

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.

# **ANNUAL REPORT**

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

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Cover: Hashem Shakeri, Dashtiari County, Sistan and Balouchestan Floods, January 2020.

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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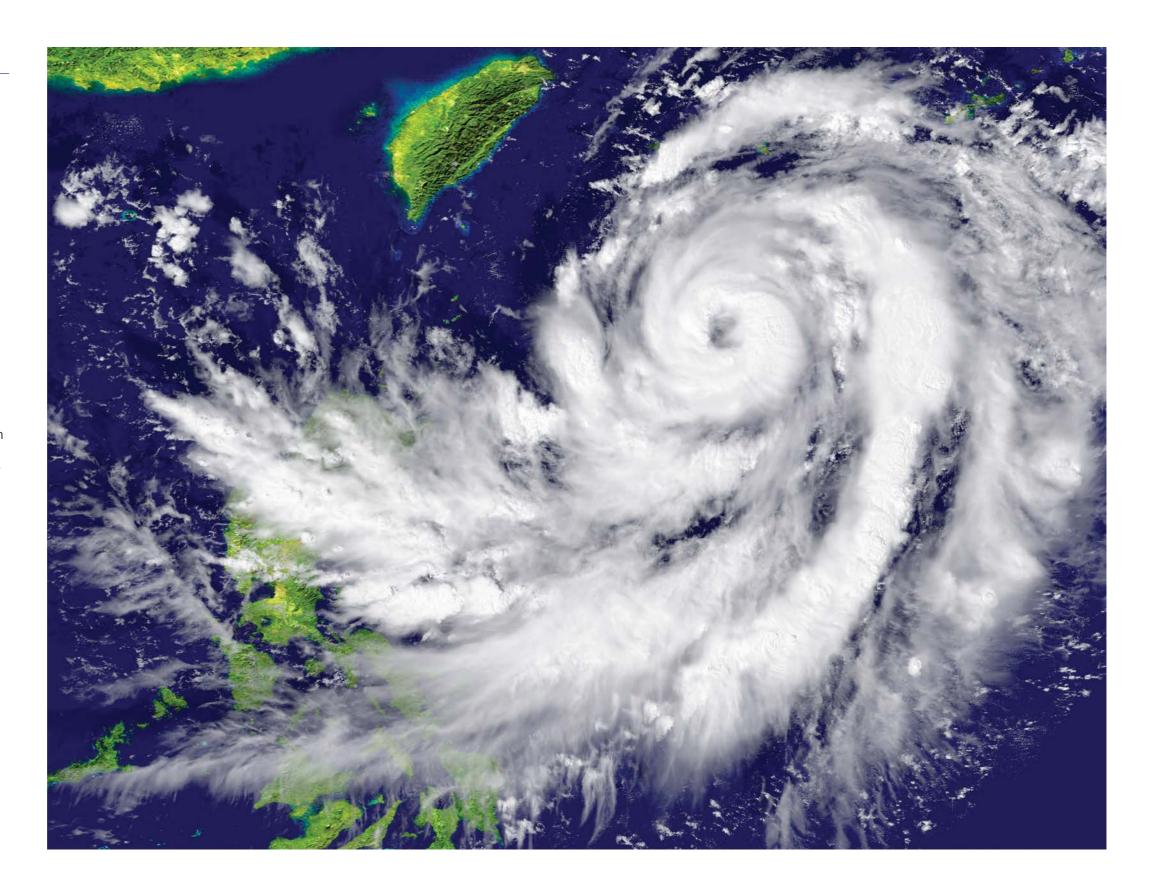
### **Establishing APDIM**

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 67<sup>th</sup> 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.



