



PHOTOS BY CYNTHIA VAGNETTI

4 | THE HIGH COST OF CHEAP FOOD

Summary

This session addresses how policies impact the price and cost of food. Through a game-like simulation, learners will examine the hidden environmental and social costs of producing food in different ways. Guided reading selections will help learners understand some basic ways the U.S. Farm Bill impacts food production and food prices.

Author's note: The issue of subsidies and their impacts is too complex to address in a single session. This session provides an introduction with the aim of familiarizing learners with some of the basic economics of price and cost. An additional session on subsidies is tentatively planned as part of potential curriculum expansion. This session is designed to provide a deeper look at corn subsidies and their role in meat production, the environment, food prices, consumer health, and foreign trade policy.

Guiding Questions

- What is the difference between price and cost?
- What policy factors affect the price of food?
- What is the U.S. Farm Bill? What type of programs does it support?
- What has value in the food system? What is worth supporting?

Big Ideas: As a result of this session, learners will understand that:

- Meals and individual foods can be produced through different types of food systems. These differences can have impacts on consumers, workers, farmers, the environment, and the community.
- Price, cost and value are three different concepts that relate to what consumers pay for a product, the impacts of production, and the benefit ("utility") gained.
 - The **price** is the amount of money a consumer directly pays for an item.
 - **Costs** are the impacts on workers and the environment that are not directly reflected in the price.
 - **Value** is the overall worth and benefit. Not all things of value (family, beauty, kindness) have a price.
- The Farm Bill is major piece of U.S. federal legislation that affects how food is grown, in part through the allocation of subsidies (price supports).
- In the past decades, the Farm Bill has provided subsidies for large-scale production of key commodities: corn, soy, rice, cotton and wheat. These subsidies have impacted the price of food.
- Consumers have a role in deciding what has value and what is worth supporting in the food system, and can support these decisions through purchasing decisions or by getting involved in policymaking.

Sequence and timing:

Activity	Overview	Minutes
1) Price, Cost and Value: What's the difference?	Learners consider the difference between their most memorable and most expensive meals: Where they the same? If not, what made one memorable? What made the other expensive? The discussion leads to working definitions of price, cost, and value. (This was the "homework" assigned at the end of the previous session.)	10
2) The Real Cost of a Meal	Pairs of learners are placed in the role of consumers of two contrasting meals. Then in a card game format, learners gain or lose money tokens based on the price of their meal, any subsidies involved, and the external costs. Debriefing enables learners to clarify understanding of the core concepts of price, cost and subsidies.	30
3) What's Worth Supporting?	Learners review price supports in the Farm Bill, and then apply their learning from the lesson to allocate a fictional budget to areas such as nutrition assistance, conservation, etc.	30
4) Before the next session (optional)	Learners are provided with options to extend their learning about policies through individual research.	

Materials and preparation

- For learners, the Session 4 handout packet
- Accompanying Slides for Session 4
- For Activity 2:
 - This activity uses two pages of small 'cards', found in the learner's booklet. One page has Meal A cards and the next Meal B cards. Learners will work in groups of four; two people are assigned to Meal A cards and two people to Meal B. Make the appropriate number of copies of each card set and cut out. (Ex: For twenty people, there will be five groups of four, with two people in each group assigned to A and two people to B. This requires five sets of Meal A cards and five sets of Meal B cards.) Adjust numbers as necessary (it's OK to have odd numbers), as long as each group has players for Meals A and B. Prepare all needed sets and bring to class ready to distribute.
 - Each group of four will also need thirty tokens, ten each of three different kinds. (Use three different types of beans, three colors of paper clips or poker chips, etc.) Ten tokens of the same kind are given to Meal A players, ten of another kind are given to Meal B players, and the other ten tokens are placed in a cup labeled "Public Wealth." Count out and separate tokens before class. (You will need 150 tokens -- fifty each of three different kinds -- for five teams.)
 - Review the set up and overview in the facilitator's directions 2 before leading the game with learners in class.

Procedure

Activity 1) Price, Cost and Value: What's the Difference?

