Training on Financing for Disaster Risk Management

Session 1.1

Overview of Risk Financing Instruments

Session Objectives

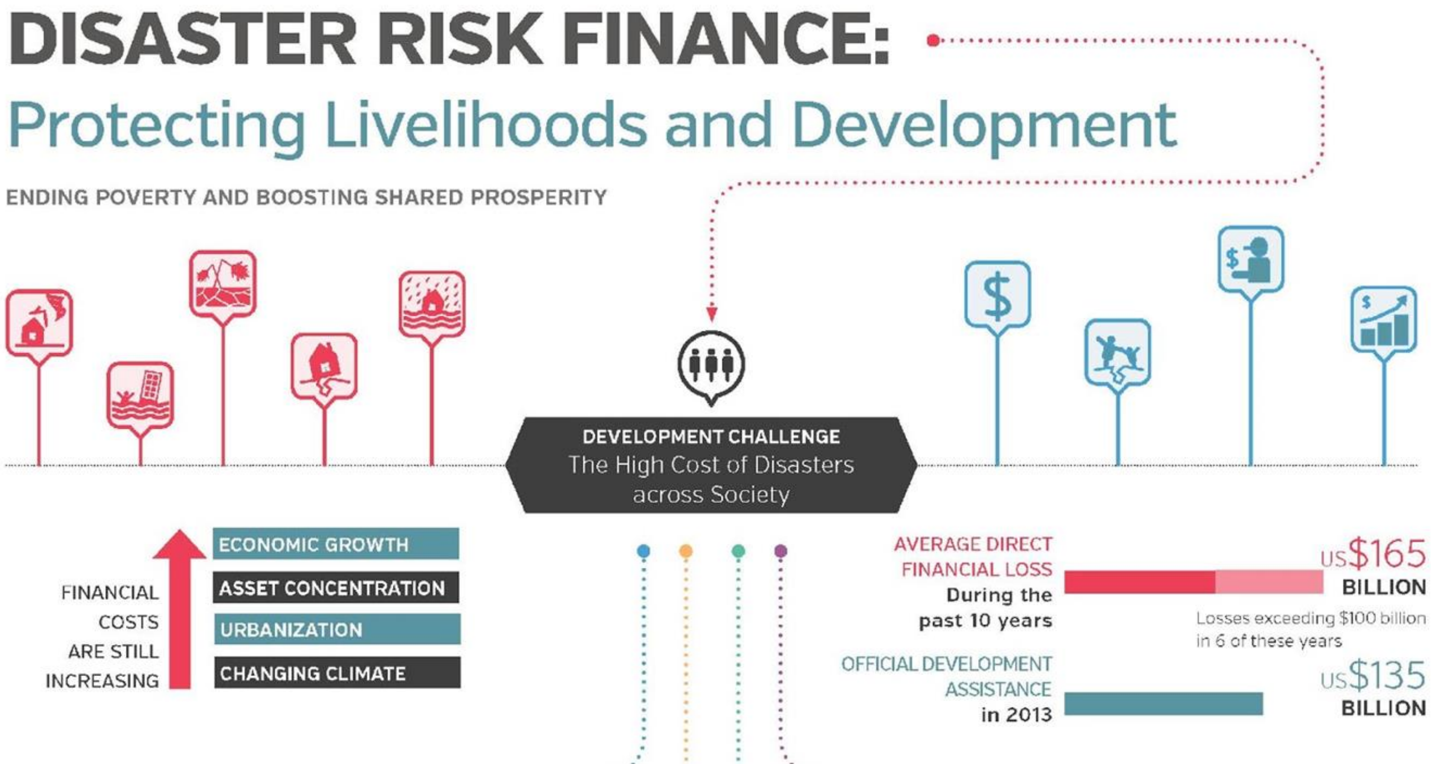
At the end of this session, participants should be able to:

- Define disaster and climate risk financing; and
- Enumerate and explain disaster and climate risk financing instruments

Outline:

- Disaster risk financing concept and instruments
- Disaster risk financing considerations
- Practical examples and a toolkit of risk financing

Disaster Risk Finance (DRF) is a growing discipline that addresses the fiscal impacts and economic losses caused by natural hazards and supports countries to increase their financial resilience to natural disasters. (GFDRR)



