

Module Three

Food Sovereignty for Environmentalists





Environmental Reflection Exercise: Building a Green Food System

▶▶ Introduction

This exercise is a card game in which participants compete to create a “hand” of cards that represents the “greenest” food system. The objective is for participants to learn about the environmental impacts of industrial food production and connect those impacts to particular food and trade policies.

 **Time: 45 minutes**

Materials needed

- Sets of playing cards (see Module 3, p. 3)
- Newsprint with list of the 6 Food Sovereignty Principles (see Overview, p. 9)
- Copies of environmental factsheet at the end of this module and evaluation forms and *What I/We Can Do* sheets (Overview, pages 15 and 16)
- Newsprint, tape and markers
- Fair Trade or locally grown food to share (optional)

Preparation

Print out all playing cards. Groups should be composed of 3 to 6 people, and each group should receive 6 cards. Cut the cards along the dotted line and shuffle well. Groups should also be provided with blank cards to add their own impacts. Also print out enough handouts.

Procedure

Part I – Small groups / 25 minutes

1. Let people know they will be breaking into small groups of approximately 3 – 6 players (6 is ideal). Tell them they will be playing a card game, and that the deck has cards that either tilt towards food sovereignty or industrial farming. The object of the game is for each small group to examine their set of cards, evaluate the environmental impact of the food system described by their cards, and attempt to improve the food system’s environmental impact by exchanging some cards and making new ones.
2. Tape up the newsprint with the list of 6 Food Sovereignty Principles (see Overview, p. 9). Explain that these principles reflect the values behind the food sovereignty cards in the card game. Briefly walk through them.
3. Place a set of 6 cards in front of each group from the shuffled deck. There may be cards left over and, likewise, if you have a large number of groups it is fine to reuse cards in which case some of the groups will have the same cards. Explain that everyone in the group should take turns drawing cards, until 6 cards have been drawn. When each person draws a card, they should read it aloud, and then put it face up in the middle of the table or floor.
4. After the group has drawn, read aloud and discussed their 6 cards, the group turns to a second task: identifying actions that people in the group have taken in real life to improve the food system. Actions may range from “I shop at the farmers’ market” to “I belong to an advocacy group that wrote to the CEO of Taco Bell for better wages for tomato pickers.” The objective is to have people see that they have already taken transformative actions, however modest those may be.



Environmental Reflection Exercise, continued

↔ Procedure, continued

5. When the group has written down 6 actions of their own on newsprint, they can then discard two cards (presumably ones that are obstacles to a healthy food system) and replace those cards with two cards of their own invention. These two new cards should reflect programs or policies that will help bring about a more environmentally sustainable food system. Make sure that people have been given markers and blank cards so that they can create these new cards (one person in the group should create these two new cards).
6. With the new, improved 6-card hand, the group should now analyze their hand. Overall, what are the strengths and weaknesses of their hand with respect to creating an environmentally sustainable food system?
7. Participants should tape their cards to a large newsprint and summarize the strengths and weaknesses of the food system their hand represents. They should also write down those actions they have taken in their lives to create an improved food system (this will likely require a separate piece of newsprint). The other groups will want to see what they've done.

Part II – Gallery Walk / 5 minutes

Allow 5 minutes for a gallery walk/stretch so that each group can view the others' work.

Part III – Large Group Discussion / 15 minutes

After the brief gallery walk, the groups should come together in plenary and allow 15 minutes for discussion based on observations made during the gallery walk. The facilitator may have to prompt the group to get the ball rolling. What did the groups have in common? In contrast? Were the food sovereignty principles represented in your food systems? What are the obstacles to creating an environmentally-sensitive food system? What are the opportunities to create an environmentally-sensitive food system? Be sure to end on a note of positive opportunities. During this plenary session, you can share food if you have brought any.

Lastly, engage in the Wrap-Up Exercise (see Overview, p. 14) and leave enough time for people to fill out the evaluation forms.



Industrial and Food Sovereignty Playing Cards

North American Free Trade Agreement (NAFTA) passes in 1994

- Multinational agribusinesses profit
- Small farmers in U.S., Canada and Mexico lose their farms

Freedom to Farm Bill Passes (1996)

- Price floors removed, giant agribusinesses gain advantage, process 95% of all U.S. food
- Industrial farms grow, hurting environment
- Small farmers suffer

Freedom to Farm Bill Passes (1996)

- Policies to control supply and stabilize production eliminated
- Prices paid to farmers collapse
- Giant agribusinesses profit and grow
- Cheap grain encourages factory farms

Oligopoly control

- A few large processors determine the prices paid to thousands of dairy farmers
- Increase herd from 100 to 1,000 to make up for low price
- Increase air and water pollution from manure

United Nations recognizes the right of all countries to determine their own food, agriculture and trade policies

- Creates foundation for international trade agreements based on food sovereignty

New Deal establishes Farm Bill (1930s) that ensures farmers do not overproduce via:

- Price floors which reflect true cost of production
- Conservation set-asides
- Buying grain in high-yield years
- Farmers have incentives to conserve land and soil
- Farmers get fair price for product

Sustainable Farm Bill Passes!

