

THE SEED GAME

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OBJECTIVE // To understand the struggle of farmers to retain their traditional right over seeds, to understand the ways corporations are attempting to privatize seeds, and to see the role the government can play in ensuring the rights of their citizens are respected.

TIME // 60-90 minutes

GROUP SIZE // 12-30 students

This activity uses the three parts of the 'See, Judge, Act' model. During the "See" part, the role-play game is played. The "Judge" part is a debriefing session where participants reflect on their experience using the principles of Catholic Social Teaching. During the "Act" part, participants brainstorm ways that they can take action to work for seed justice.

MATERIALS //

- 10 each of 3 different kinds of beans
- 40 of a 4th kind of bean
- One die
- Paper (or whiteboard) and marker to record rules created during the game

PREPARATION //

- Thoroughly review the game.
- Learn a little more about the issues using some of the background information:
 - Read the "The Seed Game" glossary and PowerPoint presentation. Key terms in bold font are defined in the glossary.
 - Watch some of the documentaries and video clips listed at the end of this document.
 - For more information, please also review the Action Sheet and Theological Backgrounder of the "Sow Much Love" campaign, under the Resources tab of the website: devp.org/sowmuchlove.
- Post on the wall or show on a projection screen the list of possible actions for the farmer's groups and the government. You will find this list at the end of the "The Seed Game" PowerPoint and below.

NOTE TO THE FACILITATOR //

This game needs strong guidance from you as a facilitator, especially after Action Round 2. The goal is to let the group develop its response to the scenarios outlined in the game, yet you should be comfortable enough to step in to guide them and to move into the next steps. The debriefing of this game is very important and you should plan enough time for students to express their feelings, thoughts and comments on their experiences as farmers, business people and government representatives. The debriefing also allows the participants to reflect on the importance of preserving access to seeds for farmers.



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PART 1: SEE (30 minutes)

ROLE-PLAY GAME

FACILITATOR // We are about to play a game to better understand the fight for power over seeds and the roles of the actors involved. In order to prepare for the game, we will first review a PowerPoint which explains the terms we'll be using, and some of the issues involved.

Review the PowerPoint to the group prior to playing to give a better understanding of the real-world connections.

FACILITATOR // In this role-play game, you will gain insight into the experiences and roles of farmers and governments in the Global South, and how companies are attempting to control seeds. Right now farmers in Canada and around the world are losing access to seeds and their right to control the seeds they farm. Giant seed companies want farmers to stop saving their seeds, and to only buy the seeds that the companies produce, some of which are genetically-modified. This game is a struggle for control that challenges the food sovereignty of the farmers.

Divide students into 5 groups to play the different roles: 3 groups of small-scale farmers from 3 different regions, the company, and the government.

FACILITATOR // In this game, beans represent both seeds and money for taxes and life's costs.

Hand out the beans to each group:

- Each group of farmers receives 3 beans, with each group using a different kind of bean. (For larger groups, increase the number of groups of farmers and add another type of bean to the game.) (For example, Group 1 receives 3 x bean A, Group 2 receives 3 x bean B, etc)
- The company gets 20 beans of type 4, which represent a new genetically modified (GM) seed created by the company.
- The government gets 41 beans: 7 each of types 1, 2, 3, and 20 of type 4.

Hand out a copies of the "Roles and Actions" of each group to the members of each group.



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ROLES AND ACTIONS

THE COMPANY:

The Company gets 20 beans of type 4, which represent a new **genetically modified (GM) seed** created by the company.

GOALS // To have as many of its bean-seeds in circulation as possible and seek government control of the use of all bean-seeds.

POSSIBLE ACTIONS //

1. **Patent a New Seed:** The company presents its new GM bean-seed that it is now seeking to patent. Pay the patent application fee of 1 bean-seed to the government and roll the die. If the bid (die-roll) is successful, the company explains the properties of the bean-seed to the farmers and tries to sell it to farmers when they are struggling. The patented bean-seed produces a consistent harvest yield of 3 bean-seeds – without the risk of rolling the die, as the seeds are treated with a **'technology package.'** This patented seed must be purchased for each planting season, so the farmer would pay 1 bean-seed to the company each growing season. When a farmer switches to using the company seed, the farmer trades all of their remaining seeds (minimum 1) for 1 company seed.
2. **Violation of Patent:** Once the company has patented a bean-seed, the facilitator can choose one type of farmer's seed to be found in violation of the company's patent on the next round. If a farmer group uses that seed, they must pay 1 bean in **royalties** to the company for each growing season that seed is used.
3. **Plant Variety Protection Laws:** Once a bean-seed has been patented, the company lobbies the government to adopt Plant Variety Protection laws. Given the practice of seed selection and natural variation and adaption of the natural seeds used by small-scale farmers, their seeds cannot be certified; this is advantageous to the company because it removes farmer's options for seeds, which the company hopes will force farmers to purchase their seeds. If the company's roll determines that their lobbying is successful, the company is to select one kind of farmer's bean-seed that will be banned from the market, and that bean is removed from the game at the end of that round. In the subsequent rounds, the company can roll to ban 1 type of farmer bean-seed from the market per round to represent the expansion of the plant variety protection laws.
4. If a farmer's cooperative is formed, the company can lobby the government on its turn under **Plant Variety Protection Laws** to ban the exchange and trade of uncertified seeds, by paying the two seeds to lobby the government and rolling the die to determine the outcome.



