

----- Part 1: Game Overview-----

Title: Paying for Predictions, A game of chance where players experience the value of forecasts

Description

This participatory activity aims to support experiential learning and dialogue on the concept of climate-based disaster risk reduction, which is becoming more salient in the face of climate change. In this table game, players become Red Cross Red Crescent workers, who face changing risks. They must make individual and collective decisions, with consequences. Rich discussions emerge, and there will be winners and losers.

Why This Game?

The humanitarian movement under-utilizes climate forecasts for a number of reasons, some of which include:

- These forecasts are not always disseminated to the appropriate decision-makers in the movement.
- Red Cross Red Crescent employees often do not understand the forecasts.
- If the forecasts are understood, employees are often unclear on what types of action could be taken in preparation for a potential disaster.
- Employees fear “acting in vain”, ie: taking disaster preparedness measures when a disaster does not manifest itself.
- Funding is often not available until after the disaster has already occurred.

Playing this game is one step towards helping publicize the potential value of these forecasts, and helps break down some of these barriers to their effective use.

Facilitator Skill Level

4 out of 5

Intended Audience

Disaster managers/ volunteers/ branch officers/ meteorological service authorities, donors, etc

Number of Players

36 players; though this game can be played with 6-100 players, depending on skill of facilitator

Time Needed for gameplay/discussion

45-60 minutes (depending on experience of facilitator, group size, and desired level of discussion during gameplay)

Materials

- Normal Dice (6-sided): 36 white, 12 colored
- 8-sided dice: 12
- Beans: at least 360 (a kilo of the biggest beans you can get)
- Red stones: around 20
- Non-transparent cups: 12
- Transparent cups: 6
- Prizes: for winning player, and for winning team
- Printouts: Player sheets (1 per player)

Optional: powerpoint projection, audio equipment for amplifying facilitator with large groups

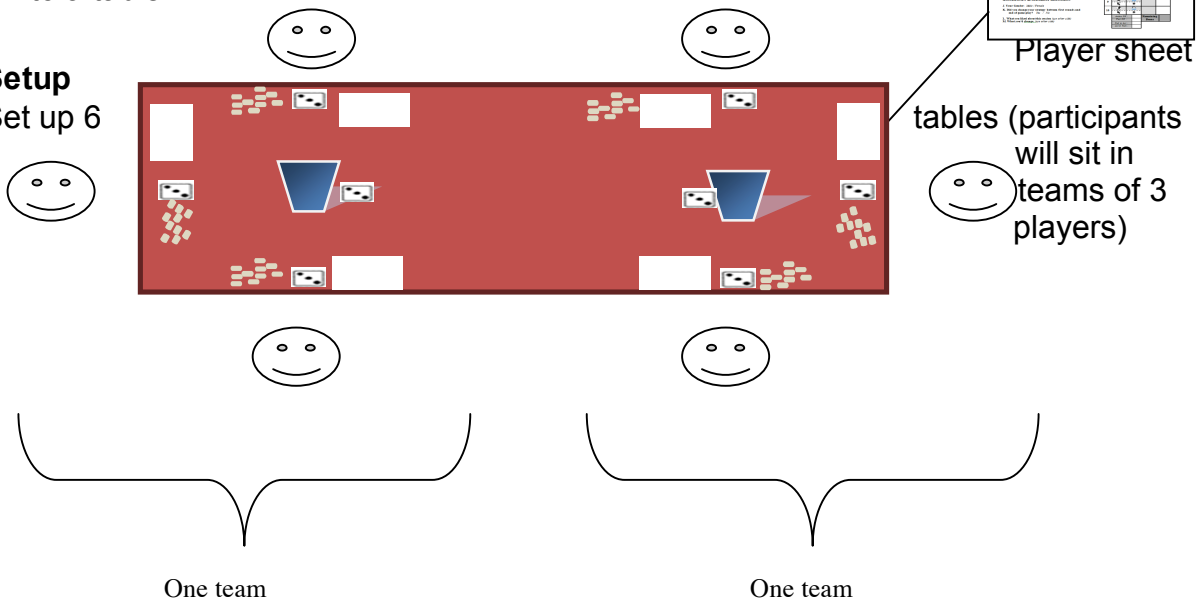
- Game Facilitator: 1
- Game assistants: 3

Playspace Requirements

A large room with tables and chairs – 6 tables and 36 chairs, or one chair for each player depending on number of players, Players can sit six to a table.