(projected, has not yet occurred)

- U.S.D.A. re-establishes price floors, ensures prices of commodities are stabilized *at or above* true cost of production
- Farmers don't have to deplete land by growing more crops for less money
- Taxpayers win as price of organics drops due to expansion of public support for sustainable ag

Strong Conservation Program passes

(projected, has not yet occurred)

- Farmers adopt sustainable methods
- Crop rotations reduce fertilizer and pesticide use
- Cover crops reduce erosion and improve soil fertility



Industrial and Food Sovereignty Playing Cards, continued

U.S.D.A. re-establishes grain reserve

(projected, has not yet occurred)

- Buys surplus grain in bountiful years; half is used for emergency food aid, half is used for growing agrofuels industry
- Ensures against grain shortages due to climate change

Strong Conservation Program passes

(projected, has not yet occurred)

- Only farmers in compliance with conservation programs receive price supports
- More farms set aside land for conservation (reducing overall number of acres in production)
- More wildlife habitat created
- Soil erosion reduced

Factory farms (CAFO's) must pay true cost of production for grain

(projected, has not yet occurred)

- Diversified small farms gain advantage
- Fewer CAFO's means fewer manure lagoons
- Nutrients recycled on more farms
- Dead zone in Gulf of Mexico shrinks

Bulk of credit available for large-scale farms

(projected, has not yet occurred)

- Small-scale diversified farms blossom around the country
- Farmers experiment with heirloom seed varieties and heritage breeds
- Increased biodiversity

Oligopoly control

- A few large processors determine the prices paid to thousands of grain farmers; set prices low
- Farmers forced to increase acres in cultivation just to break even
- Plow up wetland that provided habitat for migrating ducks

Farm Bill gives biggest subsidies to largest farms, resulting in:

- More acres in production
- Increased erosion
- Increased pesticide applications
- Plowing of wetlands

Cheap grain prices encourage Confined Animal Feeding Operations (CAFO's)

- More CAFO's means more excessive, concentrated manure
- Air and water pollution increase
- Animals suffer unsanitary conditions

North American Free Trade Agreement is broadened

- GMO corn from U.S. floods Mexico
- Original strains of corn contaminated Biodiversity threatened
- Mexican small farmers lose farms – migration of undocumented workers to U.S. spikes



Industrial and Food Sovereignty Playing Cards, continued

Sustainable Farm Bill Passes!

(projected, has not yet occurred)

- Small farmers have more funds for good conservation practices
- Watershed and groundwater protected

Sustainable Farm Bill Passes!

(projected, has not yet occurred)

- Funding increased for research on sustainable farming methods
- Reduce pollution from synthetic chemicals
- Improve soil nutrients
- Increase in beneficial insects

Sustainable Farm Bill Passes!

(projected, has not yet occurred)

- Fruit, vegetable and other specialty crops get more funding: small farmers benefit
- Reduces long-distance imports of fruits and vegetables
- Agricultural production reflects U.S.D.A. food pyramid (used for nutritional recommendations)

Strong Conservation Program passes

(projected, has not yet occurred)

- Farmers switch from confined feeding to rotational grazing
- Reduces manure run-off into streams

Conservation funds given to largest farms

- Creates incentive for factory livestock farms or Confined Animal Feeding Operations (CAFO's); enlarges manure lagoon
- Excess manure pollutes rivers and streams; algae grows, kills fish
- Taxpayers foot the bill to clean contamination

Use of synthetic pesticides on corn and soy crops increases

- More pesticides in rivers and groundwater
- Pesticides cause sex changes in waterfowl and frogs
- Increased cancer rates

Monsanto invents genetically engineered crops that tolerate herbicides

- Creates superweeds
- Hurts pollinators and other beneficial insects

No credit for small farmers

- To obtain credit and stay in business, forced to contract to raise hogs for large corporation
- Go from 30 hogs to 3,000 hogs
- Build manure lagoon, contribute to groundwater pollution
- Lose independence



Industrial and Food Sovereignty Playing Cards, continued

Irrigation from industrial farms depletes local aquifer faster than it can be recharged

- Area wells go dry

Grain processors must pay true cost of production, including water and waste

(projected, has not yet occurred)

- Factory livestock farms at disadvantage
- Family farms that grow own feed for livestock get a leg up

African-American farmers discriminated against by U.S.D.A.

- Do not receive subsidies or loans
- Lose farms

Climate change causes droughts and floods

- Food supplies unpredictable

Grain processors must pay true cost of production, including water and waste

(projected, has not yet occurred)

- Factory livestock farms at disadvantage
- Family farms that grow own feed for livestock get a leg up

Small farmers in Brazil establish seed banks to keep native seeds GMO free

- Biodiversity preserved
- Thousands of small farmers earn more money for their produce by connecting with consumers who value biodiversity and local markets

Food sovereignty platform adopted by a U.S. presidential candidate.

(projected, has not yet occurred)

- Increased media draws attention to links between food system and the environment
- Consumers change the kind of food they buy
- Public support to sustainable farmers – organic food prices drop

U.S. citizens promote Farm Bill as a Consumer-Farmer-Environment Bill of Rights and lobby for its passage

(projected, has not yet occurred)

- Push through a Sustainable Farm Bill



Industrial and Food Sovereignty Playing Cards, continued

Factory farm manure lagoon breaks

- “Dead zone” area of low oxygen in Gulf of Mexico expands
- Massive fish and shrimp die-off in Gulf—prices soar

Corn blight hits!