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SMALL-SCALE FARMERS:

Three groups of farmers are needed, which can be named after different regions in a chosen country. Each group receives 3 beans, each group using a different type of bean. For larger groups, increase the number of farmer groups and add another type of bean to the game.

GOALS // To protect the diversity of bean-seeds in play and keep enough beans to always have 1 to plant and 1 to cover taxes.

EACH ROUND // You must plant and harvest each year; your livelihood depends on this. Plant your seed (pay 1 bean-seed to the government's market pile) and roll the die to determine your harvest.

If you find yourself without a seed to plant, you have gone hungry, and either must receive aid either from the Government, or from a farmers' co-operative, if one exists.

POSSIBLE ACTIONS //

1. **Appeals:** The government is a democracy, and so you can appeal to the government to oppose systems which you do not support, such as the Plant Variety Protection laws, through systems such as a human rights tribunal or a court case. Appeals are expensive legal endeavours, and so this action requires all farmer groups to be in agreement and to each pay 1 bean to the market-pile, representing the energy and time taken away from other gainful activities and the costs required to support an appeal. One farmer group can pay for another if the latter cannot pay. The success of the appeal is determined by a die roll.
2. **Farmer's Co-operative:** Sometimes, small-scale farmers work together by creating co-operatives. If all farmers agree, you can form a seed co-op, where you can pool your extra bean-seeds to assist farmers who are struggling and to exchange seeds (you can thus diversify your crops, planting more than 1 seed per round and rolling separately for each crop!) However, farmers must each still have enough of their seed to plant and pay taxes. Farmers who receive help from the co-op should try to pay back their borrowings quickly.
3. **Protection of Heritage Seeds:** Once Plant Variety Protection laws come into effect, a farming cooperative can apply to have a bean-seed recognized as a heritage seed by the government by paying 1 bean to the market-pile to represent administrative fees. A representative of the farming cooperative then rolls the die to determine the success of its application. If unsuccessful, the cooperative can try again on its next turn. Seeds that have already been found to be violating a patent or have been removed from the game are ineligible for protection as heritage seeds.



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THE GOVERNMENT:

Gets 41 beans: 7 each of types 1, 2, 3, and 20 of type 4.

GOALS // To ensure no group runs out of bean-seeds – and therefore out of food! The government regulates the market, and so it holds a variety of the beans in its market-pile which represent the seeds planted, crops grown, and taxes paid. It can interrupt play at any time to count seeds and/or to make a new rule to regulate the market (the rules of the game).

POSSIBLE ACTIONS //

1. **Create a rule:** at any point in the game, you can create a rule to ensure no one goes hungry and to ensure the good functioning of the market in your country. You are empowered, as an elected government, to define rights; create and change laws governing market, taxes, sales, aid, etc; create programs for aid; etc. The facilitator will determine reasonable laws as compared to real powers of government; should a proposed law be determined to be impractical, unjust or contradictory, the facilitator would explain why and give you the chance to modify the law. This function can be understood as the role of the Senate, Court, or Parliamentary committee. It should also be noted that this game assumes that the company is a private firm and cannot be taken to be a **crowd corporation**. Record rules on the board or paper, visible to the whole group.
2. **Government tax relief:** If farmer groups are struggling from a poor harvest, the government can give them a one-year tax break (not charge taxes from farmers for one year). Tax rules must apply to all groups (all farmers, a break or a raise applies to all farmers, or all companies, etc). Taxes cannot be cancelled on a regular basis as the government needs income to provide education, health care, etc.
3. **Aid:** The government can provide 1 additional bean-seed to each farmer group, such as from government or international aid. However, this cannot be sustained unless the costs are recovered, such as through raising taxes.



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HOW TO PLAY

One round represents a growing season, from planting to harvest. Rolling the die determines the outcome of the following: 1) the success or failure of crops each season, 2) bids for laws and patents by the company, and 3) applications on the part of farmers.