Setup

Set up 6



Each player receives:

- 1 white die
- 1 player sheet (face down)
- 10 beans

Each team receives:

- 1 colored die
- Red stones for the facilitator

How To Win This Game

To win the individual prize, be the player with the highest number of beans at the end of the Game. To win the group prize, be the team with the highest number of beans at the end of the game. In the event of a tie, the tied team with fewer red stones wins.

Game Play

Play one practice round (see Facilitator Guidance).

Start by asking each person to flip over their player sheet, and fill out the first questions A-D.

Each team rolls the regional rains under the cup.

Bidding winners will see the value through the transparent cup while others keep it under the cup.

Players make decisions (give 1-2 minutes at the beginning for people to discuss individual and collective strategy).

Countdown. By the end of the countdown, each player is either standing (an early action that expresses repositioning relief items and costs one bean), or sitting (ie: doing nothing).

“Stop!”

Collection of upfront payment (1 bean) for those who took early action

Teams with no forecast now reveal their regional die.

All players Roll the second –local- die – see who has a flood.

(data entry) Ask each player to circle their choice: a running person if they paid 1 bean for early action, and the sitting person if they did not. Ask them to circle the result: flood if the dice total was >10, otherwise the sun, indicating good weather. Ask them to record the numbers on the regional and local die in the “Rains” column.

Game assistants take 4 beans from any player who had a flood but did not take early action. Those who run out of beans receive a red stone, symbol for a crisis.

Throughout the round facilitator can share remarks about observed behaviour

Next round begins.

After round 2, before round 3: Explain the DRR “twist”

At start of round 7: Introduce new conditions affecting player decisions

Rules

Players should *expect* to be confused, both by the rules and throughout gameplay. Like in the real world, in this game the relationship between decisions and consequences can be complex... Being confused is a natural condition (which should dissipate as gameplay evolves and people figure out the implications of the various rules).

The game is a simplified representation of reality. It is designed to amplify certain aspects that matter for the purpose of learning about resilience, while excluding other aspects of reality that, while relevant, would make the game too complicated. Players join the game accepting the rules – no challenging of the rules during gameplay. Assert

authority in the beginning: I am the supreme court of justice and will be in charge of resolving any situations, be somewhat bossy in anticipation of later in the game.

While consultation with team members is encouraged, each player's decisions are individual (nobody can force someone else to act in a certain way). There will be some "practice" rounds, and then 10 rounds "for real" (with losers, winners, and prizes).

Players cannot share beans – in this players simply can't give away beans (otherwise players tend to behave in unrealistically altruistic and cooperative ways).

Proceed to explain the rest of the game rules, following the sequence indicated in the powerpoint slide. When explaining the game rules, ask participants to roll the die and see who got a flood, to make sure they understand the concept.

Variations

"Paying for Predictions" is a game deliberately designed with system flexibility, in order to enable people and organizations to explore possible modifications to game rules and narrative aimed at better capturing aspects of the relationships between context, decisions and consequences.

NOTE: The "disaster" in this game does not necessarily need to be a flood. You may replace all flood-related language with a location-appropriate disaster that is impacted by climate, ie: drought, cholera epidemic, etc.

----- Part 2: Facilitation Guide -----

Preparation Time

20 minutes

GamePlay

Each player assumes the role of a Red Cross/Red Crescent worker involved in supply chains for relief items in case of flood-related displacement of vulnerable people in a specific sub-regional district. For example, using the case of shelter, each player is in charge of deliver tents for those left homeless by the flood in their district. The cost of deploying relief items depends on when the action is taken:

One bean if tents are prepositioned before the rainy season (when there is abundant time to transport items, but it is not clear whether or not the relief items will be needed).

Players express this action by standing up with a bean in their hand (which they must give to the facilitator before the rains) Call the standing up “early action” (based on the regional dice players can decide to invest in this or not – drill this word.

Four beans if tents are transported after a flood (when the need for relief is certain but movement needs to be fast and some roads or bridges may be impassable, requiring more expensive means). Players who did not stand up must pay the four beans if they experience a flood.

