

ANNUAL REPORT

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The Asian and Pacific Centre for
the Development of Disaster
Information Management



ESCAP

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The shaded areas of the map indicate ESCAP members and associate members. *

The Economic and Social Commission for Asia and the Pacific (ESCAP) serves as the United Nations' regional hub promoting cooperation among countries to achieve inclusive and sustainable development. The largest regional intergovernmental platform with 53 Member States and 9 Associate Members, ESCAP has emerged as a strong regional think-tank offering countries sound analytical products that shed insight into the evolving economic, social and environmental dynamics of the region. The Commission's strategic focus is to deliver on the 2030 Agenda for Sustainable Development, which it does by reinforcing and deepening regional cooperation and integration to advance connectivity, financial cooperation and market integration. ESCAP's research and analysis coupled with its policy advisory services, capacity building and technical assistance to governments aim to support countries' sustainable and inclusive development ambitions.

In May 2015, The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), adopted Resolution 71/11 to establish the Asian and Pacific Centre for the Development of Disaster Information Management (APDIM) in the Islamic Republic of Iran as a regional institution of the Commission. APDIM was established with the objective to reduce human losses, material damages and the negative impact of natural hazards through enhancement of disaster information management in Asia and the Pacific.

* The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

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Heavy rainfall and flooding after years of severe drought caused gully erosion in this area.
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Message from the Director

Asia-Pacific faces an alarming spectrum of natural hazard and disaster risks which are rapidly growing in complexity and intensity due to increased exposure and changes in climate. The detailed analysis of the Asia Pacific Disaster Report 2019 clearly underscores that the poorest communities are the most vulnerable in the event of disasters.

If we are to collectively achieve the 2030 Agenda for Sustainable Development, it is incumbent upon us to work towards reducing disaster risk and building resilience. Using baseline disaggregated data by gender, age, and disabilities is necessary to target disaster risk reduction investments where they would be most effective in protecting those most vulnerable.

APDIM has a critical role in this connection as a knowledge institution of the Economic and Social Commission for Asia and the Pacific to promote South-South and regional cooperation to bridge gaps in capacity and access to information and knowledge for disaster risk reduction and resilience. This Annual Report highlights the progress APDIM made in the last years towards this objective and shows the great potential of APDIM to capitalize on new technologies, supporting countries in the Asia Pacific in understanding the importance of integrating big data, risk analytics and geospatial information to reduce the exposure of communities and assets to natural hazards. Risk informed decisions and investments are critical along with coordinated policies to tackle trans-boundary hazards - disasters know no boundaries.

At APDIM, we are committed to implementing our mandate with the collaboration of our many international and national partners who have shown tremendous support towards our work. I am grateful to all of them and to all APDIM's staff for their hard work and dedication. In closing, I would like to express my appreciation to APDIM's Host Country, the Islamic Republic of Iran for its vision, commitment and support to enhance risk information management efforts in the region and for the exemplary priority attention towards disaster risk reduction.