Overview: Learners consider the difference between their most memorable and most expensive meals: Where they the same? If not, what made one memorable? What made the other expensive? The discussion leads to working definitions of price, cost and value. (Note: Learners were to consider these questions as “homework” from the previous session.)

- Direct learners to Activity 1 in their booklets. and review the directions. As noted, participants are to think of the best meal they've ever had and the most expensive one, and to discuss if and why the responses are the same or not.
- As a full group, ask participants for their observations on the difference between satisfaction obtained from something and the price paid. Are they the same? Why or why not?
- Continue by having participants read aloud the “price, cost and value” section on that page. Explain that the rest of the lesson will explore these concepts.

Activity 2) The Real Cost of a Meal

Overview: Pairs of learners are placed in the role of consumers of two contrasting meals. Then, in a card game format, learners gain or lose money tokens based on the price of their meal, any subsidies involved, and the external costs. Debriefing enables learners to clarify understanding of the core concepts of price, cost and subsidies.

This game is designed to show how subsidies and external costs affect the price a consumer pays for two different meals:

- **Meal A** represents a fast food meal of a burger, fries, and soda or milkshake.
- **Meal B** represents pasture-grazed meat, bread made with organic wheat, and local vegetables.

Learners will play in groups of four, with two people assigned to Meal A and two to Meal B. (Assign three people to a meal as needed; it is okay if numbers are not even as long as each group has Meals A and B represented.)

Meal A and B pairs each receive a set cards that list items that contributed to their meal's **total cost**; this can include items that directly affect the price (such as the price of the wheat for the bun), subsidies, indirect costs (negative impacts), or benefits to the public. The game uses these categories:

- **Price:** These items are directly reflected in the amount of money consumers pay for the food. Example: The price of a bun is included in the total price the consumer paid for the hamburger.
- **Subsidy:** These items are supported with public funds. Example: Some corn products are subsidized through federal programs; this has the effect of reducing the price the consumer pays for items containing corn.
- **Indirect Cost:** These are negative impacts to the environment and/or society that are not directly paid by the consumer. Ex: Carbon emissions from using fossil fuels to grow and transport the wheat for the bun are a negative impact, but not one that the consumer directly pays for in the price.
- **Benefit:** These are positive impacts to the environment and/or society; public benefits may be direct or indirect. For example, if the bun was made with local organic wheat, potential benefits include water

quality, soil fertility, and local employment. The consumer who paid for this bun contributes to environmental health and the local economy.

- Overall Cost: In this game, the “Overall Cost” is the price paid by consumer PLUS the any Subsidies and **Indirect Costs**.

The play:

Meal A and Meal B players take turns placing one of their meal cards face up on the table and reading it aloud. (Team A plays a card, then Team B, etc.) Each time, players follow the action prompt on the card. Types of cards and prompts are as follows (and are summarized on the cards):

Type of card	Action prompt
<u>Price</u> : These are items that directly contribute to the price the consumer (you) pays.	Pay one of your Private Money tokens onto the Total Cost pile.
<u>Subsidy</u> : These are items that are supported by public funds (i.e., from the Public Wealth pile).	Take a token from the Public Wealth pile and add it to your Total Cost pile. This represents the “payment” from the public funds.
<u>Indirect Cost</u> : These are items that have an indirect negative impact on the environment and/or society (i.e., public wellbeing).	Take a token from the Public Wealth pile and add it to your Total Cost pile. This represents the indirect way the public “pays” for these impacts.
<u>Benefit</u> : These are items that directly or indirectly benefit or add value to the environment and/or society.	Pay one of your Private Money tokens into the Public Wealth cup. This represents your contribution to public well-being.

Directions for leading the activity in class:

- Before class, prepare the cards and tokens as described. Bring all materials to class ready to distribute.
- In class, break participants into groups of four (or five as needed). Within each group, assign two people to Meal A and two people to Meal B. Add a third player to a meal as needed; numbers do not have to be even.
- Have learners read “Set up” and “The Play” sections silently in their booklets; these sections introduce the activity and procedures as described above. As participants read, distribute cards and tokens.
- Instruct players to find and place their TOTAL COST card in front of them (it’s shaded); remind players that most tokens will go here. Check to see that all tokens are ready and cards are face down in front of players.
- Review what the different tokens represents, emphasizing the difference between the **Private Money** and **Public Wealth**. Point out that in this game, **Public Wealth** is a general category that includes public funds (such as tax money) and public well-being (such as environmental health, strong communities, etc.).
- Give groups the signal for the Meal A pairs to play their first card, then let groups play at their own pace. Circulate and provide clarification as needed. All teams should finish within 10 minutes.

