Master that Disaster!
A Game on Disaster Risk Financing
Ground Rules

**Goal:** Experience disaster risk financing

**One turn** = one year

**Game** = *simplified* representation of reality

Facilitator’s decisions cannot be appealed
Your Goal: Invest & Develop
Agriculture
Transport
Finance
Education
Health

5 Ministries per Country

Exchanges cannot

Ministers per Country
WINNERS & LOSERS

Winning Ministers: Most Assets
Start with 7 or 8

Losing Ministers: Crisis
Total Assets = 4 or less? → Fired!

Losing Country: Catastrophe
Cannot cover all needs in time (before deadline)

Winning Country: Most Assets
Start with 29
Your Performance depends on:

- **Pre-covered Needs**
  - Until Aug.
  - Until July

- **Productive Assets**
  - 8
  - 7

- **Min. Finance Cash**
  - ?
  - ?
**Productive Assets**
Tokens: inputs per year

**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
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
Year 2:
Tax & Aid
Min. Finance Gets Annual Budget

At the beginning of each year, Get 2 Coins ‘Tax’

You can use Budget to:
- Help other Ministers
- Save for future use
"Oh No!" Stand Up, Ask for Help
Aid: Min. Finance cover each Need
All Needs covered? Pay to Market, then Sit

Min. Finance may cover Deficit

Not enough cash?

Finance must explain decisions to Cabinet
Could Shocks lead to Big Deficit?

How to Get Funds Fast?

Year 3:
Shocks &
Loans
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
Bad Year for All
2 Assets Fail

Normal Year
Normal Year
Normal Year

Normal Year
Normal Year
Normal Year

Normal Year
Normal Year
Normal Year

Bad Year for Farmers
2 Assets Fail
Shake Tokens!
Year 4:
DRFI
INSURANCE CONTRACT
“Pay annually. Get cash if Bad Rains”

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

The insurer will deliver to Min. Finance a payout of $6, immediately after the occurrence of a ‘Bad Year for All’ card.

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: $____
Year 2: $____
Year 3: $____
Year 4: $____ or $____
Year 5: $____ or $____
Year 6: $____ or $____

Name and Signature
(Minister of Finance)
WHAT FINANCIAL INSTRUMENT?

Consult: ~7 minutes

Submit form to facilitator before deadline.

Not enough for all

Submit either “Ins” or “Cont. Loan”

At least one country will be left out

Funder will choose most favourable submissions
GROUP BY MINISTRY
SHAKE
Please Form trios: reflect on decisions
Groups of 3 players from different tables & different ministries

Each trio will briefly share:
- One emotion
- One insight
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)*

GFDRR  WORLD BANK GROUP
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- 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
Min. Finance will pay each year a premium of $1.

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Bad Year
2 Assets Fail

Normal Year
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OTHER
Speed matters, but not all resources are needed at once.

Core Principle 1: Timeliness of funding

Can we reduce total resources needed, while accelerating availability of funds?
Core Principle 1: Timeliness of funding

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

Source: Ghesquière and Mahul (2010)
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<th>Month</th>
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**MARKET**

- **Surplus?** Buy 1 Asset
- **Deficit?** Sell 1 Asset
- **Tax?** Get 2 coins
- **Aid?** Spend coins

**SURPLUS?**
Gain +1 Asset

**DEFICIT?**
Lose Asset