jOiNEd For sUsTainability - bUilding climate REsilient communities in WB and EU

Risk Management Workshop

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Paying for Predictions

"Linking Early Warning to Early Action"

#110

Welcome

Why a game?

There are barriers to manage contemporary complex risk management issues

The future is **uncertain** but full of unwanted events. How should we prioritize?

Money tends to be allocated only **after** something undesirable has occurred

We want to prepare ourselves, but **not too** much – because then we might waste resources

Games can be a good way to represent (a simplified picture of) reality.

Context

You work with humanitarian issues and disaster management in a heavily flood-prone area. If you are prepared, you can reduce the consequences of the floods, but preparation costs money. If the resources run out, there will be a humanitarian crisis with many people without shelter, food, and water.

How do you use your resources most effectively?

Roles

Each person is responsible for their local community's disaster management budget. You work in regional teams, but each decision is made individually. You manage your own resources (beans) and cannot share them within the team. There is no way to earn new resources.

Whether there will be a flood or not is determined by chance (rolling dice) and is influenced by both regional rainfall and local rainfall (two dices will be summed). The regional dice affects everyone in the region, while the local one affects you individually.

Each round, you will choose between investing in preparedness by buying insurance. If you buy insurance, you can manage the consequences of the flood without paying; otherwise, it will be very expensive to handle the aftermath.

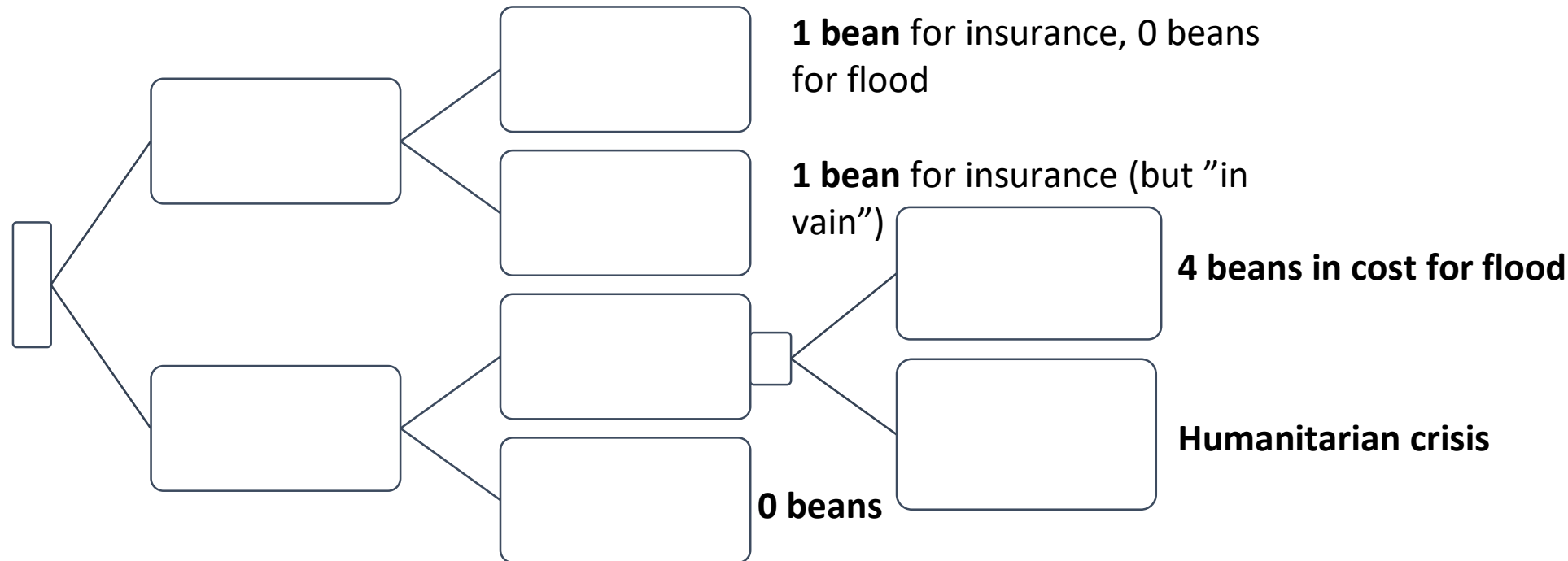The future is unpredictable - other things might happen along the way…

How do you play?

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An insurance costs 1 bean and an unprepared flood costs 4 beans.

There will be a flood if the sum of the regional dice and the local dice is **9 or more**.

The winning team is the one with 1) the fewest humanitarian crises and 2) the most beans combined within the team at the end of the game.

1 bean for insurance, 0 beans for flood

1 bean for insurance (but "in vain")

4 beans in cost for flood

Humanitarian crisis

0 beans

Logbook

Used to keep track of your strategy.

Continuously fill in what happens during the game!

Do not turn the paper around until after the game is over!

Price

Time to play!