Letizia Rossano



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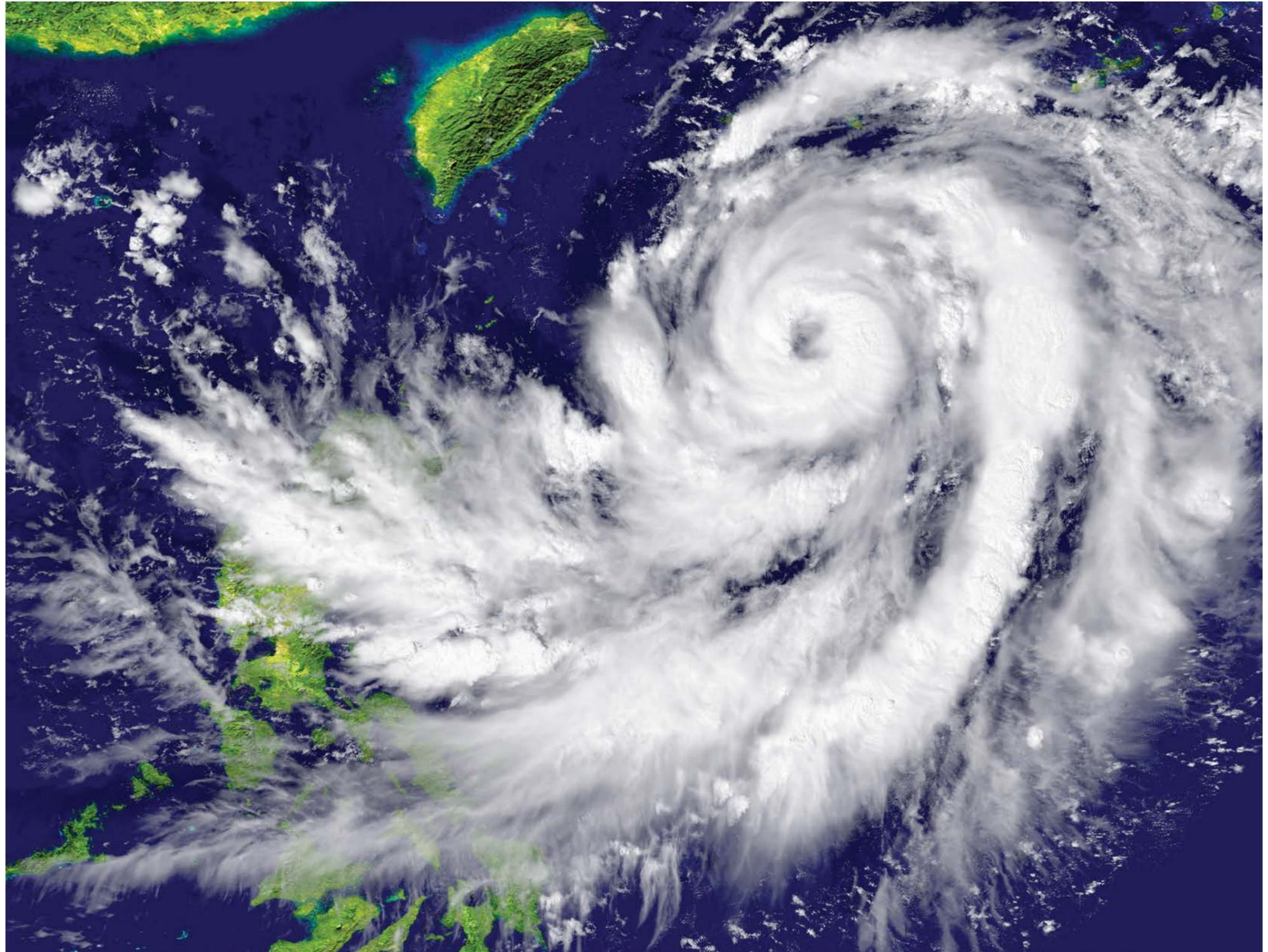
Establishing APDIM

Following the destructive Bam earthquake of 2003 in Iran, the Government of the Islamic Republic of Iran made a proposal for the establishment of a regional centre of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) for the development of disaster information management in the region.

Subsequent disasters in Asia and the Pacific, to name but a few, the Indian Ocean Tsunami of 2004, the Wenchuan earthquake in China, cyclone Nargis in Myanmar in 2008, the flood in Pakistan in 2010 and the earthquake and tsunami in Japan in March 2011, underscored the priority need for a regional centre for disaster information.

At its 67th Session in May 2011, ESCAP unanimously adopted Resolution 67/4 through which it decided to establish the Asian and Pacific Centre for the Development of Disaster Information Management (APDIM) in the Islamic Republic of Iran. In 2015, ESCAP reaffirmed through Resolution 71/11 its decision to establish APDIM and approved the statute of the Centre.

Following the conclusion of APDIM Host Country Agreement between ESCAP and the Government of the Islamic Republic of Iran on 30 January 2018, the Centre's premises were inaugurated in Tehran on 19 December 2018.