Whether or not a flood happens in any district depends on the roll of the dice: if the sum of the regional and local dice equals ten or more, a flood materializes.

After a couple of practice rounds, the game begins with a surprise: a bidding process for the whole group to access a seasonal rainfall prediction. Each player discusses with team members how many beans they are willing to invest, and then secretly puts into the regional cup as many of her beans as desired (between zero and ten – representing how much of their budget they are willing to invest in accessing and understanding the seasonal prediction).

By the end of the bidding countdown, each team’s cup is brought to the front. Half of the teams –the highest bidders- will receive a transparent cup and are thus able to “see” the value of the regional rains before making the decision of whether or not to preposition tents for all the ten rounds of gameplay. The other half of the teams recover their bidding beans, and won’t be able to see their regional die before deciding whether or not to stand up.

There is a second bid round for DRR programmes, that will reduce the number of beans that will have to be paid after a flood from 4 to 2 beans.

0. Explain rules (powerpoint file available)

Players should *expect* to be confused, both by the rules and throughout gameplay. Like in the real world, in this game the relationship between decisions and consequences can be complex... Being confused is a natural condition (which should dissipate as gameplay evolves and people figure out the implications of the various rules).

The game is a simplified representation of reality. It is designed to amplify certain aspects that matter for the purpose of learning about resilience, while excluding other aspects of reality that, while relevant, would make the game too complicated. Players join the game accepting the rules – no challenging of the rules during gameplay. Assert authority in the beginning: I am the supreme court of justice and will be in charge of resolving any situations, be somewhat bossy in anticipation of later in the game.

While consultation with team members is encouraged, each player’s decisions are individual (nobody can force someone else to act in a certain way). There will be some “practice” rounds, and then 10 rounds “for real” (with losers, winners, and prizes).

Players cannot share beans – in this players simply can't give away beans (otherwise players tend to behave in unrealistically altruistic and cooperative ways).

Proceed to explain the rest of the game rules, following the sequence indicated in the powerpoint slide. When explaining the game rules, ask participants to roll the die and see who got a flood, to make sure they understand the concept.

1. Practice round #1 (no forecast yet)

TEAMS ROLL REGIONAL DIE for their team, making sure that it is not visible under the cup. Note: it is important to retain the same name for each object throughout the game, to avoid confusion (ie: "regional die").

REMINDE PLAYERS OF THEIR CHOICES: They can pay 1 bean to prepare for a flood, and they need to stand up with that bean in their hand. Otherwise, they pay nothing and stay seated.

INDICATE SHORT TIME AVAILABLE for consultation before deadline for individual decisions. Use anxiety as a tool; always don't let people have enough time. Start countdown before people know what they are going to do.

START COUNTDOWN FOR DEADLINE: "10, 9, 8..." (After end of countdown players can't change decision) Be loud and clear: countdown should be the moment of anxiety, use the word STOP: emotion amplification.

END COUNTDOWN WITH A LOUD "STOP!" (Players must stay where they are – if they are sitting or standing this indicates their choice.)

COLLECT PROTECTION PAYMENTS: Players who chose flood or drought protection must pay one bean to the game assistant (if relevant, facilitator can make or invite observations about decision patterns, such as risk aversion, similarity or difference across teams, etc).

Individuals Roll their die

ASK WHO HAD A FLOOD (10 or more dots on the dices) and illustrate the different possibilities of acting in vain vs. failing to act.

Give & take performance points

If a player has no flood, he/she pays nothing.

If a player has a flood, he/she pays 4 beans if not standing (not prepared), and 0 beans if standing (prepared).

If a player cannot pay the 4 beans, she/he pays as many beans as are available, and then receives a red stone (symbol of a humanitarian crisis). This person continues to play, but can no longer invest one bean in DRR, or pay 4 beans for a disaster. The person can however receive more red stones if she/he rolls in the next round 10 or more dots on the dices. Note that a person who pays 4 beans is safe and can stay, even if she/he is left with no beans.

Players do not "die" if they run out of beans; don't refer to death as a penalty – games that playfully invoke death are unacceptable to humanitarian workers who have seen it first hand. Make a big deal when someone gets a humanitarian crisis: what happened to you? Create drama.

