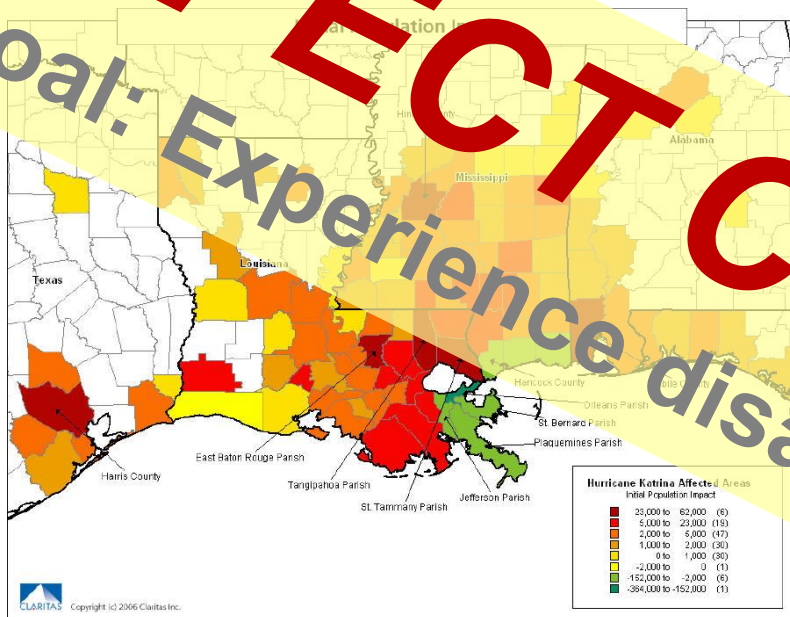


# Hurricane Hurry

## Caribbean Disaster Risk Financing Game

**EXPECT CONFUSION**

Goal: Experience disaster risk financing



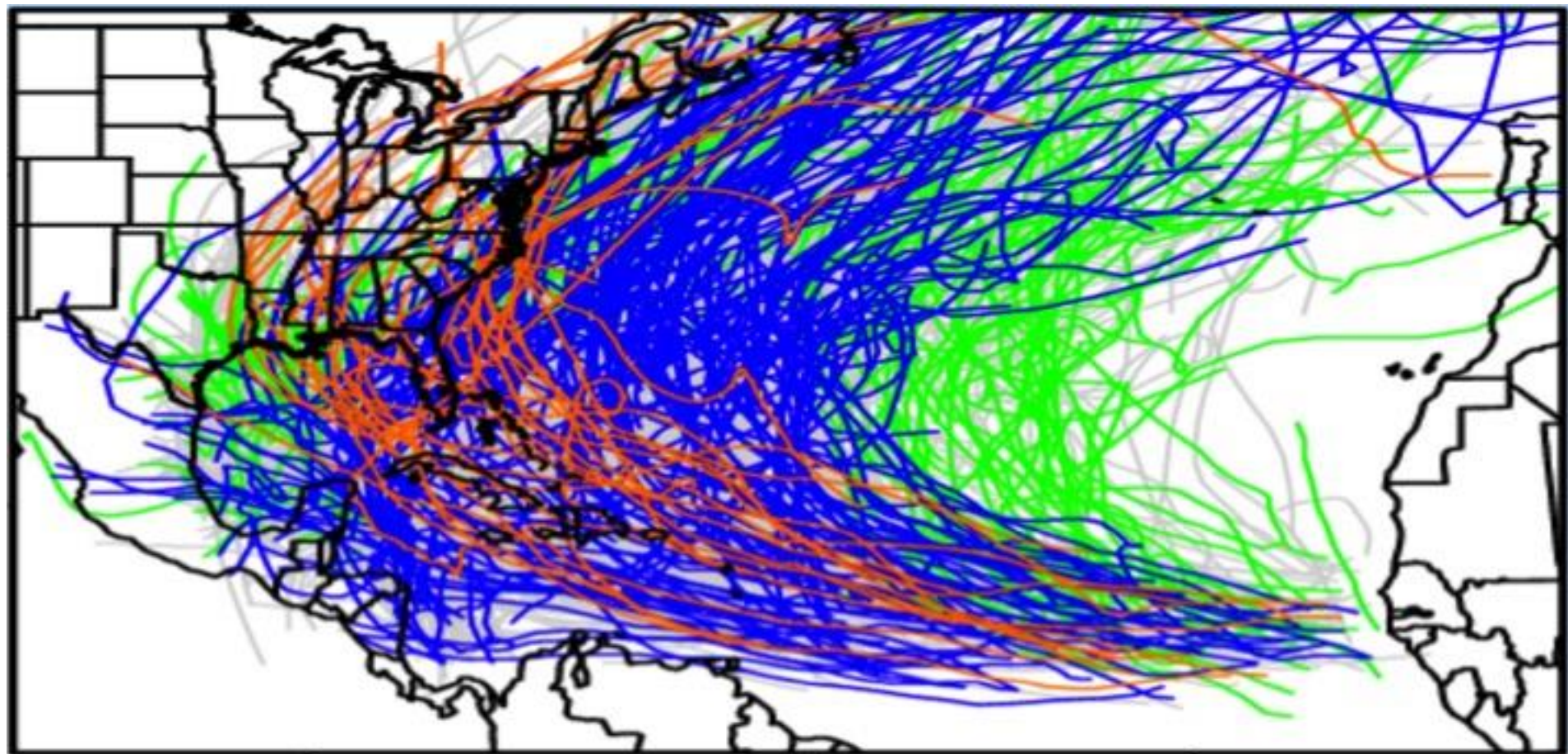
**THE WORLD BANK**




*Designed by Pablo Suarez and Janot Mendler de Suarez  
for World Bank DRFTA Team*

*with thanks to WB DRFI, ACP-EU and GFDRR*

# Tropical Storm Trajectories

## Since 1980



-  *Cat 2 or stronger*
-  *Cat 1 or weaker*
-  *No impact over Caribbean*





**Belize**



**Jamaica**



**Grenada**



**St. Lucia**

# Ground Rules

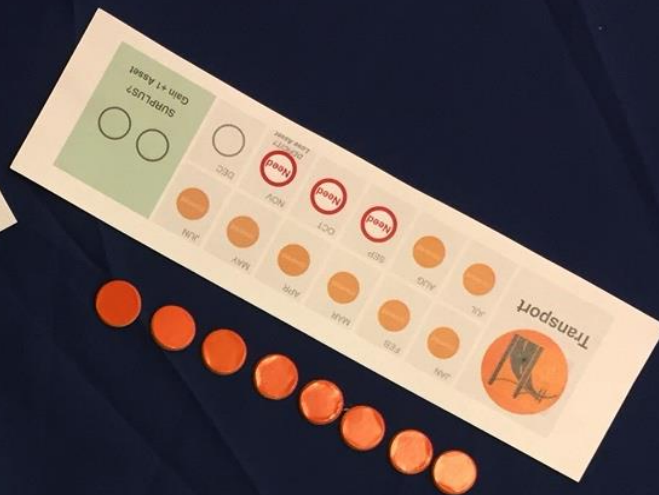
Goal = *Experience disaster risk financing dynamics*

