Decisions for the Decade

How do we make smart long-term decisions?

Dan Christian
Tetra Tech

THE WORLD BANK

RED CROSS/RED CRESCENT CLIMATE CENTRE

International Federation of Red Cross and Red Crescent Societies

The Netherlands Red Cross

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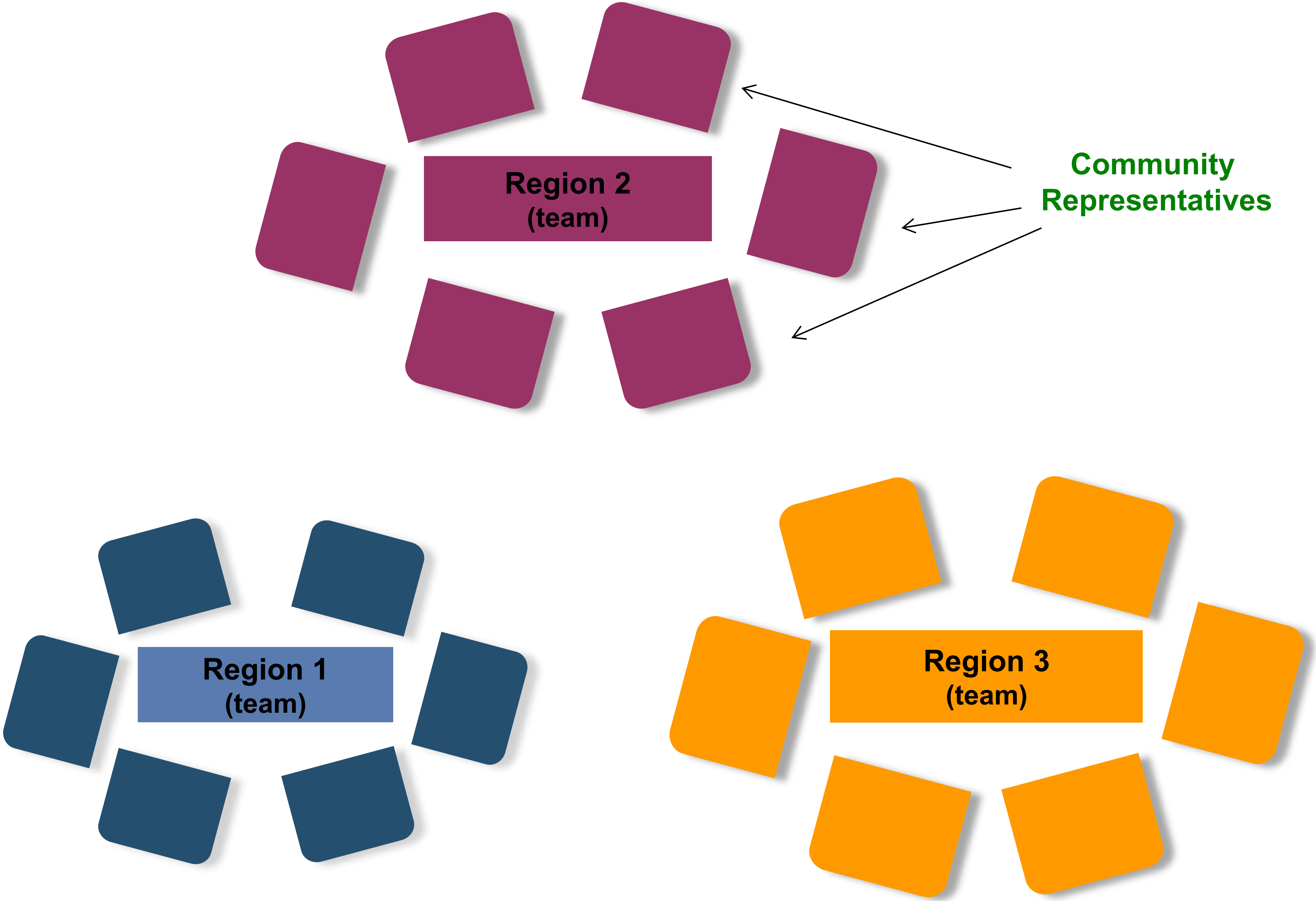

Region 2
(team)
Community
Representatives
Region 1
(team)
Region 3
(team)

Your aim: to create a prosperous community and region…

BASIC RULES

1. **Simplification of reality**
   No challenging the rules!

2. **Decisions are individual**
   But region (team) consultations are welcome

3. **We will play 4 decades of decision making**
   Each round is 10 years

Community Plan

***FLOOD PROTECTION* Investment**
If you roll a flood: lose 1 bean

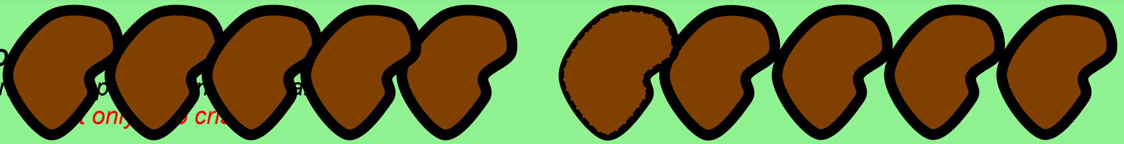
***DEVELOPMENT* Investment**
Earn 1 Prosperity Point per bean,
But only if no crisis

DROUGHT PROTECTION
If you roll a drought: lose 1 bean

Used Beans

	2. INVESTMENT DECISIONS				3. OBSERVATIONS	4. RESULTS	
Decade	**FLOOD Protection (0 - 9)**	**DEVELOPMENT (1 - 10)**	**DROUGHT Protection (0 - 9)**	Choose **Robust** Option?	**Annual Precipitation**	**# Crises**	**# *Prosperity Points***
1							
2				Yes / No			
3				Yes / No			
4				Yes / No			
					TOTAL:		

FLOOD PROTECTION Investment
If you roll a flood: lose 1 bean



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Ear
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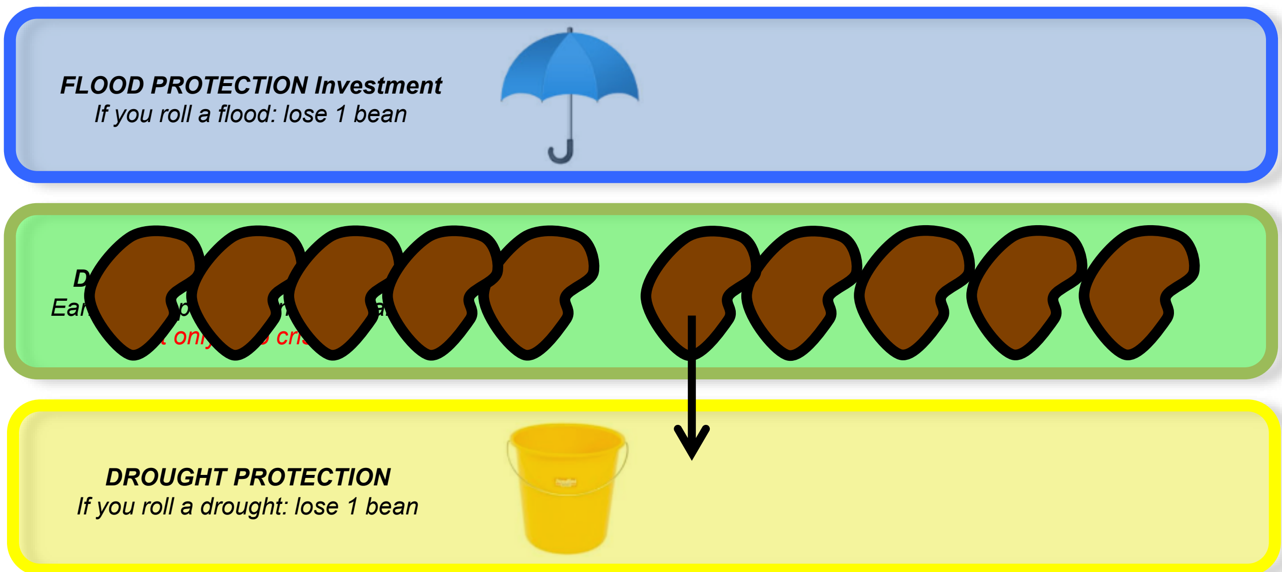
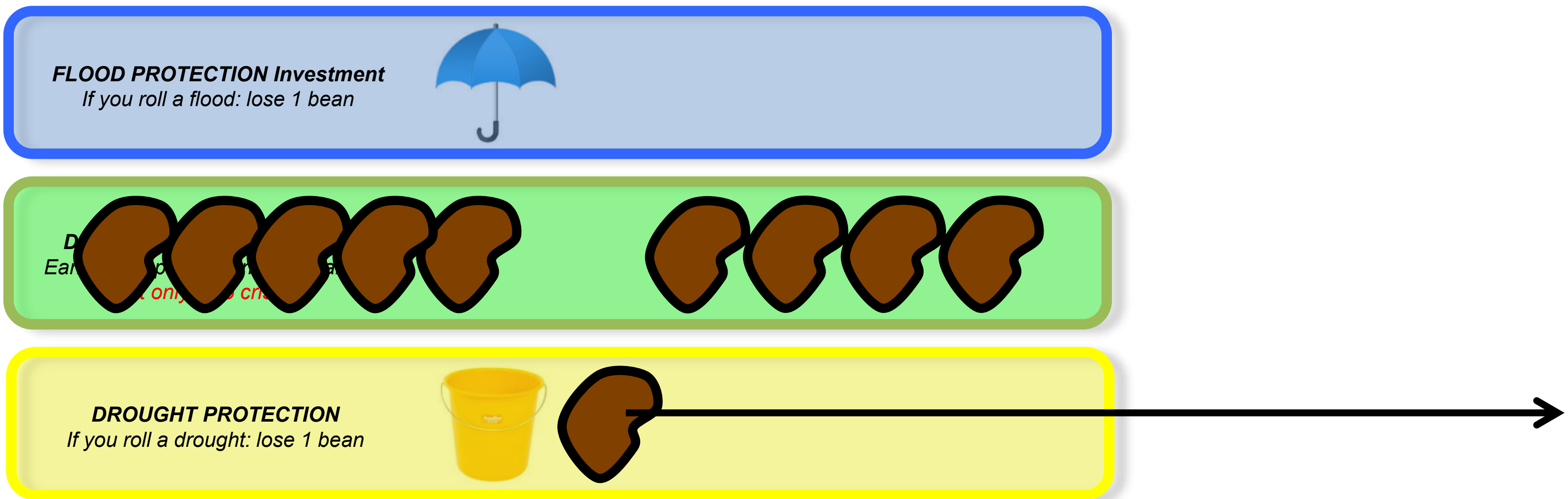
DROUGHT PROTECTION
If you roll a drought: lose 1 bean

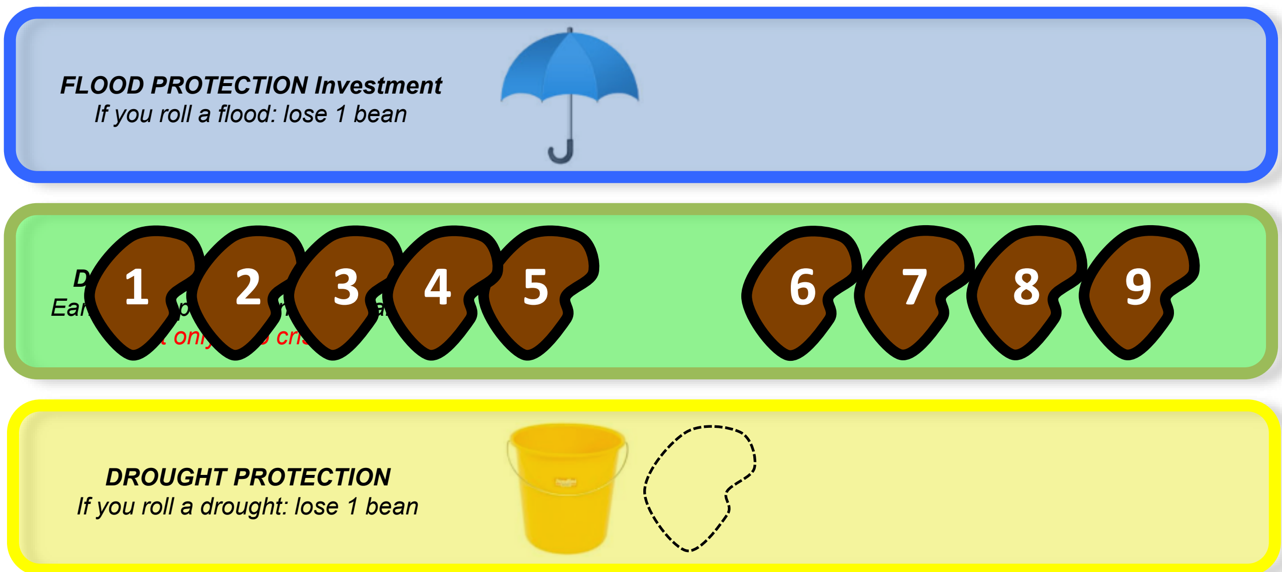


Let’s protect against 1 drought…



Let’s protect against 1 drought…

When a drought occurs, use a protection bean…

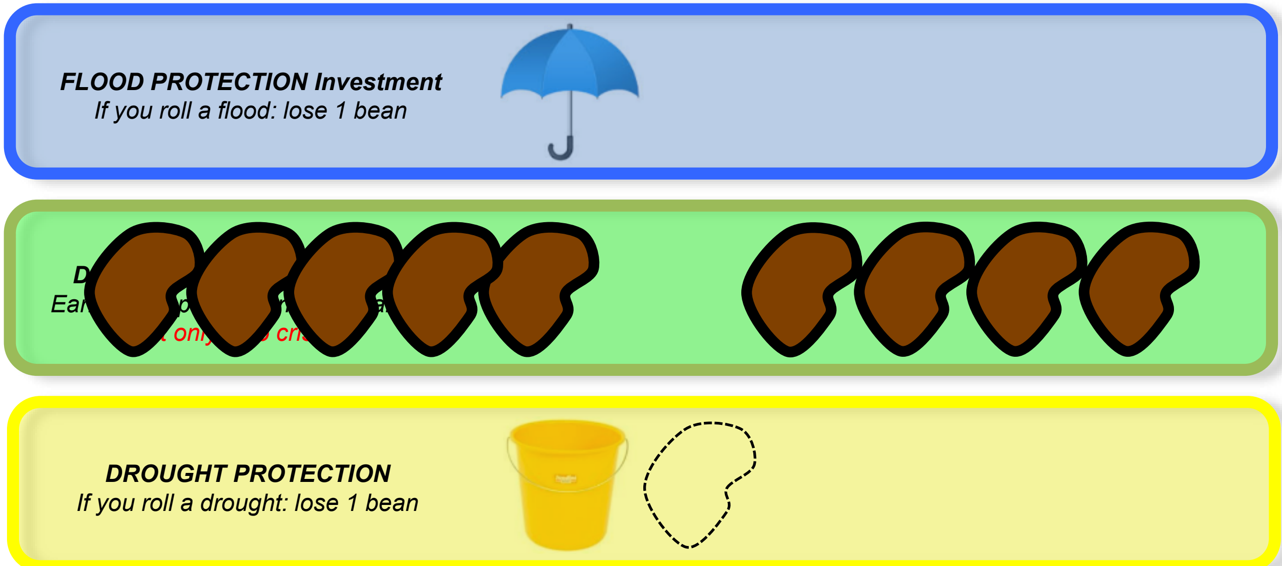


Let's protect against 1 drought…

When a drought occurs, use a protection bean…

If just 1 drought occurs…

…we get 9 Prosperity Points!



But, what if we had a second drought?

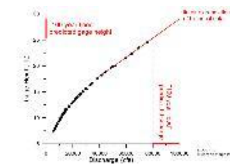
Not enough protection…

…means a humanitarian crisis

…and 0 prosperity points!

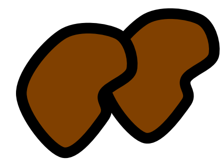
Each shortage of protection is a new crisis!

1. Scientific Information



Probabilities, Predictions, Etc.

2. Decision



Your 10-Year Investment in Development and Protection

3. Observations

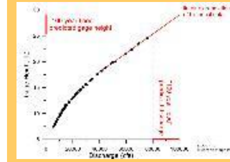
Rains, Teammate Decisions

4. Results

Crisis….or Prosperity Points?

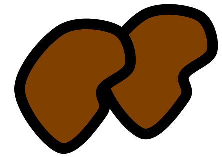
1. Scientific Information

Probabilities, Predictions, Etc.



