

# **PARTNERS FOR RESILIENCE**

## **Disaster Risk Reduction Game Kit**

Game

# **Decisions for the Decade**

Facilitator Guidelines



Climate Centre-IFAD game sessions, Vietnam, September 2014 (Photo: Ilaria Firmian/IFAD)

# Game overview

**Description:** “Decisions for the Decade” is an intensely interactive game designed to support learning and dialogue about key aspects of long-term investments under uncertainty. Many decision makers in the real world do not initially recognize the risk of disasters as deeply uncertain and plan for the most likely scenarios rather than for extreme events that can bring devastating outcomes. The gameplay experience of “Decisions for the Decade” helps people recognize that there are aspects of the future climate that are deeply uncertain, and therefore managing risks may require being prepared for surprises.

**Learning Outcomes:** planning for extremes, experiencing climate change impacts, cooperation to better manage risk

**Facilitator Skill Level:** 3 out of 5

**Intended Audience:** While particularly suited for government officials at local to national level, this game can be useful to a wide range of stakeholders affected by long-term climate risks.

**Number of Players:** Ideally 8 to 40 people, in teams of 4 (teams can have 3 to 6 members, and with microphone and sufficient table assistants the game could be played with hundreds of players)

1 Game Facilitator

Support team of 1-3 facilitation assistants can be helpful for larger groups

**Time Needed for gameplay/discussion:** 30 to 60 minutes (depending on experience of facilitator, group size, and desired level of discussion during gameplay)

## Materials:

*per player:*

- 10 beans
- 1 blank paper

*per team (3 players):*

- 1 normal die (6-sided, large size is ideal)
- 1 pen
- ~ 10 red stones

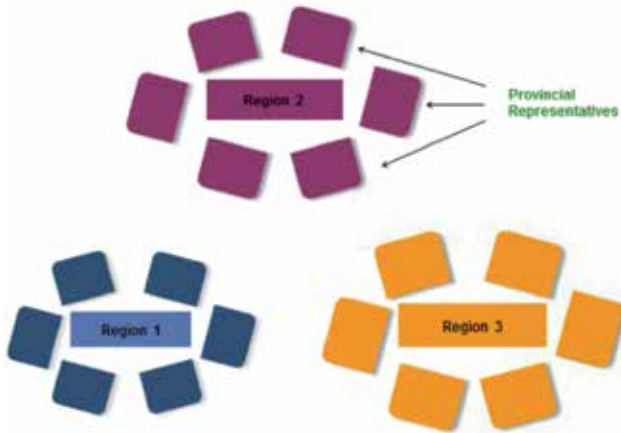
*Game Facilitator:*

- 1 special (8-sided) die per team
- 1 'cone of uncertainty' (small version available in the box)
- About 10 red tokens
- Prizes: 1 small prize for winning player, plus one larger prize for winning team

**Playspace Requirements:** Ideally a room with tables and chairs. The game can also be played without tables, with players rolling the dice on the floor

**Setup:** Ideally one or two teams per table – configuration is flexible and may be adapted to existing constraints.

Example set-up:



## Goal:

Winning team: Fewest humanitarian crises, tiebreaker: most prosperity points  
Winning player: No humanitarian crisis and most prosperity points

# Facilitator guide

## Game Play:

The facilitator coaches the players through three stages;

- 1) Setting the scene,
- 2) Three decades of decisions;
- 3) Winners... and Losers

### 1. Setting the scene:

See facilitation guidelines for setting up their development investment for the decade game sheet

### 2. Three decades of decisions:

Within each decade, players follow a sequence of four stages: Information, Decisions, Observations, and Results.

- Information:* Facilitator describes what is known about probabilities of extreme rainfall to inform decisions in the coming decade.
- Decisions:* With the information received, each provincial government player individually decides how to invest their ten beans. Each bean can be allocated to 'protective investments' (umbrella or bucket), or 'prosperity investments' (central part of the board). The facilitator imposes a firm, tight deadline for this investment decision stage (preferably in a way that makes several players feel the pressure: decisions often have to be made faster than desired). After the deadline, beans cannot be reallocated.
- Observations:* After the investment deadline, each team rolls the rains ten consecutive times, representing ten years. Every time a flood happens in a province, the player must remove a "flood protection" bean from the umbrella portion of the board and place it to the side of their board. This is no longer in the game. Similarly, every time a drought happens in a province, the player must remove a "drought protection" bean from the bucket area of the board. Whenever an extreme event happens and no protective beans are available, a "crisis" occurs: All 'prosperity investment' beans are lost (removed from the central part of the board), and a red stone must be placed on the board. A province may get more than one crisis per decade.

- d. *Results:* If no crisis takes place by the end of the decade, the beans that were allocated to “development” for that decade are counted as ‘prosperity points’ (the number of beans can be written on the central part of the board).

### **3. Winners... and Losers:**

See also facilitation guidelines

#### **Rules:**

*Rule 1:* The rules may not be contested. When in doubt, the facilitator always has the last say. There will be time for feedback at the end!

*Rule 2:* Decisions are individual and there will be no sharing of beans.

*Rule 3:* Decision making happens once every decade, so the players cannot change their investment decisions after the fact: beans may not be moved from one square to another.

# Facilitation guide

Preparation Time: 10 minutes

## Before starting:

“Decisions for the Decade” comes with a PowerPoint presentation. Each slide has facilitator’s notes to coach the facilitator.