Objectives and Scope of Work

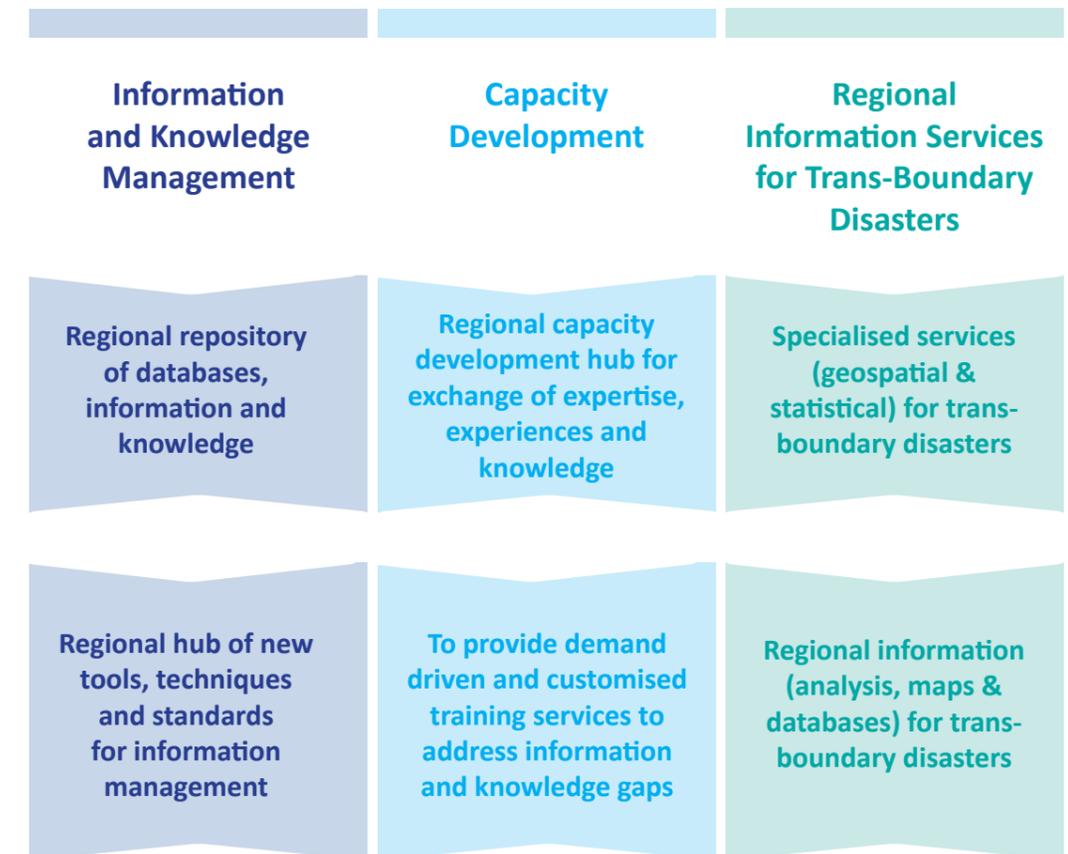
Based on APDIM statute, the objectives of the Centre are:

- a) To reduce human losses and material damages and the negative impact of natural hazards through enhancement of disaster information management in the Asia-Pacific region
- b) To strengthen the capabilities and capacities of countries and regional organizations in the fields of disaster information management and risk reduction and implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 and the Sustainable Development Agenda.
- c) To contribute to the enhancement of regional cooperation and coordination among countries and organisations in the region in the field of disaster information management aiming at socio-economic development of nations and achieving internationally agreed development goals, particularly those related to the Sendai Framework for Disaster Risk Reduction 2015-2030 and the evolving post-2015 development agenda.

In accordance with APDIM strategic programme of work, the scope of the Centre includes:

- a) **Information and knowledge repository:** APDIM serves as a knowledge and information repository for disaster-related data in the region.
- b) **Capacity development:** APDIM provides capacity development support, drawing on the experiences of ESCAP's other regional institutes to impart training and knowledge sharing.
- c) **Regional information services for trans-boundary disasters:** APDIM delivers information services and facilitates discussions for trans-boundary disaster risk reduction in the region. APDIM works to fill information gaps on the regional mapping of seismic risk; establish a sand and dust storm regional plan of action and alert system based on trans-boundary risk assessments; and set up an Asia-Pacific sand and dust storm network.