2. Decision

Your 10-Year Investment in Development and Protection



3. Observations

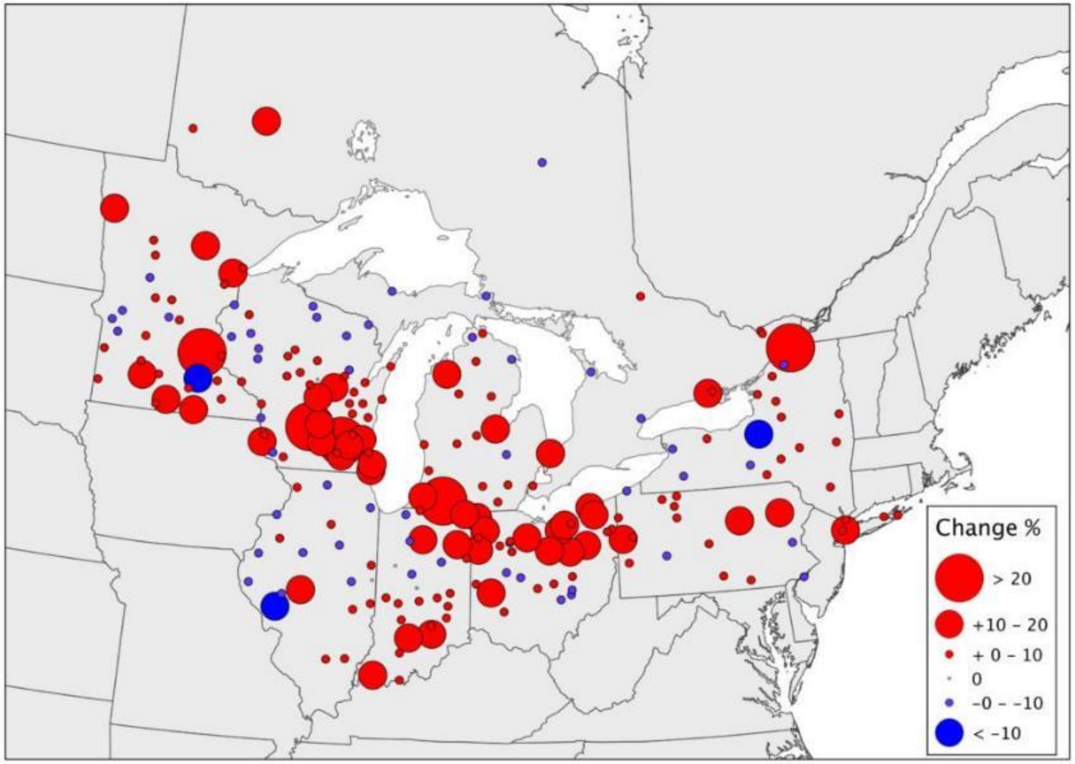
Rains, Teammate Decisions

4. Results

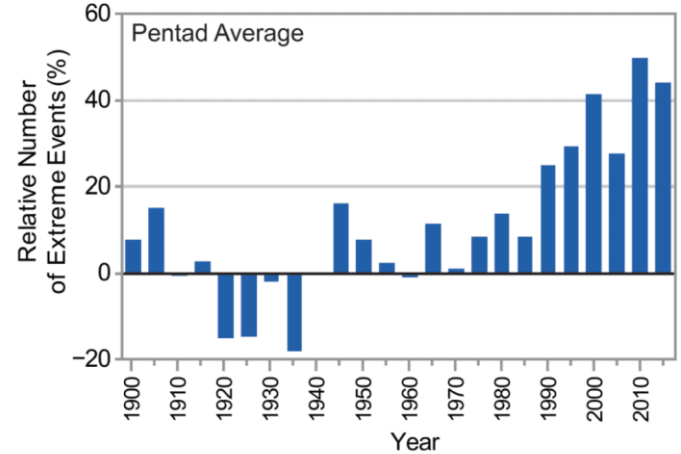
Crisis….or Prosperity Points?

1. SCIENTIFIC INFORMATION

Observed Changes (%) in the Intensity of the 1% Heaviest Precipitation Days (1951-1980 vs. 1981-2010)



2-Day Precipitation Events Exceeding 5-Year Recurrence Interval



Changes in the Heaviest 1% of Daily Precipitation Events from 1951-1980 to 1981-2010 in the Great Lakes Region	
Change in Intensity of 1% Heaviest Storm	5.1% ↑
Change in Number of 1% Heaviest Storm Days	23.6% ↑
Change in Amount Falling in 1% Heaviest Storms	24.5% ↑

Regional analysis of extreme precipitation. Values are based on observations from 230 U.S. and Canadian GHCN stations across the Great Lakes region.

Great Lakes Summer Surface Water Temperature Trends (1980–2021)

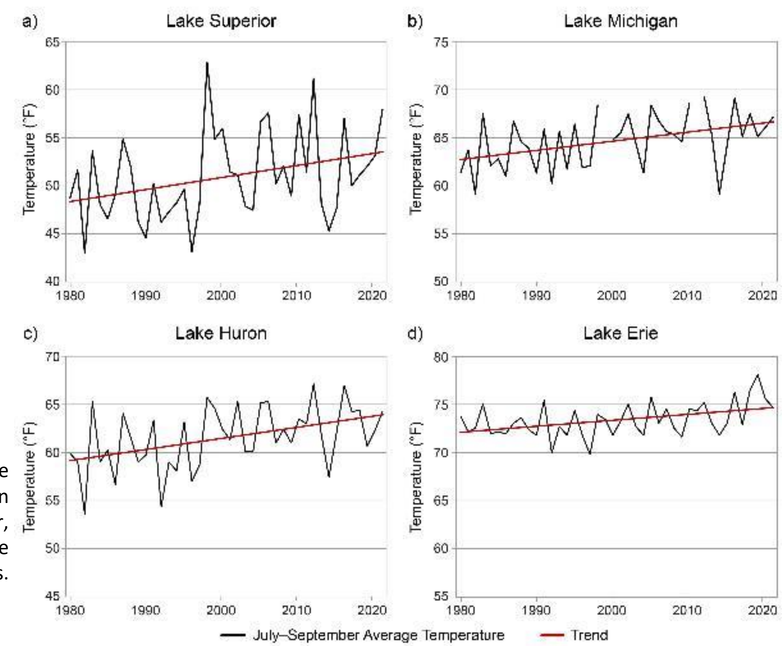
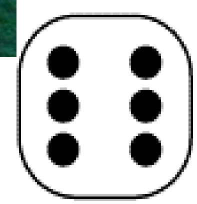
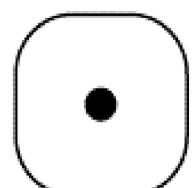
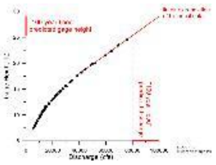


Figure 24.13. Summer surface water temperatures have been increasing for Lakes Superior, Michigan, Huron, and Erie since the late 1970s.

 = Flood 

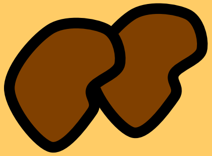
 = Drought 

1. Scientific Information



Probabilities, Predictions, Etc.

2. Decision



Your 10-Year Investment in Development and Protection

3. Observations

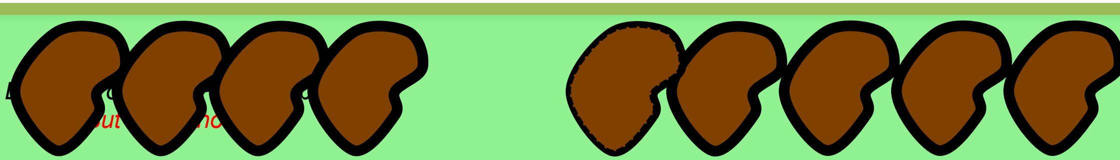
Rains, Teammate Decisions

4. Results

Crisis….or Prosperity Points?

Community Plan

***FLOOD PROTECTION* Investment**
If you roll a flood: lose 1 bean

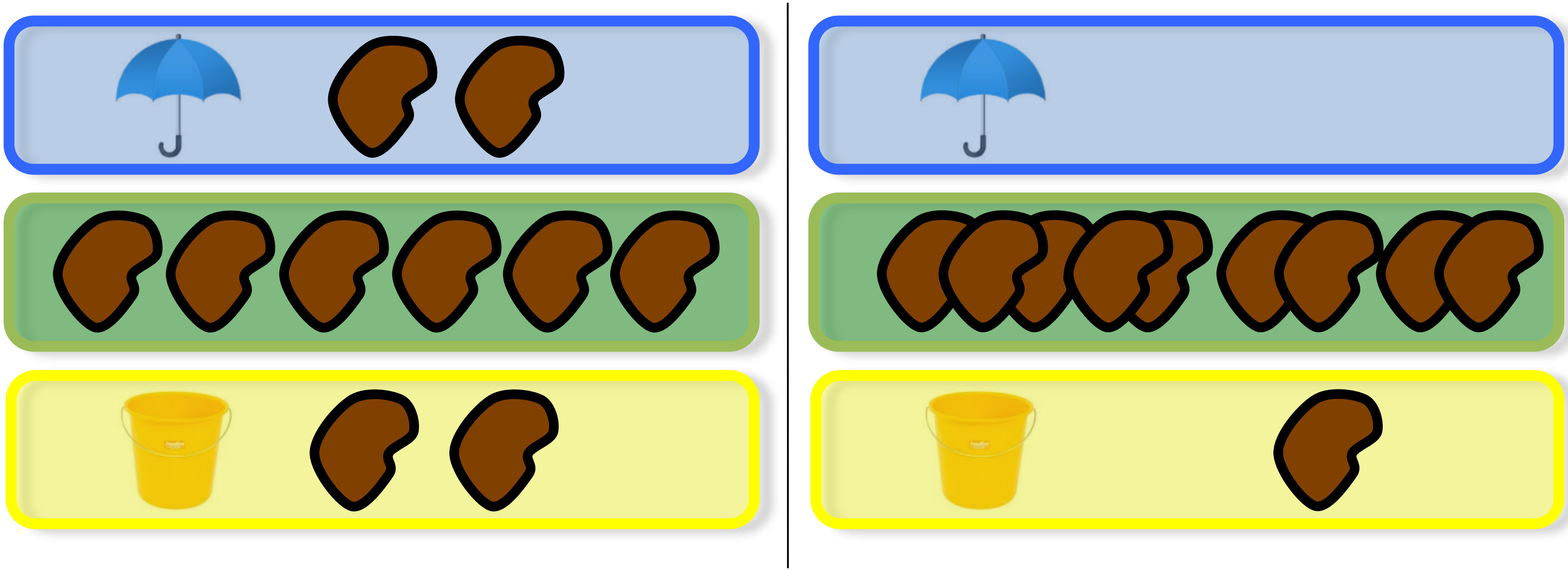


DROUGHT PROTECTION
If you roll a drought: lose 1 bean

Used Beans

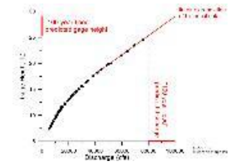
	2. INVESTMENT DECISIONS				3. OBSERVATIONS	4. RESULTS	
Decade	**FLOOD Protection (0 - 9)**	**DEVELOPMENT (1 - 10)**	**DROUGHT Protection (0 - 9)**	Choose **Robust Option?**	**Annual Precipitation**	**# Crises**	***# Prosperity Points***
1	0	9	1				
2				Yes / No			
3				Yes / No			
4				Yes / No			
					TOTAL:		

Community 1 **Commuity 2**



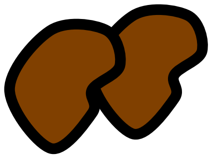
1. Scientific Information

Probabilities, Predictions, Etc.



2. Decision

Your 10-Year Investment in Development and Protection



3. Observations

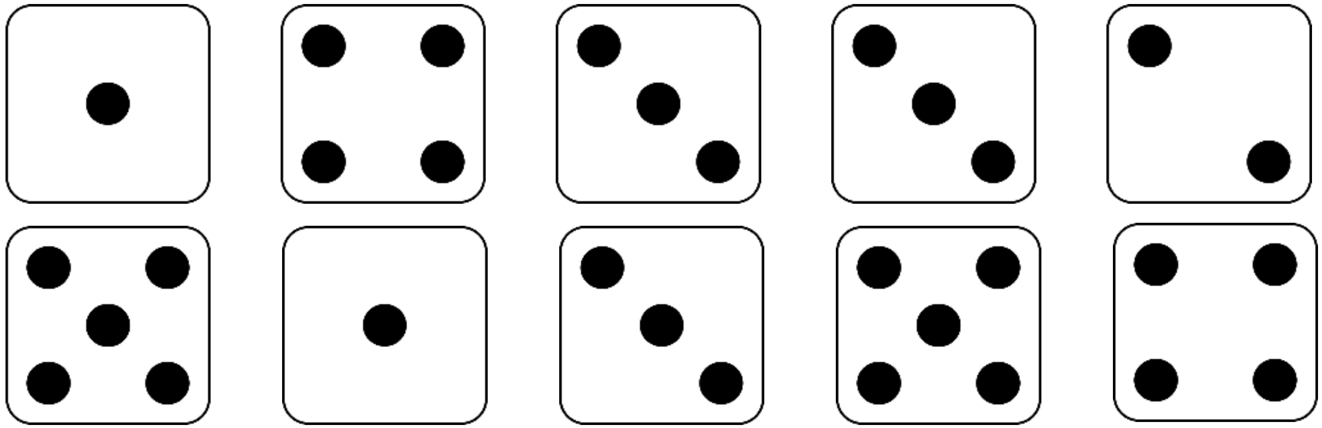
Rains, Teammate Decisions

4. Results

Crisis….or Prosperity Points?

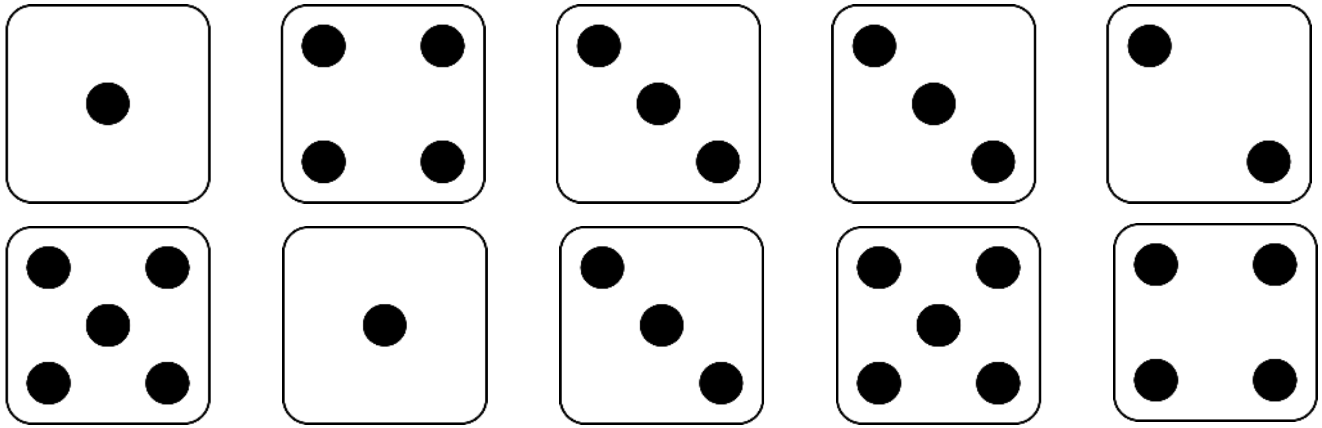
3. OBSERVATIONS

Ten years of rainfall occur



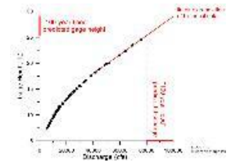
3. OBSERVATIONS

Ten years of rainfall occur



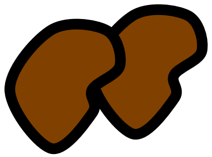
	2. INVESTMENT DECISIONS				3. OBSERVATIONS	4. RESULTS	
Decade	**FLOOD Protection (0 - 9)**	**DEVELOPMENT (1 - 10)**	**DROUGHT Protection (0 - 9)**	Choose **Robust Option**?	**Annual Precipitation**	**# Crises**	***# Prosperity Points***
1	0	9	1		1, 4, 3, 3, 2, 5, 1, 3, 5, 4		
2				Yes / No			
3				Yes / No			
4				Yes / No			
					TOTAL:		

1. Scientific Information



Probabilities, Predictions, Etc.

2. Decision



Your 10-Year Investment in Development and Protection

3. Observations

Rains, Teammate Decisions

4. Results

Crisis….or Prosperity Points?