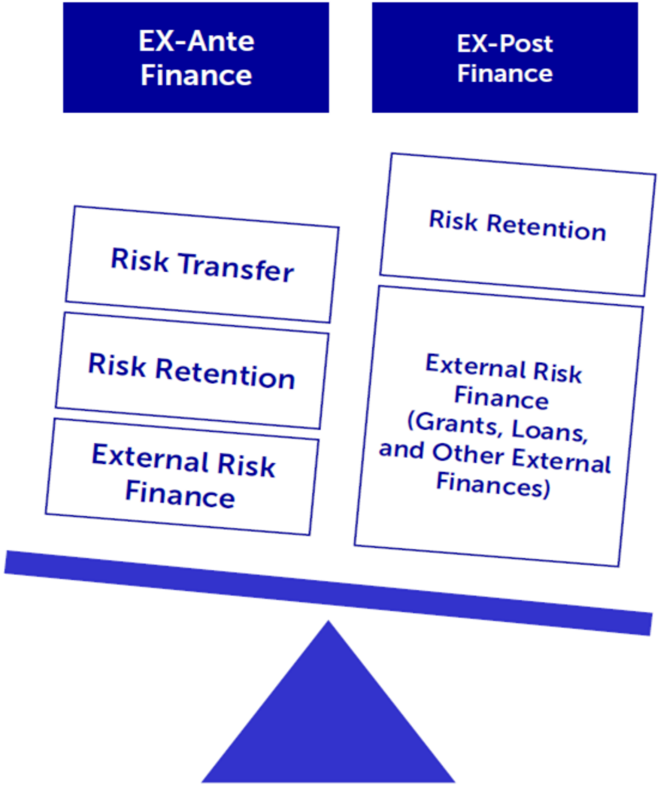
Why do we need risk financing?

As climate change increases the frequency and impacts of large-scale natural hazards, it is critical that governments put in place or update **actionable, comprehensive, transparent and inter-ministerial disaster risk management (DRM) plans**.

For these plans to be implementable and cost-effective, governments should include a **disaster risk financing strategy** as an integral component of their DRM plan.

Financing resource needs

- **Ex-Ante finance**
  - Before disasters strike
- **Ex-Post finance**
  - After disaster events



Ex-Ante finance examples

- risk reducing and mitigating infrastructure expenditures (e.g., sea walls, road repaving to reduce run-off)
- costs associated with the development of regulatory standards to promote climate resilience
- general financial sector resilience expenditures to improve regulation and support business continuity planning and stress testing
- expenditures for the development of legal and regulatory frameworks to increase the availability of climate and disaster risk insurance, distribution channels for insurance, or to establish domestic risk financing pools
- costs associated with the establishment or integration of early warning systems, safety nets and (adaptive or shock-responsive) social protection systems

Ex-Post finance examples

- emergency response and assistance
- economic recovery and support to state-owned enterprises
- infrastructure reconstruction and the reconstruction of uninsured housing
- associated logistical and supply chain costs (which are particularly high for remote areas)
- loan repayments for financing of the above

Risk Transfer

- Part of ex-ante financing product
- The process of formally or informally shifting the financial consequences of risks from one party to another, whereby a household, community, enterprise or State authority will obtain resources from the other party after a disaster occurs, in exchange for ongoing or compensatory social or financial benefits provided to that other party (UNDRR)
- Insurance is one form of risk transfer

Risk Transfer Instruments

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- indemnity triggers (depend on actual losses)
- index triggers (triggered by an estimated industry loss "index")
- parametric triggers (based on well-defined parameters of an event)
- modelled triggers (based on parameters input into exposure models)
- hybrid triggers (combinations of the above triggers)

In practice however, index-based, parametric and modelled triggers are all often referred to as "index-based" to differentiate them from the more traditional indemnity products.

Risk Transfer: Different Types of Insurance

- **Sovereign Risk Insurance and Regional Insurance Pools**
  - Issued by government or regional organizations/International Financial Institutes
- **Insurance for Public Assets**
  - Government purchased insurance for public assets
- **Natural Resource Insurance**
  - Insurance for extractive industries. Insurers offer risk transfer solutions for energy (oil and gas), renewable energy, forestry, and mining and metallurgy
- **Meso and Microinsurance**
  - Meso insurance policies are held by an institution, either to transfer institutional risk, or to aggregate demand of members (such as a farmer's association taking out a policy to protect its member farmers). Microinsurance is insurance held by an individual (or household).

