

CLIMATE CHANGE

AND FARMING

GRADE VI ONWARDS

Aim:

- To understand climate change impacts on farmers, crop resilience and insurance in a real world setting
- To discuss possible resilience mechanisms to cope with climate change and the changing nature of risk.

Learning objective:

This activity enables students to understand how unpredictable and extreme weather conditions can impact farmers in countries across the world. They will learn what it means to have protection from climate change and also understand global problems of poverty. Young people will practice decision-making skills as individuals and teams in the times of adversity.



You will need:

- A dice
- 70 coffee beans
- Chits of Annexure 1

Time:

Explanation: 10 minutes
Play time: 20 minutes
Discussion: 15 minutes

How to play:

Divide the class into five countries. Let them pick a chit which determines what country they belong to. Explain to them that they are small-holder farmers' part of a community from each country. Now give each country the number of coffee beans allocated to them in the chit, tell them that these beans are their investment decisions. The teacher retains the remaining beans and puts them in the centre of the class.

Now, roll a die at the beginning of each round. As the die rolls, farmers win and lose beans depending on simulated rain conditions and their decisions about crop selection.

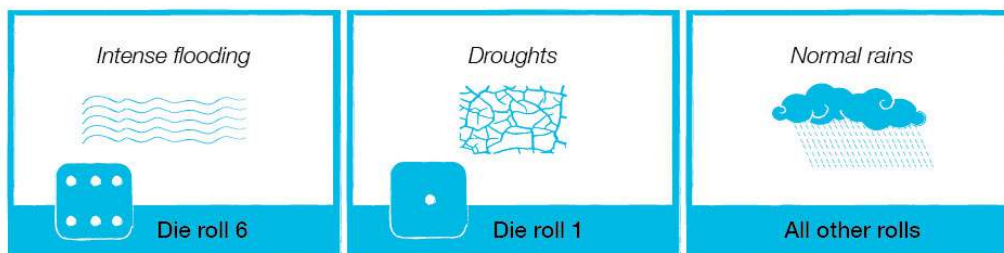
Investment decisions can include one of these three choices:



Rules of the game:

- Play 10 rounds of this game.
- Protection from drought and flood requires an upfront payment of 1 bean each.
- No protection means no bean cost.
- In case of an extreme event, unprotected farmers have to pay 4 beans to recover from the loss
- In case of no extreme weather event, and a farmer is protected, she gains 2 beans ;in that round.
- Farmers who lose all their beans and can't pay after a disaster forfeit the game.
- The country with the most beans win.

A die roll signifies the probability of disaster:

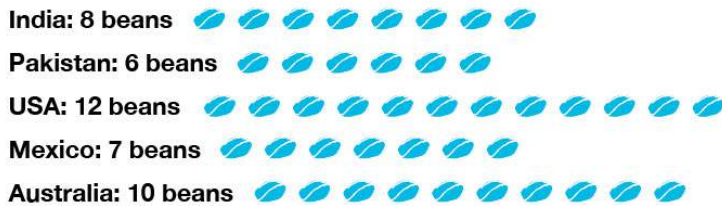


Learning

After the game is over, hold a discussion about climate change, risk and adaptation:

- Why did some countries get more beans than the others?
- What does it mean to be a farmer in the developing world as compared to the developed world?
- When it comes to climate change, what adaptation methods should farmers look at adopting?
- As risk becomes harder to measure, how can farmers safeguard themselves from unpredictable weather conditions?
- Can Fairtrade play a role in climate change adaptation and mitigation? See Annexure 2.

ANNEXURE 1



ANNEXURE 2

Fairtrade and Climate change:

Source and more reading: <http://www.fairtrade.net/climate-change.html>

Climate change related events are on the rise, notably in developing countries. Producers in the Global South are increasingly feeling the brunt of climate change effects, including higher temperatures, increased rain, floods, and droughts. Research carried out by the Natural Resources Institute of the University of Greenwich indicate that climate change “will have mainly negative impacts upon agricultural production, food security and economic development, especially in developing countries.”

Tea producers in India are already feeling the impact of climate change as unpredictable rain affects crops. Further pests such as the tea mosquito bug is proliferating due to climate change.

Unfortunately, the picture of the future does not appear promising. In fact, several modeling studies predict that by 2050 the productivity of coffee, cocoa, tea or cotton will severely be affected and production in some areas might even disappear. Many farmers will need to adapt their practices to the new climatic conditions or risk losing their livelihoods.

The Fairtrade Approach:

As the effects of climate change become more evident, Fairtrade producers need additional technical and financial support to confront these new challenges. Beyond the benefits that Fairtrade offers to producers (Fairtrade Minimum Price, Fairtrade Premium, strong environmental standards, etc.), the system supports basic pre-conditions that are needed to implement climate change adaptation measures such as: organizational development, environmental sustainability, financial stability, investment possibilities, and greater autonomy.

Fairtrade International acknowledges that the current benefits of the Fairtrade system are insufficient to help producers confront the effects of climate change. As a result, we have developed a climate change strategy that defines the scope, establishes Fairtrade priorities and provides a framework for action.



A global work plan for climate change has been developed, focusing on producer services (i.e. climate change standards), producer support for climate change adaptation (creating partnerships for adaptation projects), and producer-driven advocacy. The overall mission is to enable vulnerable producers to adapt to climate change and support them to mitigate the impacts, while promoting further sustainable development practices.

Fairtrade International and some member organisations have also introduced carbon reduction plans to reduce their operational impact on climate change.

How Climate Change is addressed in the Fairtrade Standards:

The Fairtrade Standards promote sustainable development through best agricultural practices, which not only guide producers to adapt to climate change, but also encourage them to mitigate their impact. The environmental standards include the following practices: integrated pest management, prevention of soil erosion, improvement of soil fertility, sustainable use of water sources, sustainable waste management, prohibition of GMOs, protection of biodiversity, use of renewable energy, and reduction greenhouse gas emissions.

Additional reading resources:

http://www.fairtrade.net/fileadmin/user_upload/content/2009/resources/2010-04_Climate_Change_and_Fairtrade_Position_Paper.pdf

http://s3-eu-west-1.amazonaws.com/maxhavelaar.nl/keplarcms/items/imagevalues/000/000/736/original/2010_climate_change_agricultural_adaptation.pdf?1383917099

Based on *Dissolving Disasters*, a game by Pablo Suarez:

<https://www.youtube.com/watch?v=wKHiTV9TaAQ>