Observations

1, 4, 3, 3, 2, 5, 1, 3, 5, 4

Two (#1) droughts

4. RESULTS

Community 1 | **Community 2**

4. RESULTS	
# Crises	# Prosperity Points
0	6

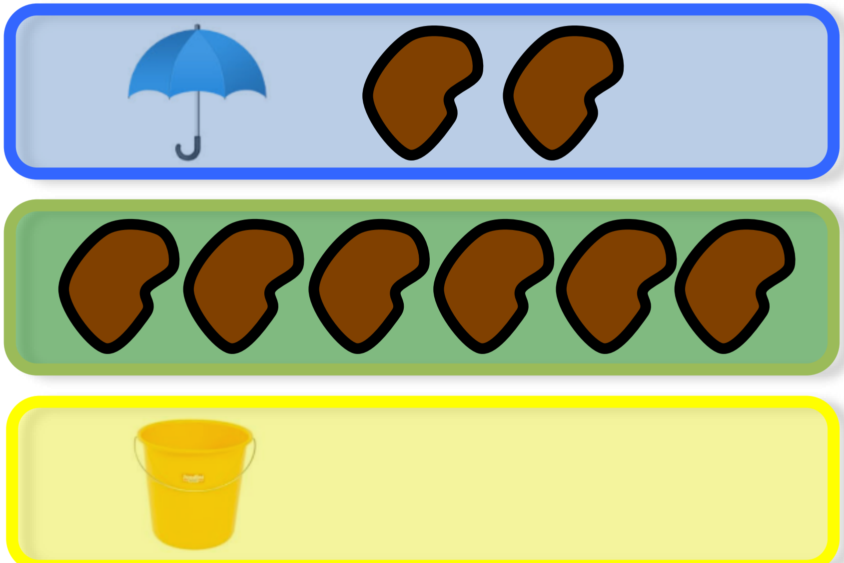
Observations

1, 4, 3, 3, 2, 5, 1, 3, 5, 4

Two (#1) droughts

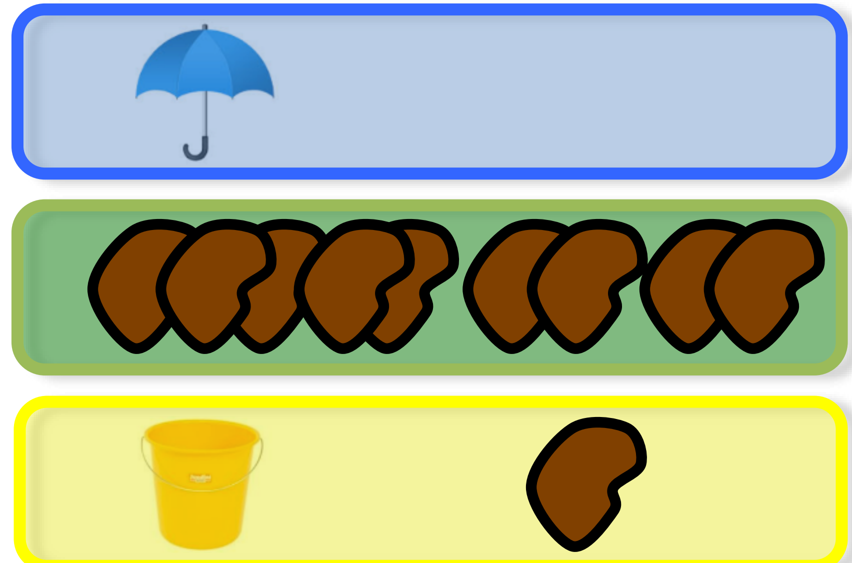
4. RESULTS

Community 1



4. RESULTS	
# Crises	# Prosperity Points
0	6

Community 2



4. RESULTS	
# Crises	# Prosperity Points
1	0

Winners…& Losers

Community Losers:

Any with a HUMANITARIAN CRISIS…(1 or more)

1 Community Winner *in each Region:*

No Humanitarian Crisis!

Most Prosperity Points

1 Winning Region:

Most Prosperity Points ~ the grand total

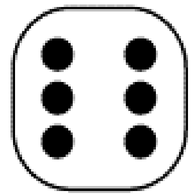
Tiebreaker: Region with fewest crises

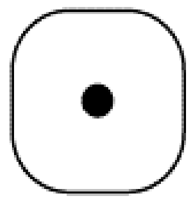
Let's Play!!!


DECADE 1

SCIENTIFIC INFORMATION

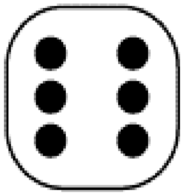
Historical Rainfall

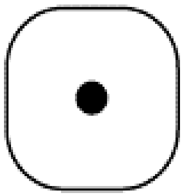
 = Flood 

 = Drought 

Game Play decade 1

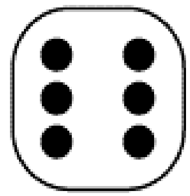
1. Scientific Information
2. Decision
   - Investment distribution
3. Observations
   - Please roll **2** times only then **stop**
4. Results

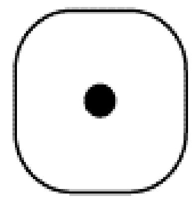
 **= Flood** 

 **= Drought** 

Game Play decade 1 con’t

1. Scientific Information
2. Decision
   - Investment distribution
3. Observations
   - Roll the remaining **8** times
4. Results

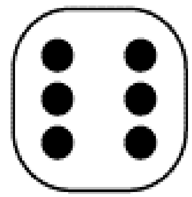
 **= Flood** 

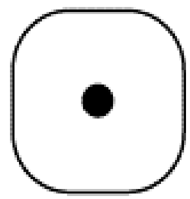
 **= Drought** 


DECADE 2

SCIENTIFIC INFORMATION

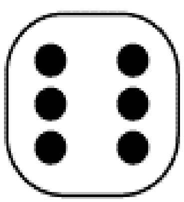
Historical Rainfall

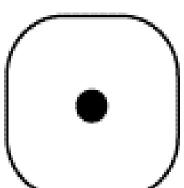
 = Flood 

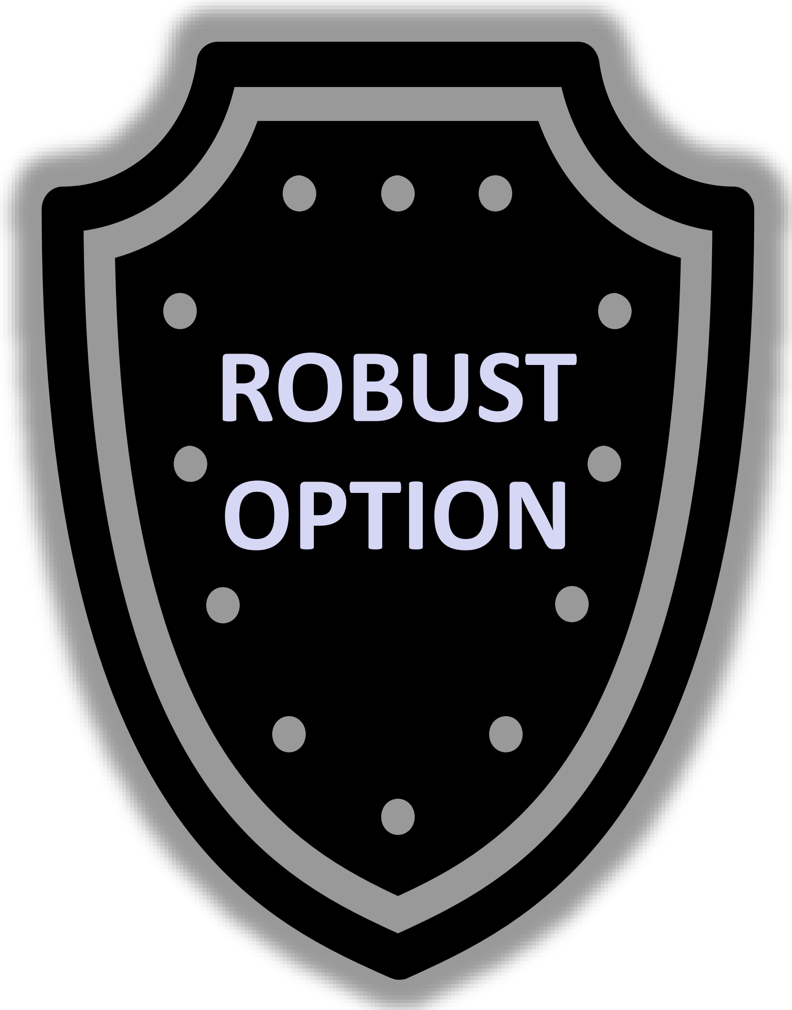
 = Drought 

Robust Option

Guarantee:	? Prosperity Points
Applicable to:	Regions
Cost:	10 (all) beans from all communities within the region
Duration:	1 decade

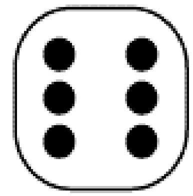
 = Flood 

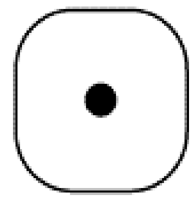
 = Drought 

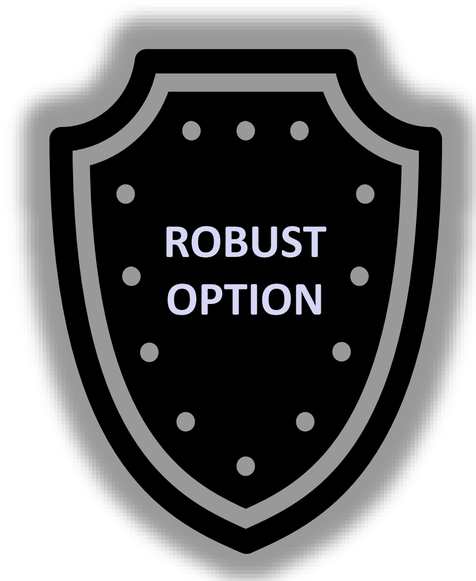


Game Play decade 2

1. Scientific Information
2. Decision
   - Robust Option
   - Investment distribution
3. Observations
   - Please roll **2** times only then **stop**
4. Results

 **= Flood** 

 **= Drought** 



SCIENTIFIC INFORMATION

New Data Just Arrived

- Additional urbanization, environmental degradation, and other forms of land use change have occurred.
- Has led to a change in flood risk.

1 = Drought 

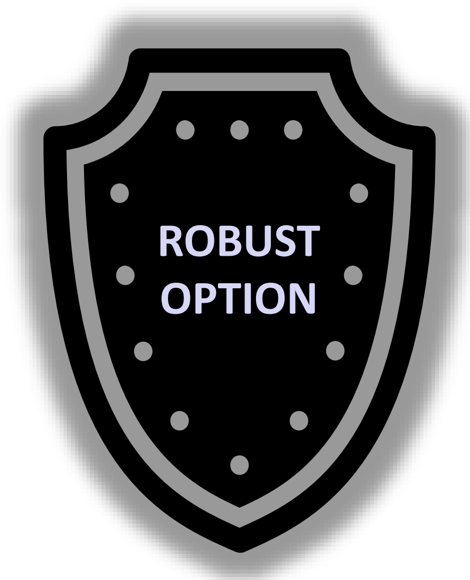
6 7 8 = Flood 

Game Play decade 2 con't

1. Scientific Information
2. Decision
   - Robust Option
   - Investment distribution
3. Observations
   - Roll the remaining **8** times
4. Results

6 7 8 **= Flood** 

1 **= Drought** 




DECADE 3

SCIENTIFIC INFORMATION

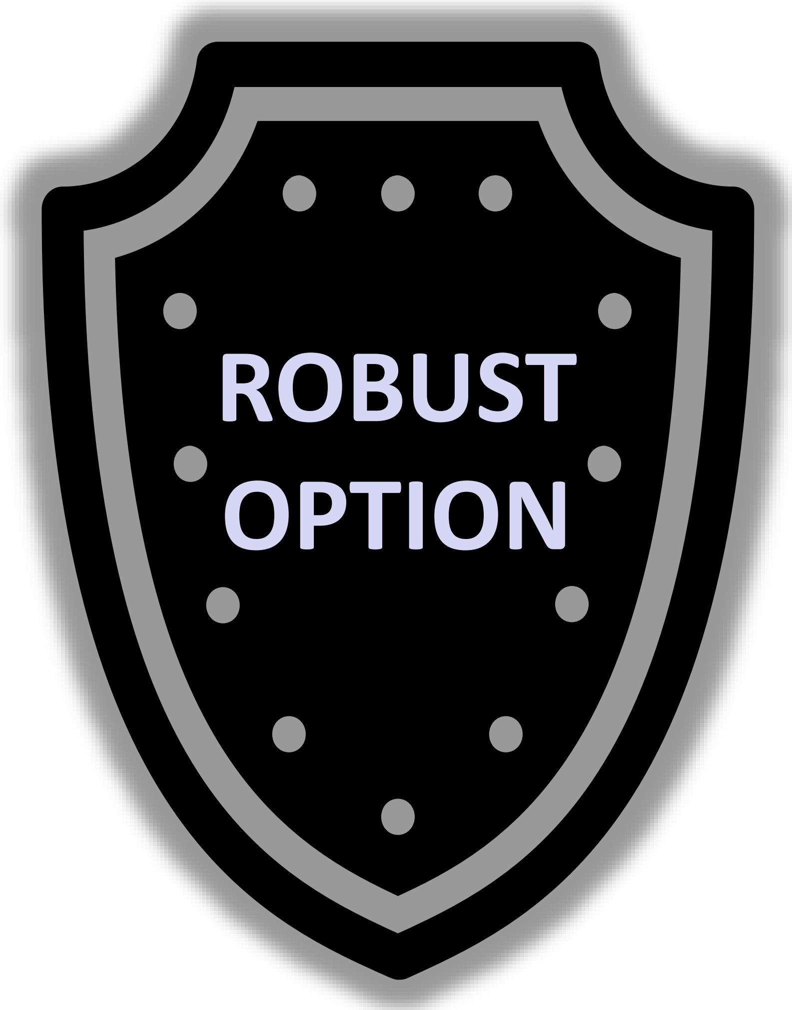
Updated Rainfall

1 = Drought 

6 7 8 = Flood 

Robust Option

Guarantee:	? Prosperity Points
Applicable to:	Regions
Cost:	10 (all) beans from all communities within the region
Duration:	1 decade



6 7 8 = Flood 

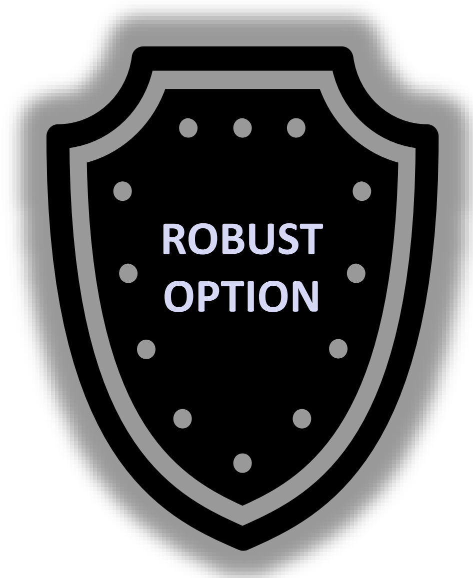
1 = Drought 

Game Play decade 3

1. Scientific Information
2. Decision
   - Robust Option
   - Investment distribution
3. Observations
   - Please roll **2** times only then **stop**
4. Results

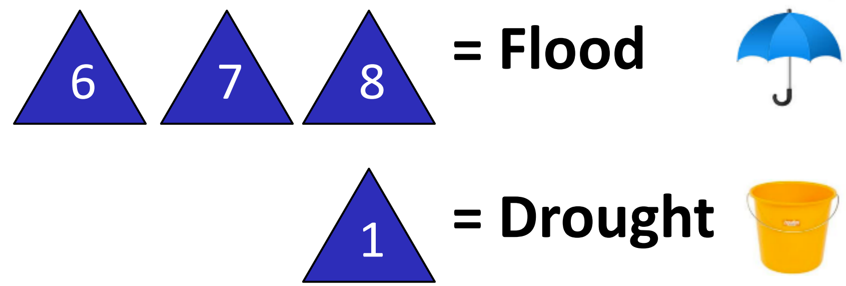
6 7 8 **= Flood** 

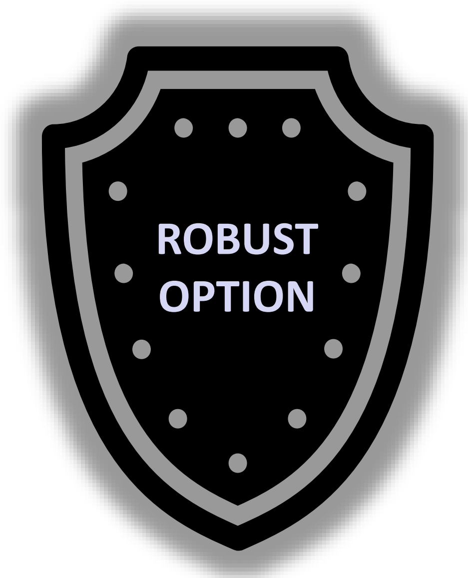
1 **= Drought** 



Game Play decade 3 con’t

1. Scientific Information
2. Decision
   - Robust Option
   - Investment distribution
3. Observations
   - Roll the remaining **8** times
4. Results






DECADE 4

1. SCIENTIFIC INFORMATION

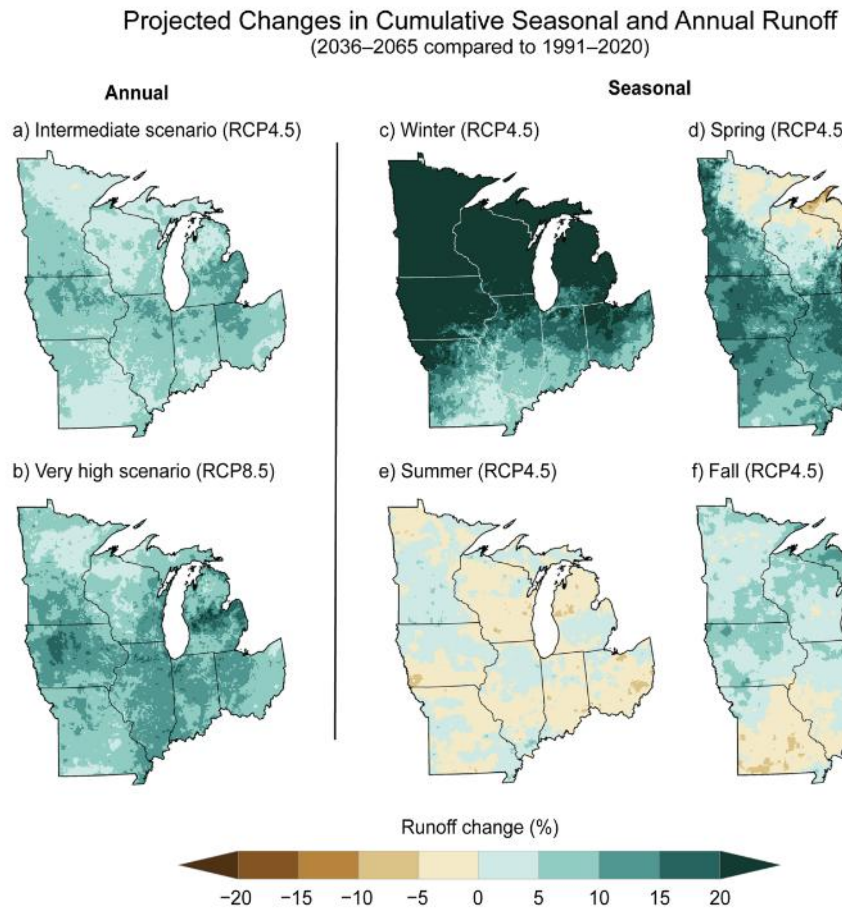


Figure 24.11. Projected changes in cumulative local runoff will lead to increased flooding susceptibility in winter and spring with, increased flash drought potential in summer.