One turn = *1 year*

Game = *simplified representation of reality*

Facilitator's decisions = *cannot be appealed*





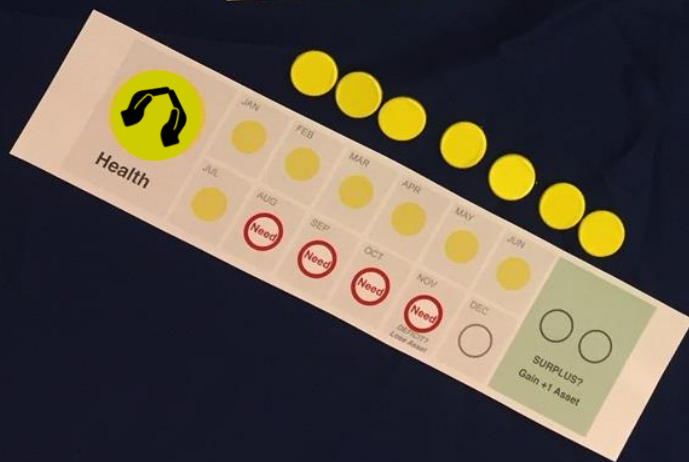
## MARKET

**Surplus? Buy 1 Asset**

**Deficit? Sell 1 Asset**

**Tax? Get 2 coins**

**Aid? Spend coins**



# 5 Stakeholders per Country



Financ  
e



Tourism



Emerg.  
Mgment



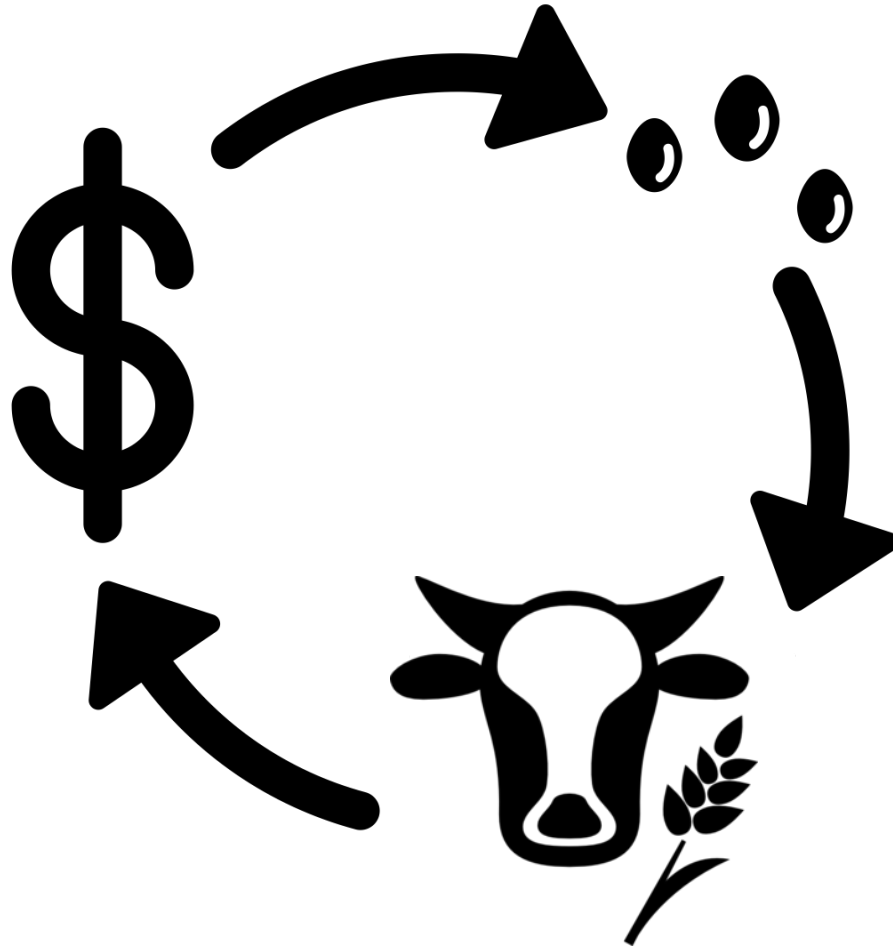
Transport



Agriculture

**Directors May Not  
Exchange Assets**

# Your Goal: Invest & Develop



# WINNERS & LOSERS

## **Winning Directors: Most Assets**

*Start with 7 or 8*

## **Losing Directors: Crisis**

*Total Assets = 4 or less? → Fired !*

## **Losing Country: Catastrophe**

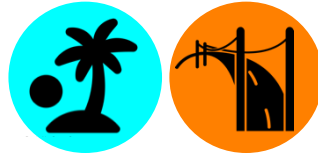
*Cannot cover all needs in time (before deadline)  
or: More than one Director fired*

## **Winning Country: Most Assets**

*Start with 30*



# Your Performance depends on:



**Needs Covered**

*until Aug.*

*until July*

**Productive Assets**

8

7

**Min. Finance *Cash***

?

?

# ***Productive Assets***

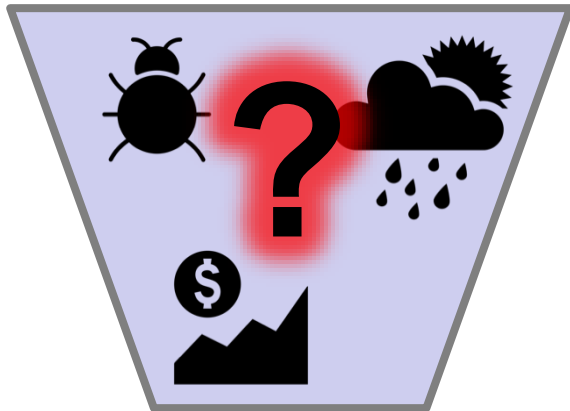
*Tokens: inputs per year*

Labor

Seeds

Infr.

Etc.

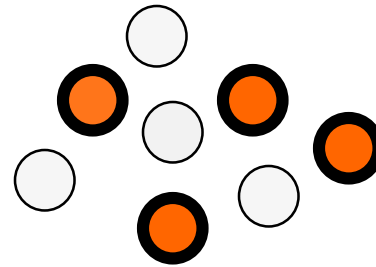
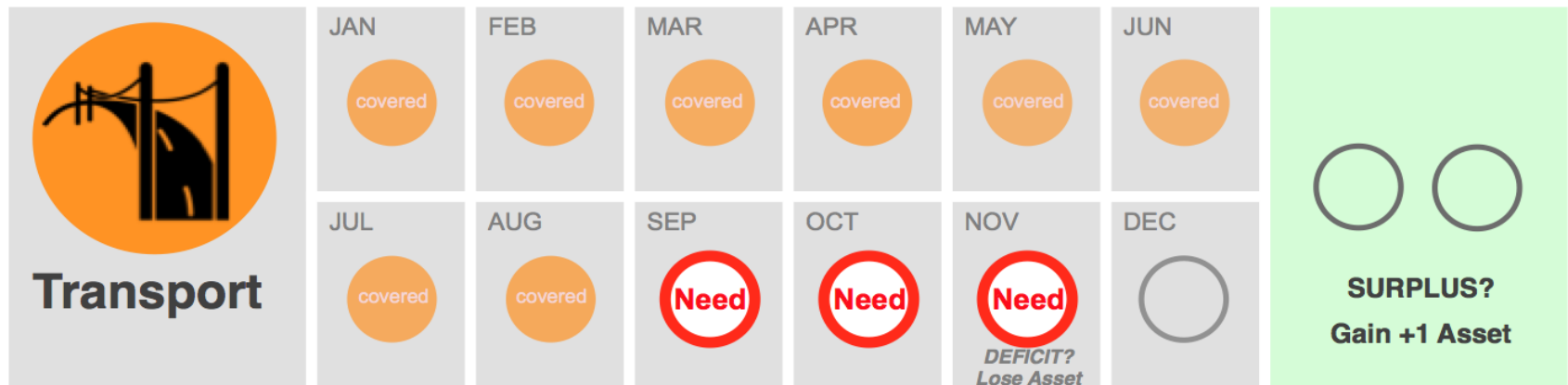


