# ASEAN DISASTER RISK FINANCING AND INSURANCE – Phase 2 (ADRFI-2) INITIATIVE

VISION

The vision of the ADRFI-2 Platform is to become ASEAN's Platform that enhances ASEAN capacity to analyse, develop and implement disaster risk management strategies to support ASEAN efforts to achieve greater resiliency against losses created by Natural Catastrophe Disasters. Its mission is three prongs:

- Create robust data and analytics foundation for better evaluation of risks and support risk advisory, particularly in assessment of risk financing options.

- Enhance AMS' capabilities in developing and evaluating ex-ante risk financing and transfer strategies and risk financing solutions.

- Strengthen ASEAN's disaster risk resilience efforts at national, sub-regional and regional levels.
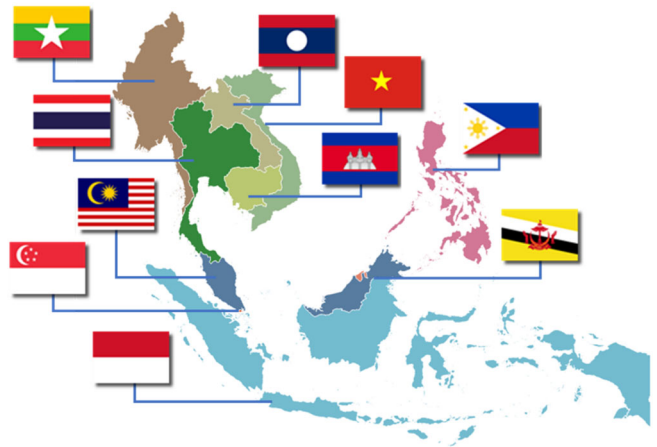

OVERVIEW

While ten ASEAN Member States (AMS) forming one of the most economically dynamic regions, it is also one of the most exposed areas in the world to Natural Catastrophes (NatCat) by floods, typhoons/ tropical cyclones, earthquakes and volcanoes. ASEAN has stepped up collective efforts towards regional NatCat disaster relief and risk mitigation with the ASEAN Disaster Risk Financing and Insurance (ADRFI) Roadmap developed in 2011.

Continuing from its Phase 1 and established to implement the strategies outlined in the roadmap, ADRFI-2 specifically supports a holistic approach in advancing regional cooperation on Disaster Risk Financing and Insurance (DRFI). Focus of ADRFI-2 on the upstream activities supporting DRFI will strengthen the region's overall disaster risk management capabilities, providing the foundation for future long-term public and private disaster risk financing and risk transfer solutions.

Structure of ADRFI-2
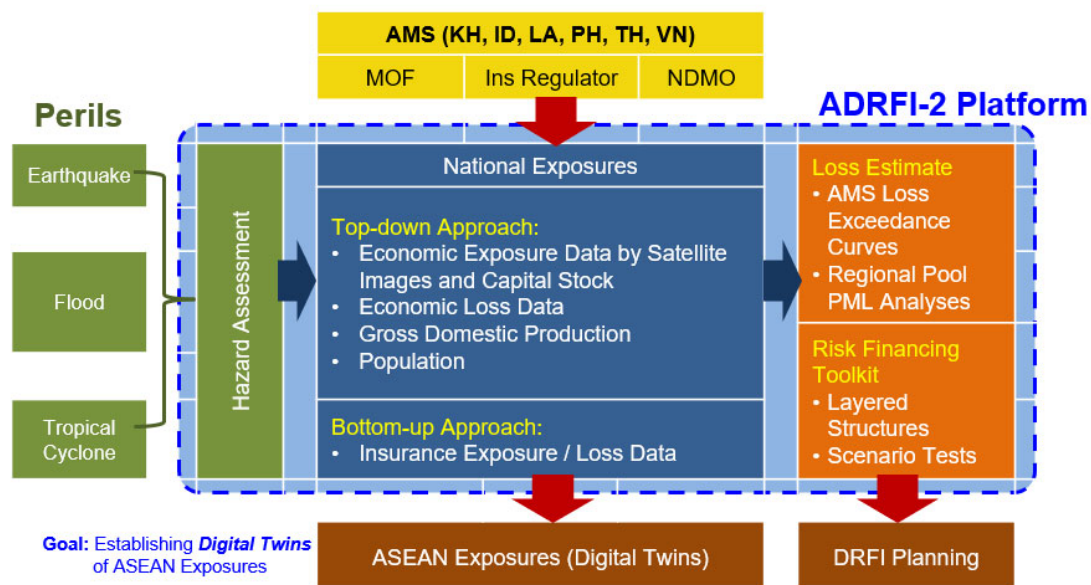
ICRM is further developing an ADRFI-2 Web-based GIS Platform with its NatCat Hazard and Exposure databases and built-in analytics that enable scenario testing and further supports ASEAN-wide efforts towards meeting their Risk Assessment and Risk Financing Advisory needs.