Risk Transfer: Different Types of Insurance

- **Takaful**
  - Sharia-compliant, insurance alternative developed for Muslim clients. Takaful is a cooperative insurance mechanism where the policy holders are also the owners. For example, Takaful Insurance of Africa offers index-based livestock insurance as well as an indemnity-based Fire and Perils product.

- **Catastrophe Bonds**
  - Catastrophe bonds are a way for insurance and reinsurance companies to redistribute catastrophe risks through issuing securities. These securities pay an investor a premium; if the event occurs, the principal will be reclaimed by the insurance company to cover the costs of the event.

Risk Retention

- An approach to risk management that involves retaining responsibility for risk and any costs associated with the materialization of that risk (OECD)
- Different types of tools used by governments
  - Government Revenue and Budget Allocation
  - Contingency and Reserve Funds
  - Extrabudgetary Funds
  - Budget Reallocation and Realignment
  - Taxation

External Risk Finance (grants, loans, and other external finance)

- Can be used for both ex-ante or ex-post financing
- Products include:
  - Traditional DRR, development, and climate finance
  - Contingent credit/Catastrophe Deferred Drawdown Option (Cat DDO)*
  - Disaster response banking instruments
  - Disaster risk finance facilities
  - Bonds
  - Humanitarian assistance
  - Forecast-based Finance (FbF)
  - Private sector responses

External Risk Finance (grants, loans, and other external finance)

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- **Traditional DRR, development, and climate finance**
  - Ex-ante development and climate finance options from their development partners such as the Green Climate Fund, the World Bank's International Development Association (IDA) and International Bank for Reconstruction and Development (IBRD)
- **Contingent credit/catastrophe deferred drawdown option (Cat DDO)**
  - To disburse quick, pre-arranged, liquid resources to governments after a disaster

External Risk Finance (grants, loans, and other external finance)

- **Disaster Response Banking Instruments**
  - Ex-post external financing from IFIs such as World Bank, Asian Development Bank
- **Disaster Risk Finance Facilities**
  - E.g., World Bank’s Pandemic Emergency Financing Facility and Global Risk Financing Facility
- **Bonds**
  - Allows the sponsor—a government, private sector entity, Public Private Partnership or (development) bank—to borrow from investors for a specific purpose, often related to construction or project implementation.

External Risk Finance (grants, loans, and other external finance)

- **Humanitarian assistance**
  - Cash programming
- **Forecast-based financing**
  - Use forecasts of extreme weather events to allow early (pre-event, anticipatory) humanitarian action to be taken to save lives, reduce suffering and increase the cost-effectiveness of the response
- **Private sector responses**
  - Private sector depending on public infrastructure can be engaged to pay for mitigation and repair cost of infrastructure

Disaster Risk Financing Considerations

Disaster Risk Financing Considerations

- **Timeliness**
  - The speed of the instrument (how long it takes funds to be made available)
  - Timing of the instrument (when in the response those funds will be needed, depending on whether they are for relief and emergency response, recovery, or longer-term reconstruction)
- **Cost**
  - Opportunity costs may make disaster risk financing politically and fiscally challenging.

Disaster Risk Financing Considerations

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- **Disbursal mechanisms**
  - The disbursal process should be efficient and transparent in order to promote trust in government and the efficient use of funds. Need strong policy to ensure transparency and accountability
- **Risk layering**
  - Governments select a combination of instruments that meet their needs to protect the government and population from events of different severity and frequency, making sure that resources are deployed in the most cost-effective and efficient way. E.g., risks related to high frequency, lower impact events should be retained. External risk finance is more appropriate for higher severity events. Given the costs, risk transfer tools are typically reserved for very high impact, low frequency events.