## ***Seasonal Conditions***

*Shake and Flip Assets*

## ***Covering Needs***

*Use Assets to cover 12 months*



**All Needs covered, No Surplus?**

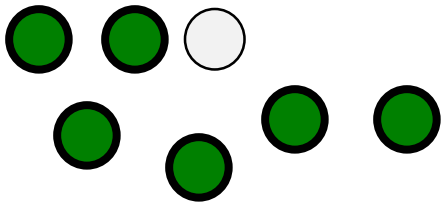
**“Just enough”**





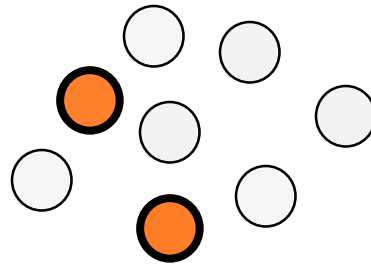
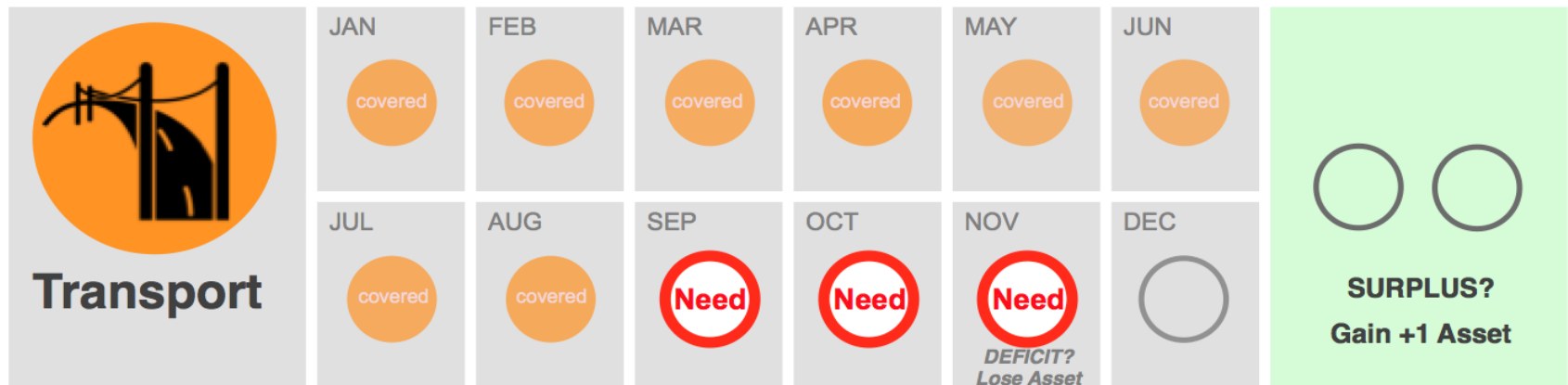
Cover more than needed?

Announce: ***SURPLUS!***

*Get 1 New Asset from Marketplace*



 Food	JAN	FEB	MAR	APR	MAY	JUN	 SURPLUS? Gain +1 Asset
	covered	covered	covered	covered	covered	covered	
	JUL	AUG	SEP	OCT	NOV	DEC	
	covered	Need	Need	Need	Need <small>DEFICIT? Lose Asset</small>		



**Can't cover Needs?**  
**DEFICIT: Oh No!**



*Stand Up, Ask for Help*

**If No Aid: Sell one Asset → Cover all Needs**

*Sit down after problem solved*

**4 Assets or less? CRISIS! Minister fired**

Asset Level

start

round 1

round 2

round 3

Asset Level

11

11

10

10

9

9

8

8

7

7

6

6

5

5

increase 

same 

decrease 

No. of  
Players

1000

363

492

145

174

334

309

33

132

189

265

217

134

52

11





Asset Level

start

round 1

round 2

round 3

Asset Level

10

10

9

9

8

8

7

7

6

6

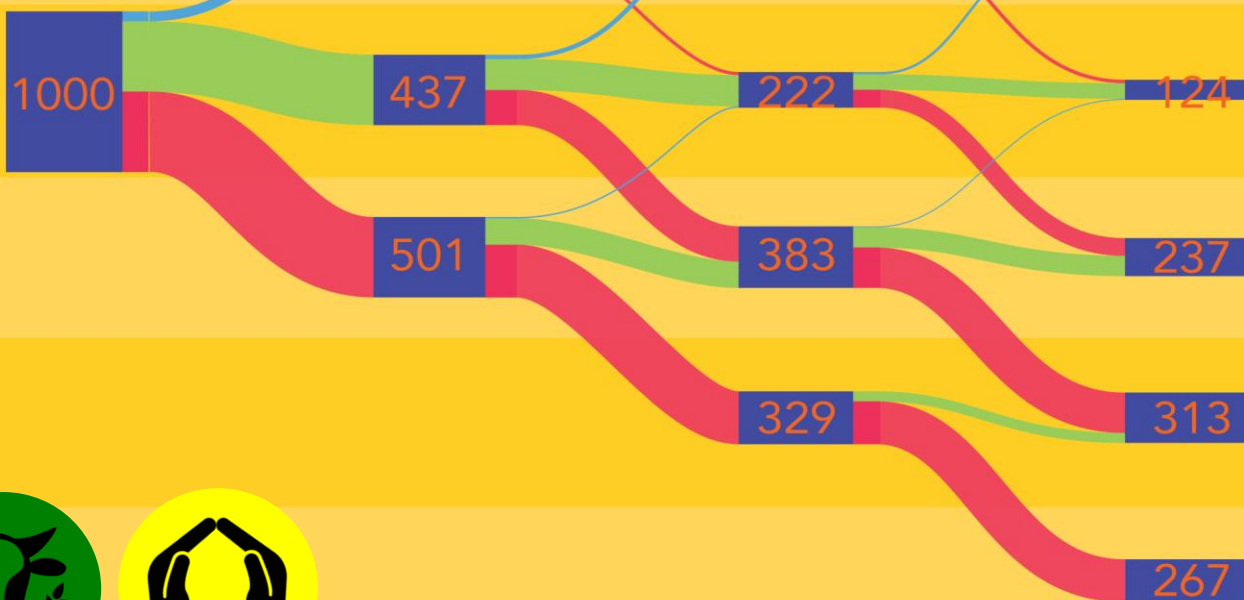
5

5

4

4

increase  
same  
decrease

No. of  
Players

## **Year 2: Tax & Aid**

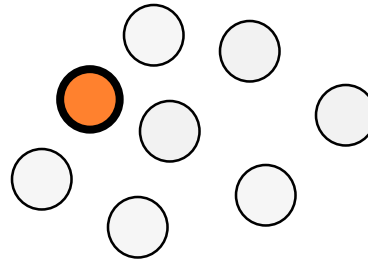
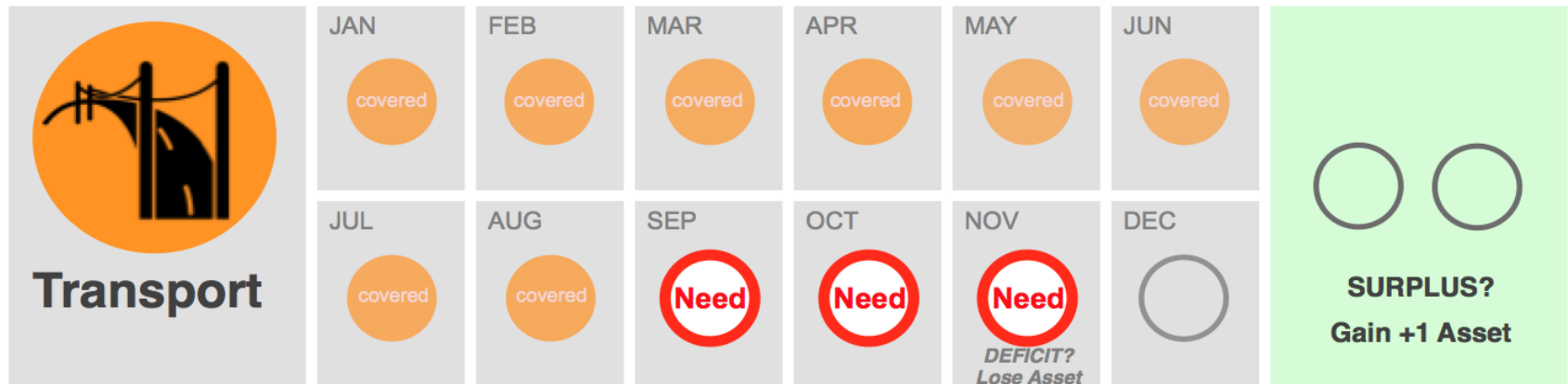


