Executive Education Program on DRF for Indonesia

SESSION: Fundamentals of DRF

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What does Disaster Risk Finance mean to you?
- Ensuring money reaches people who need it the most, when they need it the most
- Using Financial Planning to protect Investments in human development and productive assets
- Planning on how to meet the cost of disasters before they happen
- Increasing the speed, predictability and transparency of disaster response

- Adapting to long-term climate changes and trends
- Raising funds from International partners after a disaster
- Financing risk reduction and development
Without Financial Protection

Negative coping strategies slow down development progress, keep people in poverty, or push them back into it.

A lack of resources to respond immediately and effectively in the onset of a disaster can lead to rapidly increasing human and economic costs.

Governments often have to draw funding away from basic public services or divert funds from other development programs.

Losses from the 2008-2011 drought in Kenya was estimated at $12.1 billion with the majority (72 percent) of losses falling on individuals, households or businesses that owned livestock.

The 2010 Chile Earthquake caused a 3 percent (50,000 people) rise in National Poverty Index and an increase in the number of destitute from 80,000 people to 700,000 people.

The average household income in the Philippines declined 6.6% in a year following a typhoon. This caused severe reduction in household spending in human capital investments like education, healthcare etc.

The 2004 Indian Ocean Tsunami destroyed over 111,000 fishing boats and $520 million in damages to fishermen in affected countries.

The seismic event in Lombok during 2018 led to a 0.86% economic contraction in North Lombok, primarily attributed to a 4.89% downturn in the tourism sector.
With Financial Protection

Investments in human capital and future growth continue — shocks are managed as part of everyday financial planning.

SEADRIF is a collaborative platform among ASEAN+3 countries that focuses on providing facilities and financing solutions for disaster risk through insurance for ASEAN countries. It was established to enhance the region’s financial resilience to disasters.

The government has the necessary resources to respond immediately and effectively at the onset of a disaster.

The Indonesian government introduced an innovative funding mechanism known as the Disaster Pooling Fund, or joint fund, with the issuance of Presidential Regulation Number 75 of 2021 concerning the Joint Disaster Mitigation Fund on August 13, 2021.

Vulnerable households know that they will receive support in case of a catastrophe and can plan ahead.

The index-based Livestock Insurance Pilot in Mongolia protects the livelihoods of 11,000 herders or 22% of herders in all piloted provinces.
What is Disaster Risk Finance?

Protecting livelihoods and development

Increasing the Financial Resilience of the national and subnational governments, businesses, households, farmers, and the most vulnerable against natural disasters by implementing sustainable and cost-effective financial protection policies and operations.
Four Primary Groups impacted by natural disasters and climate risk

- Government
- Home/Business Owners
- Farmers/Herders
- The Poorest
Emergency borrowers, struggling to find money in a time of crisis  
Effective risk managers, planning ahead and being prepared

Take away already budgeted resources and disrupt planned spending  
Dedicated resources are available for disaster response, protecting planned investments and public services.

Difficult and long negotiations with providers of support and within government to prioritize spending, have to take place during an emergency.  
Negotiations are carried out in advance and clear rules and financing mechanisms are in place that allow everyone to focus on the response.

Financial assistance particularly for subnational governments and households is uncertain and unpredictable.  
Subnational governments and households know in advance when they will receive assistance and how much, allowing for improved planning.
Access to compensation for property damage and other indirect losses

Loss of income/livelihood due to damage of often insured or underinsured assets

Mitigates shocks by providing compensation for livelihoods, safeguarding people from falling into poverty.

Loss of already limited assets and resources for investment in human capital

Increases awareness and understanding of financial vulnerability to natural disasters and incentivizes investment in risk reduction.

Reliance on the government to provide post-disaster assistance

Rapid assistance to reduce need for relying on negative coping strategies.

Decreases expenditure on necessities like food, health and human capital
Financial Protection and DRM

**Pillar 1: Risk Identification**
Improved identification and understanding of disaster risks through building capacity for assessments and analysis.

**Pillar 2: Risk Reduction**
Avoided creation of new risks and reduced risks in society through greater disaster risk consideration in policy and investment.