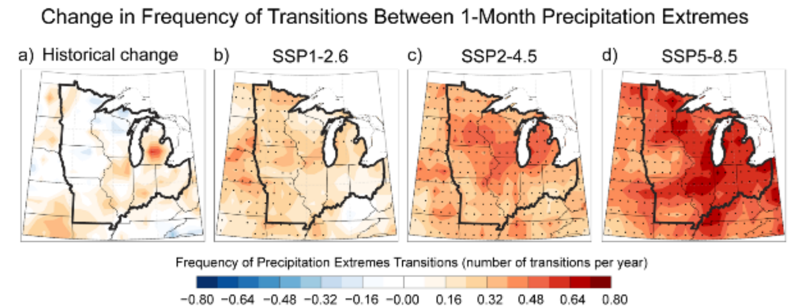
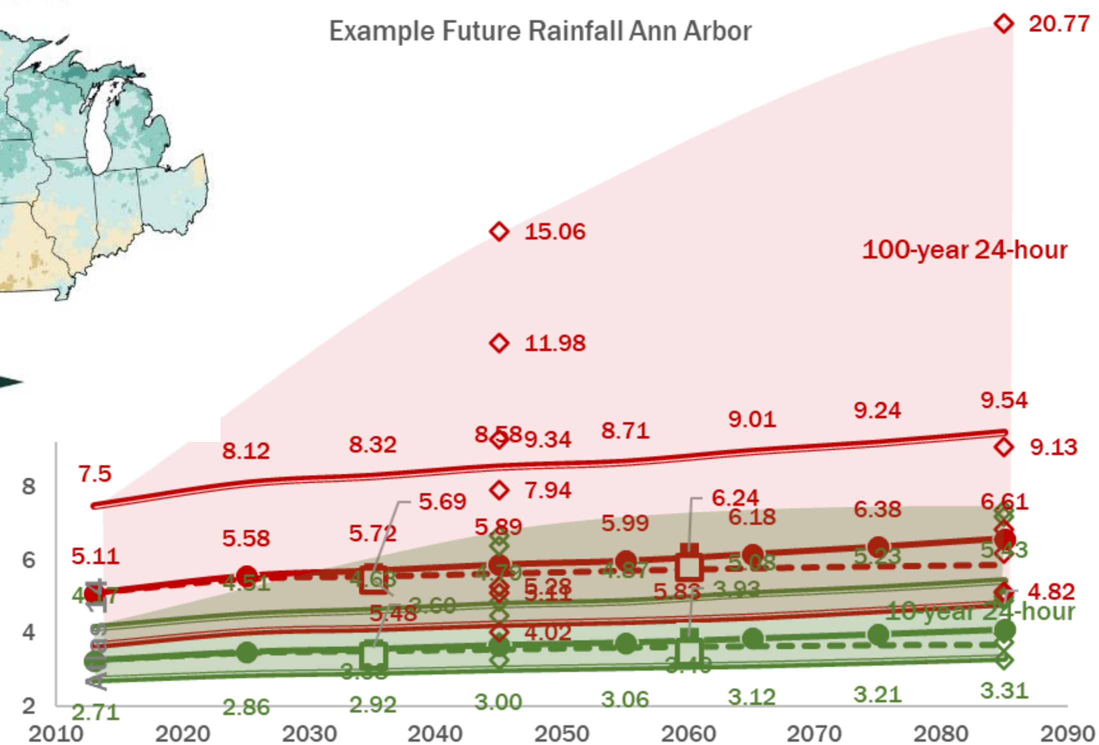


Figure 24.1. The frequency of wet–dry and dry-wet transitions across the Midwest is projected to increase by late century (2071–2100).

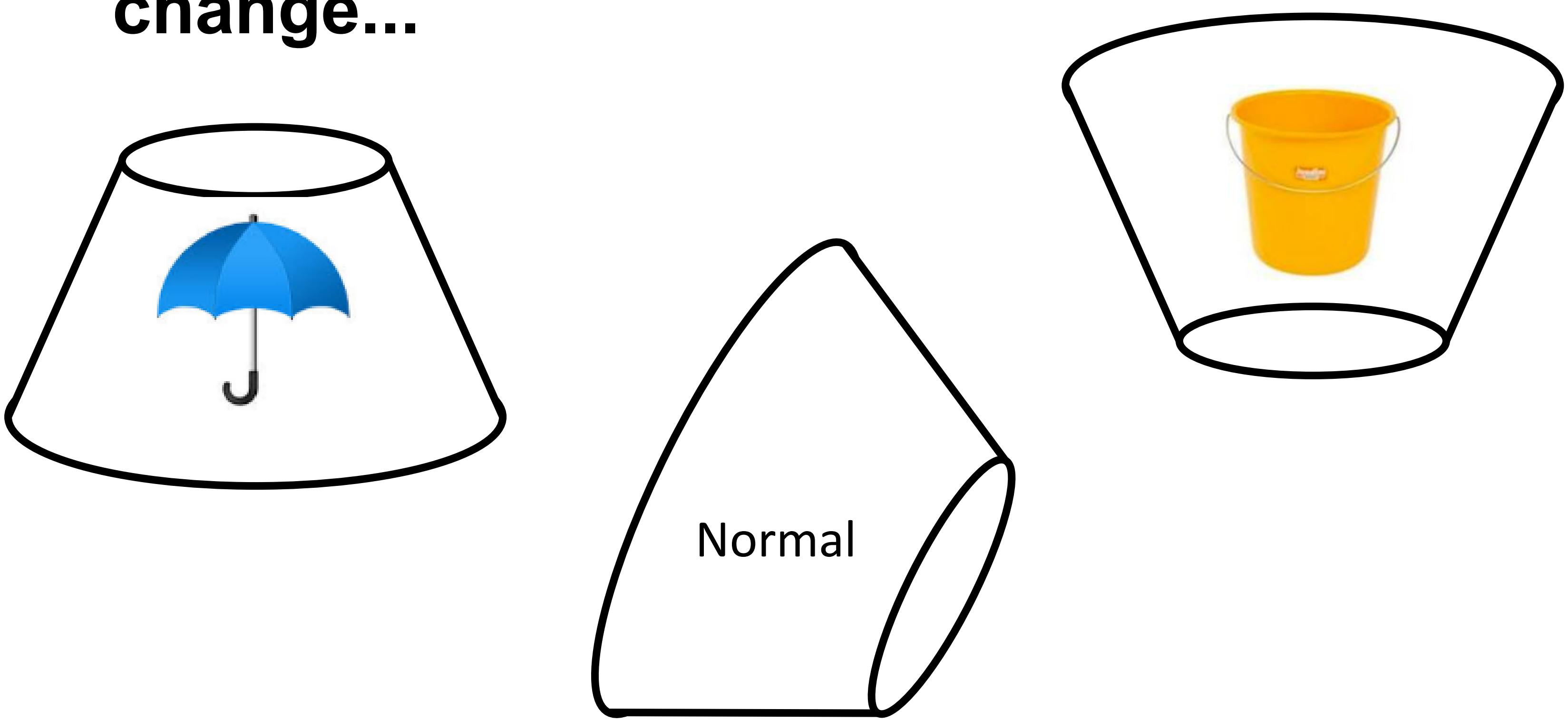
Fifth National Climate Assessment
Chapter 24 nca2023.globalchange.gov



<u>SCIENTIFIC INFORMATION</u>

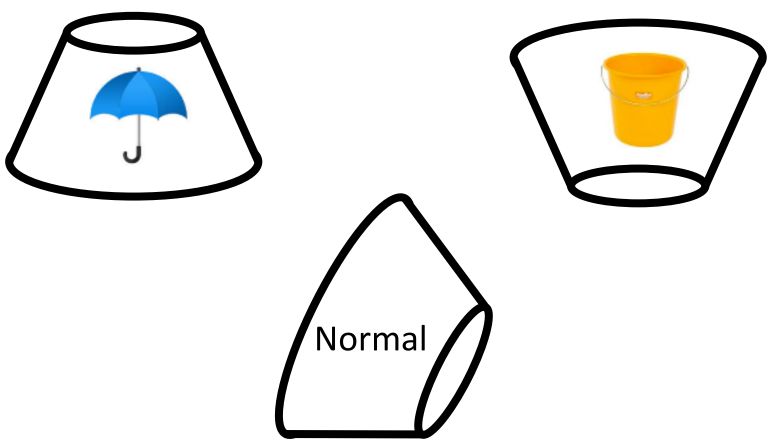
Climate Change

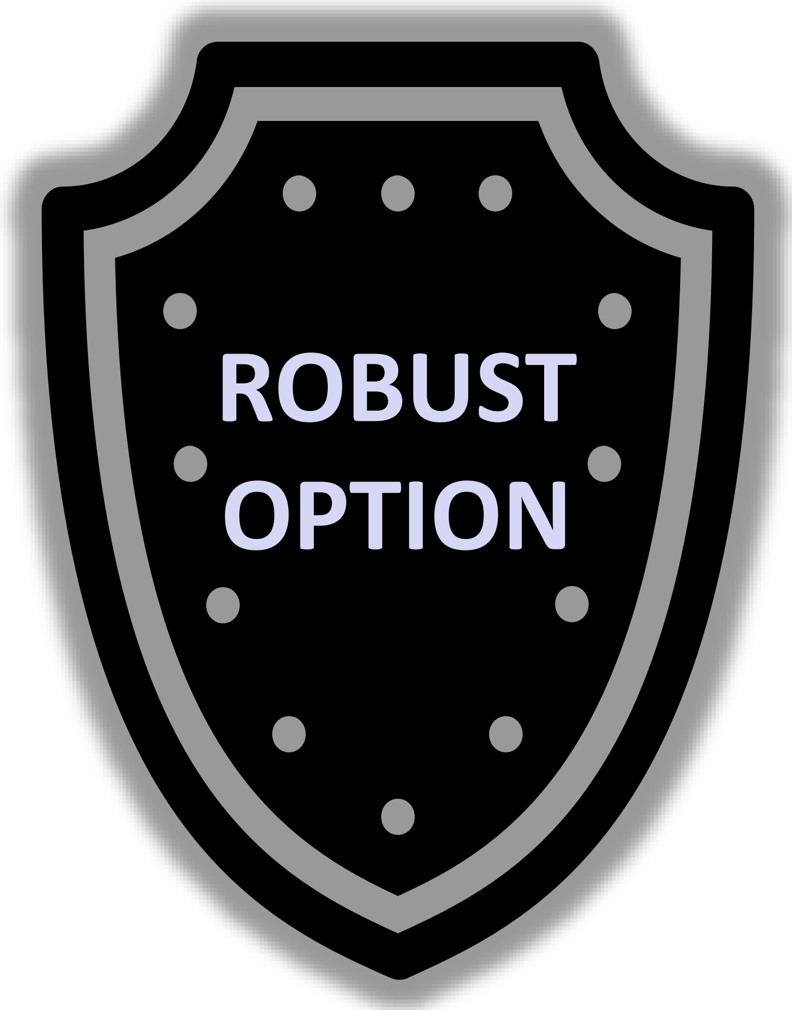
We have a NEW MODEL for climate change...



Robust Option

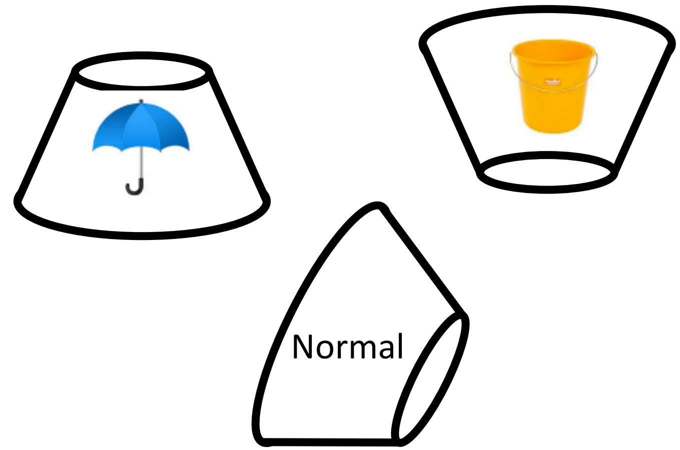
Guarantee:	? Prosperity Points
Applicable to:	Regions
Cost:	10 (all) beans from all communities within the region
Duration:	1 decade

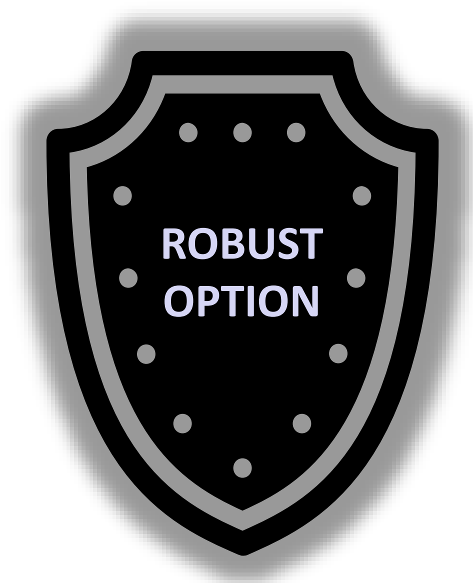




Game Play Decade 4

1. Scientific Information
2. Decision
   - Robust Option
   - Investment distribution
3. Observations
   - Please toss **2** times only then **stop**
4. Results



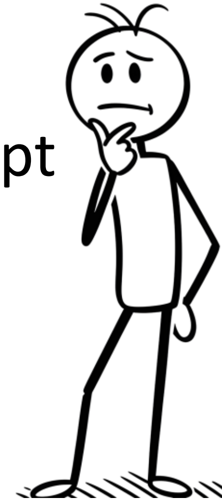


Stop. Game Over.

no tossing the cone of uncertainty

From the Game to Real-World Planning

- **In the game, you made simple choices about how much protection to invest in.**
- **In real communities, those same choices show up as decisions about:**
  - When to act versus when to wait
  - How much risk to reduce upfront
  - Where to invest limited resources
  - What consequences communities are willing to accept
- **Use this lens as we move into the discussion.**

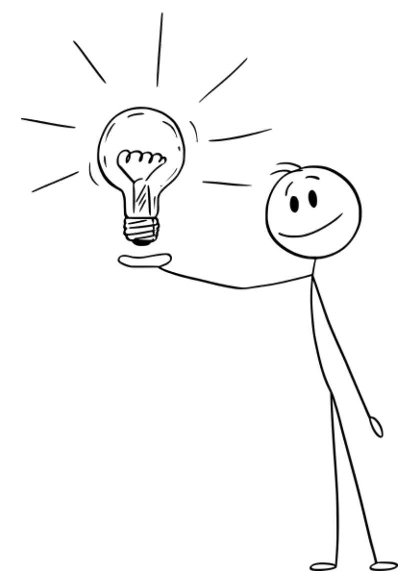


Q1. Early decisions and flood outcomes

Which early decisions had the biggest impact on flood outcomes later in the game?

Examples to react to

- How much flood and drought protection was chosen early on
- Tradeoffs between protection and remaining prosperity
- Impacts of early choices that couldn't be changed later

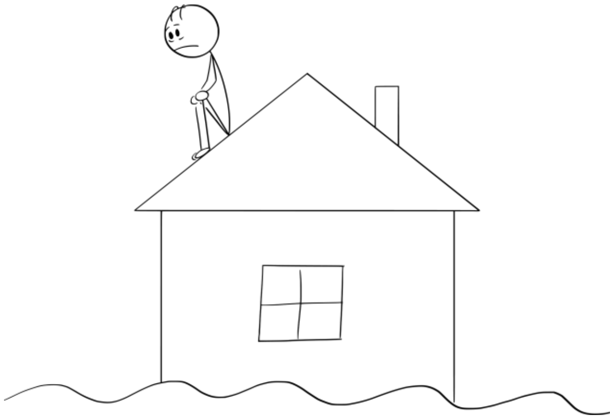


Q2. Translating the game tradeoff

In the game, increasing protection reduced flood impacts but limited prosperity.
What real-world strategies does that tradeoff represent?

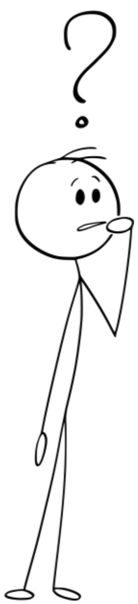
Examples to react to

- Investing in flood protection infrastructure
- Reducing exposure to future flood risk
- Preserving land or space for flood storage
- Coordinating to stretch limited resources
- *other*



Q3. Where planners face this tradeoff

In the game, investing in flood protection reduced prosperity.
In real communities, what planning or land use decisions reflect that same tradeoff?