(projected, has not yet occurred)

- Majority of U.S. corn crop wiped out

Multinational oil companies invest in genetically engineered agrofuels as the wave of the future

- Plant millions of acres of rainforest with genetically modified trees for cellulosic agrofuels.
- Destroy habitat for wildlife
- Eliminate local jobs and farms
- Create ecologically sterile “green deserts”

Funding for Farmers Markets cut

- Consumers drive to big box stores for plastic packaged produce
- Climate change exacerbated
- Diabetes epidemic grows

Environmentalists join the Via Campesina

- Help build international movement for ecological agriculture

WTO forces holdout countries to adopt genetically modified (GMO) seeds

- Increases industrialization of agriculture
- Increases control of food production in the hands of a few corporations

U.S. funds small-scale, locally-owned agrofuel processing facilities

(projected, has not yet occurred)

- Promotes community-based production of alternative fuels
- Encourages sustainable farming methods
- Fosters local economic development

Sustainable Farm Bill Passes!

(projected, has not yet occurred)

- More funding for farmers’ markets.
- More people can walk or bike to a farmers’ market
- Less fuel consumed
- Public health improves



Industrial and Food Sovereignty Playing Cards, continued

Sustainable Farm Bill Passes!

(projected, has not yet occurred)

- Through innovative public programs, low-income families can buy more food from farmers markets and Community Sustained Agriculture projects (CSA's)
- Local family farms supported
- Families get fresh healthy food

Sustainable Farm Bill Passes!

(projected, has not yet occurred)

- More money for farm-to-cafeteria programs for schools and hospitals
- Local farms flourish with new market
- Reduce carbon emissions with less food transported long distances
- Less food thrown out

Establish Food Policy Council

(has occurred in some localities)

- Public institutions must purchase food from local farms whenever possible
- Small sustainable farms supported
- City's carbon footprint shrinks

Local groups advocate for zoning that values agriculture over development

(has occurred in some places)

- Preserve working landscape and rural livelihoods
- Conserve wildlife habitat
- Protect watershed

Wal-Mart starts selling organic

- Buys from industrial scale organic farms to maintain low prices
- No pesticides used, but products shipped over long distances in trucks
- Vast amounts of plastic used for weed control and packaging
- Animals kept in huge lots

Colleges and institutions continue to buy industrial food shipped long distances

- Supports industrial farming
- Carbon footprint stays large
- Students eat tasteless tomatoes

Monsanto employs Terminator Technology (in which seeds of grains, fruits and vegetables are made sterile)

- Farmers lose ability to save seed

High property taxes on farmlands

- Sell family farm to developer who builds big box stores and McMansions
- Electricity use surges
- Greenspace diminishes
- Migratory waterfowl lose stopover wetland



Industrial and Food Sovereignty Playing Cards, continued

Environmental laws against industrial agriculture enforced

(has occurred in some places)

- Environmental group sues slaughterhouses over water pollution
- State uses proceeds to fund smaller, locally owned processors
- Water quality improves

Food sovereignty talks are given at local grocery and community institutions

(has occurred in some places)

- Inspires members to change buying policies
- Grocery makes more purchases from sustainable local farms and fair trade co-ops

Town meetings organized on genetically engineered crops

(has occurred in some places)

- Town passes resolution to be GE-free zone
- Hundreds of towns and counties across the U.S. say no to GMO's
- Organic farmers protected from GMO contamination

Town Meeting organized on confined animal feeding operations (CAFOs)

(has occurred in some places)

- County passes health ordinance restricting size of livestock farms
- Downstream water quality improves
- Childhood asthma rates decrease

Meatpacking industry allowed to self-regulate

- Streams contaminated with fecal bacteria and other animal wastes

Whole Foods tells local farmers they will not buy directly

- Farmers must ship through warehouse halfway across the country
- Whole Foods does not measure its whole carbon footprint

Legislation introduced in 19 states to prevent local control of plants and seeds

- Communities prevented from passing anti-GMO ordinances
- Democracy undermined

Pre-emption bills on livestock prevent towns from banning factory farms (CAFO's)

- Due to free trade agreements and undermining of decentralization, local officials can't protect health and well-being of their citizens and environment



Industrial and Food Sovereignty Playing Cards, continued

Country of Origin Labeling (C.O.O.L.) not enforced

- Consumers stay uninformed of where their meat and produce comes from
- Consumers continue to buy organic strawberries shipped from China

Anti-trust legislation on the books but not enforced

- A few huge corporations dominate the food system
- Industrial farming increases
- Confined animal feedlots grow
- Environment suffers

Recombinant Growth Hormone (rBGH) introduced

- More milk from fewer cows
- Cows tired and prone to illness
- Increase antibiotic resistant bacteria
- Small dairies go under

Meatpackers allowed to own livestock

- A few companies own food chain from beginning to end
- Encourages factory livestock farms (CAFO's)
- Shareholder profit trumps environmental health
- Small farms can't compete

Environmentalists and farmers join forces to enforce Country of Origin Labeling (C.O.O.L.)

(projected, has not yet occurred)

- Consumers see what countries their meat and produce comes from
- Reduce carbon emissions by buying locally grown food

Anti-trust legislation enforced

(projected, has not yet occurred)

- Trend toward concentration of agriculture in the hands of a few corporations reversed
- Family farms get a chance to succeed

Food and Water Watch anti-GMO Campaign succeeds!

- Starbucks stops buying milk from farms that use genetically engineered growth hormones (rBGH).
- Less rBGH means healthier happier cows and fewer antibiotics in the food system

Meatpackers banned from owning livestock

(projected, has not yet occurred)

- Decreases number of confined animal feeding lots (CAFO's)
- Independent farmers get fair prices for free-range meat
- More free range farms improves soil and water quality



Industrial and Food Sovereignty Playing Cards, continued

Students encourage colleges to buy from sustainable local farms

- Reduce college's carbon footprint
- Students eat fresh, tasty food
- Grades improve (kidding!)