2. Repeat this practice round, then refund everyone their beans.

The “real game” is about to start, with losers, winners and prizes (show what prize will be given to winning player and winning team). Before moving on:
Invite players to ask any questions to clarify rules. Answer all questions about game rules and mechanics, but refrain from answering any rules about strategy –let people learn through their own thinking and action.

3. Explain the forecast “twist”

Ask players who would like to see the result of the regional die roll under the cup *before* they have to make a decision about whether or not to prepare. (People should say yes.)

Explain that with science, we can actually forecast rainfall, and you can see the regional die before making a decision. However, it costs resources to learn how to understand and act on such a forecast, and so it will take an initial investment from a team to be able to see the regional die. Only half of the teams will be able to see the die before they have to make a decision. How will you decide which ones? We will have a bidding process.

Ask each person to contribute any number of beans to their team’s bid for the forecast. The teams with the highest bids will be able to see their regional die for rest of game.

Indicate short time available for consultation before deadline for individual decisions (can discuss as teams). Each team will send someone up to the facilitator with the bid in their cup.

Start countdown for deadline (10, 9, 8...) after countdown need to be standing with cup/beans in hand, can’t change decision.

End countdown with loud STOP!

Count each bid and determine which teams get the forecast (half should get it, in event of tie, give it to both).

4. Begin game “for real”

Start by asking each person to flip over their player sheet, and fill out the first questions A-D.

Each team rolls the regional rains under the cup.

Bidding winners will see the value through the transparent cup while others keep it under the cup.

Players make decisions (give 1-2 minutes at the beginning for people to discuss individual and collective strategy).

Countdown. By the end of the countdown, each player is either standing (an early action that expresses prepositioning relief items and costs one bean), or sitting (ie: doing nothing).

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Ask them to record the numbers on the regional and local die in the “Rains” column.

Game assistants take 4 beans from any player who had a flood but did not take early action. Those who run out of beans receive a red stone, symbol for a crisis.

Throughout the round facilitator can share remarks about observed behaviour

Next round begins.

5. After round 2, before round 3: Explain the DRR “twist”

Reveal that, besides forecasts, a team can invest in DRR (disaster risk reduction) as well. In this context, the DRR represents planting mangroves to reduce the impact of flooding. A bid, similar to the one for the forecast will be held, but now only one team can win. The team that wins the bid will plant mangroves, and the members of this team will only need to pay 2 beans instead of 4 if a flood happens and they are not prepared. Only 1 team will get DRR.

Ask each person to contribute a certain number of beans to their team’s bid for the DRR programme.

Indicate short time available for consultation before deadline for individual decisions (can discuss as teams). Each team will send someone up to the facilitator with the bid (in beans) in their cup.

Start countdown for deadline (10, 9, 8...) after countdown need to be standing with cup/beans in hand, can’t change decision.

End countdown with loud STOP!

Count each bid and determine which team gets the DRR (1 team).

5. Introduce new conditions affecting player decisions: round 7

At the beginning of round 7 it is time to introduce climate change. Until this point, keep climate change secret. The game mechanics should generally explain themselves; you don’t need to talk about it very much. The facilitator replaces the regional die by an 8-sided die. This increases flood risk, and will be used in all remaining turns.

All other rules remain unchanged. At the beginning of round 7, players are left wondering what the new object is under the cup, which represents the uncertainty around climate change.

6. End Game

The game ends upon completion of the tenth round. A small prize is given to the player that ends with the most beans (individual winner: efficient use of resources allows to use the remaining budget for humanitarian expenses that would otherwise not happen). A bigger prize is given to the winning team, i.e. the region that collectively ends up with the most beans (this establishes a trade-off between collaboration and competition which enriches the discussion and adds to the emotional depth of the gameplay experience).

After celebrations are over, invite players to spend a few minutes filling the next set of the questions on their *player sheet*, E-G.

Discussion Questions:

Invite players to form small groups (5-8 persons) to share insights and come up with 1-2 very brief comments to be shared with plenary about what they experienced and what they learned during the session. After group discussion, they fill out questions J-M. End with by thanking all participants.

Designed by

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