**Pillar 3: Preparedness**
Improved capacity to manage crisis through developing forecasting and disaster management capacities.

**Pillar 4: Financial Protection**
Increased financial resilience of governments, private sector and households through financial protection strategies.

**Pillar 5: Resilient Recovery**
Quicker, more resilient recovery through support for reconstruction planning.

Disaster Risk Finance is one component of a comprehensive approach to risk management.

Financial protection complements, but does not replace, risk reduction and resilience measures.
Workshop Objectives

- Understand the purpose and role of disaster risk financing
- Get to know four core principles of disaster risk financing
- Be able to explain five key steps to get started in strengthening financial resilience
Effective risk financing and insurance programs

COORDINATED PLAN
For post-disaster action agreed in advance

Fast, evidence-based
DECISION-MAKING PROCESS

PRE-PLANNED FINANCING to ensure plan can be implemented

- Ensures funds are available quickly when—and only when—they are required
- Binds partners to pre-agreed objectives, decision processes, and implementation and modalities
- Promotes greater discipline, transparency, and predictability in post-disaster spending
- Ensures rapid mobilization of funds, reducing humanitarian costs and potentially saving money

Based on Dull Disasters (2016).
Clarke and Dercon. OUP
Core Principles of Disaster Risk Finance
Core Principle 1

Timeliness of funding

Speed matters, but not all resources are needed at once.
Core Principle 1

Timeliness of funding - Tradeoffs

Most programs that use parametric triggers for finance or action, e.g. Kenya’s Hunger Safety Net Programme, Caribbean, Pacific and African sovereign risk pools.

Speed

Cost

Reliability

Loans for Reconstruction

Humanitarian systems?
Core Principle 1: Timeliness of Funding

World Bank Contingent Credit (Cat DDO) to provide immediate financing (Serbia)

<table>
<thead>
<tr>
<th>Development Challenge</th>
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<tbody>
<tr>
<td>Severe flooding in May 2014 affected 1.6 million people (22 percent of the population).</td>
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<tr>
<td>Difficult to set aside considerable amounts of budgetary resources for contingencies.</td>
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<tr>
<td>Government requires access to short-term immediate liquidity for emergency response and maintenance of essential services until additional funds become available.</td>
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</table>

<table>
<thead>
<tr>
<th>DRF Solution: US$70 million World Bank Contingent Line of Credit (2017)</th>
</tr>
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<tbody>
<tr>
<td>A World Bank Development Policy Loan with a Catastrophe Deferred Drawdown Option.</td>
</tr>
<tr>
<td>Funds may be drawn upon declaration of a State of Emergency in the Borrower’s territory, as a result of a natural disaster.</td>
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<tr>
<td>A fiscal buffer to reduce the impact of future disasters on its fiscal balance as well as critical bridge financing available immediately after a disaster until other domestic funds can be reallocated or international aid is received.</td>
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<tr>
<td>Since the introduction of the Cat-DDO in 2008, the World Bank has approved 12 Cat-DDOs for a total value of $2.3 billion.</td>
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</tbody>
</table>
Core Principle 2

How money reaches beneficiaries is as important as where it comes from
Core Principle 2: Disbursement of Funds

HORN OF AFRICA’S De-Risking, Inclusion and Value Enhancement of Pastoral Economies Project (DRIVE)

Development Challenge
The Horn of Africa (HoA) is amongst the poorest and most fragile regions in the world.
Pastoralists are among the poorest population group; exposed to disasters, amplified by climate change, incl. recurrent severe droughts.

Intervention Design
Background: DRIVE is a regional project, currently implemented in Djibouti, Ethiopia, Kenya, and Somalia.
Goal (Component 1): To enhance pastoralists’ access to financial services (Package of payments, savings and insurance) for drought risk mitigation.