Examples to react to

- Deciding where development is allowed or restricted
- Choosing whether to preserve land for flood storage
- Balancing short-term growth with long-term flood risk
- Aligning land use decisions with infrastructure capacity
- *other*

Q4. Planning under uncertainty

In the game—and in real communities—how does uncertainty about future conditions affect flood-related decisions?

Examples to react to

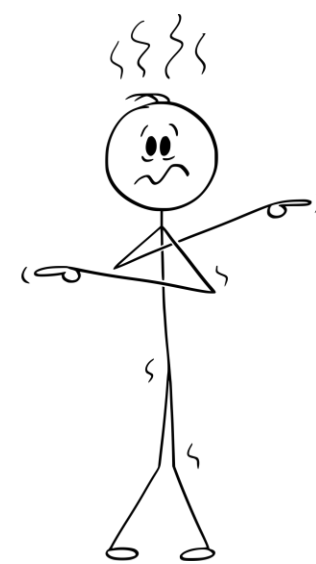
- Choosing when to act versus when to wait
- Actions that reduced risk even under uncertainty
- Making decisions without perfect information
- *other*

Q5. Capacity and coordination challenges

What makes it hard to make good long-term flood decisions?

Examples to react to

- Staffing, expertise, or technical capacity
- Funding availability and timing constraints
- Coordination across departments or jurisdictions
- Institutional, regulatory, or political barriers
- *other*

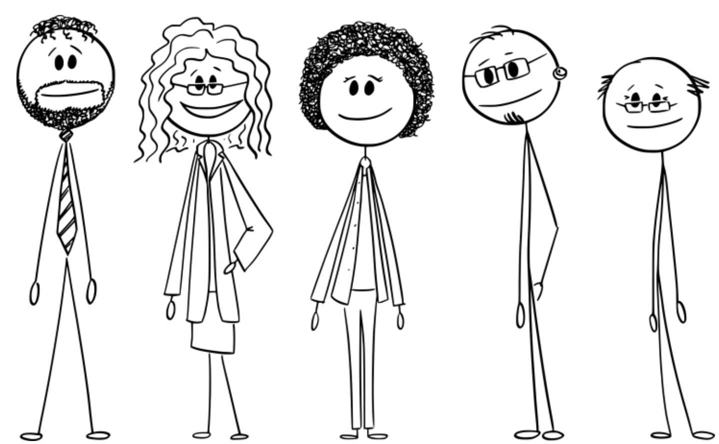


Q6. Regional and SEMCOG Support

What kinds of regional support would help communities make better flood-related decisions earlier?

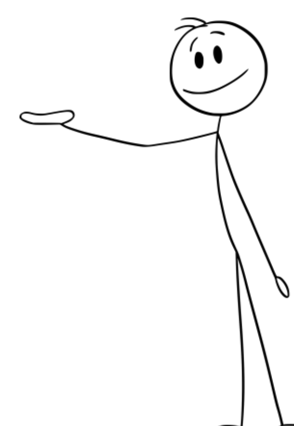
Examples to react to

- Planning guidance, tools, or model policies
- Regional data, analysis, or technical assistance
- Coordination, convening, or peer learning
- Funding support or implementation assistance
- *other*



Key takeaways for flood resilience planning

- Flood risk compounds over time if early action is delayed
- Early tradeoffs between protection and prosperity shape long-term outcomes
- Infrastructure alone cannot manage flood risk
- Integrated planning approaches reduce long-term risk and cost
- Uncertainty is not a reason to delay action
- Regional coordination strengthens local decision-making



Final Results: Decades 1-3 ONLY

	2. INVESTMENT DECISIONS				3. OBSERVATIONS	4. RESULTS	
Decade	FLOOD Protection (0 - 9)	DEVELOPMENT (1 - 10)	DROUGHT Protection (0 - 9)	Choose Robust Option?	Annual Precipitation	# Crises	# Prosperity Points
1							
2				Yes / No			
3				Yes / No			
4				Yes / No			
					TOTAL:		

1 Community Winner *in each Region:*

No Humanitarian Crisis!

Most Prosperity Points

1 Winning Region:

Most Prosperity Points ~ the grand total

Tiebreaker: Region with fewest crises

RED CROSS/RED CRESCENT
CLIMATE CENTRE

International Federation
of Red Cross and Red Crescent Societies

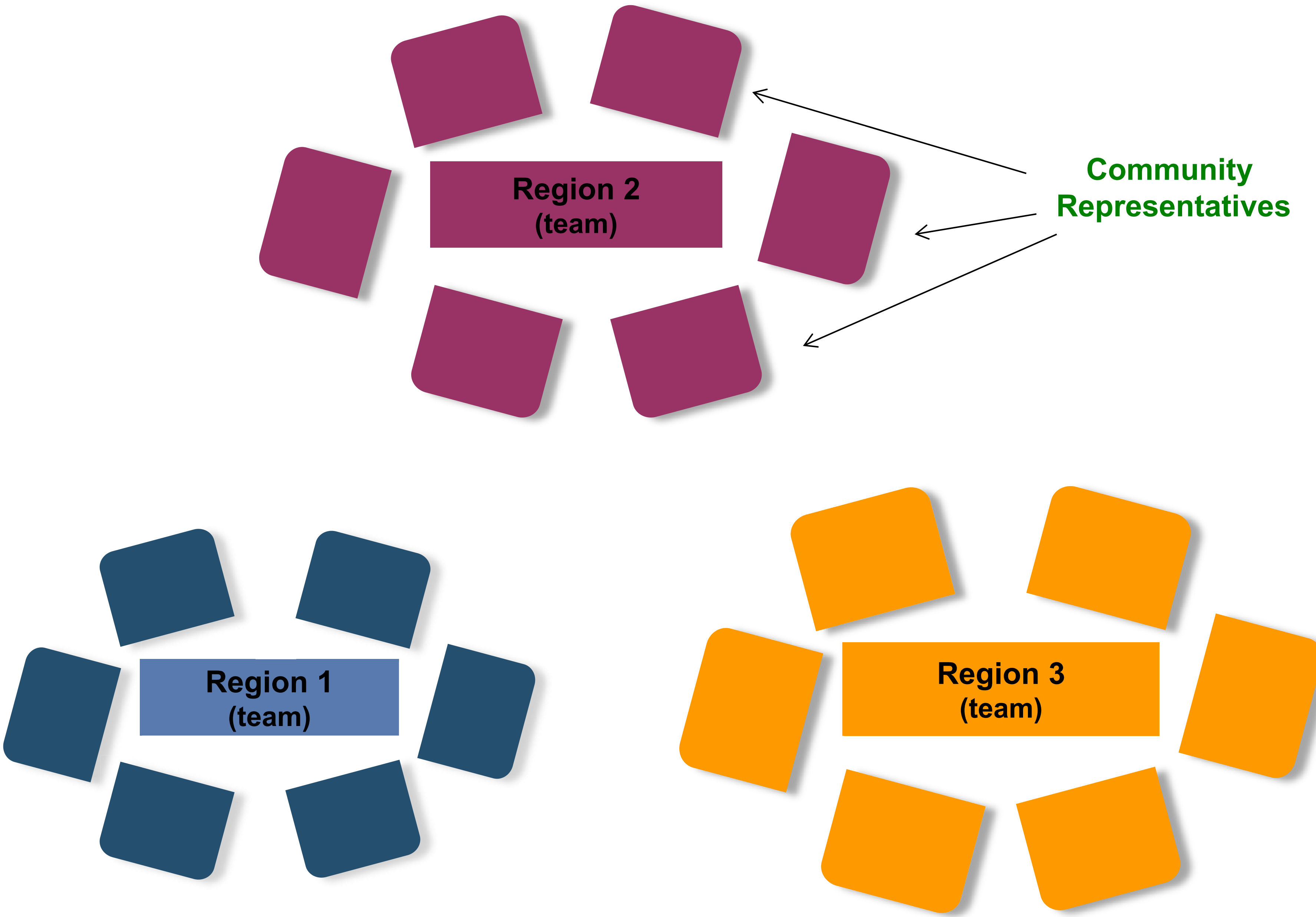
The Netherlands Red Cross

Thank you!

Dan

This game was designed by Pablo Suarez and Janot Mendler de Suarez (Red Cross / Red Crescent Climate Centre) for the World Bank Chief Economist for Sustainable Development, with additional support from the American Red Cross and CDKN.

The development process was part of a research grant to the Red Cross/Red Crescent Climate Centre from the Climate and Development Knowledge Network (CDKN Action Lab Innovation Fund). As such, it is an output from a project funded by the UK Department for International Development (DFID) and the Netherlands Directorate-General for International Cooperation (DGIS) for the benefit of developing countries. However, the views expressed and information contained in it are not necessarily those of or endorsed by DFID, DGIS or the entities managing the delivery of the Climate and Development Knowledge Network, which can accept no responsibility or liability for such views, completeness or accuracy of the information or for any reliance placed on them.



Region 2
(team)
Community
Representatives
Region 1
(team)
Region 3
(team)

Your aim: to create a prosperous community and region…

Community Plan

***FLOOD PROTECTION* Investment**
If you roll a flood: lose 1 bean

***DEVELOPMENT* Investment**
Earn 1 Prosperity Point per bean,
But only if no crisis

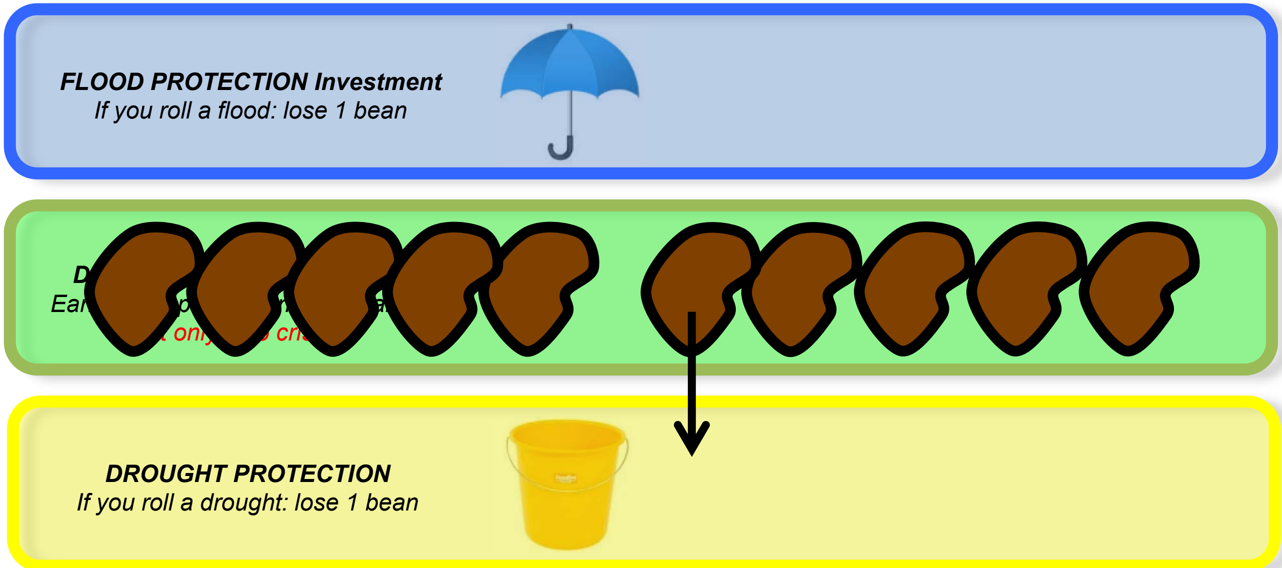
DROUGHT PROTECTION
If you roll a drought: lose 1 bean

Used
Beans

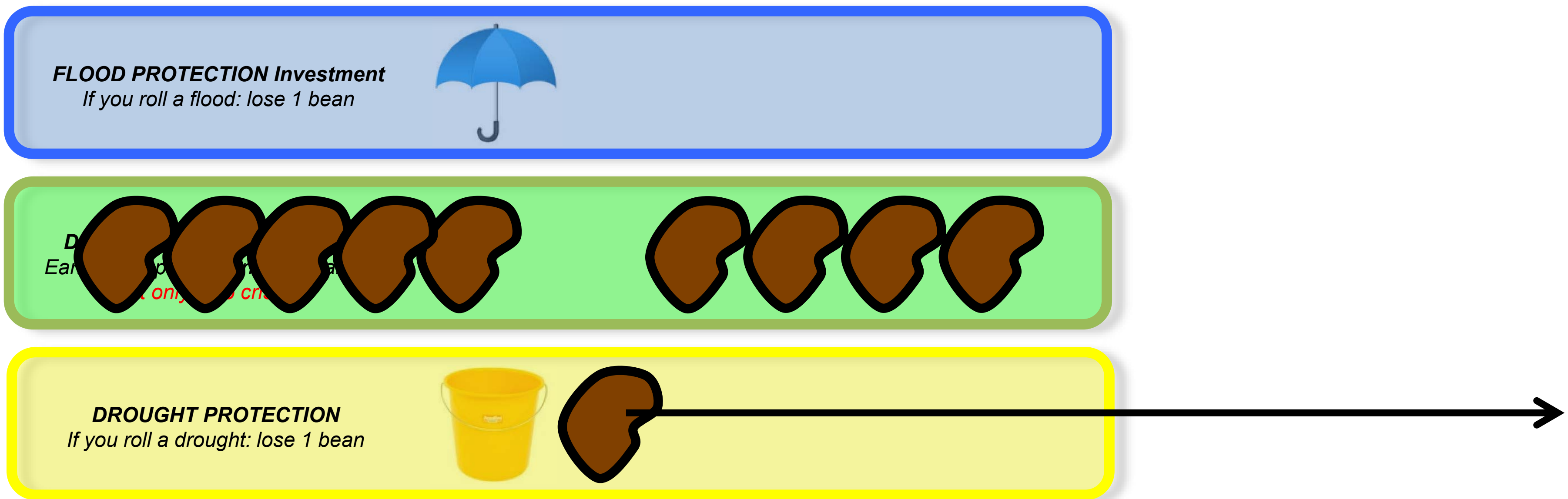
	2. INVESTMENT DECISIONS				3. OBSERVATIONS	4. RESULTS	
Decade	**FLOOD Protection (0 - 9)**	**DEVELOPMENT (1 - 10)**	**DROUGHT Protection (0 - 9)**	Choose **Robust** Option?	**Annual Precipitation**	**# Crises**	***# Prosperity Points***
1							
2				Yes / No			
3				Yes / No			
4				Yes / No			
					TOTAL:		

FLOOD PROTECTION Investment
If you roll a flood: lose 1 bean

DROUGHT PROTECTION
If you roll a drought: lose 1 bean

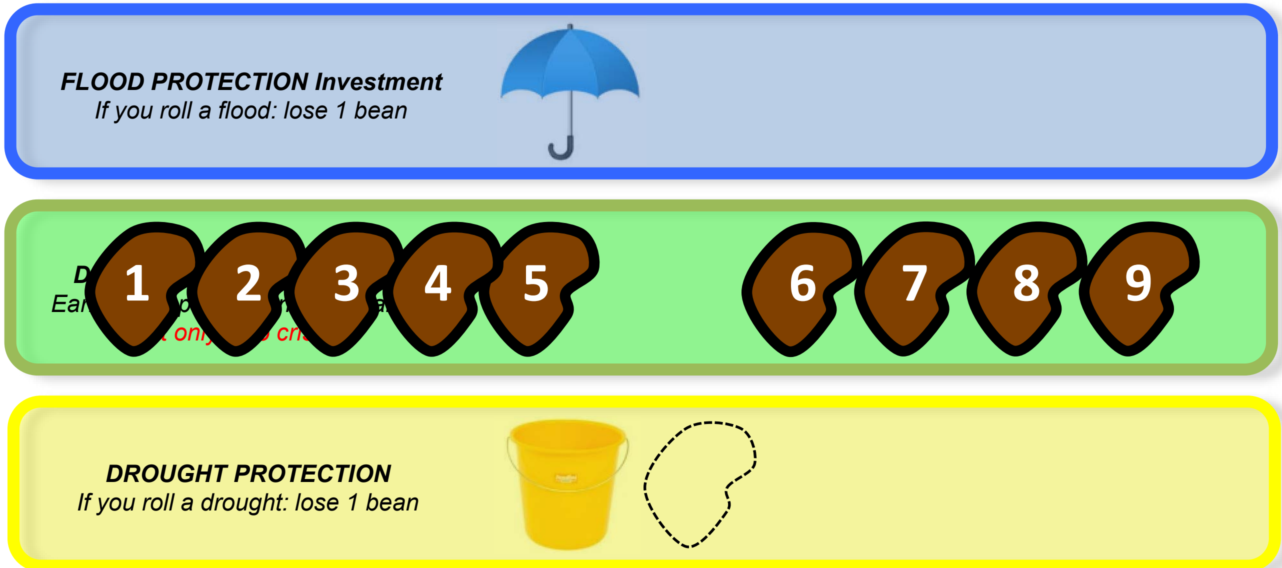


Let’s protect against 1 drought…



Let’s protect against 1 drought…

When a drought occurs, use a protection bean…

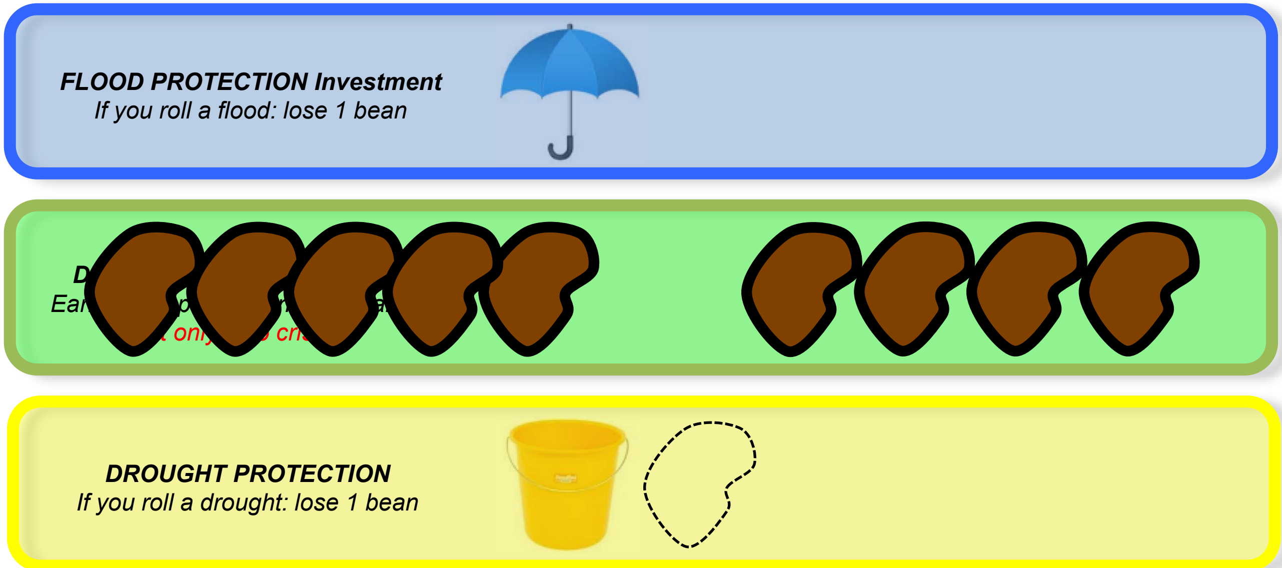


Let’s protect against 1 drought…

When a drought occurs, use a protection bean…

If just 1 drought occurs…

…we get 9 Prosperity Points!