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## **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 transboundary 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 Management

**Capacity Development** 

Regional
Information Services
for Trans-Boundary
Disasters

Regional repository of databases, information and knowledge

Regional capacity development hub for exchange of expertise, experiences and knowledge

Specialised services (geospatial & statistical) for transboundary disasters

Regional hub of new tools, techniques and standards for information management

To provide demand driven and customised training services to address information and knowledge gaps

Regional information (analysis, maps & databases) for transboundary disasters



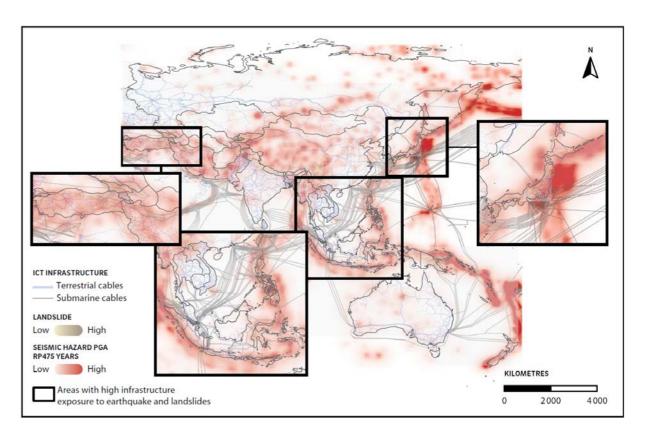


## **Information and Knowledge Repository**

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.

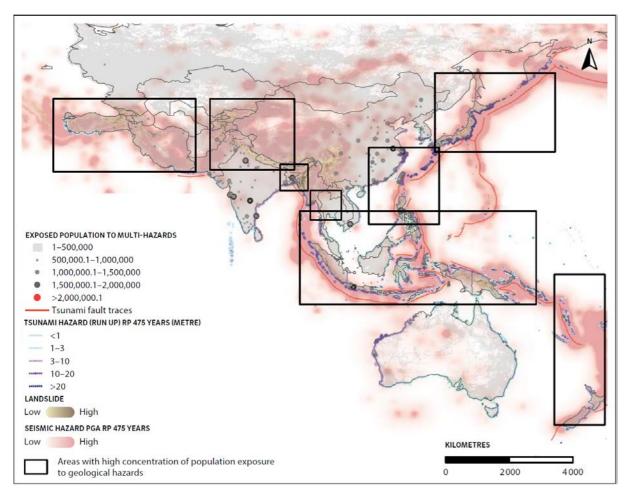
The first step in any effective disaster risk reduction and management programme is access to multi-sectoral hazard information about physical and social vulnerabilities, and exposure of people and infrastructure to those hazards. Such information provides the necessary background and knowledge on the 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 infrastructure investment needs and to provide information and necessary guidance for policymakers to make risk-informed decisions, APDIM initiated the development of Asia-Pacific Disaster Risk Atlas. The Atlas is developed to help the countries in the region to improve the understanding, assessing and measuring disaster risks in a multi-hazard and multi-sector manner. The Atlas functions as an online tool containing various geospatial

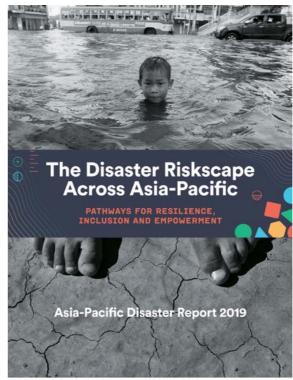
datasets relating to natural hazards and exposure, which users can select to view as layers as on a base map of the region. Examples of hazards layers include historical data on cyclone storm tracks and future projections of drought. Users can compare these layers to various forms of infrastructure such as power plants as well as socio-economic data such as population density, to determine how exposure varies throughout the region. Users can also access basic analysis of the data they have selected, through the dashboard.

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 'riskscape' 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.

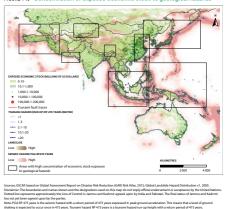
While this will require significant additional finance, the report shows the amounts are small compared to the amounts that countries in the region are currently losing due to disasters. The report demonstrates how

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.