Disbursement of funds
Outreach: Microfinance institutions & banks as distribution agents alongside insurers to reach pastoralist communities.
Disbursement: A regional digital payment platform was developed to collect premium and deliver any payouts.
Core Principle 3: Disaster Risk Layering

No single Financial instrument can address all risks

Three-Tiered Risk Layering Strategy for Government

- **Risk Transfer**
  - Risk transfer for assets such as property insurance or agricultural insurance and risk transfer for budget management like paramedic insurance, cat bonds/swaps

- **Contingent Credit**
  - Financial instruments that provide liquidity immediately after a shock

- **Budget Reserves/Reallocations**
  - Reserve funds specifically designated for financing disaster related expenditures, general contingency budgets, or diverted spending from other programs

Funding Instruments

- Market-Based Instruments
  - Low Frequency/High Severity

- Contingent Financing
  - High Frequency/Low Severity

- Budgetary Instruments

International Assistance (uncertain)

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Core Principle 3: Disaster Risk Layering

In Practice: Philippines’ risk financing strategy

Since the adoption of DRFI Strategy in 2015, the government implemented a series of transformative initiatives:

- **Sovereign Risk Transfer** (Catastrophe bond 2019-2022)
- **Public asset insurance** (National Indemnity Insurance Program; under preparation)
- **Insurance for households, farmers** (Philippine Crop Insurance Corporation)
- **Parametric insurance program** 25 LGUs, DepEd (2017-2019)
- **Philippines Catastrophe Insurance Facility** (reinsurance)
- **Contingent Financing:** Such as from the World Bank (Cat DDO) and other development partners
- **Unprogrammed and Contingency Funds; Budget Reallocations**
- **National / Local Disaster Risk Reduction and Management Funds**
- **Quick Response Funds**

**Asset Data and Risk Data:**
- National Asset Registry System (NARS);
- GeoRiskPh;
- Philippines Cat Risk Model

**Emergency Funding** → **Rehabilitation and Reconstruction**
Core Principle 3: Disaster Risk Layering

In Practice: Indonesia's risk financing strategy

- **Transfer**: Homeowner Insurance, State Asset Insurance
- **Retention**: Contingent Loans
- **Pooling fund**: APBN/APBD Allocation
- **Catastrophic Insurance**

Frequency: High → Low  Impact: Low → High  Residual Risk
Core Principle 4
To Make Sound Financial Decisions you need to have the right information

- Loss Data (Historical Data/CAT Risk Model)
- Microeconomic Data
- Financial and other Data

DRFI Analytics
- Quantitative Analytics
- Financial Decision Making Tools
- Financial Impact Analysis
- Cost Benefit Analysis

Understanding Financial Impact of Disasters
Make evidence based financial decisions
Leverage private financial markets using quantitative outputs
Monitor and evaluate DFRI strategies
The Four Core Principles of Disaster Risk Finance

01 Timeliness of funding: speed matters but not all resources are needed at once.

02 No single financial instrument can address all risks.

03 How money reaches beneficiaries is as important as where it comes from.

04 To make sound financial decisions you need to have the right information.
Can you think of an example from your own experience where these DRF principles could be applied?

If you were to apply these principles of DRF in Riskland, what changes would you make to what you do now?

You have 15 minutes!
Workshop Objectives

1. Understand the purpose and role of disaster risk financing
2. Understand the purpose and role of disaster risk financing
3. Be able to explain five key steps to get started in strengthening financial resilience
Getting Started:
Steps to Strengthen
Financial Resilience
## Step 1

Take stock how disaster response is currently financed

<table>
<thead>
<tr>
<th>Instrument</th>
<th>$</th>
<th>Targeted Population</th>
<th>Risk Layer Covered</th>
<th>Data Req.</th>
<th>Rules</th>
<th>Timing of Payouts</th>
<th>Pre-Requisites</th>
<th>% of Budget</th>
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<tbody>
<tr>
<td>DRM Fund</td>
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<td>Continent Budget line</td>
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<td>Private-sector agriculture</td>
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<td>insurance</td>
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<td>International risk transfer</td>
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Step 2

Gather risk information/carry out risk assessments

The Components for Assessing Risk

HAZARD
The likelihood, probability, or chance of a potentially destructive phenomenon

EXPOSURE
The location, attributes, and values of assets that are important to communities.