Agricultural Justice Project brings Domestic Fair Trade label to community farms and groceries

- Ensure that farmers get a fair price
- Improve working conditions for farmworkers

All regional Free Trade agreements re-written to incorporate food sovereignty principles

(projected, has not yet occurred)

- Farmers, environmentalists and consumers succeed in getting agriculture out of free trade agreements for good

Rainforest Action Network campaign against big agribusiness succeeds

(projected, has not yet occurred)

- Massive boycott forces giant agribusinesses to stop clearing rainforest for soy and palm oil plantations.
- The lungs of the planet get to breathe again

WTO gives up efforts to apply free trade to agriculture

(projected, has not yet occurred)

- United Nations takes over negotiations for Fair Trade in agriculture. Small farmers given seat at the table.
- Environmental principles for agriculture adopted internationally

Business groups lobby for Free Trade to export fruits and vegetables

- Increase in carbon emissions from exporting produce
- Farmers in the Global South can't compete against low prices, lose farms

Central American Free Trade Agreement (CAFTA) passes

- Small farmers in U.S. and Central America can't compete with industrial farms, lose farms
- Loss of genetically diverse traditional plants and animals

Multinational agribusinesses destroy thousands of acres of rainforest to grow soy to feed livestock in U.S. and Europe

- Hundreds of rainforest species lost
- Huge amounts of greenhouse gases emitted from burning forest
- Slave labor used to clear forest



Environmental Action Exercise: Food Sovereignty Treaty for a Stable Climate

▶▶ Introduction

This exercise asks participants (there should be no fewer than 10 for this exercise to work well) to negotiate the agriculture section of an international treaty on climate change. The objective of the agriculture section is to reduce greenhouse gas emissions caused by agricultural activities (CO₂, methane and nitrous oxide) while ensuring adequate food availability.

Participants wearing the hat of negotiators, representing their respective governments, will work in small groups. Each group will have their own particular set of needs and “deal-breakers.” The challenge for them is to reach agreement on how to reduce greenhouse gases, given the conflicting visions of transnational agribusiness and food sovereignty within their countries.

Participants should come away with an understanding of the opportunities and challenges inherent in multi-lateral negotiations, and realize how agriculture and trade policies in the Global North affect communities and climates in the Global South.

 **Time: 90 minutes**

Materials needed

- Copies of the regional profiles (see Module 3, p. 15), the industrial agriculture vs. food sovereignty arguments (see Module 3, p. 19), the climate change maps (see Module 3, p. 20) and “Global Agriculture Agreement Based on Food Sovereignty Principles” (see Module 3, p. 18)
- Newsprint for recording agreement elements
- Namecards for each region (i.e., Asia, Africa)
- Water pitcher and cups, plus pens and scrap paper for each regional team
- Copies of environmental factsheets, located at the end of this module
- Evaluation forms and *What I/We Can Do* sheets (see Overview, pages 15 and 16)

Preparation

- Set up the table and chairs to look like a negotiation forum, with name cards and a cup of water in front of each negotiator.
- Tape up sheets of newsprint for recording the agreement elements as they are voted on.
- If possible, prepare food for sharing during the closing discussion.



Environmental Action Exercise, continued

↔ Procedure

1. *Introduction / 10 min.:* Begin by stating that climate change is upon us. The most optimistic estimates predict there will be a 1 to 2 degree Fahrenheit rise in temperature in the coming decades; more dire estimates predict a rise of many more degrees.

Industrial agriculture is a significant contributor to greenhouse gases and climate change – in fact, it contributes approximately 25% of all greenhouse gases. Agriculture and food availability around the world will also be significantly affected by climate change, as droughts, floods and severe weather affect our ability to grow food. But by changing to a more sustainable and just global food system now, we can greatly reduce risks and impacts.

Each of you will be representing a different region of the globe. You are here today at the behest of your governments that have committed, to some degree, to reduce their greenhouse gas emissions. The task before you is to negotiate *how* your region will do so. The goal for each team is to win approval from other teams for certain agriculture and trade policies, bearing in mind that it faces certain political and economic constraints.

We are not expecting that you will be able to resolve all of these issues today. Your goal today is merely to agree on some elements to include in the Agricultural Agreement of the Climate Change treaty. If you don't reach agreement on anything, constituent groups in your country will be angry, accusing you of doing nothing about global warming.

You will receive a handout called “A Global Agriculture Agreement Based on Food Sovereignty Principles” consisting of 12 elements. Each team should select 3 elements that are a *priority* for their region (and can be won without violating the “deal-breaker” listed on their profile card) as well as discuss which elements they will vote for and against. The goal of the exercise is to find common ground on climate change solutions through food sovereignty and to understand each others' limitations.

Have participants break into regional teams of at least 2 people for each region (Asia, Africa, etc.). Explain that one person should be the spokesperson for the group as they negotiate the agreement. If you have a small number of participants, you can do the exercise with one group from the North (North America and Europe combined) and two groups from the South (drawing from South America, Africa, Pacifica, or Asia).

Give each group their regional profile, factsheet, industrial agriculture vs. food sovereignty arguments and a copy of the “Global Agriculture Agreement Based on Food Sovereignty Principles.” If you wish, you can also pass around a copy of the climate change maps showing how different regions of the world contribute to, and are affected by, climate change.