# Min. Finance Gets Annual Budget

*You can use Budget to:*  
*At the beginning of each year, Get 2 Coins 'Tax'*

- Help other Ministers*
- Save for future use*



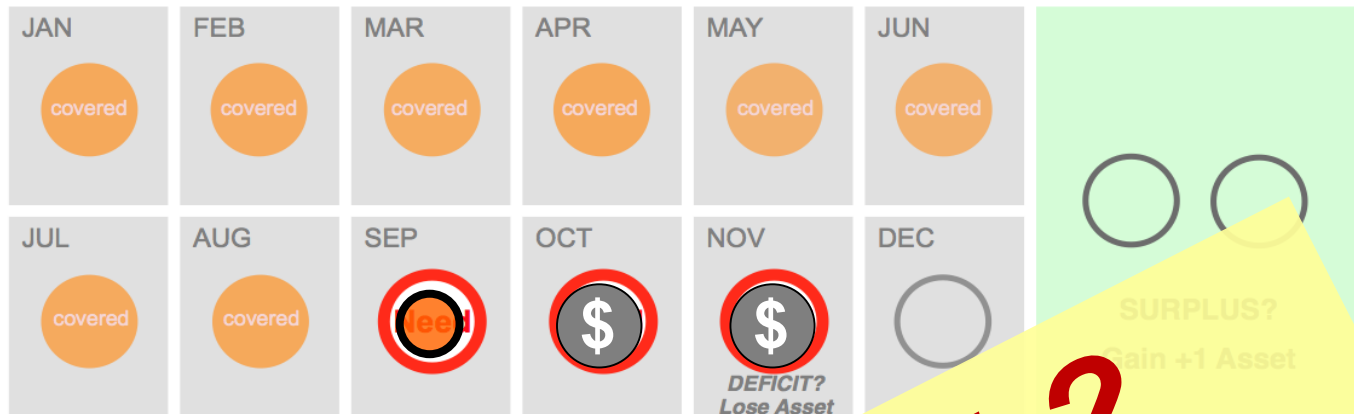
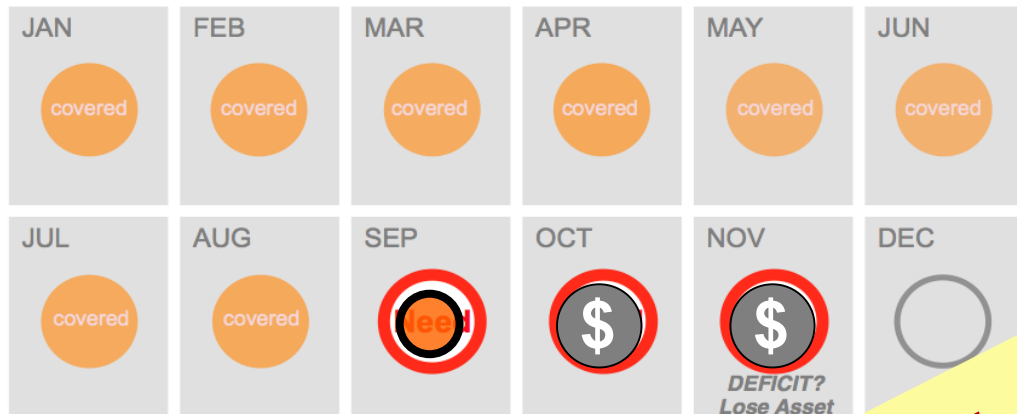


# Min. Finance may cover Deficit



*“Oh No!” Stand Up, Ask for Help*

*Aid: Min. Finance cover each Need*



DEFICIT? Lose Asset

Not enough cash?

Cabinet

MARKET

T \$ \$

Finance must explain decisions to

cover Deficit

Up, Ask for Help

**Min. Finance cover each Need**  
**Needs covered? Pay to Market, then Sit**  
*Or sell 1 asset*

# Could Shocks lead to Big Deficit?

## How to Get Funds Fast?

Year 3:  
Shocks &  
Loans

# FinLoans, Inc.

**“Borrow Now, Repay later”**  
*(with interest)*



**Creditor will give a total of \$ 5m**

**Min of Finance must repay the Loan, as follows:**

*Year 1: \$ 1m*

*Year 2: \$ 1m*

*Year 3: \$ 2m*

*Year 4: \$ 2m*

*Year 5: \$ 2m*

*Year 6: \$ 2m*

*If Min. Finance can't repay, Creditor will take possession of 7 assets*

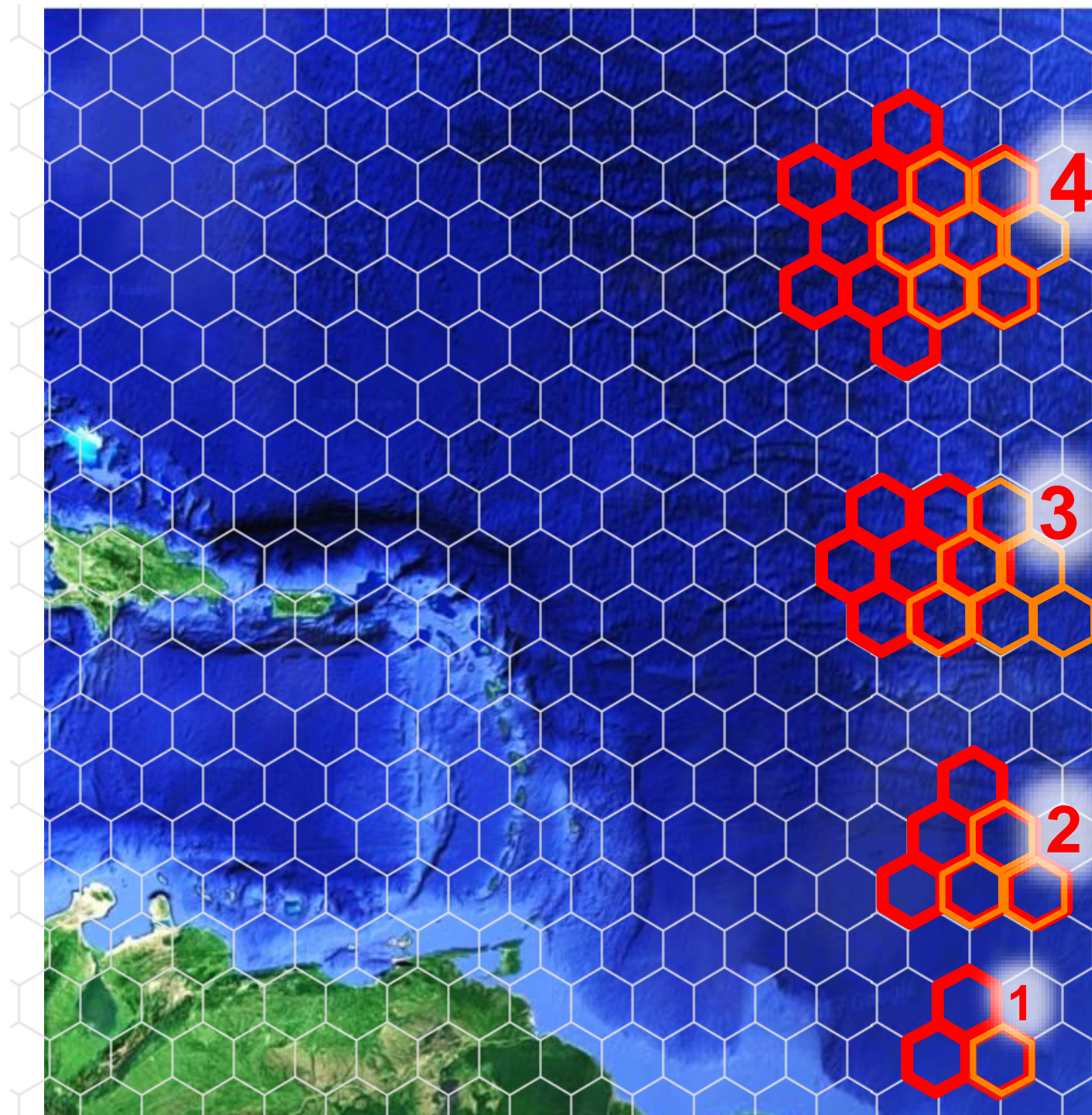
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*Name and Signature*  
*(Minister of Finance)*