VULNERABILITY
The likelihood that assets will be damaged or destroyed when exposed to a hazard event.

IMPACT
For use in preparedness, an evaluation of what might happen to people and assets from a single event.

RISK
Is the composite of the impacts of ALL potential events (100s or 1,000s or models).

Risk information does not have to be complicated! Start by looking at historical data

MATERIAL: XINDER BLOCK
ROOF: STEEL

27° 43’ 0” N 85° 19’ 0” E

50% 60%
Step 2

Gather risk information/carry out risk assessments

Remote sensing for monitoring floods

<table>
<thead>
<tr>
<th>Disaster Type</th>
<th>Time Period</th>
<th>Number of events</th>
<th>Total number of people affected</th>
<th>Total damage (US$ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flood</td>
<td>1991 - 2015</td>
<td>12</td>
<td>1,104,662</td>
<td>137</td>
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<tr>
<td>Storm</td>
<td>1991 - 2015</td>
<td>5</td>
<td>2,830,125</td>
<td>4,068</td>
</tr>
<tr>
<td>Earthquake</td>
<td>1991 - 2015</td>
<td>3</td>
<td>38,463</td>
<td>505</td>
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<tr>
<td>Landslide</td>
<td>1991 - 2015</td>
<td>1</td>
<td>145,000</td>
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Step 3
Decide on Policy Priorities

Policy: Financial Protection Strategy & Action Plan

Start
What do I want to do/are my overall goals?
Who do I want to be protected?
Identify and prioritize beneficiaries
Assess Risks

Why do I want to do this?
What do I want them to be protected against?
Identify and prioritize financial impact and underlying problems driving this impact

How will I go about achieving these development goals?
Who will pay and how?
Identify source of funds
Arrange Financial Solutions

How will the funds reach the beneficiaries?
Identify delivery channels
Deliver Funds to Beneficiaries

How can I implement these policy decisions?
Identify necessary human, technical, financial resources and partnerships
Implementation

Monitoring & Evaluation

Technical: Operational Framework

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Step 4

Build a Financial Protection Strategy

**Colombia: Policy strategy for public financial management of natural disaster risk**
Step 4

Build a Financial Protection Strategy

DRF Strategy in the Philippines

Strategic Policy Goals

To maintain sound fiscal health at the national government level, necessary to support long term rehabilitation and reconstruction needs;

To develop sustainable financing mechanisms for local government units, necessary to provide immediate liquidity at the onset of a disaster; and

To reduce the impact on the poorest and most vulnerable and prevent them from falling into a cycle of poverty, while also shielding the near-poor from slipping back into poverty.

Priorities Areas

National Level: Enhancing the financing of post-disaster emergency response, recovery, and reconstruction needs

Local Level: Providing local governments with funds for recovery and reconstruction after a disaster

Individual Level: Empowering poor and vulnerable households and SMEs to quickly restore their livelihoods after a disaster
Step 4

Build a Financial Protection Strategy

DRF Strategy in Indonesia

**Strategic Policy Objectives**

01. Protecting state and regional assets

02. Protecting households and communities vulnerable to disasters, especially low-income households

03. Restoring the livelihoods of communities affected by disasters

04. Promoting the role of local governments, communities and the private sector in financing disaster risks

05. Developing the domestic insurance market

06. Protecting state finances
Step 5

Work with and Improve existing processes

Climate & Disaster Risk Management

Energy & Water

Infrastructure & Urban Development

Agriculture & Food Security

Social Protection

Financial Market Development

Public Debt & Risk Management

Macro & Fiscal Stability

Pembiayaan Risiko Bencana

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Five Steps
Towards Strengthening Financial Resilience

01. Take Stock of how disaster response is currently financed

02. Gather risk information/carry out risk assessments

03. Decide on policy priorities

04. Build financial protection strategy

05. Work with and improve existing processes for DRF
Workshop Objectives

- Understand the purpose and role of disaster risk financing
- Get to know four core principles of disaster risk financing
- Be able to explain five key steps to get started in strengthening financial resilience
Next Steps:
What can we do now?
Thank You!