2. *Prepare to Negotiate / 20 min.:* Tell the groups they have 20 minutes to read the materials they've been given and to prepare as a team. They should remember that they are negotiators representing their governments and may need to be responsive to constraints and constituencies. They should agree on the following:
 - Which 3 elements would they most like to include in the agreement?
 - What other elements would they like to vote for and against?
 - What arguments will they make in those elements' favor?
 - What they are willing to be flexible on in order to win their priorities?

Tell them that once they have determined their positions, each team will have 1 minute to state their case on each of the policy elements that are a priority for them.



Environmental Action Exercise, continued

↔ Procedure, continued

3. *Consult with Other Groups Informally / 10 min.:* Once the regional groups have formulated their positions, the facilitator should open up a 10 minute period for the groups to negotiate with one another, in order to gain allies for their positions. Groups should circulate among tables in search of common ground.
4. *Negotiations / 30–40 min.:* Ask everyone to take their places at the negotiating table. Remind them that each region has a maximum of 1 minute to make their case for each of the 3 elements that they want to include in the agreement. Go through each element one by one – using the “Global Agriculture Agreement Based on Food Sovereignty Principles” as your script. In some cases, no one will advocate for a particular element. Regardless, the facilitator will call a vote on each element. Each team can vote on each element—whether it is a priority element for them or not. Majority rules. The facilitator should write down the results of the voting.
5. *Closing Discussion and Sharing Food / 10 min.:* Share fair trade or locally grown food or drinks while you assess the process. On which elements of the “Global Agriculture Agreement Based on Food Sovereignty Principles” have you reached some agreement? Explain what kind of positive impacts there would be on the environment and for food sovereignty if we were able to pass an international agreement such as the one they just negotiated (or tried to negotiate...). Ask what kinds of actions we can take as individuals or in groups to help us move towards realizing these goals and how real negotiations may or may not mirror our negotiations here.
6. Engage in the Wrap-Up Exercise (see Overview, p. 14) and leave enough time for people to fill out the evaluation forms.



Regional Profiles

North America and European Union

How you are likely to be affected

- Hurricanes, floods and droughts will increase
- Grain production will be reduced
- Tropical diseases, including agricultural pests and disease, will move into temperate zones

- The U.S. agricultural economy is based on exporting grains using fossil fuel agriculture
- Many powerful multinational oil and agribusinesses are based in the U.S. and Europe; they have significant political clout
- You import a lot of inexpensive food from other countries. Consumers expect cheap food, and will not be happy about changing their consumption patterns
- To reduce foreign oil dependence, you want to put agrofuel plantations in tropical rainforests

Points to consider

Deal-breaker

No deal if Asia does not promise to reduce emissions from its manufacturing sector

Asia

How you are likely to be affected

- Hurricanes, floods and droughts will increase
- Asian river deltas will be particularly hard hit, millions will be at risk of famine
- Grain production in India and China is already in decline due to climate change

- You want to be able to continue to industrialize as you see fit
- You want the North to reduce its emissions from agriculture
- You need to produce large amounts of food for growing populations

Points to consider

Deal-breaker

- You will not agree to the North imposing limits on your manufacturing and transportation emissions
- You want the right to determine your own food and agriculture production and to protect your markets from the dumping of cheap grains from the U.S. and Europe



Regional Profiles, continued

South and Central America, Caribbean

How you are likely to be affected

- Hurricanes, floods and droughts will increase; mudslides on heavily deforested slopes will wipe out many villages
- Many countries will not have the resources to take care of their infrastructure and will thus need to rely on food aid and international aid

- A relatively important part of your economy is based on exporting agricultural products to the North such as coffee, fruits and off-season vegetables
- Much of the industrial production of agrofuels is proposed to take place in your tropical rainforests and in your corn-producing belt, destroying forests and livelihoods, and replacing them with plantations (which will benefit some of your large landowners); citizen groups are already rising up in protest against industrial agrofuels
- You want the North to drastically reduce its emissions from manufacturing, energy use and agriculture
- Small farmers in your country are protesting against the dumping of cheap imported agricultural products on your local markets and seek fair trade, not free trade

Points to consider

Deal-breaker

- You will not agree to the North imposing limits on your emissions from your fledgling manufacturing sector or your struggling transportation sector
- You want the right to determine your own food and agriculture production and to protect your markets from dumping
- No deal if Asia does not promise to reduce emissions from its manufacturing sector

Africa

How you are likely to be affected

- Africa has some of the lowest per capita emissions for greenhouse gases, yet Africa, Pacifica and the Arctic are the regions that will be worst hit by global warming
- Increased drought and disease
- Millions will be at risk of famine

- Much of your economy is based on exporting agricultural products to the North
- You want the North to drastically reduce its greenhouse gas emissions
- You want the North to stop subsidizing its agriculture, which makes it very difficult for your country's small farmers to maintain their livelihoods
- Small farmers in your country are protesting against the dumping of cheap imported agricultural products on your local markets and seek fair trade, not free trade

Points to consider

Deal-breaker

- You want international support to deal with the impacts of climate change
- You want the North to stop subsidizing its agriculture which makes it impossible for you to compete
- You cannot afford to pursue any solutions until your international debt is forgiven