APDIM Key Areas of Work



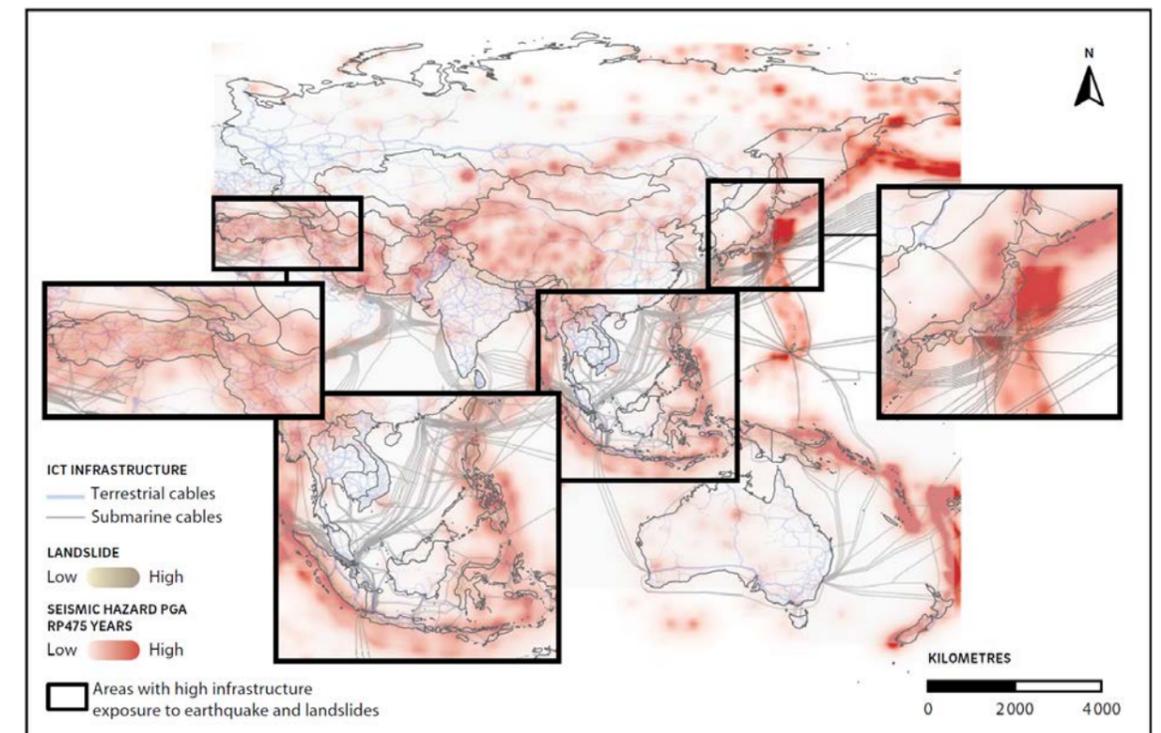


Information and Knowledge Repository

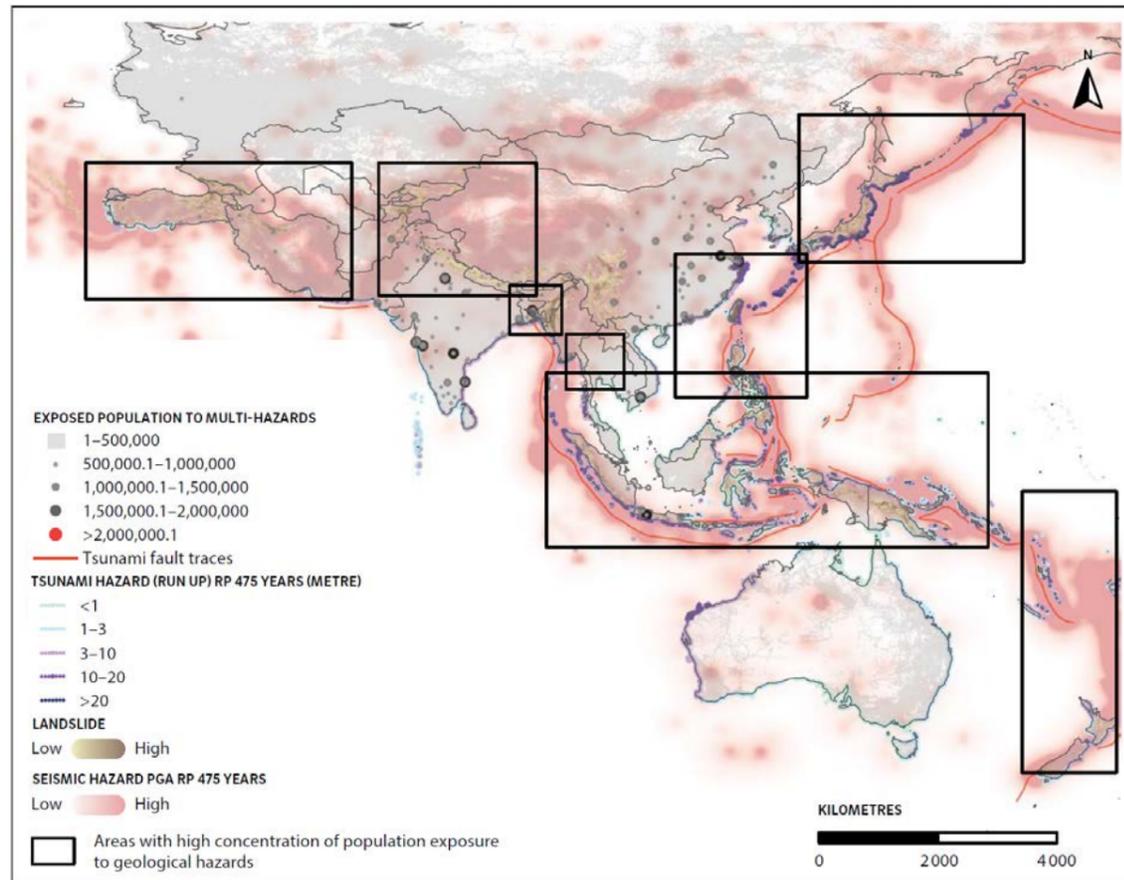
APDIM strives to bridge the gaps in information and knowledge, and in so doing deepen the understanding of complex drivers of disaster risk. APDIM functions as a regional facility to strengthen the science-policy interface.

One of the key methods of achieving this is to pool data, information, and statistics on disaster risk including those from emerging sources such as big data and geospatial information. Although increasingly such data is available in the public domain, there is scope for **a regional platform to add value in contributing to turn raw data into “actionable” risk-informed analysis** and knowledge to support decision-making processes.

The first step in any effective disaster risk reduction and management programme is access to multi-sectoral hazard information about physical and social vulnerabilities, and exposure of people and infrastructure to those hazards. Such information provides the necessary background and knowledge on the type, location, and degree of potential losses and damages and enables responsible institutions and policymakers to develop risk reduction measures in terms of preparedness, investments and, of course, response plans. Accurate communication and information management also contributes to the development of recovery plans for anticipated disasters.



This map shows the hotspots of ICT infrastructure including terrestrial and submarine cables exposure to hazards such as earthquakes and landslides. The online tool of the Asia-Pacific Disaster Risk Atlas provides similar outputs to the users with comparable layers. This map is extracted from the Asia-Pacific Disaster Report, 2019.
 Sources: ESCAP, based on Global Assessment Report on Disaster Risk Reduction (GAR) Risk Atlas, 2015; Global Risk Data Platform, 2013; Global Landslide Hazard; ESCAP, Asia Information Superhighway, 2018(b).
 Disclaimer: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.