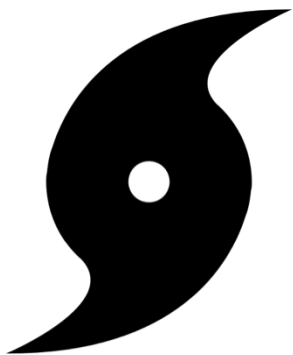




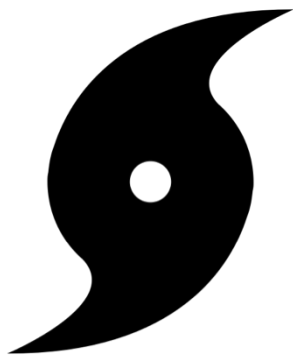




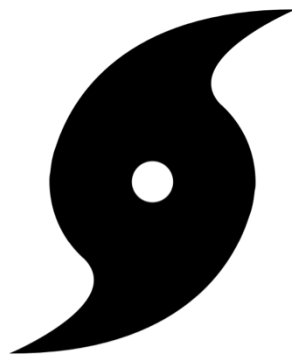




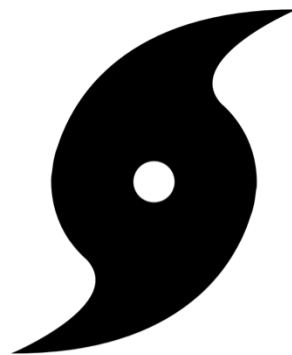
**GO**



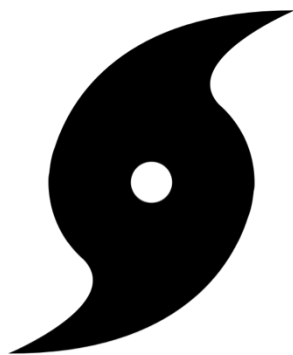
**GO**



**GO**



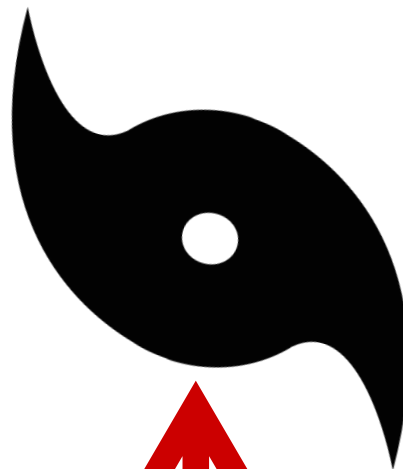
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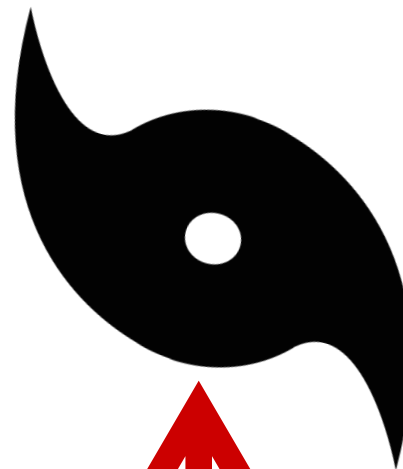
**GO**






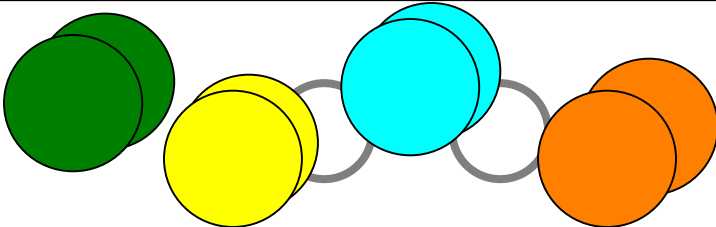







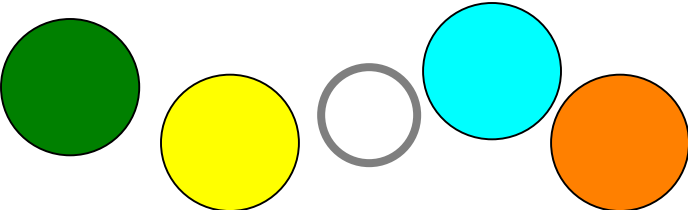
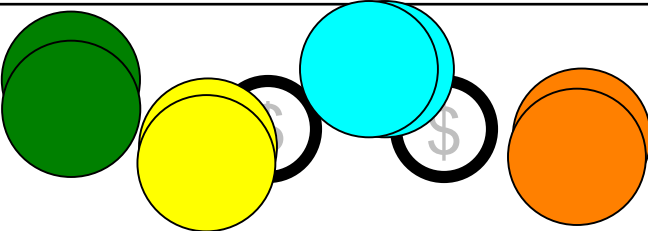
**TURN**



**GROW**



**GROW**

HURRICANE CATEGORY	MILD DAMAGE Assets disabled one year	SERIOUS DAMAGE Asset Recovery: \$1m, one year
		
		
		
		
		

**Year 4:**  
**DRFI**

**Funder**



**Stakeholders**



**DIALOGUE**



**Min. Finance**  
**Disaster Risk?**

# INSURANCE CONTRACT

Pay annual premium. Payout if disaster



**Min. Finance will pay each year a premium of \$ 1**

**The insurer will deliver to Min. Finance a payout of \$ 8, immediately after the occurrence of a *Hurricane making landfall in your country.***

---

*Name and Signature  
(Minister of Finance)*



# CONTINGENCY LOAN

“Borrow right after shock, Repay later”

**Bank will give a total of \$ \_\_\_\_\_, in case of occurrence of the following extreme event:**

[describe verifiable event]

**Min of Finance will repay the Loan, as follows:**

Year 1:	\$	<u>1</u>	
Year 2:	\$	<u>1</u>	
Year 3:	\$	<u>1</u>	
Year 4:	\$	<u>1</u>	or <u>2</u>
Year 5:	\$	<u>1</u>	or <u>2</u>
Year 6:	\$	<u>1</u>	or <u>2</u>

---

Name and Signature  
(Minister of Finance)





# WHAT FINANCIAL INSTRUMENT?

Consult: ~7 minutes

Submit

**Not enough capacity for all**

Each country can submit either "Ins" or "Cont. Loan"  
At least one country will not get new instrument  
Funder will choose most favourable submission before deadline.

While Funder reviews submission:

**Form Mixed Trios: reflect on decisions**

Groups of 3 players from different tables & different ministries

**After break, each Trio will briefly share**

**-*One emotion***

**-*One insight***

**Then: one more round!**

*If you're back on time 😊*



# WHAT FINANCIAL INSTRUMENT ?

**Each trio reflect & share:**

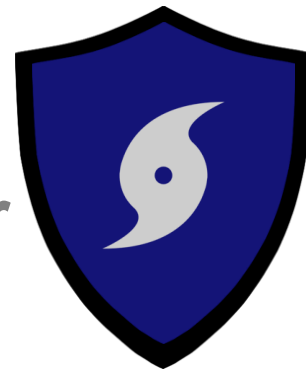
- ***One emotion***
- ***One insight***

*“Pinky Finger” to choose who speaks for group*

*One more round*

# INSURANCE CONTRACT

Pay annual premium. Payout if Disaster



Min.<sup>2</sup> Finance will pay each year a premium of \$ 1

The insurer will deliver to Min. Finance a payout of \$ 8<sup>10</sup>, immediately after the occurrence of a Cat. 3<sup>2</sup> *Hurricane or greater making landfall in your country.*

---

Name and Signature  
(Minister of Finance)

# REGIONAL RESERVE FUND

All put money in, use when needed



Pay \$ 1 per year for reserve fund.  
Donor will match with \$ \_\_\_\_

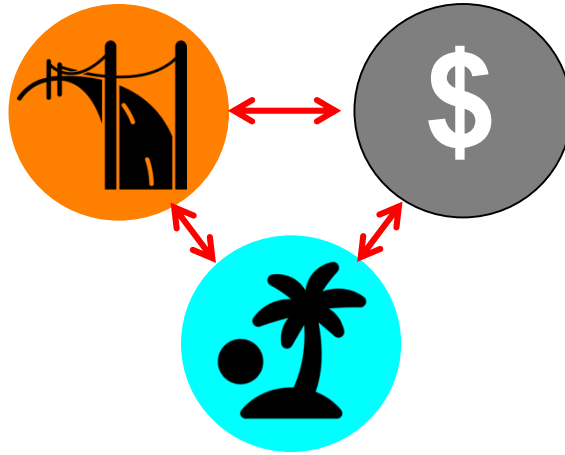
A country may draw up to \$ \_\_\_\_ from the Fund if  
[describe event]