Regional Profiles, continued

Pacifica

How you are likely to be affected

- All scenarios predict a rise in global sea levels of 1 to 2 feet over the next decades
- You live on islands and atolls; as the oceans rise, entire nations will have to be evacuated, and the Carteret Islands in Papua New Guinea have already been evacuated
- Rising ocean temperatures have already damaged 95% of the world's coral reefs – some of the world's most diverse ecosystems and breeding grounds for fish

- Agrofuels: Since tropical rainforests sequester carbon, you are concerned that the cutting of forests for industrial agrofuel production will contribute to global warming and the rise of oceans
- You want *all* regions to drastically reduce emissions as soon as possible
- You want to know how countries in the North, which are largely responsible for climate change, will help when you have to abandon your island nations

Points to consider

Deal-breaker

None. You have relatively little power and have everything to gain by *any* agreements to reduce emissions



Global Agricultural Agreement

A Global Agriculture Agreement Based On Food Sovereignty Principles

We the undersigned believe in the principles of food sovereignty. In order to protect the world's environment for future generations, we propose an agriculture agreement that focuses on food for people, values food providers, localizes food systems, makes decisions locally, builds knowledge and skills, and works with nature.

We agree to the following 12 elements:

- 1. Gradually replace industrial agriculture with sustainable agriculture by:**
 - a. Establishing conservation set-asides of forests and wildlands to promote carbon sequestration
 - b. Requiring that the largest agricultural greenhouse gas emitters pay fees for their emissions
 - c. Establishing subsidies and price supports based on sustainability, not the size of the farm
- 2. Commit to sustainable agrofuel¹ production:**
 - a. Agrofuel production should be small-scale and environmentally sustainable, and be overseen by local populations; products should not be transported over long distances or controlled by transnational oil corporations or agribusinesses
 - b. Agrofuel production should not displace food production
 - c. Agrofuel production should not use genetically modified organisms (trees or other fuel plants)
- 3. Engage in Fair Trade:**
 - a. To minimize the distance food is transported, trade should take place according to the "proximity principle" – that the most local source of a product should always be given preference
 - b. Food and agriculture should be removed from world trade agreements
 - c. The North must cap farm subsidies in order to: 1) dissuade "dumping" or exporting food at prices below the cost of production; 2) dissuade over-production that drives prices down, and 3) discourage putting of too much land into agricultural production, thus eroding the environment
 - d. Countries should be allowed to protect their own farmers and markets by controlling imports, including bringing back tariffs that have been eliminated by free trade agreements
- 4. Reduce methane production by placing limits on Confined Animal Feeding Operations (CAFO's):**
 - a. The U.S. and Europe must enforce anti-trust legislation that breaks up livestock and processing monopolies; combining these processes in one vertically-integrated company encourages CAFOs
 - b. States and communities must be allowed to pass public health ordinances restricting the size of confined animal operations

¹ A word about terminology: The convention in the Via Campesina and other progressive associations is to use the term "agrofuels" instead of "biofuels" because "bio" connotes life. To apply "bio" to agrofuel production is considered a contradiction in terms because large scale agrofuel plantations destroy biodiversity and rural livelihoods.



A Sampling of Industrial Agriculture vs. Food Sovereignty Arguments

Industrial Agriculture Model

Small-scale organic agriculture will never feed the world. It is inefficient to produce food on small parcels. Only the newest technologies will enable us meet the challenge, such as new seed varieties developed through genetic modification and new chemical fertilizers and pesticides.

Food Sovereignty Model

Small farms produce more per hectare than industrial farms.

Organic agriculture:

- is highly efficient and *can* feed the world
- doesn't use fossil-fuel based chemicals
- emits less CO₂ than conventional agriculture
- may help soil store carbon
- deserves public support, with which it would be competitive with industrial agriculture product prices
- doesn't burden taxpayers to clean up pollution damage

Agrofuel Production

Agrofuels are a critical solution to diminishing oil reserves but only make economic sense on a large industrial scale.

Agrofuels can be a good alternative to fossil fuels if they:

- are grown on a local scale
- do not destroy local livelihoods or the environment
- do not decrease the amount of food available to consumers

Trade and Export Agriculture

Export agriculture is a critical part of the world's economy and works efficiently because it is based on comparative advantage – a system in which each region should produce and trade the products they are best suited to produce.

By removing barriers to agricultural trade, free trade will help make food available to everyone at prices informed by supply and demand.

Exporting food:

- consumes huge amounts of fuel
- contributes to climate change
- subjects farmers in the South to unfair competition, especially when the North subsidizes export production
- can leave nation food insecure

Free trade agreements tend to remove environmental protections:

- food and agriculture should be exempt from all free trade agreements
- fair trade and fair prices should cover the true costs of production

