeast. The crop losses now are concentrated in Illinois, Iowa, Minnesota, Missouri, Nebraska, South Dakota and Wisconsin, Rominger said.

June rains in much of the western Corn Belt totaled more than 200% of normal, he added, with some localities getting more than 10 in. just in June. Some areas have seen rainfall in excess of 700% of normal. There were indications that the stalled weather systems that have brought the deluge were moving to the east, but slowly.

However, the economic effects of the weather should be felt most by farmers,

Rominger told the panel.

Food prices should increase little if at all as a result of the flood, but higher soybean and corn prices will produce increases in meat production costs. However, with ample supplies of meat on hand, consumer prices should not be affected to any great extent, Rominger said.

USDA plans to reopen the Farmer-Owned Reserve, he said, and maturity dates for 1992 wheat and feed grains coming due in June, July and August will be to Sept. 30. Conservation Reserve Program acreage in the affected areas will be opened for haying and grazing, Rominger added.

Rep. Glenn English (D., Okla.), chairman of the House Agriculture Committee subcommittee with crop insurance jurisdiction, noted that crop insurance purchases were running 50% or more among eligible farmers, but most of those policies did not cover prevented planting conditions.

Rominger said farmers without crop insurance would be eligible for disaster aid as would farmers who bought insurance, but those who bought could not double-dip beyond 100% of the value of

Aid/...

## VI. Source:

- lesson idea adapted from [Agriculture in the Classroom](#).