But, what if we had a second drought?

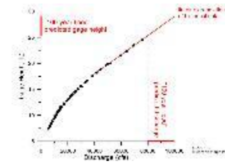
Not enough protection…

…means a humanitarian crisis 

…and 0 prosperity points!

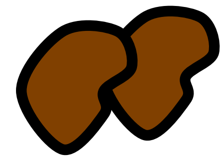
Each shortage of protection is a new crisis!

1. Scientific Information



Probabilities, Predictions, Etc.

2. Decision



Your 10-Year Investment in Development and Protection

3. Observations

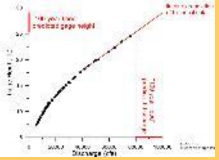
Rains, Teammate Decisions

4. Results

Crisis….or Prosperity Points?

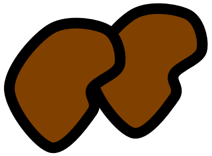
1. Scientific Information

Probabilities, Predictions, Etc.



2. Decision

Your 10-Year Investment in Development and Protection



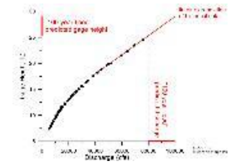
3. Observations

Rains, Teammate Decisions

4. Results

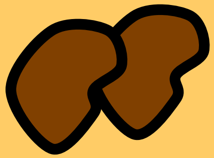
Crisis….or Prosperity Points?

1. Scientific Information

Probabilities, Predictions, Etc.

2. Decision



Your 10-Year Investment in Development and Protection

3. Observations

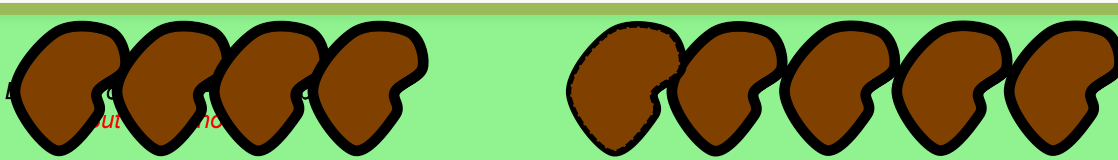
Rains, Teammate Decisions

4. Results

Crisis….or Prosperity Points?

Community Plan

***FLOOD PROTECTION* Investment**
If you roll a flood: lose 1 bean



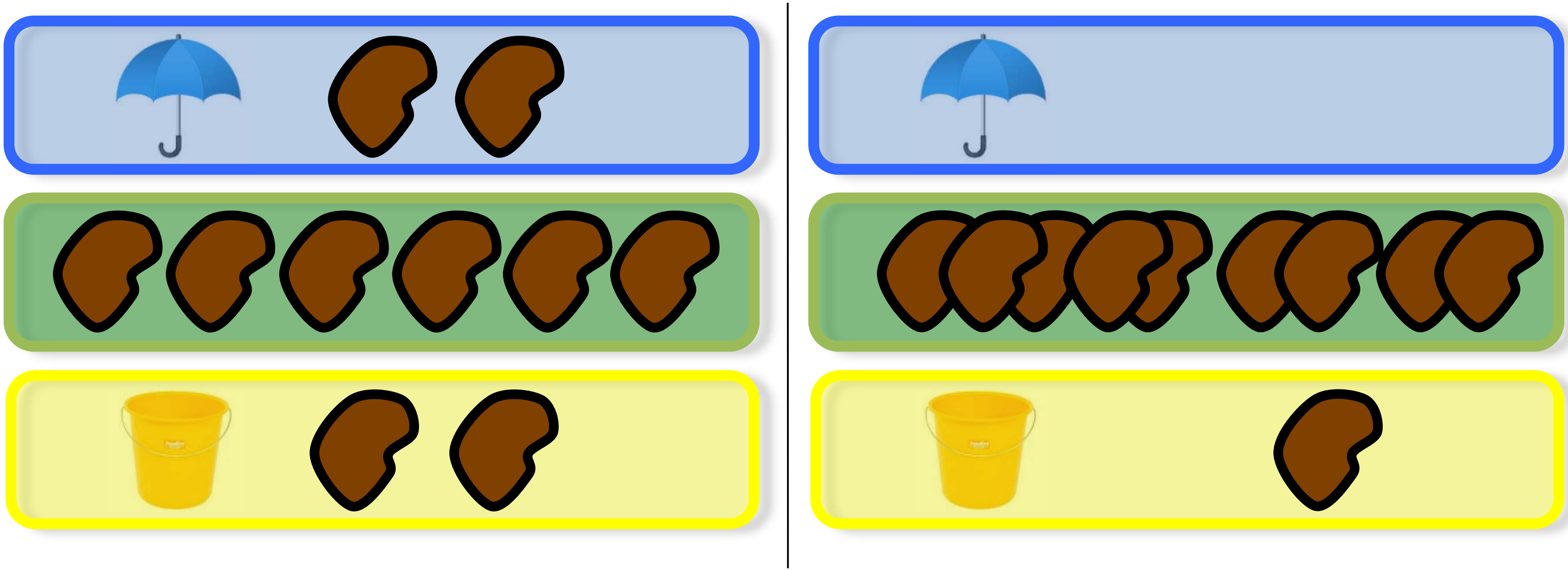
DROUGHT PROTECTION
If you roll a drought: lose 1 bean

Used Beans

	2. INVESTMENT DECISIONS				3. OBSERVATIONS	4. RESULTS	
Decade	FLOOD Protection (0 - 9)	DEVELOPMENT (1 - 10)	DROUGHT Protection (0 - 9)	Choose Robust Option?	Annual Precipitation	# Crises	# *Prosperity Points*
1	0	9	1				
2				Yes / No			
3				Yes / No			
4				Yes / No			
					TOTAL:		

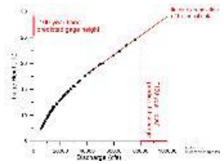
Community 1

Commuity 2



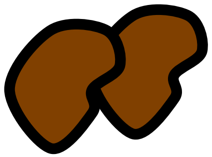
1. Scientific Information

Probabilities, Predictions, Etc.



2. Decision

Your 10-Year Investment in Development and Protection



3. Observations

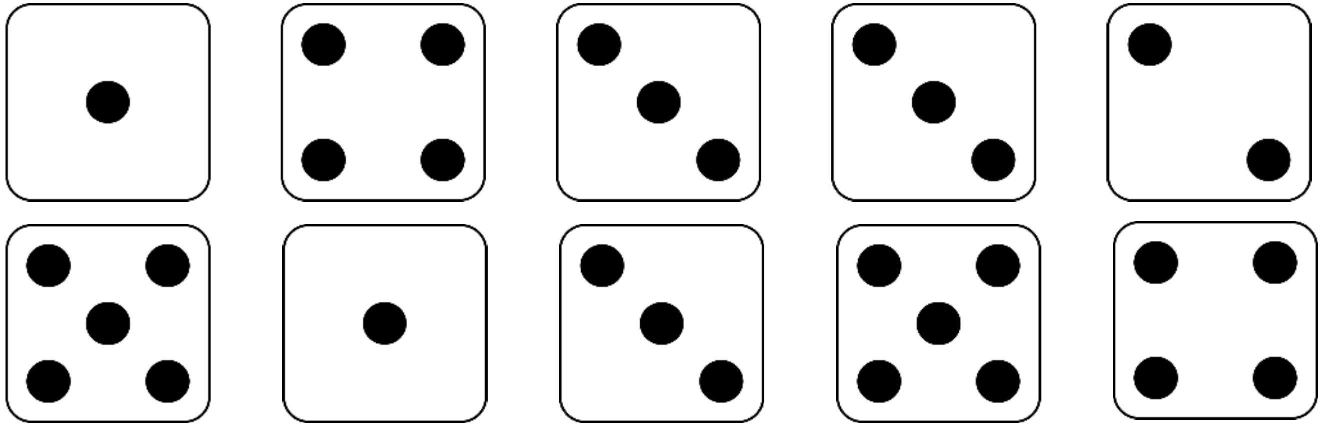
Rains, Teammate Decisions

4. Results

Crisis….or Prosperity Points?

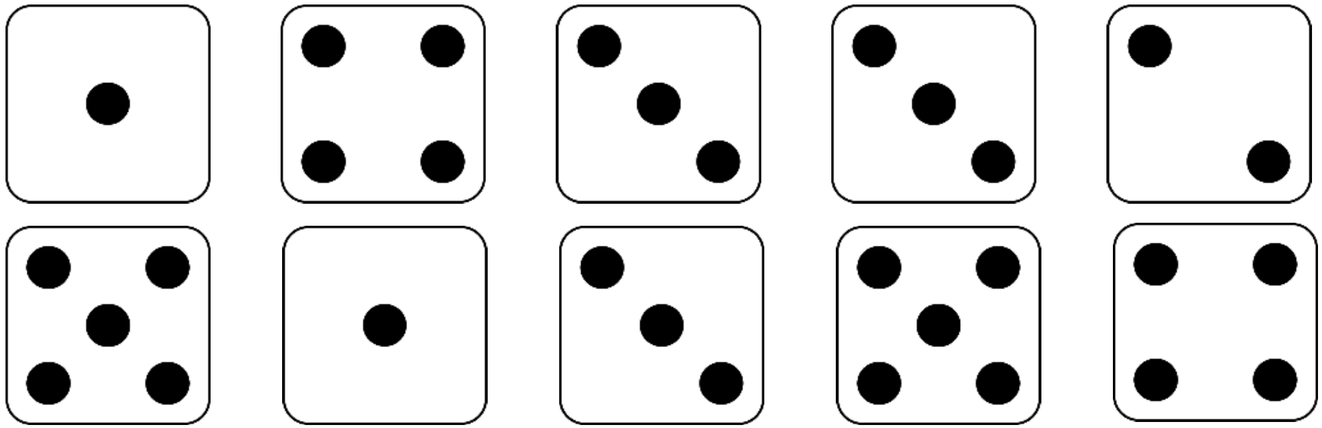
3. OBSERVATIONS

Ten years of rainfall occur



3. OBSERVATIONS

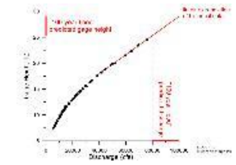
Ten years of rainfall occur



	2. INVESTMENT DECISIONS				3. OBSERVATIONS	4. RESULTS	
Decade	**FLOOD Protection (0 - 9)**	**DEVELOPMENT (1 - 10)**	**DROUGHT Protection (0 - 9)**	Choose **Robust** Option?	**Annual Precipitation**	**# Crises**	**# *Prosperity Points***
1	0	9	1		1, 4, 3, 3, 2, 5, 1, 3, 5, 4		
2				Yes / No			
3				Yes / No			
4				Yes / No			
					TOTAL:		

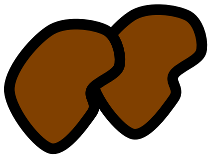
1. Scientific Information

Probabilities, Predictions, Etc.



2. Decision

Your 10-Year Investment in Development and Protection



3. Observations

Rains, Teammate Decisions

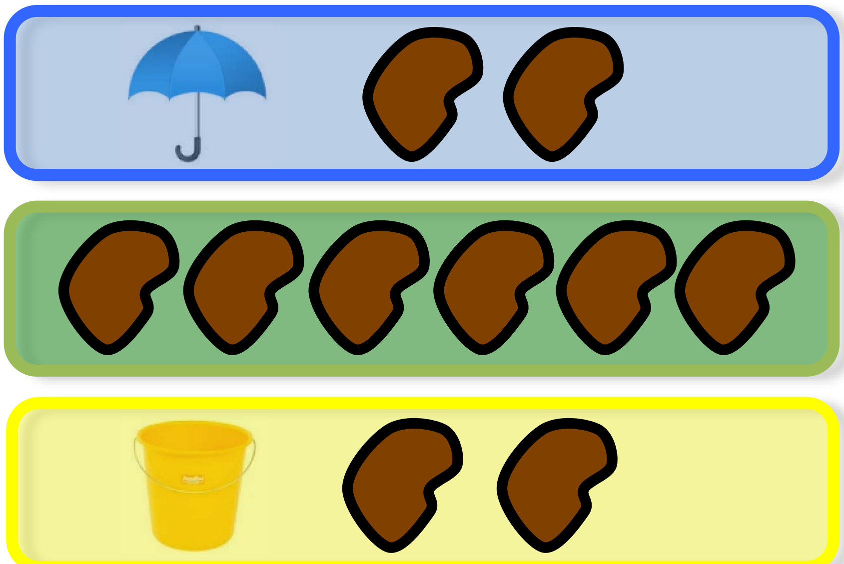
4. Results

Crisis….or Prosperity Points?

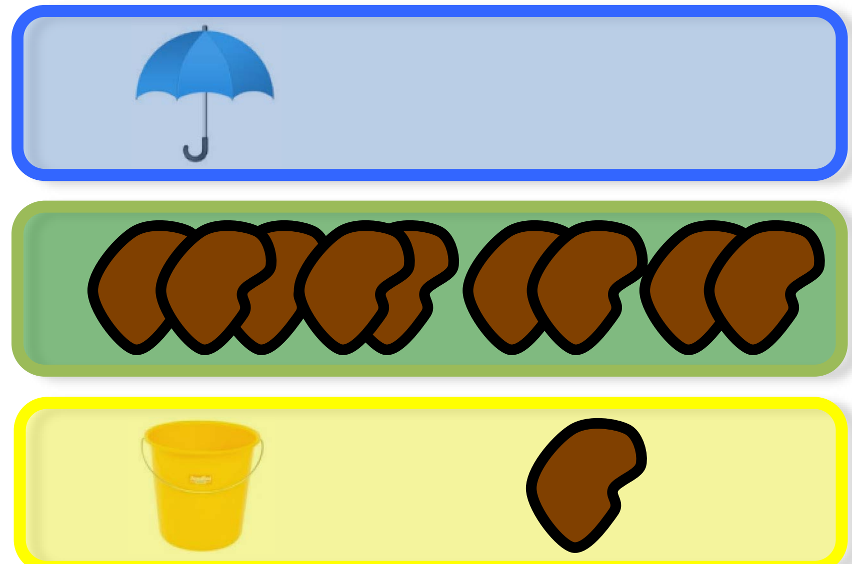
Observations
1, 4, 3, 3, 2, 5, 1, 3, 5, 4
Two (#1) droughts