The above map extracted from the Asia-Pacific Disaster Report 2019, illustrates the concentration of exposed population to multi-hazards including tsunami, landslide and seismic risk. Similar maps will be included in the Asia-Pacific Disaster Risk Atlas online tool.
 Sources: ESCAP, based on Global Assessment Report on Disaster Risk Reduction (GAR) Risk Atlas, 2015; Global Landslide Hazard Distribution v1, 2000.
 Disclaimer: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.

Asia-Pacific Disaster Risk Atlas: to address datasets relating to natural hazards and

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https://www.yunbaogao.cn/report/index/report?reportId=5_748



Asia-Pacific Disaster Report: APDIM and ESCAP published the Asia-Pacific Disaster Report (APDR) in August 2019. The Asia-Pacific Disaster Report 2019, applying amongst others APDIM's Risk Atlas data, shows how **disasters are closely linked to inequality and poverty, each feeding on the other and leading to a vicious downward cycle.** It assesses the scale of losses across the disaster 'riscscape' and estimates the amounts that countries would need to invest to outpace the growth of disaster risk. It shows the negative effects of disasters on economies in the region and where investments are more likely to make the biggest difference.

While this will require significant additional finance, the report shows the amounts are small compared to the amounts that countries in the region are currently losing due to disasters. The report demonstrates how

countries can maximise the impact of their investments by implementing a comprehensive portfolio of sectoral investments and policies that jointly address poverty, inequality and disaster risk. The report showcases examples from the region of innovative pro-poor disaster risk reduction measures and risk-informed social policies that are breaking the links between poverty, inequality and disasters. Similarly, **the report explores how emerging technologies such as big data and digital identities can be used to ensure the poorest and most vulnerable groups are included in these policy interventions.**

Ultimately, the report argues that countries will have to invest more in the measures appropriate to their own circumstances, but that they should also work more closely together to unlock the potential of regional cooperation.

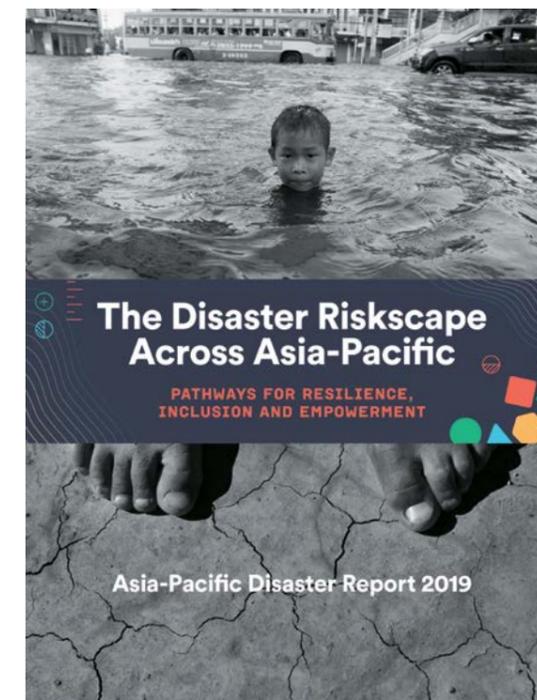
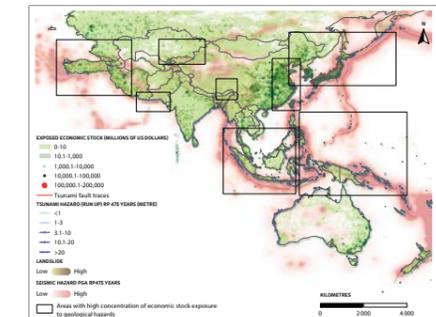


FIGURE 1-10 Concentration of exposed economic stock to geological hazards



Sources: ESCAP based on Global Assessment Report on Disaster Risk Reduction (GAR) Risk Atlas, 2015; Global Landslide Hazard Distribution v1, 2000.
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 Note: PGA RP 475 years is the seismic hazard with a return period of 475 years expressed in peak ground acceleration. This means that a level of ground shaking is expected to occur once in 475 years. Tsunami hazard RP 475 years is a tsunami hazard run-up height with a return period of 475 years.