---

*Name and Signature*  
*(Minister of Finance)*

# PARTIAL REAPPROPRIATION

Swap Budget/Assets Across Sectors



**Pay \$ 1 for Administrative Reform that allows  
‘Partial Reappropriation’**

***If Relevant Stakeholders Agree:***

- Surplus can become 1 coin for Min. Finance***
- Assets can be traded in Market***

---

*Name and Signature  
(Minister of Finance)*



# CAT DDO

**Bank will give a total of *up to* \$ 6, in case of occurrence of the following extreme event:**

Declaration of National Emergency

Agreed Set of Prior Actions

Development of DRM Framework

**Min of Finance will repay the Loan, as follows:**

Year 1-3: No payment

Year 4-10 \$1m per year (IDA covers the rest)

---

*Name and Signature*  
*(Minister of Finance)*

**Facilitate:**

**Form groups with similar questions**

- **Insurance?**
- **Cat DDOs?**
- **Contingency Funds?**
- **Partial Reappropriation?**
- **Reserve Fund?**
- **Other?**

**Then enable small-group discussion / Q&A**



# Five Steps Towards Strengthening Financial Resilience

1

- **Take Stock** of how disaster response is currently financed

2

- **Gather risk information** / carry out risk assessments

3

- Decide on **policy priorities**

4

- **Build financial protection strategy**

5

- **Work with and improve existing processes** for DRF

DISASTER RISK FINANCING AND INSURANCE PROGRAM (DRFIP)



WORLD BANK GROUP

# MATERIALS



Transport

JAN

covered

FEB

covered

MAR

covered

APR

covered

MAY

covered

JUN

covered

JUL

covered

AUG

covered

SEP

Need

OCT

Need

NOV

Need

DEFICIT?  
Lose Asset

DEC



SURPLUS?  
Gain +1 Asset



Surplus? Buy 1 Asset

Deficit? Sell 1 Asset

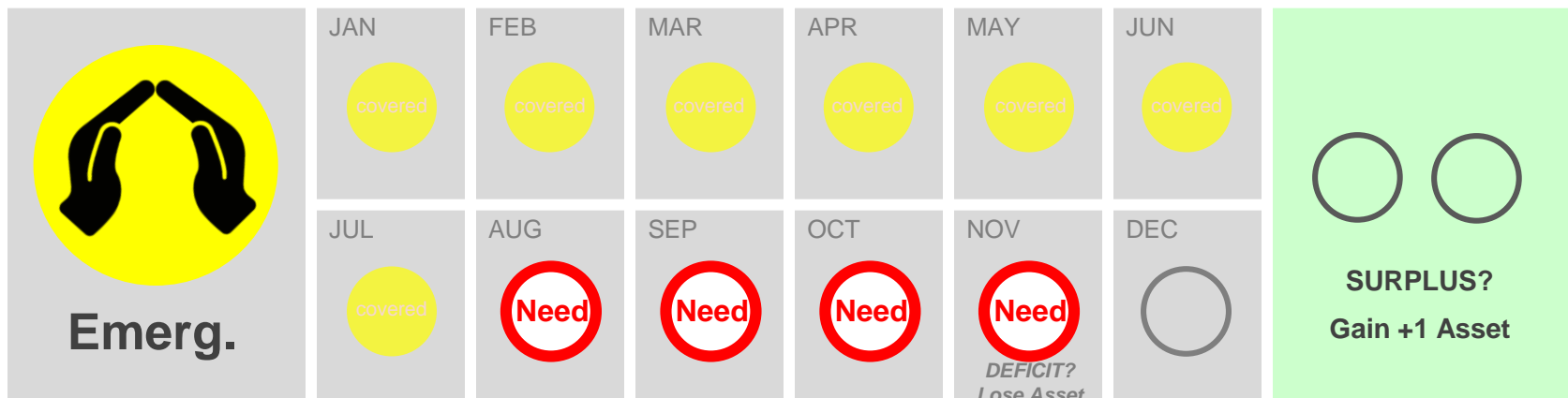
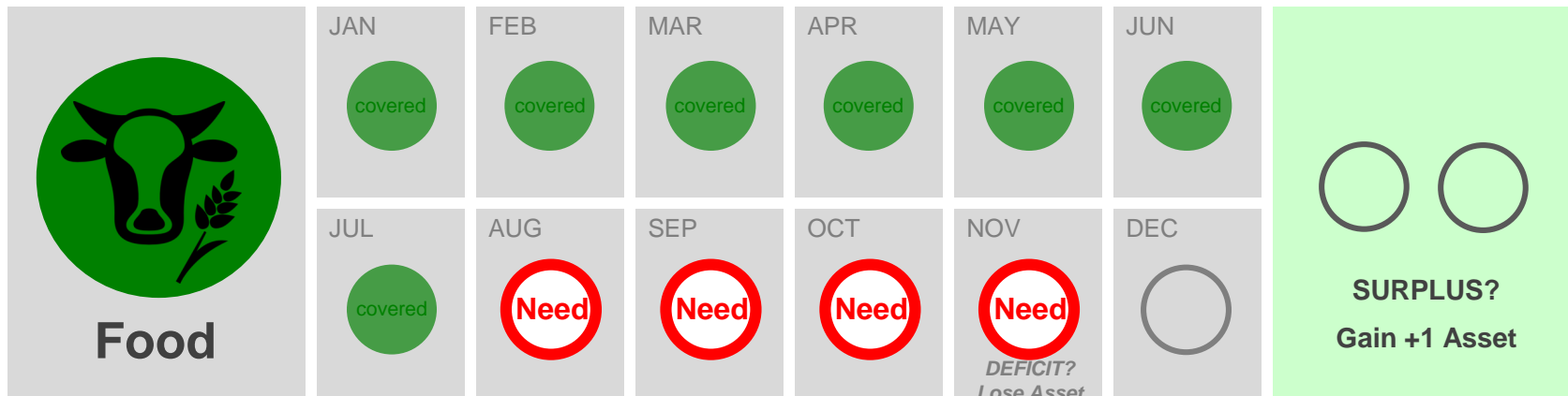
# MARKET














Tax? Get 2 coins

Aid? Spend coins







HURRICANE CATEGORY	MILD DAMAGE Assets disabled one round	SERIOUS DAMAGE Asset Recovery: \$1
		
		
		
		
		

# FinLoans, Inc.

“Borrow Now, Repay later”  
*(with interest)*



**Creditor will give a total of \$ 5m**

**Min of Finance must repay the Loan, as follows:**

*Year 1: \$ 1m*

*Year 2: \$ 1m*

*Year 3: \$ 2m*

*Year 4: \$ 2m*

*Year 5: \$ 2m*

*Year 6: \$ 2m*

*If Min. Finance can't repay, Creditor will take possession of 2 assets*

---

*Name and Signature  
(Minister of Finance)*

# INSURANCE CONTRACT

Pay annual premium. Payout if disaster



**Min. Finance will pay each year a premium of \$ 1**

**The insurer will deliver to Min. Finance a payout of \$ 8, immediately after the occurrence of a *Cat. 3 Hurricane or greater making landfall in your country.***

---

*Name and Signature  
(Minister of Finance)*

# INSURANCE CONTRACT

Pay annual premium. Payout if disaster



**Min. Finance will pay each year a premium of \$ 2**

**The insurer will deliver to Min. Finance a payout of \$ 10, immediately after the occurrence of a *Cat. 2 Hurricane or greater making landfall in your country.***

---

*Name and Signature  
(Minister of Finance)*



# CONTINGENCY LOAN

“Borrow right after shock, Repay later”