Debriefing after the play:

After all the cards have been played, players will report out on their “scores” as you records on the board using the format shown on the next page. Players can mark in their books or just follow along. Record responses to the item given and follow with the question in the order presented. Numbers are provided and responses to the questions are in brackets. (Note that all A Teams will have the same result; all B Teams will have the same, but different, result.)

Item	Meal A	Meal B
Price (The total number of tokens you “paid” from your Private Money and into the Total Cost pile.)	2	4

- Which meal was more expensive from a price standpoint? Why? [Response: It turns out that Meal B was more expensive from a price standpoint. Meal A had more subsidies, which lowered the price the consumer paid. Meal B had indirect public benefits that the consumer paid for through higher prices.]

Total Cost (The number of tokens on your Total Cost pile; these are token “paid” from your Private Funds as well as from the Public Wealth piles.)	10	6
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- Which meal had a higher total cost? Why? [Meal A was more expensive from a cost standpoint because of the environmental and social costs.]

Subsidies and Indirect Costs: (The number of tokens taken out of the Public Wealth pile and placed into your Total Cost pile.)	8	2
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- Which meal had more subsidies? [Meal A.]

Benefits: (The number of tokens you paid from your Private Money into the Public Wealth pile.)	1	5
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- Which meal contributed more to public wellbeing? [Meal B.] How? [Meal B offered environmental, social and community benefits, often through avoided costs. For example, the meal was healthier, potentially preventing added health care costs.]

Continue by leading a discussion using the questions provided in the learner’s guide:

- How could you change the game so that Meal B is less expensive from a price standpoint? [Possible responses: The subsidies for Meal A could be switched to support the beneficial aspects of Meal B; adjust the price of some of the items in Meal A so that the true environmental and community costs are reflected; put a tax on Meal A to help pay for some of these costs.]
- What else could you do to make the price of each meal more accurately? [See above responses.]

- What might the impacts be if more people chose Meal B? [Possible responses: People would spend more money on their food, but might be healthier; the community and environment might benefit more.]
- After the discussion, direct learners to the one-page summary of key concepts presented in the game; this summary follows the cards. Allow participants to read over definitions and examples, and/or present key points from the accompanying slides.

Activity 3) What's Worth Supporting?

Overview: This activity aims to make connections between the concepts presented in the game (price, cost, and subsidy) and the U.S. Farm Bill, the piece of federal legislation that impacts the food system. After reading about the Farm Bill in Part A, learners will then allocate their own fictional federal budget based on the values and practices they consider worth supporting.

- Have someone read the overview aloud. Clarify the focus of the two parts of the activity.
- Provide several minutes for learners to review the Part A reading. Then present and explain key points using the accompanying slides. Emphasize that although nutrition programs are the largest spending category in the Farm Bill, the reading focuses on subsidy programs for farmers since these programs relate to the concepts presented in the game. Encourage learners to learn more about the Farm Bill at the websites provided; additional resources are in the references section at the end of the learner's guide.
- Continue to Part B, Budget Allocation. Review point 1 of the directions. Give participants a few minutes to brainstorm ideas using the prompts provided.
- Continue to point 2 of the directions. (Participants are to allocate a fictional budget represented by \$100 (or 100%) to categories they choose.) Give participants 5-10 minutes to work, then have people share responses. Ask people to clarify their choices and the values behind them. Make connections to what has been discussed so far.
- Use the accompanying slides to emphasize the importance getting involved in the food system and making informed decisions. Point out that individuals can have multiple roles: People can make purchasing decisions as consumers, and get involved in policymaking as citizens. Explain that types of action steps will be the focus of Session 6.
- Wrap up by encouraging participants to continue their learning using the suggestions provided.

4) Before the next session: Extend your learning (optional)

Learners are provided with options to extend their learning about policies through individual research.