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The Asia-Pacific Disaster Report 2019

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# **Capacity Development**

APDIM works to expedite the development of the capacities of countries and organisations of the region by facilitating the exchange of expertise, experiences and knowledge in disaster information management. APDIM provides technical services and support to Member States and institutions of the region through various mechanisms, including North-South and South-South cooperation.

Since 2016, thematic sessions on disaster information and knowledge management, disaster risk reduction, combating desertification with emphasis on dust haze and sand storms, seismic risk reduction have been held by APDIM and its partners. Highlevel participants from countries in Asia and the Pacific such as Cambodia, India, Islamic Republic of Iran, Kyrgyzstan, Maldives, Nepal, Pakistan, the Philippines, Sri Lanka, Turkey and other countries in the region benefited from these on-going capacity building programmes. All these sessions resulted in building human, institutional and technical capacities and strengthening regional and South-South cooperation.<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> First, Second, Third and Fourth session of the Governing Council of APDIM from 2016 to 2020 in New Delhi, Tehran and Islamabad; APDIM's scoping mission for micro-zonation capacity development - Thimphu, 10-13 September 2017; Expert consultation on disaster information and knowledge - Bangkok, 9-11 October 2017; Regional workshop on seismic risk reduction - Tehran and Bam, 9-11 December 2017; High-level regional conference on information management for disaster risk reduction and resilience - Tehran, 30-31 January 2018; Side-event on disaster information management and sustainable development - Bangkok, 15 May 2018; Side event on building resilience to slow-onset disasters: implications for regional cooperation – Ulaanbaatar, 3-6 July 2018; Expert group meeting of UN Coalition to combat sand and dust storms on regional plan of action for information sharing and capacity development in Asia and the Pacific - Bangkok, 27-28 August 2019; Experts consultation on regional cooperation for building resilience to slow-onset disasters including sand and dust storms and information management for trans-boundary disasters in Asia and the Pacific - Tehran, 5-6 November 2018; Workshop to develop a methodology for a regional risk assessment for sand and dust storms - Geneva, 30-31 October 2019; High-level expert consultation on disaster information management - Tehran, 18 -19 December 2019. High-level expert consultation on disaster information management - Islamabad, 19-20 February 2020.

Further to the major earthquake that hit Nepal in April 2015, in October of the same year experts from Iran and APDIM conducted a detailed risk study of Nepal and provided technical assistance by transferring their experience from the Bam earthquake in the retrofitting of cultural monuments and heritage.

In line with APDIM priority for regional information services for trans-boundary disasters and capacity development in the region, APDIM and its partners supported the Government of Nepal by sharing technical knowledge and lessons learned with the policymakers of Nepal. The national recovery and reconstruction strategy ensured resiliency, sustainable recovery and reconstruction in building back better.

In 2017, APDIM and its partners in the Government of the Islamic Republic of Iran and Bhutan provided technical assistance to Bhutan seismic risk reduction efforts by contributing to the **enhancement of seismic micro-zonation** through the exchange of information and knowledge to understand the gaps and needs of Bhutan for seismic risk reduction. For structure improvements, geotechnical studies and databases for land use planning in urban areas and landslide databases were used.

In September 2018, APDIM contributed to the promotion of scientific exchange and collaborative efforts in the establishment of effective early warning systems for different hazards such as the one for tsunami supported by UNESCO's Intergovernmental Oceanographic Commission (IOC). The exercises gave Indian Ocean countries an opportunity to test standard operating procedures, communities' tsunami preparedness and evacuation procedures and provided a platform for communication links between stakeholders. Enhancement of tsunami awareness and

preparedness in coastal areas of Iran was achieved by leading this exercise.

In April 2019, in partnership with UNDP, UNDRR, UN Iran Country Team and partners from the Government of the Islamic Republic of Iran including Planning Budget Organisation, National Disaster Management Organisation and Road, Housing and Urban Development Research Centre, APDIM trained experts and government authorities on the Sendai Framework Monitoring and disaster loss and damage assessment. The training resulted in raising awareness on the relevance and benefits of collecting and using disaster information, sharing experiences; as well as reinforcing national technical capacities to collect and maintain damage and loss database through DesInventar.