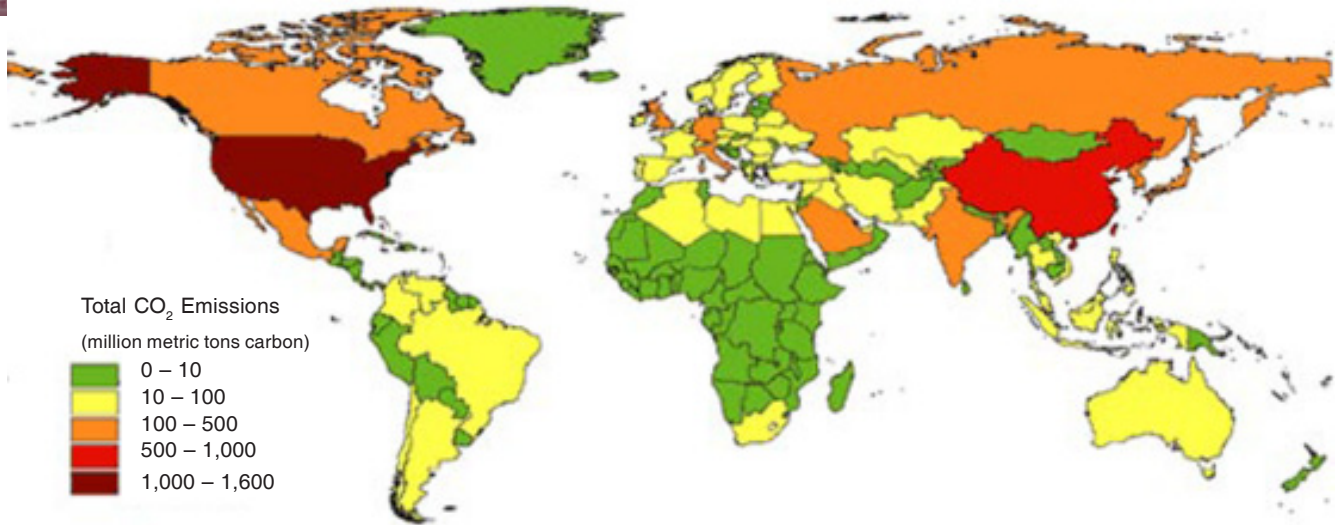
Confined Animal Feeding Operations (CAFOs)

Because of economies of scale, CAFOs are the most efficient way to deliver meat at prices set by supply and demand.

- Industrial livestock production is one of the largest contributors to greenhouse gases.
- Massive amounts of grain are grown to fatten livestock on valuable agricultural land. Small-scale grass-fed farms are cleaner and healthier.



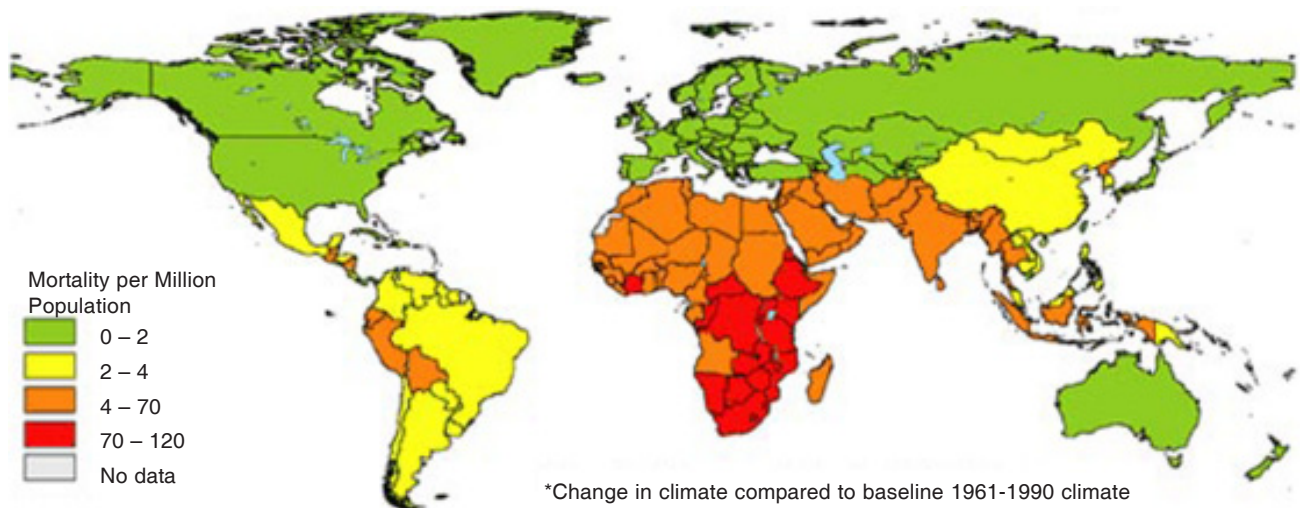
Total CO₂ Greenhouse Gas Emissions in the Year 2000, by Country



This map shows total carbon dioxide emissions from fossil-fuel burning, cement production, and gas flaring for the world's countries in 2000. Emissions are expressed in million metric tons of carbon. The map was created by a team of climate and health scientists led by Jonathan Patz, Associate Professor of Environmental Studies and Population Health Sciences at the University of Wisconsin-Madison. Map courtesy the Center for Sustainability and the Global Environment.

Source: www.news.wisc.edu/11878.html

Estimated Deaths Attributed to Climate Change in the Year 2000, by – Subregion*



The health effects of global warming vary markedly at the regional scale. This map shows the estimated numbers of deaths per million people that could be attributed to global climate change in the year 2000. Drawn from data from the World Health Organization, the map was also created by Patz's team. Map courtesy the Center for Sustainability and the Global Environment.

Source: www.news.wisc.edu/11878.html



Factsheet: Why Is a New Agricultural Policy Relevant to Environmentalists?

Agricultural policy is environmental policy: In recent decades, the U.S. Farm Bill and free trade agreements have encouraged cheap imports and low prices to farmers for their basic grains. These policies have favored corporate interests over community and environmental concerns and have fostered the consolidation of our food system in the hands of a few multinational agribusinesses. Our industrialized food system consumes increasing amounts of the earth's finite resources and pushes family farmers – environmental stewards when farming agroecologically – off their lands.