Odd numbers represent bad growing seasons and unsuccessful bids, lobbying and applications

Even numbers represent good growing seasons, and successful bids, lobbying and applications

1. In turn, each farmer group pays to the government market-pile 1 bean-seed for planting, and then rolls the die to see whether the harvest will be good. If the roll determines a **bad growing season**, the farmer group receives 1 seed from the market-pile. If the roll produces a **good growing season**, the farmer group receives 3 seeds from the market-pile.
2. Each round, the company attempts to gain more control over all bean-seeds in play and circulate more of its GM variety of bean-seeds through the "Possible Actions" listed above. The company explains its bid to the group, and then rolls the die to determine the outcome.
3. At the end of each round, the farmers and the company must pay 1 bean-seed to the government in taxes, which represents the costs of food, housing, health care and education. If any farmers are using the company's seeds, they must also pay 1 seed to the company for royalties at this time for the cost of planting the bean-seed the next season.
4. The game continues in rounds, with the government interrupting as needed to change the rules to ensure no one goes hungry.
5. If the same number is rolled 3 times in a row (or at the discretion of the facilitator) a natural disaster or crop failure occurs. The facilitator selects a consequence: perhaps the growing season is shortened and all farmers yields for the next round produce a maximum of 2 beans, or perhaps a new pest is introduced to a region, causing one crop to fail that season, etc.

The game ends when:

- Any group of farmers have no beans left, or
- Time runs out (facilitator's discretion)



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PART 2: JUDGE (15 minutes)

After the game is over, discuss the following questions with the group or class and introduce the following moral principles after the discussion of each group of questions.

What did you notice about the flow of seeds when the farmers' seeds were the majority and when the company's seed was the majority?	Sacred: The Earth is sacred. Creation has its own intrinsic value. We have a responsibility to protect and to cherish the Earth's ecological diversity, beauty, and life-sustaining processes.
What kind of power does each player have in this game? What are their strengths and weaknesses? Who is making decisions? When does each player get a say in what is happening?	Subsidiarity and the Role of Government: The state is an instrument to promote human dignity, protect human rights, and build the common good. Subsidiarity holds that such functions of government should be performed at the lowest level possible, as long as they can be performed adequately. When they cannot, then higher levels of government must intervene.
What are the values and interests that guide each player in the game? What interest is prioritized in the system of play? What force is supporting each interest?	Economic Justice: The economy must serve people, not the other way around. All workers have a right to productive work, to decent work, and to organize and join unions.
What value does seed diversity have now? What value does seed diversity have the future?	Common Good: The ecological health of the Earth and the importance of the Earth's resources to the common good must take priority over commercial interests. The economic and social costs of depleting shared resources should be borne by those who incur them, rather than by those least responsible, or by future generations.
Who should have – 'own' – the world's seeds and make decisions about their control?	Participation: All people have a right to participate in economic, political, and cultural life of society, and in decisions that affect their life and community. It is wrong for a person to be excluded unfairly or to be unable to participate in society.



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PART 3: ACT

At this time, the facilitator can start a discussion of what can be done about this problem, get feedback from the group and write their responses on the board. The following are suggestions that can be brought up when the group needs some ideas based on the age level of the class:

- Learn more about farming and the threats to traditional and sustainable farming practices.
- Educate friends, family and the public about the threat to traditional farming and why it is beneficial for us to support it.
- Buy local and organic produce when possible and support local farmer's markets.
- Buy Community Supported Agriculture (CSA) veggie boxes.
- Participate in Development and Peace's Education and Action campaigns.
- Attend information sessions and seed promotion events.
- Start a garden or a mini-garden in your home.

Share the campaign and photos of your activities or events through your community's social media, bulletin boards, and newspapers. And let us know: #sowmuchlove, @devpeace, or send photos, copies, and links to schools@devp.org.



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Introduction Clips:

Baehr, Birke. (2010). "What's wrong with our food system." Asheville, NC: TEDx Next Generation. (Birke Baehr is an 11 year old) https://www.ted.com/talks/birke_baehr_what_s_wrong_with_our_food_system

Holmgren, David. (2013). Vandana Shiva's Seed Freedom with David Holmgren (Permaculture) - Monsanto GMO. http://www.filmsforaction.org/watch/vandana_shivas_seed_freedom_with_david_holmgren_permaculture_monsanto_gmo/

Moyers, Bill. (2012). "The Problem with Genetically-Modified Seeds." New York City: Moyers & Company. <http://www.youtube.com/watch?v=fG17oEsQiEw>

Shiva, Vandana. "Solutions to the Food and Ecological Crisis Facing Us Today." Masala, India: TEDx Masala. <http://www.youtube.com/watch?v=ER5ZZk5atIE>
Vandana Shiva

Documentaries & Lectures:

Kenner, Robert. (2008). Food Inc. Unites States of America: Magnolia Pictures, Participant Media, River Road Productions.

Trailer: http://www.youtube.com/watch?v=5eKYyD14d_0

Peled, Micha X. (2011). Bitter Seeds. San Francisco, CA: Teddy Bear Films, Inc.

Trailer: http://www.youtube.com/watch?v=QZtKB_KuASc

Jeremy Seifert. (2013). Seeds of Sovereignty. London, UK: The Gaia Foundation.

Documentary: http://www.filmsforaction.org/watch/seeds_of_sovereignty_2013/

Shiva, Vandana. (2009). "The Future of Food and Seed: Justice, Sustainability and Peace in the 21st Century." Organicology Conference. Portland, Oregon: pdxjustice Media Productions

Full Lecture: <http://www.youtube.com/watch?v=yYwOTLopWlw>