After the floods in Iran in 2019, APDIM contributed technically to the joint efforts of the Government of the Islamic Republic of Iran and UN agencies in conducting the Post Disaster Needs Assessments (PDNA) for the first time in the country. This sharing of technical knowledge and contribution on the economic impact assessment of the PDNA resulted in strengthening flood risk management capacities of the country in leading and managing the recovery planning and reconstruction phases. The PDNA also enhanced disaster preparedness for effective response to build back better, one of the priorities for action of the Sendai Framework.





In March and April 2019, Golestan, Fars, Khuzestan, Lorestan and other provinces in Iran were hit by widespread floods. Photo shows impact in Khuzestan province.

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In October 2019, APDIM in collaboration with University of Tehran and the "Special Reporting Committee on Iran Floods 2019" provided the opportunity for national and regional institutions, experts and professionals to exchange ideas, knowledge, and experiences on effective flood management in line with South-South and regional cooperation in the area of flood risk management Recommendations for expansion of regional cooperation on flood risk management were among the outcomes of this workshop.

# **Regional Consultative and Expert Meetings**

In 2018, APDIM led in Tehran a high-level expert consultation on regional cooperation for combating sand and dust storms in Asia and the Pacific. The key objectives of the highlevel expert consultation included reviewing ESCAP's study on regional cooperation and examining its feasibility for implementation based on national, regional and global efforts. It also took into consideration the recent experiences of the country in advancing sand and dust storm mitigation and adaptation; explored the possibilities for expanded partnerships and deliberated on the form and contents of the Asia-Pacific sand and dust network.

Information and Communication Technology and Disaster Risk Reduction Division of ESCAP and APDIM organised a session on disaster information management and sustainable development in May 2018 in Bangkok. During this event, the Commission gained information





Islamabad, Pakistan.

and knowledge on the latest development of disaster information management and its linkage with sustainable development in Asia and the Pacific. Furthermore, the Commission was informed of the achievements of APDIM and the findings of the report on "Sand and Dust Storms in Asia and the Pacific: Opportunities for Regional Cooperation and Action".

At the Asian Ministerial Conference on Disaster Risk Reduction held on 3-6 July 2018 in Ulaanbaatar, Mongolia, APDIM in collaboration with the Government of Mongolia and the Government of Islamic Republic of Iran conducted a side event on "building resilience to slow-onset disasters: implications for regional cooperation". This session provided an opportunity for countries to learn from the experiences of Mongolia and the Islamic Republic of Iran in managing slow-onset disasters, including drought, desertification and sand and dust storms. Also, a concept for a partnership network to strengthen resilience to slow-onset disasters was presented and the case for enhancing regional cooperation as a complement to national and local actions around slow-onset disasters in line with Sendai Framework was discussed.

High-level Expert Consultation on Disaster Information Management was organised by APDIM in December 2018 in Tehran. This meeting was attended by senior officials and experts from ESCAP member countries, UNDRR, UNDP, Global Centre for Disaster Statistics (GCDS) and Japan International Cooperation Agency (JICA). As a result of this consultation, closer ties were forged at technical level amongst the participants in the area of disaster information management, and development and management of disaster loss databases in Asia and the Pacific. The importance to conduct a review of

regional and national data availability and

information management capacity to deal with sand and dust storms was emphasised at the Expert Group Meeting to Combat Sand and Dust Storms convened by APDIM in the margin of the 6<sup>th</sup> Session of ESCAP Committee on Disaster Risk Reduction in August 2019. During this meeting, a regional plan of action for information sharing and capacity development in Asia and the Pacific was discussed. Participants also underscored the importance of conducting risk assessment in order to develop a regional plan to combat the negative impact of sand and dust storms in the region with a view to also include options for regional and sub-regional initiatives as well as action at national level aligned with the cooperation framework of the United Nations in the respective countries in the region.