Agroecology is good for the environment: When farmers are supported in using agroecological techniques—agriculture that works with, rather than against, nature – they can help solve many of the world's environmental challenges: water scarcity and pollution, soil loss and climate change. Agrobiodiversity—protecting domesticated (planted) species in addition to wild species – is a key component of agroecology and is essential to combating shrinking biodiversity.

Industrial agriculture contributes to global warming and pollution:

- With its reliance on pesticides, fertilizers, machinery, and long-distance transport, industrial agriculture is responsible for 25% of the world's greenhouse gases. (Source: The Institute of Science in Society, "Feeding the World under Climate Change" 6-10-04 <http://www.i-sis.org.uk/FTWUCC.php>)
- Below-cost animal feed has fueled the growth of factory farms, known as Confined Animal Feeding Operations, or CAFOs. Livestock production contributes both methane and nitrous oxide, two powerful greenhouse gases. A CAFO of 18,000 hogs can generate as much waste as the city of St. Louis. (Source: Missouri Rural Crisis Center Factsheet: "Don't Believe the Hogwash! You deserve to know the FACTS about CAFOs, Local Control and Health Ordinances")

Industrial agrofuels damage the environment

Agrofuels are touted as the green alternative to fossil-fuels and a solution to global warming. Yet the large-scale industrial model of agrofuel production promoted by agribusinesses, oil companies and governments causes more environmental problems than it solves. To meet growing fuel needs, countries – at the urging of transnational corporations – replace rainforests with plantations of soy, sugarcane, palm oil and genetically engineered trees. These biologically sterile plantations destroy biodiversity, take land out of food production, and push family farmers and indigenous peoples – effective environmental stewards – off their lands.

- Oil, grain, auto and genetic engineering corporations are forming partnerships around agrofuel production. Partnerships between ADM and Monsanto, Chevron, Weyerhaeuser and BP promise to further concentrate ownership of food and energy companies. (Source: Eric Holt-Gimenez, Food First Backgrounder: Biofuels—Myths of the Agrofuels Transition" <http://www.foodfirst.org/node/1711>)
- The logging and burning of peat bogs and rainforests to convert them to agrofuel plantations releases CO₂ and methane and destroys carbon sinks. Every ton of palm oil produced results in 33 tons of carbon dioxide emissions – 10 times more per ton than petroleum. (Source: Rainforest Action Network, "Getting Real about Biofuels" http://ran.org/campaigns/rainforest_agribusiness/spotlight/getting_real_about_biofuels/)





Factsheet: Food Sovereignty for the Environment Means Sustainable Food Systems and a Cooler Planet!

There is a better way! Food sovereignty is the right of nations and communities to define their own food and agriculture to achieve sustainable development objectives. The food sovereignty movement supports a type of agriculture called agroecology that works *with* nature, rather than against it. The movement seeks diversified agriculture that protects and advances biodiversity, small-scale farmers who identify themselves as environmental stewards, localized food systems, organic and sustainable methods and agriculture for food over fuel production.

Strong local food systems mean a smaller environmental footprint:

- Increased funding for farm-to-cafeteria programs and other local sourcing programs will encourage buying food from local farmers. Food distributed through local food programs can reduce the distance traveled by the average meal from 1,500 miles down to 45 miles. (Source: Pirog, R. T. Van Pelt, K. Enshayan and E. Cook 2001. Food, Fuel and Freeways: An Iowa Perspective on How Far Food Travels, Fuel Usage, and Greenhouse Gas Emissions. Leopold Center for Sustainable Agriculture, Iowa State University)
- Conservation programs, such as the Environmental Quality Incentives Program (EQIP) should be linked to a farm's sustainability, not its scale of production. Circumscribing the EQIP program will control the expansion of factory farms. (Source: National Family Farm Coalition, "A Family Farm Policy Agenda," www.nffc.net)
- Increased funding for sustainable agriculture and helping farmers transition to organic will mean fewer environmental toxins in our soil and water.

Agrofuels for communities, not corporations:

- There is a place for agrofuel production if it is done correctly. This means local ownership and investment in processing facilities for domestic consumption and sustainable production methods.

For example, Cooperbio is an agricultural cooperative of 25,000 family farmers in Brazil that has proven that community-scale agrofuel production can work. Farmers plant a wide range of local crops using organic methods, combining energy crops with food crops. They currently produce 400,000 liters of agrofuels per day.

- To halt the spread of industrial agrofuels, a moratorium (http://www.grassrootsonline.org/news-publications/articles_op-eds/moratorium-agrofuels) is needed on incentives for large-scale agrofuels development, limits on the type and amount of land planted in agrofuels, and enforced anti-trust laws to prevent the further concentration of food, fuel and agriculture in the hands of a few corporations.

Seed sovereignty not GMO's in agriculture:

- At its most basic level, the right to define food production means the right to save seed and to keep our agricultural and forestry resources safe from the unintended consequences of genetically engineered organisms.
- The food sovereignty movement calls for keeping genetically engineered organisms out of agriculture, and reversing the World Trade Organization's Trade-Related Agreement on Intellectual Property (TRIPS), which gives corporations the right to patent life forms.

For more information on sustainable agriculture, agrofuels and climate justice:

Rainforest Action Network: www.RAN.org

Friends of the Earth: www.foe.org

Global Justice Ecology: www.globaljusticeecology.org