Two teams (regions) of X persons per team

10 rounds

Your teams are named A and B. Write your team's letter on your mug as well as on each person's logbook.
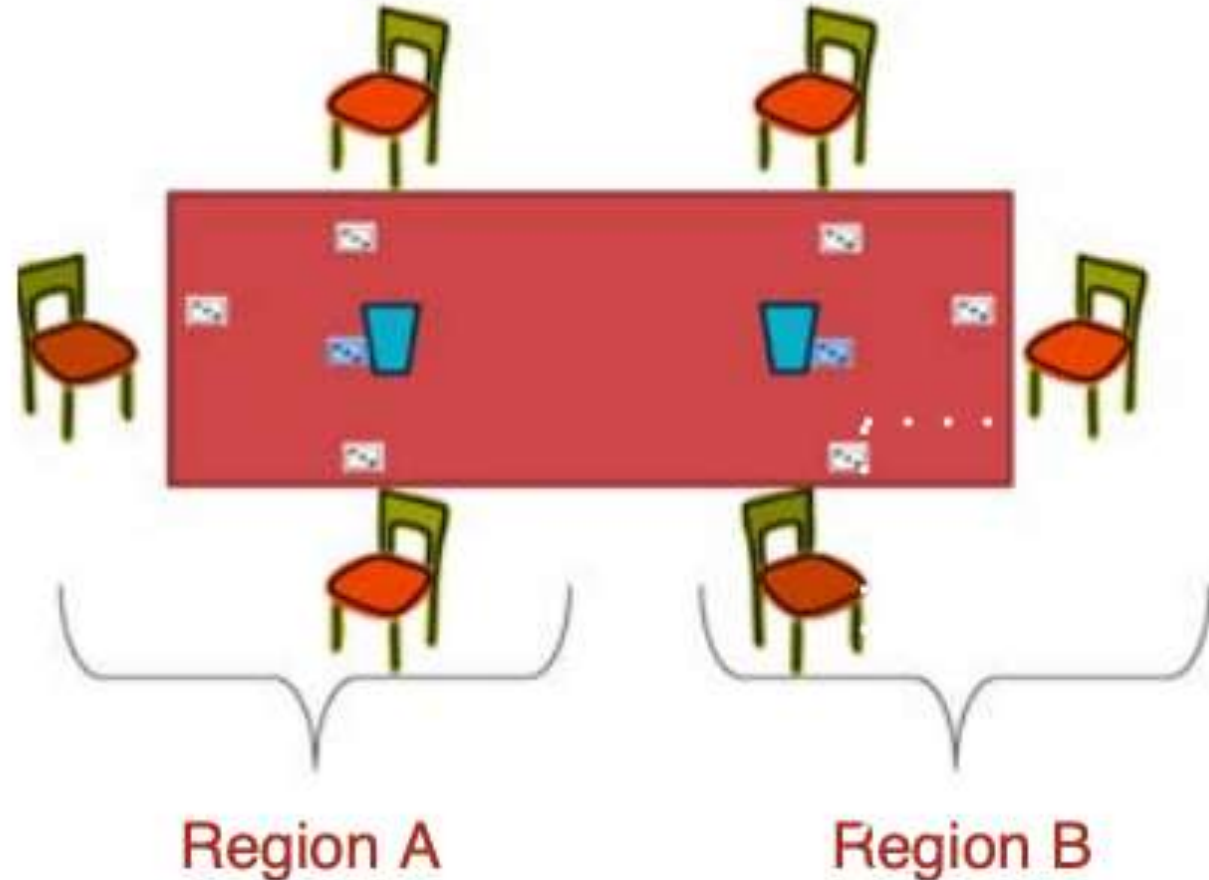
Region A   Region B

Material

Each player

Each region

x 10   x 1

x 1   xl

x 1

Rules

= Little rain

= A lot of rain

- Individual dice = local rain
- Team dice (hidden) = regional rain
- Flood occurs if sum **of local and region dice ≥ ≥**
- Flood cost: **4 beans**   2 with NBS
- Insurance cost: **1 bean**
- Stand up = Insurance
- Sit down = No insurance
- If you cannot pay for a flood then a
    humanitarian crisis occurs
- Fewest humanitarian crises and most beans wins
- Early warning: Makes the regional dice visible!
    There is only 1 EW. The teams gets to bid.
- Invest in nature-based solution (NBS)? Flood costs 2
    instead of 4. Costs 2 beans per person in the
    team.
- Climate change! Regional dice is switched.
- Early warning is now available for everyone (for free)
- Aid: it is allowed to redistribute within the team
- Drought! If the sum of <u>local</u> dice is < 34 over all 10 rounds,
    you will experience a drought. Choose if you want to
prepare   for drought as well (same price, same

One round:
1. **Throw the regional dice in the mug (do not look!)**
2. **Make an insurance decision! (stand up or sit down)**
3. **Pay 1 for the insurance if you bought one**
4. **Throw the local dice**
5. **Sum the dices**
6. **Act!**
    i) Flood and unprepared?
    – pay 4 OR 2 with NBS
    ii) Otherwise – pay 0

NOW WE ARE ON ROUND

1 2 **3** **4** 5
6 **7** **8** 9 **10**

Discussion/ reflections

Discuss the following questions in your teams:

- What did you experience during the game?
- How does what you did relate to reality?
- What did you think about the game's twists, i.e., bidding for the EW, nature-based solutions, climate change, and drought?
- Agree on an insight/thought/revelation that you want to share with the others!
- To what extent did you try to calculate probabilities vs. act on instinct?
- How could the rules be altered to make the game better?
- How can you use the game in your teaching?