**Bank will give a total of \$ \_\_\_\_\_, in case of occurrence of the following extreme event:**

[describe verifiable event]

**Min of Finance will repay the Loan, as follows:**

Year 1:	\$	<u>1</u>	
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Year 3:	\$	<u>1</u>	
Year 4:	\$	<u>1</u>	or <u>2</u>
Year 5:	\$	<u>1</u>	or <u>2</u>
Year 6:	\$	<u>1</u>	or <u>2</u>

---

Name and Signature  
(Minister of Finance)

# CAT DDO

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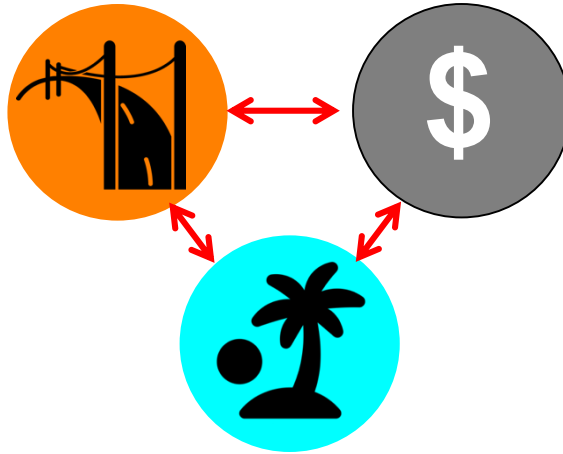
---

*Name and Signature*  
*(Minister of Finance)*



# PARTIAL REAPPROPRIATION

Reallocate Budget/Assets Across Sectors



Pay \$ 1 for Administrative Reform to allow  
‘Partial Reappropriation’ for disaster risk mgmt

*If Relevant Stakeholders Agree:*

- *Exchange Surplus for 1 coin to Min. Finance*
- *Assets can be traded in Market*

---

Name and Signature

(Minister of Finance)

# REGIONAL RESERVE FUND

All put money in, use when needed

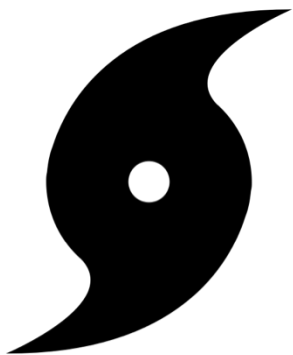


Pay \$ 1 per year for reserve fund.  
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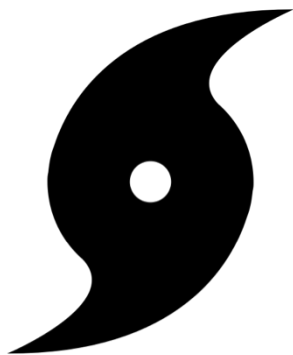
A country may draw up to \$ \_\_\_\_ from the Fund if  
[describe event]

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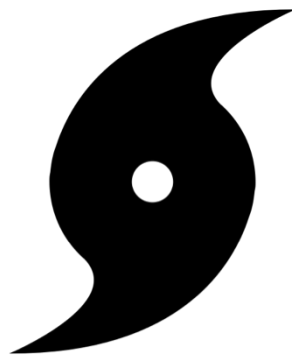
*Name and Signature*  
*(Minister of Finance)*



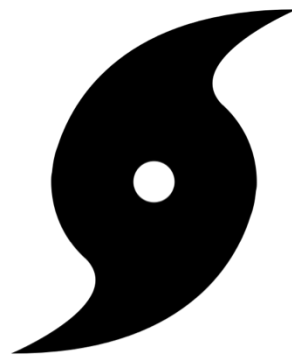
**GO**



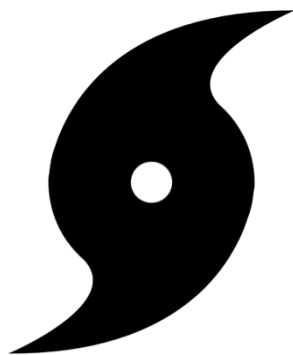
**GO**



**GO**



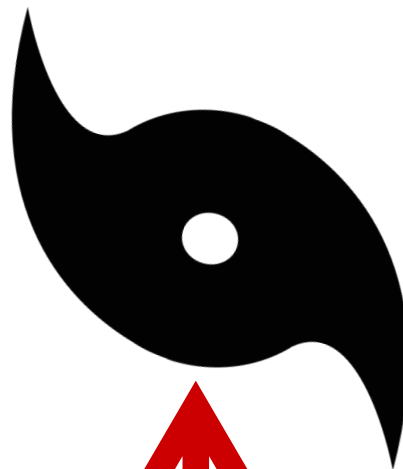
**GO**



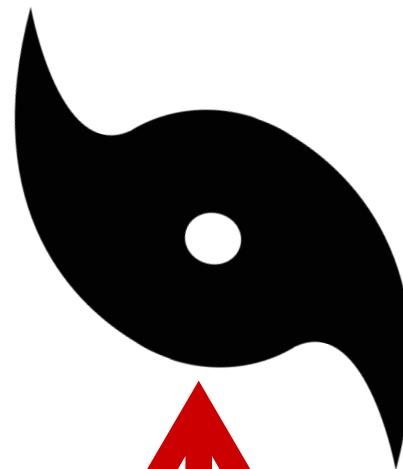
**GO**



**TURN**



**GROW**



**GROW**

**Caribbean**  
**Disaster Risk Financing**  
*Technical Assistance Program*

---



**Caribbean**  
**Disaster Risk Financing**  
*Technical Assistance Program*

---



**Caribbean**  
**Disaster Risk Financing**  
*Technical Assistance Program*

---



**Caribbean**  
**Disaster Risk Financing**  
*Technical Assistance Program*

---



**Caribbean**  
**Disaster Risk Financing**  
*Technical Assistance Program*

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**Caribbean**  
**Disaster Risk Financing**  
*Technical Assistance Program*

---



**Caribbean**  
**Disaster Risk Financing**  
*Technical Assistance Program*

---



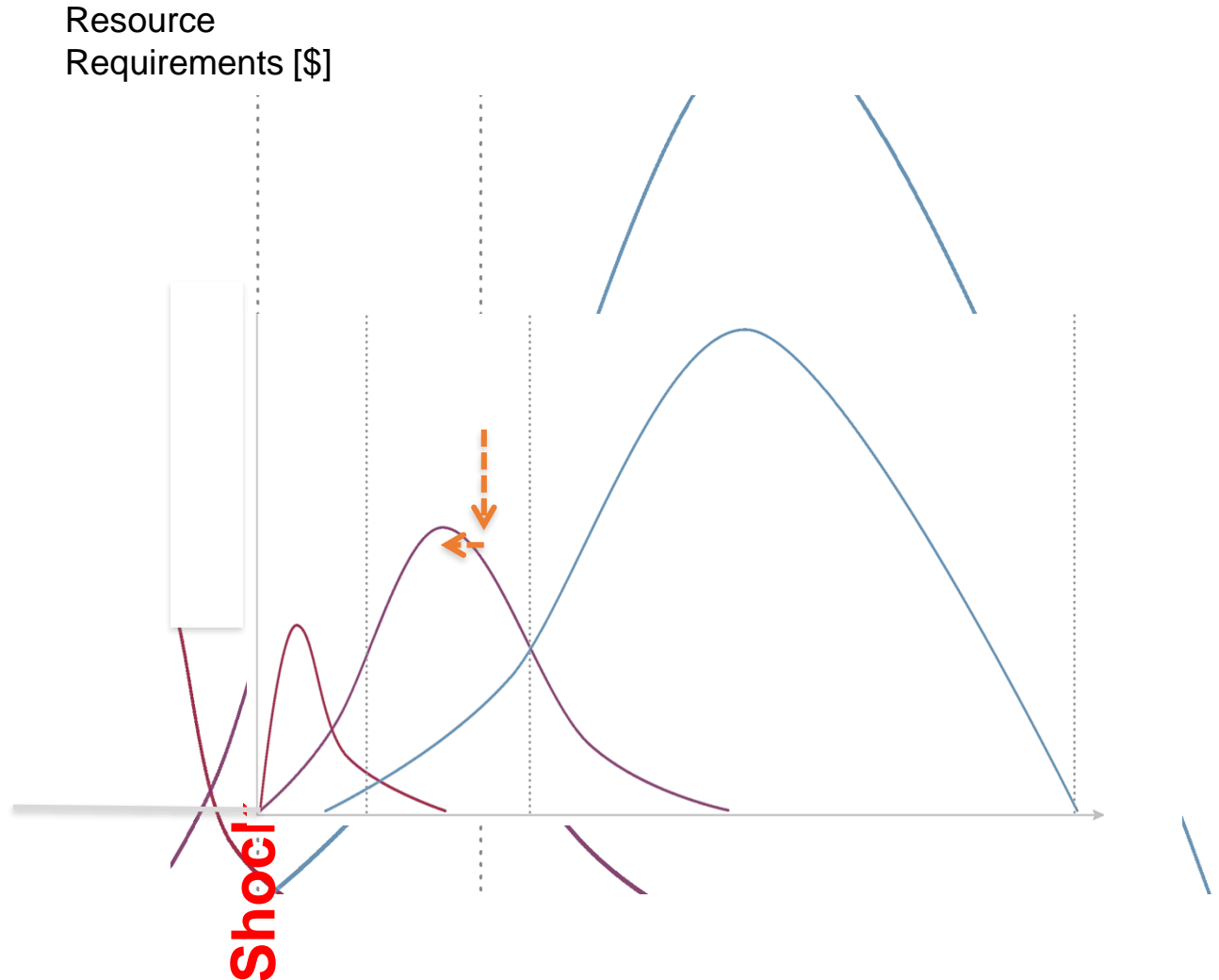
**Caribbean**  
**Disaster Risk Financing**  
*Technical Assistance Program*