4. RESULTS

Community 1



Community 2



4. RESULTS	
# Crises	# Prosperity Points
0	6

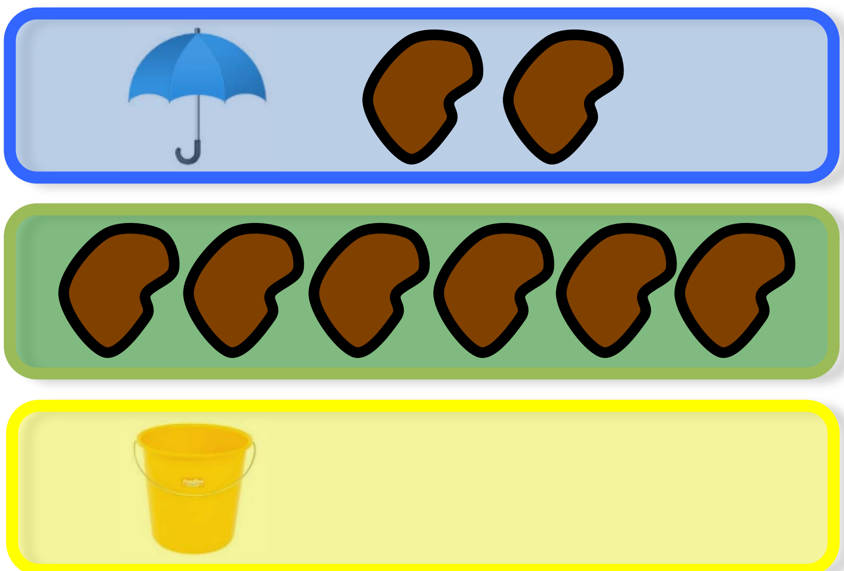
Observations

1, 4, 3, 3, 2, 5, 1, 3, 5, 4

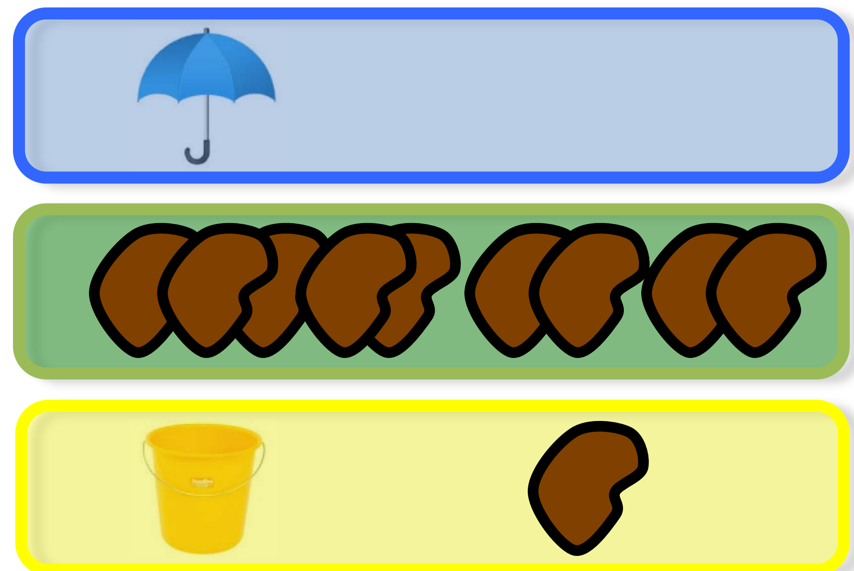
Two (#1) droughts

4. RESULTS

Community 1



Community 2

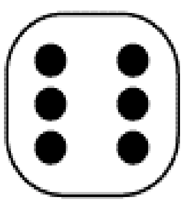


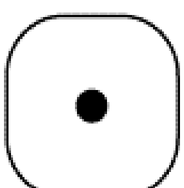
4. RESULTS	
# Crises	# Prosperity Points
0	6

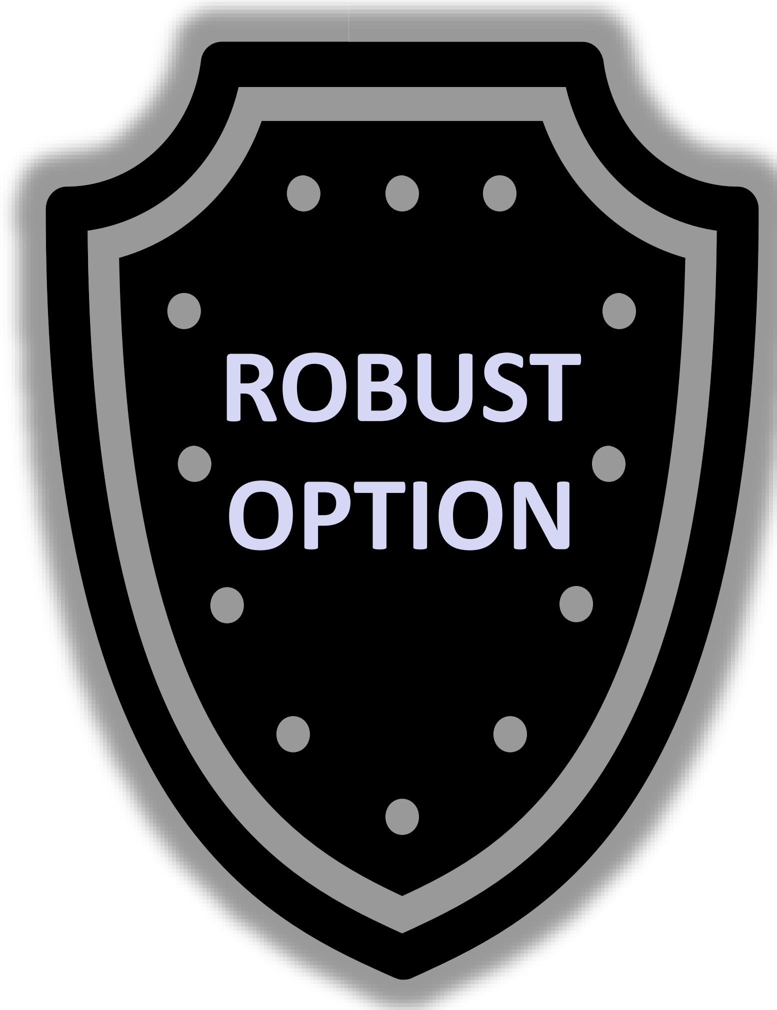
4. RESULTS	
# Crises	# Prosperity Points
1	0

Robust Option

Guarantee:	? Prosperity Points
Applicable to:	Regions
Cost:	10 (all) beans from all communities within the region
Duration:	1 decade

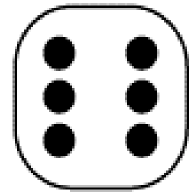

= Flood



= Drought

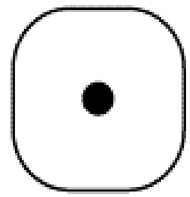



Game Play decade 2

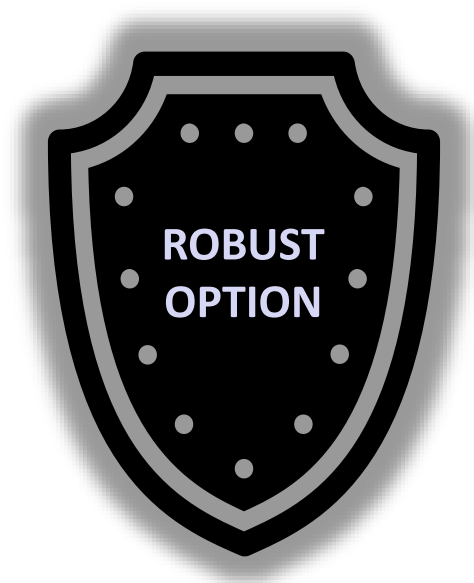
1. Scientific Information
2. Decision
    - Robust Option
    - Investment distribution
3. Observations
    - Please roll **2** times only then **stop**
4. Results



= Flood

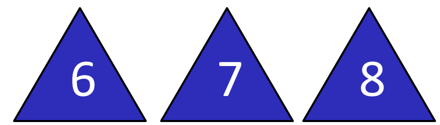


= Drought

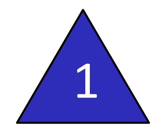


Game Play decade 2 con’t

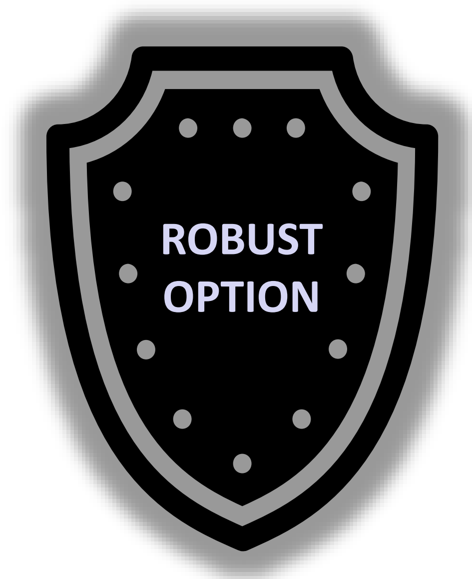
1. Scientific Information
2. Decision
   - Robust Option
   - Investment distribution
3. Observations
   - Roll the remaining **8** times
4. Results



= Flood



= Drought

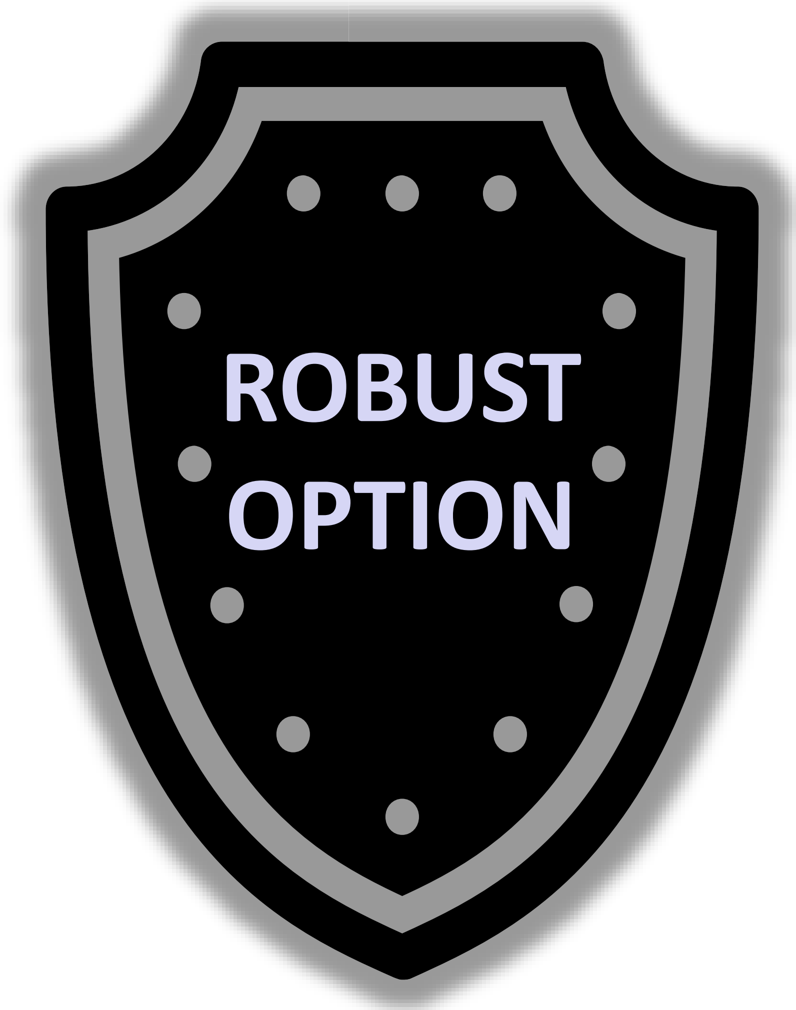


Robust Option

Guarantee:	? Prosperity Points
Applicable to:	Regions
Cost:	10 (all) beans from all communities within the region
Duration:	1 decade

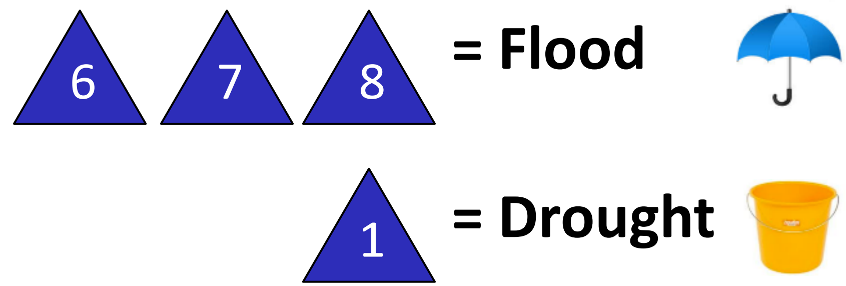
6 7 8 = Flood 

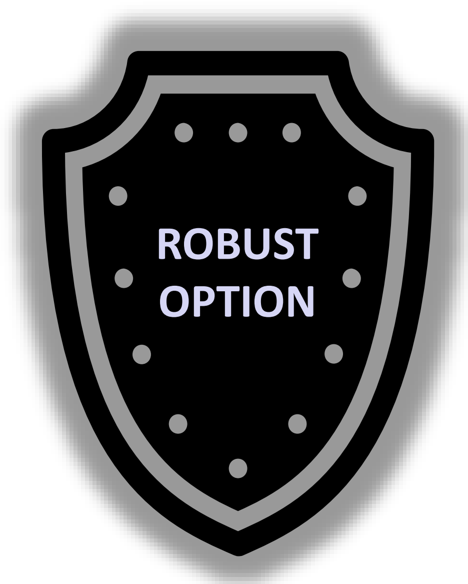
1 = Drought 



Game Play decade 3

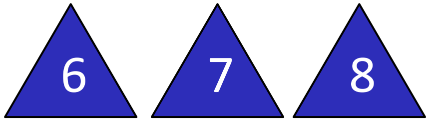
1. Scientific Information
2. Decision
    - Robust Option
    - Investment distribution
3. Observations
    - Please roll **2** times only then **stop**
4. Results



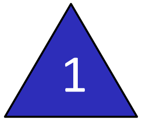


Game Play decade 3 con’t

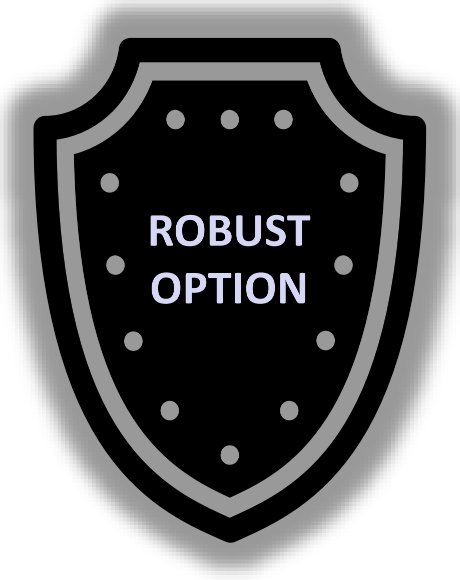
1. Scientific Information
2. Decision
   - Robust Option
   - Investment distribution
3. Observations
   - Roll the remaining **8** times
4. Results



= Flood



= Drought



1. SCIENTIFIC INFORMATION

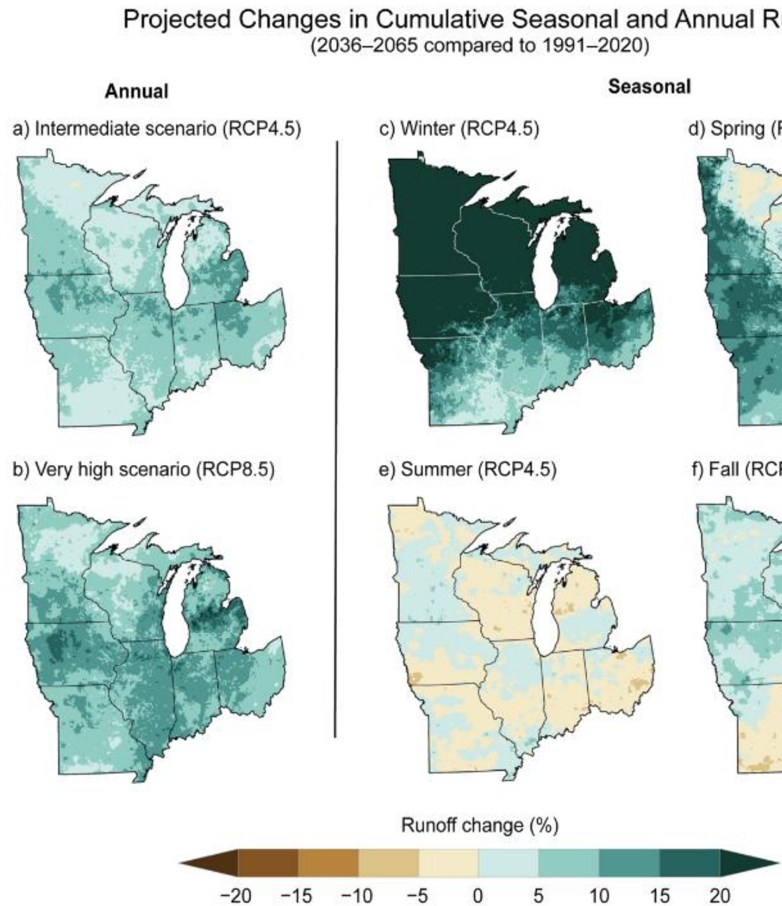


Figure 24.11. Projected changes in cumulative local runoff will lead to increased flooding susceptibility in winter and spring with, increased flash drought potential in summer.