Disaster Risk Financing Considerations

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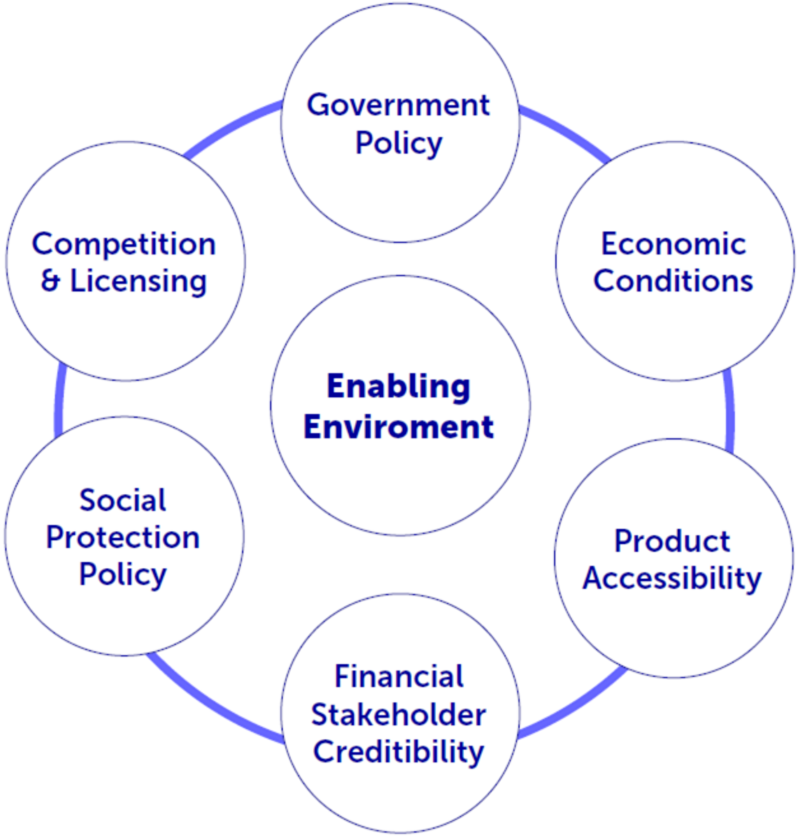
- **Risk information**
  - Need to have a clear understanding of the hazards, levels of exposure and vulnerability of different segments of the population. Gender considerations and vulnerable groups' needs must be fully accounted for in risk assessment
- **Risk responsibility**
  - Risk ownership and risk-bearing capacity
  - For governments, risk ownership involves establishing a clear understanding of potential direct losses, contingent liabilities, guarantees and potential changes in the macroeconomic environment as a result of an event
  - If a stakeholder has a limited risk-bearing capacity, then the ultimate responsibility may fall on other stakeholders

Enabling Environment for Risk Financing



Examples of risk financing in action

Fiji

- Government Revenue and Budget Allocation (including Ex-Ante Taxation)
- Environment and Climate Adaptation Levy to fund environmental, carbon-reducing and climate adaptation projects.
- The levy is a tax on prescribed services, items and income and is administered by the Ministry of Economy.
- Used to support disaster relief and response, meteorology services, rural development, cyclone rehabilitation, urban development, agricultural development, sustainable resource management, infrastructure development, energy conservation, and environmental conservation.

Examples of risk financing in action

Philippines

- In 2017, the IFRC developed Early Action Protocols for the Philippines in collaboration with the Philippine Red Cross
- Those protocols covered typhoons and floods in 22 provinces allowing forecast-based financing recipients to strengthen shelters ahead of typhoons, evacuate of livestock and harvest crops, and temporarily relocate small business stocks ahead of urban flooding.
- Starting in 2019 the project was expanded to also include drought

Examples of risk financing in action

Morocco

Morocco Integrated Risk Management Program is providing support to catastrophe risk insurance law implementation through establishing a solidarity fund for non-insured low-income households.

The World Bank Global Risk Financing Facility (GRiF) provided co-financing for the capital, supported first-loss polices, and operating costs.

Ways forward:

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- **Strengthen risk and financial vulnerability assessment** to better understand the impact of disasters (including interlinkages and interdependencies across economies), better target financial assistance, and improve the cost-effectiveness of recovery assistance.
- **Promote awareness of the need for financial preparedness** to manage disaster risks based on a clear understanding of the allocation of responsibility for disaster costs.
- **Encourage the development of disaster risk financing tools and markets**, alongside enhanced prevention of disaster risks.
- **Enhance technical and institutional capacities and co-ordination** among domestic stakeholders involved in the management of disaster risks.

Group discussion

- *List out some of the existing disaster risk financing instruments from Tajikistan?*
- *Are there any opportunities for Tajikistan to access external financial resources for the establishment of disaster risk financing instruments in the country?*

References:

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