In February 2020, senior officials and experts gathered during the high-level expert consultation on disaster information management in Islamabad and underscored the urgent need to strengthen regional cooperation and partnerships on transboundary disasters in Asia and the Pacific, including through the development of a regional plan of action based on evidence from the long-term impact of sand and dust storms, as well as, to support countries in their progress reports through international mechanisms, such as the Sendai Monitoring Framework and providing additional guidance to incorporate impact from hazards such as sand and dust storms through Sendai Monitoring Report. The meeting was organised by APDIM in close collaboration with the National Disaster Management Authority of Pakistan. Key outcomes from the expert consultation fed into deliberations at the Fourth APDIM Governing Council meeting, which was also held in Islamabad on 20 February 2020. The Governing Council reviewed APDIM's progress over the year and approved its programme of work for 2020.

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### **Regional Cooperation on Trans-Boundary Disasters**

One of APDIM's key priorities is to address trans-boundary hazards by facilitating strategic partnerships and sharing of expertise, including the development of shared analysis and policy to reduce the risk and negative impact of transboundary disasters.

# Sand and dust storms present a formidable challenge to sustainable development,

particularly in arid and semi-arid regions.
Globally, more than 150 countries are affected directly by such storms, with 45 countries classified as sand and dust storms source areas.

Dust emissions have affected the East, North-East, South, South-West and Central Asia and the Pacific for a long period of time. Since sand and dust storms are hazards that occur across national borders, an effective policy is required for international cooperation at regional and global levels.

Following United Nations General Assembly Resolution 70/195, which acknowledged the role of the UN system in promoting international cooperation to combat sand and dust storms, ESCAP Resolution 72/7 requested the secretariat to promote regional and interregional networking on sand and dust storms. During the first session of APDIM Governing Council, it was highlighted that APDIM can serve as a repository for a geospatial database on sand and dust storms in the ESCAP subregions. The Centre was encouraged to work closely with the United Nations Convention to Combat Desertification (UNCCD), United Nations Environment Programme (UNEP) and World Meteorological Organization (WMO) on related monitoring, assessment and evaluation; including the Global Assessment of Sand and Dust Storms initiative.

Tehran Ministerial Declaration in July 2017 agreed to enhance regional and international cooperation and partnerships to mitigate and cope with the adverse effects of sand and dust storms. The Declaration recognised the role of APDIM in developing human and institutional capacities in disaster information management including Sand and Dust Storm Warning Advisory and Assessment System (SDS-WAS).

The International Conference on Combating Sand and Dust Storms was hosted by the Department of Environment and the Ministry of Foreign Affairs of the Islamic Republic of Iran, with the cooperation of the Department of Economic and Social Affairs of the United Nations Secretariat, the UNEP and the UNDP in collaboration with other relevant UN entities in July 2017.

In 2019, APDIM has worked closely on this issue with the United Nations Environment Programme (UNEP), the World Meteorological Organisation (WMO) and it's Sand and Dust Storm Warning Advisory and Assessment System (SDS-WAS) as well as the Department of Environment of the Government of Islamic Republic of Iran.

In 2019, APDIM also published the report on "Sand and Dust Storms in Asia and the Pacific: Opportunities for Regional Cooperation and Action". The report described potential drivers, risk of problem areas and identified gaps in information, cooperation and policy action to enhance the science-based understanding of the phenomenon of sand and dust storm among policymakers. The report aimed at supporting the development of adaptation and mitigation policies related to sand and dust storm at the regional and national levels.