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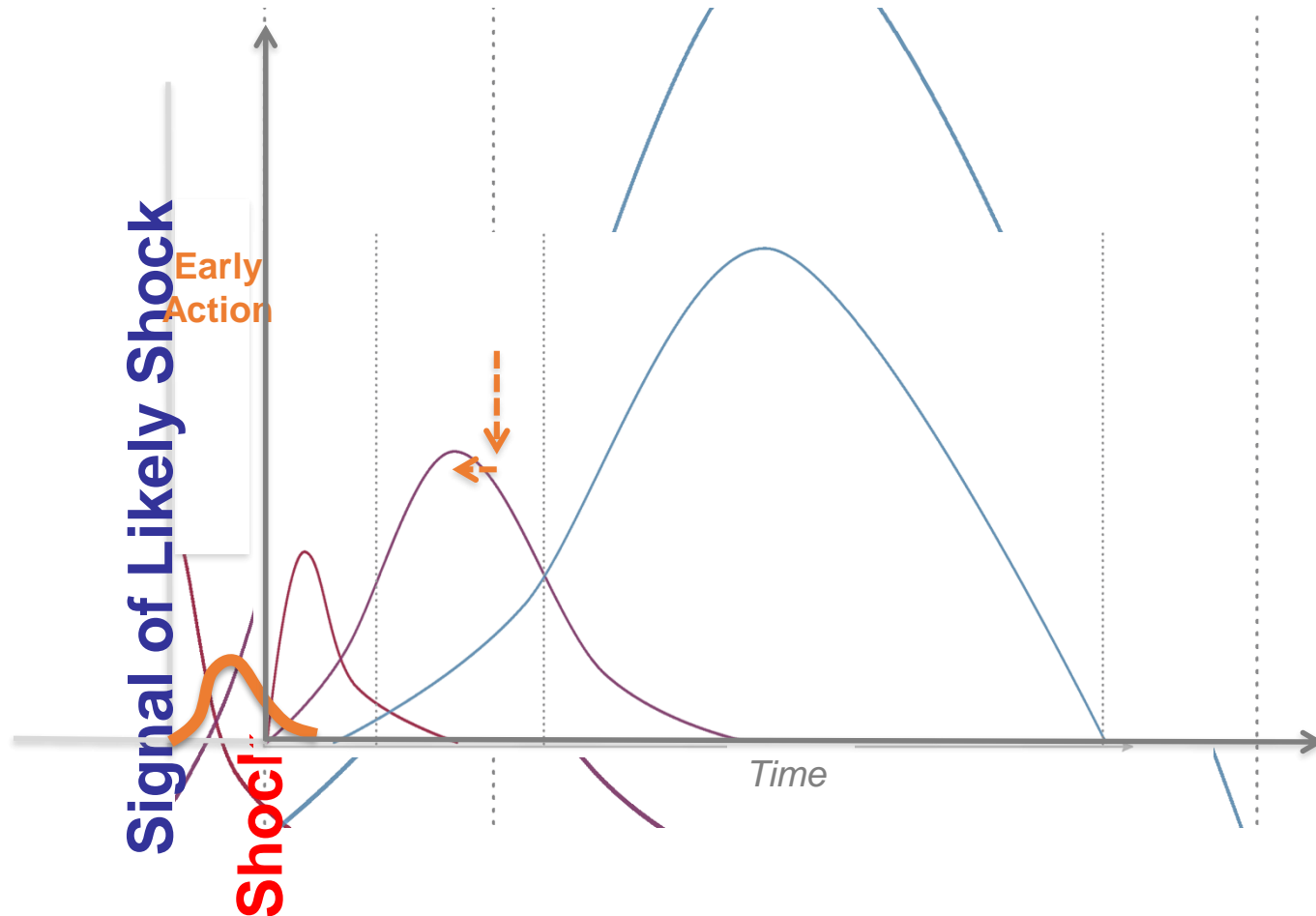
**OTHER**

# Core Principle 1: Timeliness of funding



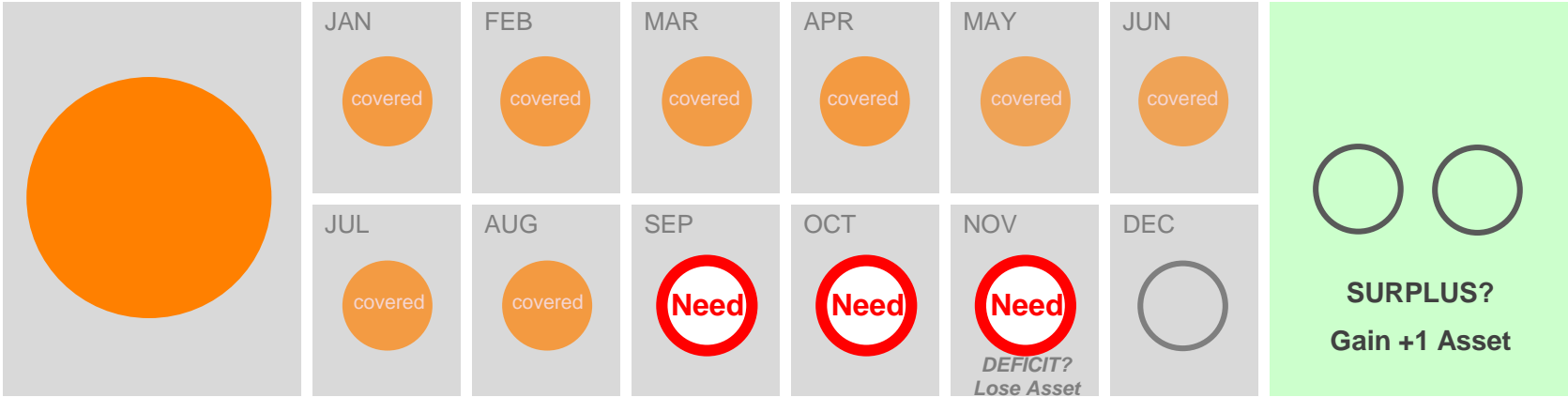
**Speed matters, but not all resources are needed**  
*Can we reduce total resources needed, while accelerating*

Resource  
Requirements [\$]



## FORECAST-BASED FINANCING: Trigger resources for early action *before the shock*, after science says an extreme event is unusually likely







Surplus? Buy 1 Asset

Deficit? Sell 1 Asset

# MARKET

Tax? Get 2 coins

Aid? Spend coins