APPROACH

To assist AMS forming an Action Cycle from Data Collection for Risk Assessment then to Risk Financing Advisory for AMS' review and implementation, as illustrated in Risk Assessment and Advisory Action Cycle with blue boxes and arrows for ADRFI-2 scope while green ones for AMS' necessary actions. The synergy and support of AMS are critical for ADFRI-2 program to be an effective and practical exercise to achieve its goal.

Risk Assessment Key Steps:

1. Collection routine built for EED/ ELD and IED/ ILD
2. Analytics for exposure assessments to evaluate protection gap and required risk bearing capacity
3. Risk Modelling in Loss Exceedance Curve (LEC)

Risk Advisory Key Steps:

1. Understanding AMS' Risk Prioritisation Strategy, LEC and Protection Gap Analysis
2. Risk Toolkit assisting quick evaluation of Risk Layering and Financing Options
3. Suggestion of Stakeholder Engagement to Operationalize Instruments

Risk Assessment and Advisory Action Cycle
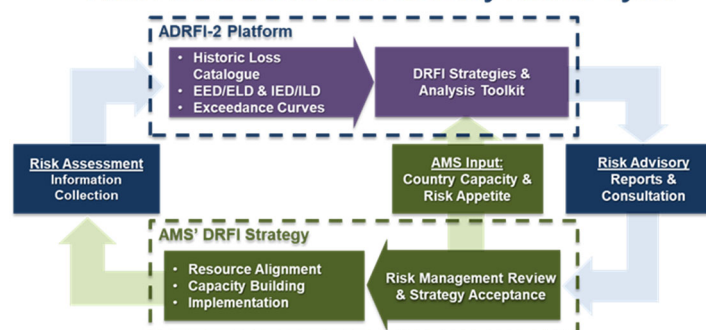
ADRFI-2 Platform

Being built to be an integrated platform to assist AMS' risk assessment and advisory work, through information collected and analysis based on country's exposure and perils exposed. The design includes multi-level views via Dashboard access to visualization and risk financing analysis functions, and embedded Risk Financing Toolkit to evaluate different DRFI strategies with user selectable parameters.

Platform Functionality List

Country Risk and Exposure Profile	Snapshot of GDP, Economic Exposure (EED) and Population for each country by administrative regions and hazard layers
National Capital Region (NCR)	In-Depth analysis of building level database by mapping buildings in major cities together with building attributes
Risk Advisory Toolkit	Develop and evaluate multiple risk transfer strategy options given the economic exposure and loss exceedance curves
Historical Loss Catalogue and Risk Profile	Catalogue of historical major loss events and statistical analysis for each country
Probabilistic Loss Analysis	Average Annual Loss (AAL), Loss Exceedance Curves (LEC) and Tail-Value at Risk Analysis by Peril and by Country
IED/ILD Usability	Analysis of the Insured Exposure (IED) and Loss databases (ILD). Comparison with EED to evaluate the provincial-level protection gap
GDP Statistics for Growth Projections	Statistics of Gross Domestic Product (GDP) based on economic outlook of each country for mid-term projections

COOPERATION PATRNERS