Fifth National Climate Assessment
Chapter 24 nca2023.globalchange.gov

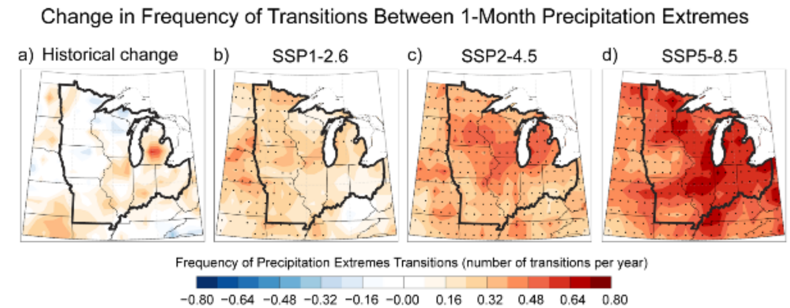
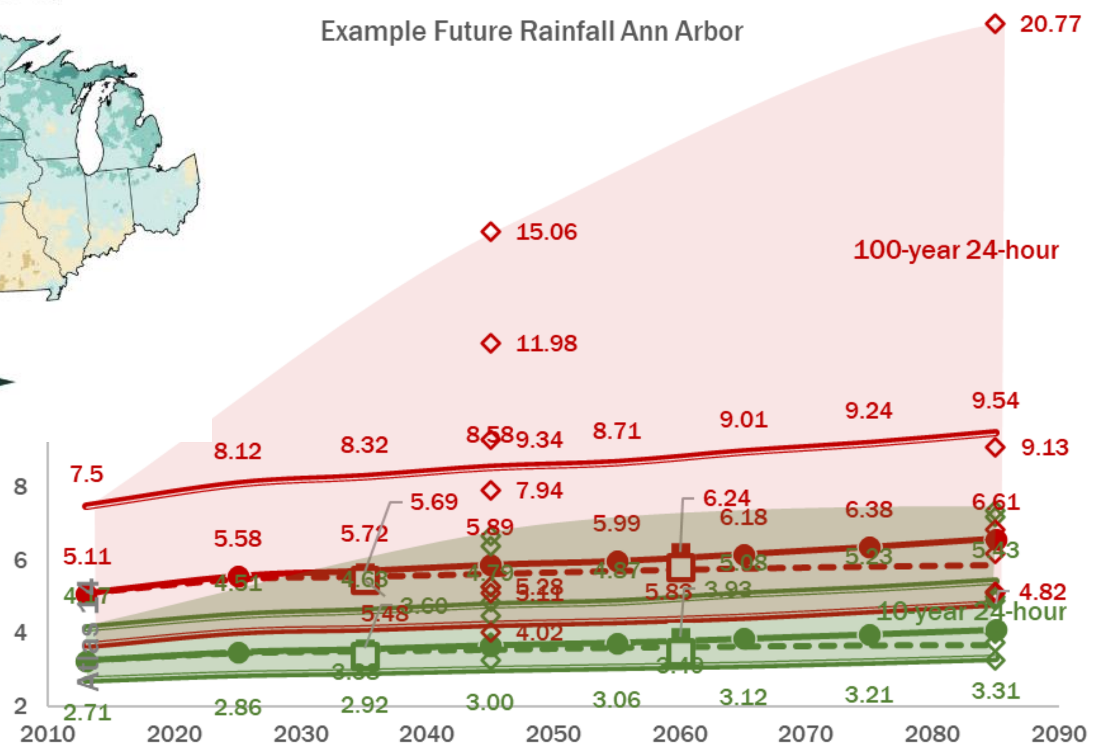
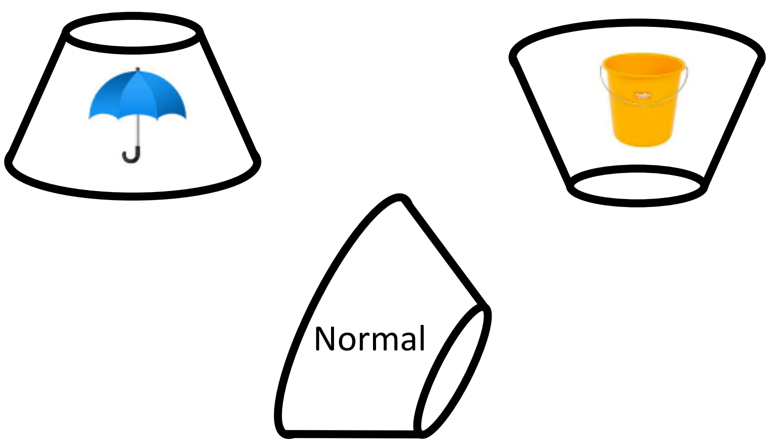


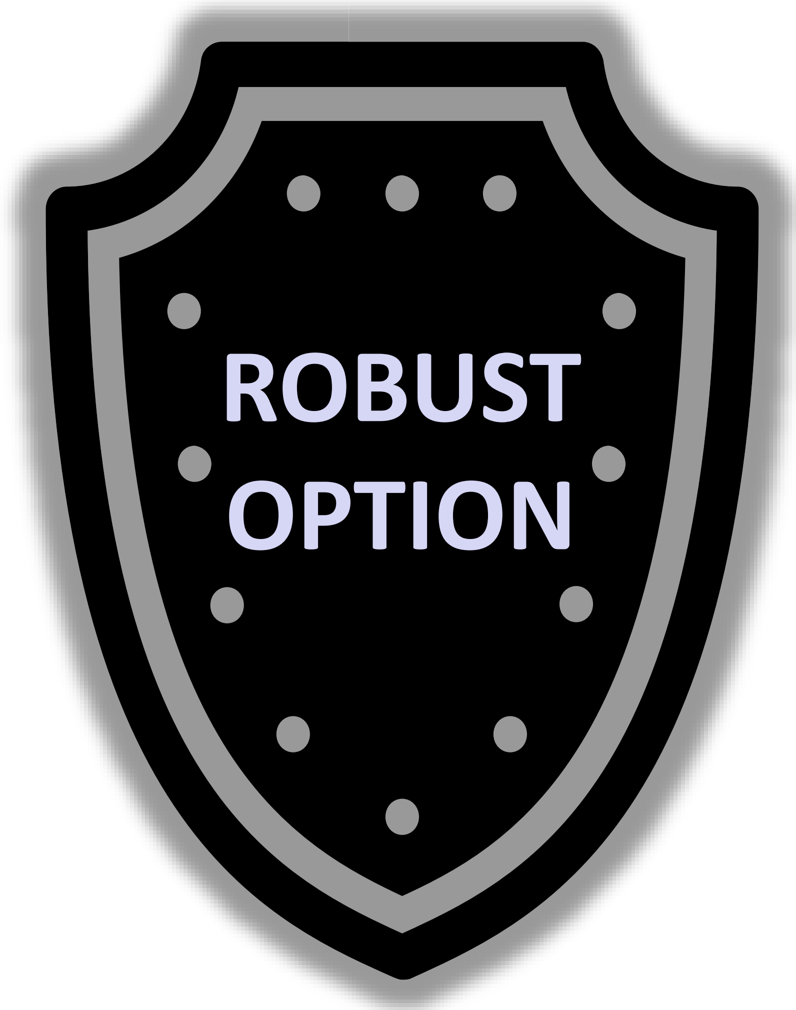
Figure 24.1. The frequency of wet–dry and dry-wet transitions across the Midwest is projected to increase by late century (2071–2100).



Robust Option

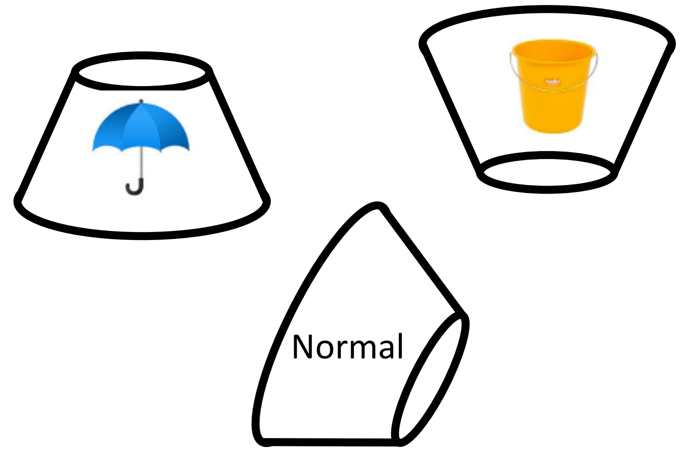
Guarantee:	? Prosperity Points
Applicable to:	Regions
Cost:	10 (all) beans from all communities within the region
Duration:	1 decade

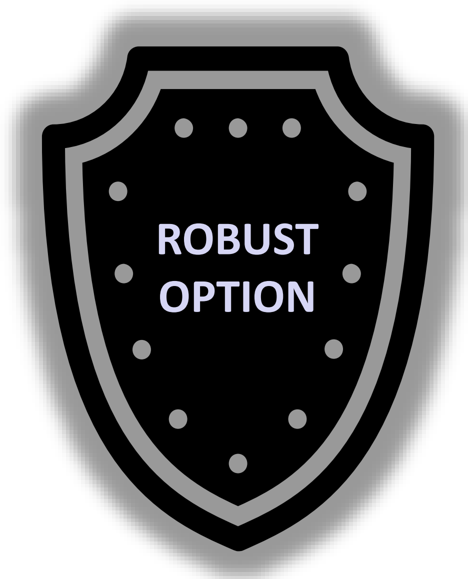




Game Play Decade 4

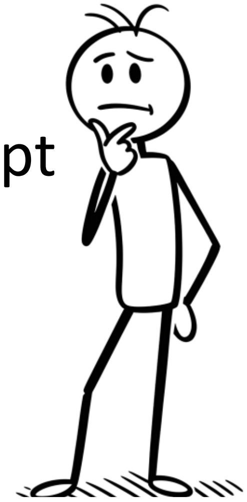
1. Scientific Information
2. Decision
   - Robust Option
   - Investment distribution
3. Observations
   - Please toss **2** times only then **stop**
4. Results





From the Game to Real-World Planning

- **In the game, you made simple choices about how much protection to invest in.**
- **In real communities, those same choices show up as decisions about:**
  - When to act versus when to wait
  - How much risk to reduce upfront
  - Where to invest limited resources
  - What consequences communities are willing to accept
- **Use this lens as we move into the discussion.**

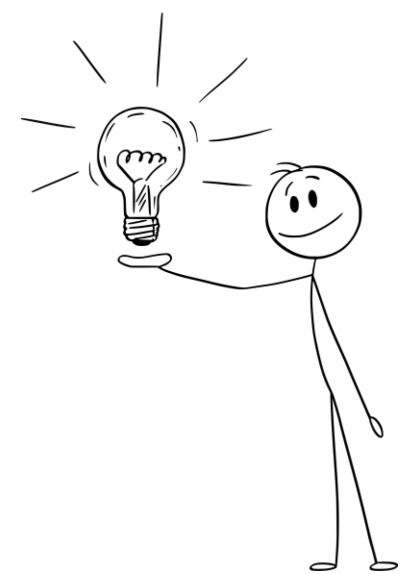


Q1. Early decisions and flood outcomes

Which early decisions had the biggest impact on flood outcomes later in the game?

Examples to react to

- How much flood and drought protection was chosen early on
- Tradeoffs between protection and remaining prosperity
- Impacts of early choices that couldn’t be changed later

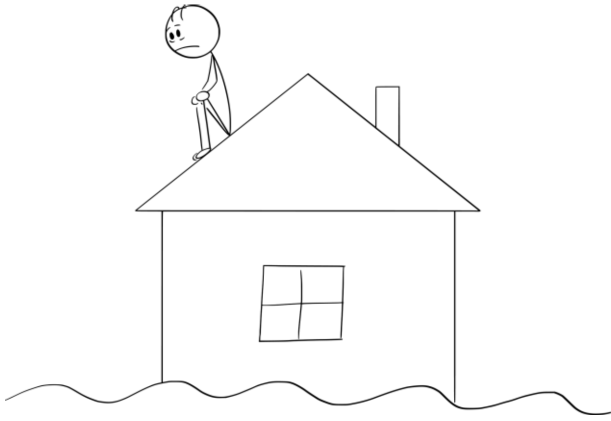


Q2. Translating the game tradeoff

In the game, increasing protection reduced flood impacts but limited prosperity.
What real-world strategies does that tradeoff represent?

Examples to react to

- Investing in flood protection infrastructure
- Reducing exposure to future flood risk
- Preserving land or space for flood storage
- Coordinating to stretch limited resources
- *other*



Q3. Where planners face this tradeoff

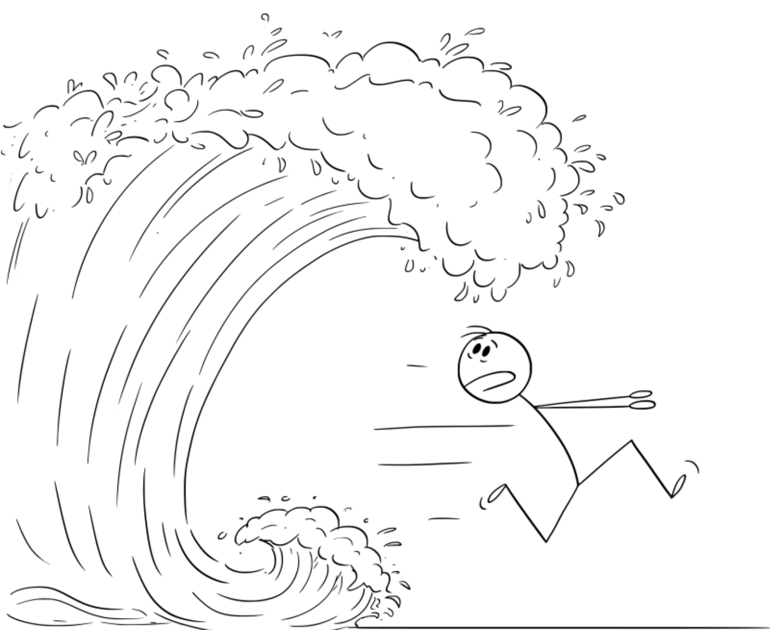
In the game, investing in flood protection reduced prosperity.
In real communities, what planning or land use decisions reflect that same tradeoff?

Examples to react to

- Deciding where development is allowed or restricted
- Choosing whether to preserve land for flood storage
- Balancing short-term growth with long-term flood risk
- Aligning land use decisions with infrastructure capacity
- *other*

Q4. Planning under uncertainty

In the game—and in real communities—how does uncertainty about future conditions affect flood-related decisions?



Examples to react to

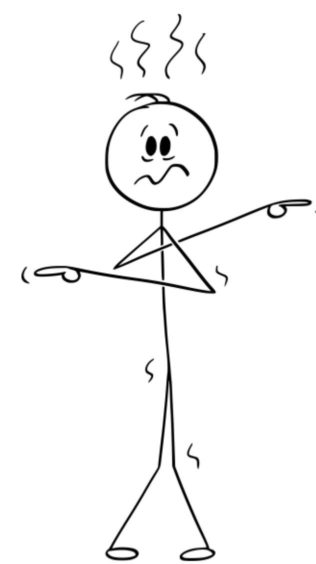
- Choosing when to act versus when to wait
- Actions that reduced risk even under uncertainty
- Making decisions without perfect information
- *other*

Q5. Capacity and coordination challenges

What makes it hard to make good long-term flood decisions?

Examples to react to

- Staffing, expertise, or technical capacity
- Funding availability and timing constraints
- Coordination across departments or jurisdictions
- Institutional, regulatory, or political barriers
- *other*

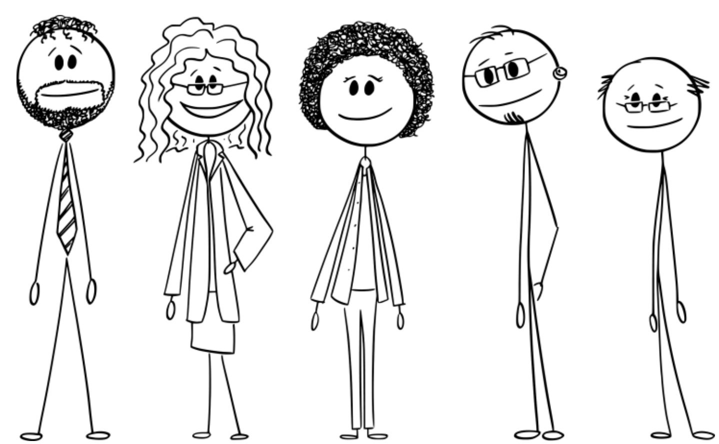


Q6. Regional and SEMCOG Support

What kinds of regional support would help communities make better flood-related decisions earlier?

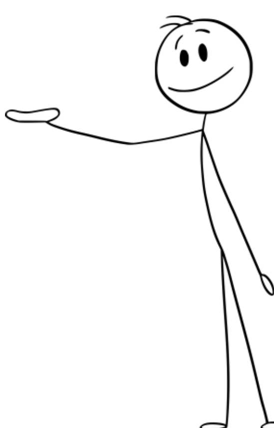
Examples to react to

- Planning guidance, tools, or model policies
- Regional data, analysis, or technical assistance
- Coordination, convening, or peer learning
- Funding support or implementation assistance
- *other*



Key takeaways for flood resilience planning

- Flood risk compounds over time if early action is delayed
- Early tradeoffs between protection and prosperity shape long-term outcomes
- Infrastructure alone cannot manage flood risk
- Integrated planning approaches reduce long-term risk and cost
- Uncertainty is not a reason to delay action
- Regional coordination strengthens local decision-making



Final Results: Decades 1-3 ONLY

Decade	2. INVESTMENT DECISIONS				3. OBSERVATIONS	4. RESULTS	
	FLOOD Protection (0 - 9)	**DEVELOPMENT (1 - 10)**	**DROUGHT Protection (0 - 9)**	Choose **Robust Option?**	**Annual Precipitation**	**# Crises**	**# *Prosperity Points***
1							
2				Yes / No			
3				Yes / No			
4				Yes / No			
					TOTAL:		

1 Community Winner *in each Region:*

No Humanitarian Crisis!

Most Prosperity Points

1 Winning Region:

Most Prosperity Points ~ the grand total

Tiebreaker: Region with fewest crises