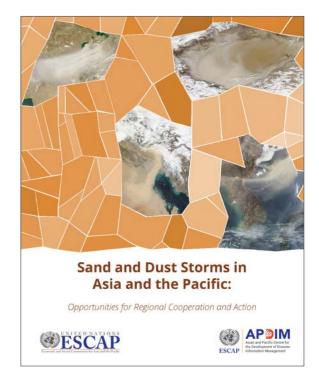
ESCAP-APDIM is one of the members of

the United Nations Coalition on Combating Sand and Dust Storms and co-leads the working group on "mediation and regional collaboration". The mandate of the coalition is to promote and coordinate a collaborative United Nations system response to the growing issue of sand and dust storms, on local, regional, and global scales.

The Coalition also ensures that unified and coherent action is taken to facilitate exchange of knowledge, data, and best practices among Coalition members to promote effective and coherent action on sand and dust storms across the UN-system, encourage and promote collaboration on initiatives and actions within the Members of the Coalition on sand and dust storms, including advocacy and funding initiatives, facilitate dialogue and collaboration amongst affected countries and the UN system in addressing sand and dust storms issues collectively. It also facilitates the capacity building of Member States, raise their awareness and enhance their preparedness and response to sand and dust storms in affected regions.

At the Steering Committee meeting of all Sand and Dust Storm Warning Advisory System (SDS-WAS) Nodes (Pan America, North Africa, Europe, Middle East and Asia) organised by the China Meteorological Agency in November 2019 in Hangzhou, APDIM chaired a session on the work of UN Sand and Dust Storm Coalition. This meeting also discussed a methodology to assess sand and dust storms risk in the long term in Asia and the Pacific.

APDIM and WMO organised a technical workshop in Geneva on 30-31 October 2019 to develop a methodology for a regional risk assessment on sand and dust storms. The meeting covered three areas (i) land issues (land degradation, desertification, and water



resource management); (ii) weather-related issues, and (iii) vulnerability and exposure. The workshop discussed various methodologies for sand and dust storms risk assessment including probabilistic and deterministic methods.

APDIM also participated in the United Nations Convention to Combat Desertification (UNCCD) COP14 in September 2019. In this event, APDIM presented its role and activities in sand and dust storms risk reduction and announced its will and preparedness to contribute substantially to the development of Sand and Dust Storms Compendium.

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## **Way Forward**

APDIM will continue to focus on the promotion and expansion of regional cooperation and capacity building on disaster information management in the three key service areas of its work: information management and repository, capacity development and regional information services for trans-boundary action.

APDIM will work on the implementation of key recommendations from the APDIM Review currently underway to ensure **APDIM's efforts in the field of information management and repository** are fully aligned with the Commission's decisions. This will include convening a "theory of change" workshop with key ESCAP and external partners.

APDIM will also conduct regional and national-

level (in at least five countries) assessment of the "Supply and Demand for Disaster Risk Information Management" in Asia and Pacific to ensure APDIM's future programmes are fully aligned with countries own's demands and capacities. APDIM will also act on specific requests from countries in the region to provide technical advice on disaster information management issues such as national risk assessment, especially when these could be helpful in further informing disaster risk management efforts for other countries in the region.

Based on the outcome of the APDIM Review and the findings of the study on the "Supply and Demand for Disaster Risk Information Management", APDIM will target its **Capacity**  **Development** efforts in 2020 to identify at least two specific areas of focus and develop at least one training module accordingly in the course of the year.

In the area of regional information services for trans-boundary disasters, APDIM, in collaboration with countries in the region, will work on a regional long-term assessment of the hazardous components of sand and dust storms in key affected areas in Central and Southwestern Asia. Building on the evidence-based recommendations of the regional risk assessment, APDIM will facilitate the development of a regional plan of action for sand and dust storms, including the identification of key mitigation trans-boundary action. The regional plan of action will be

developed through the Sand and Dust Storm
Partnership Network and in consultation with
key partners in the UN Coalition on Sand and
Dust Storms, including UNEP and UNCCD.
APDIM will also continue to build partnerships
with other relevant organizations, such as
the World Meteorological Organization to
strengthen collaboration amongst countries
in the region on disaster information
management issues and strengthen the
services provided, including the development
of impact-based forecasting and alert systems
on sand and dust storms.

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