The facilitator coaches the players through three phases of the game:

- 1) Setting the scene,
- 2) Three decades of investment decisions;
- 3) Winners... and losers.

## 1. Setting the scene

- *Introduction:* the facilitator highlights that “Decisions for the Decade” is an interactive game designed to support learning and dialogue about key aspects of long-term development investment under uncertainty. The game is a simplified representation of reality (no challenging of rules please), and players are likely to experience the tension between limited information, rapid decisions, and consequences.
- *Players:* Each player takes on the role of a provincial governor. All participants share a simple and noble goal: to create a prosperous province and nation over the coming decades.
- *Duration:* The facilitator explains the game will cover three decades (each decade consisting of ten years, or 1 round), or until running out of time (secret note: the game may actually end before the completion of the third decade).
- *Winners:* The winning region will be the team of 3-6 players with the fewest crises (if there’s a tie, the region with most prosperity points). Within each region, the winning provinces will be the two players with the most prosperity points. There are prizes for the winners.

- Draw game boards:* The first task for each player is to create their provincial investment board for budget allocation: divide the blank paper in three parts, then draw a simple umbrella in the top part and a bucket in the bottom part, as shown in the figure. Facilitator explains that the middle section represents development investments that bring prosperity. Each player receives a provincial budget of ten beans per decade. Investing all the provincial budget for prosperity can be great, if there are no floods or droughts...


- Crisis:* But on any given year, the rains may be extreme, so the risk of devastating floods and droughts can be addressed by allocating some of the beans to the umbrella (for protection against too much rain) or to the bucket (for protection against too little rain). If in any given decade the number of extreme events surpasses the investments in flood or drought protection, respectively, all development is wiped out and a humanitarian crisis occurs. Each time a crisis occurs, the player must stand up, shout “Oh No!”, and receives a red stone to represent a crisis. All provincial governors with one or more crises will likely be labeled as losers by their suffering populations...

## 2. Three decades of investment decisions

The facilitator coaches the players through the following sequence: Information, Decisions, Observations, and Results (see: game play).

Players learn as they play and each decade is presented with new information about the probability of extreme events. For the players this offers an element of surprise. At the end of each round, after players document their individual outcomes on their playing board, they may briefly discuss the links between information, decisions and consequences before beginning the next decade. When relevant, the facilitator can invite participants to share observed events, insights or questions.

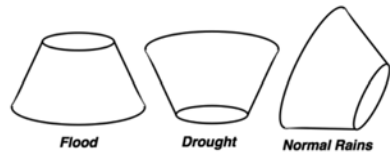


*Sequence of information for each decade*

- *First decade:* Gameplay uses a six-sided die (1 is drought, 6 is flood) to represent the historical probability distribution function (PDF) of rainfall.
- *Second decade:* The facilitator says “the information we have from the 6-sided die represents the risk of floods and droughts based on the past record”. Before making decisions for the next decade, the facilitator explains that there has been deforestation, environmental degradation and other forms of land use change upstream. This has led to a change in the risk of flooding. In addition, the pattern of rainfall has been changing, with more intense rainfall compounding flood risk. These changing risks are now represented by an eight-sided die which substitutes the 6-sided die for each region (team of provinces). Note that a 1 is still a drought, but now a flood occurs with a roll of 6, 7 or 8. Players proceed to complete ten rolls for the new decade. The risk of humanitarian crisis is higher.



- *Third decade:* New climate information is represented by the “cone of uncertainty”. (see figure on what outcome represents ‘flood’, ‘drought’ and ‘normal rains’) to elicit different estimations of flood and drought probabilities.



Facilitator explains that scientists can tell us that the climate is changing, and in some parts of the world they can tell us with some confidence what risks are more likely, but in the fiction of this game, like in many parts of the world, the information that science offers to decision makers is limited – but potentially very useful. What is clear is that the risks have changed, and that despite insufficient information all stakeholders still need to make decisions. **Secret note:** With this cone, it seems nearly impossible to confidently estimate the chances of the object falling on the big base (representing floods) or the small base (representing droughts) vs. landing on its side (good conditions).

Facilitator invites players to discuss and make their decisions based on how they interpret the “cone of climate uncertainty.”

**Option 1:** A good moment to end the game is during the third decade, right after the “decisions” phase (after the deadline and before tossing the cone of uncertainty). This is one of the moments of most intense thinking and reflection about the challenges of estimating probabilities in a context of deep uncertainty: when players notice how the same information has led to substantially differing decisions. While players will likely insist on wanting to see the flip of the cone, ending the game at this instance allows for the emergence of different opinions about likely risks and how to manage them. It allows for participants to be left with the vivid feeling of deep uncertainty, enabling richer discussion during debriefing.

**Option 2:** The facilitator can decide to play the 3rd round by flipping the cone. Although weather forecasts are becoming clearer, future climate uncertainty is becoming greater. Especially when you have to plan for longer periods of time.

### 3. Winners... and losers

Upon the facilitator’s decision to end the game, the winning country and provinces are determined, prizes are given out. Debriefing begins by first eliciting emotions and then insights – preferably regarding uncertainty and risk management given changing climate conditions. At the end of the game, the facilitator can share any additional insights and thank participants for their involvement.

## General Guidance

- Give out instructions in a step by step sequence, at the time they are needed: do not explain everything all at once. Use the PowerPoint to follow a logical sequence.
- Check in with teams to make sure people are setting up the game correctly.
- Keep all teams advancing through the steps together: make sure all teams are caught up before moving to the next step.

**Supported by:**



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