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

ANNUAL REPORT 2020

ESCAP

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

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The Economic and Social Commission for Asia and the Pacific (ESCAP) is the most inclusive intergovernmental platform in the Asia-Pacific region. The Commission promotes cooperation among its 53 member States and 9 associate members in pursuit of solutions to sustainable development challenges. ESCAP is one of the five regional commissions of the United Nations.

The ESCAP secretariat supports inclusive, resilient and sustainable development in the region by generating action-oriented knowledge, and by providing technical assistance and capacity-building services in support of national development objectives, regional agreements and the implementation of the 2030 Agenda for Sustainable Development.

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ANNUAL REPORT 2020

United Nations Publication

Printed in Tehran

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Message from the Director

As the COVID-19 pandemic ravaged across the world, Asia and the Pacific continued to be exposed to climate-related and geological hazards. In 2020, disasters affected over 75 million people and caused almost 6000 deaths in the region. Of these deaths, floods contributed to 68 per cent, followed by tropical cyclones (16 per cent) and landslides (15 per cent).

In 2020, the floods in India, Japan and China, cyclone Amphan in India and Bangladesh and the earthquakes in Turkey, China, the Islamic Republic of Iran, the Philippines and India have proven that disaster information management is more important than ever in all disaster risk reduction and management cycles.

It is critical to strengthen our common understanding of risk. We can do so by enhancing capacities in recording, reporting, accessing, and sharing of data and utilizing it for risk analysis. Risk informed decisions improve preparedness and response efforts and, equally important, inform investments to put disaster risk reduction, particularly disaster information management, at the heart of development planning, if we want development to be truly sustainable.

Throughout 2020, APDIM remained committed to its mandate and delivered its programmatic activities under its three key service areas. This report highlights some of the achievements made by APDIM working with Governments at the national and regional level; with partners in regional and international organizations; ESCAP secretariat divisions and regional institutions and other stakeholders. I would like to extend my sincere appreciation to all partners and stakeholders who collaborated with us. Connectivity, inclusion, and regional cooperation have been the core of all our activities.

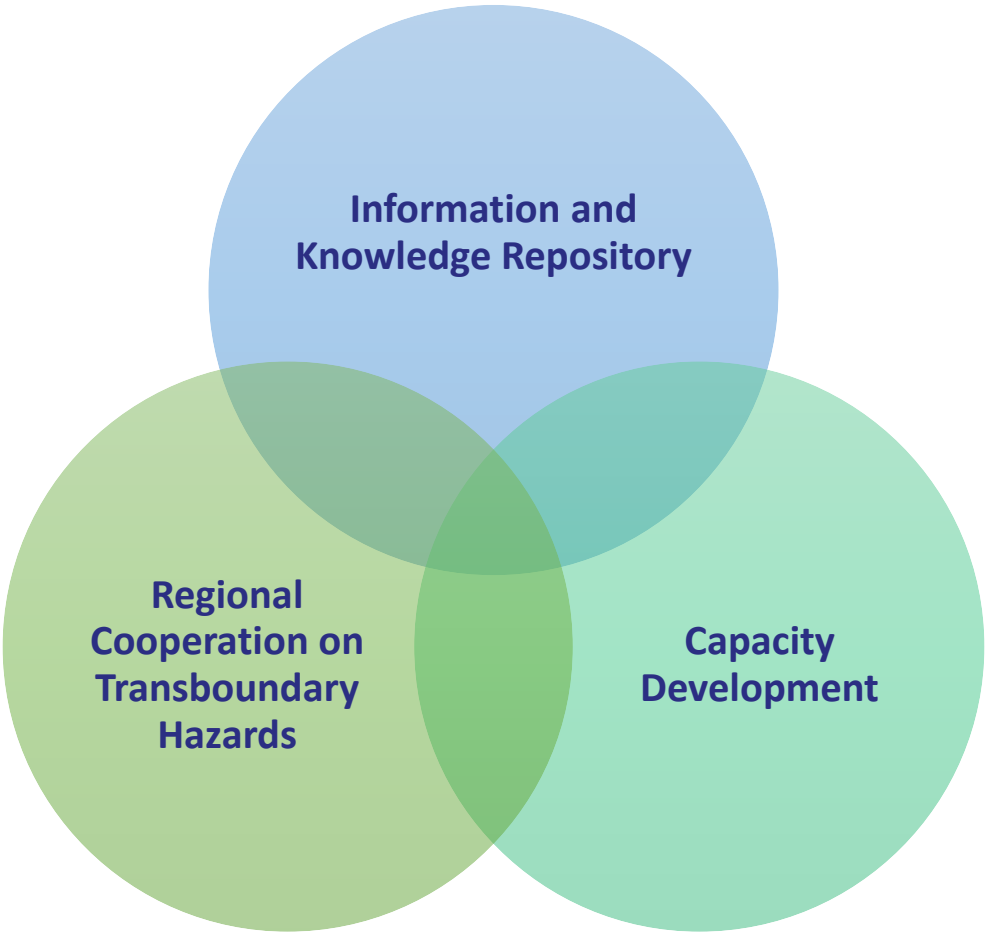
I express my sincere thanks to the Government of the Islamic Republic of Iran, APDIM host, for its contribution towards APDIM's work – both in-kind and financial. I thank our Governing Council members for trusting APDIM's essential role, as a regional institution of the Economic and Social Commission for Asia and the Pacific, in providing Member States with key services to better apply disaster risk information management to risk reduction policies. In closing, I wish to thank the APDIM team, without whose dedication and commitment in such a complex year for everyone, none of the results described in this report would have been possible.

Letizia Rossano
Director
Asian and Pacific Centre for the Development of Disaster Information Management
United Nations Economic and Social Commission for Asia and the Pacific

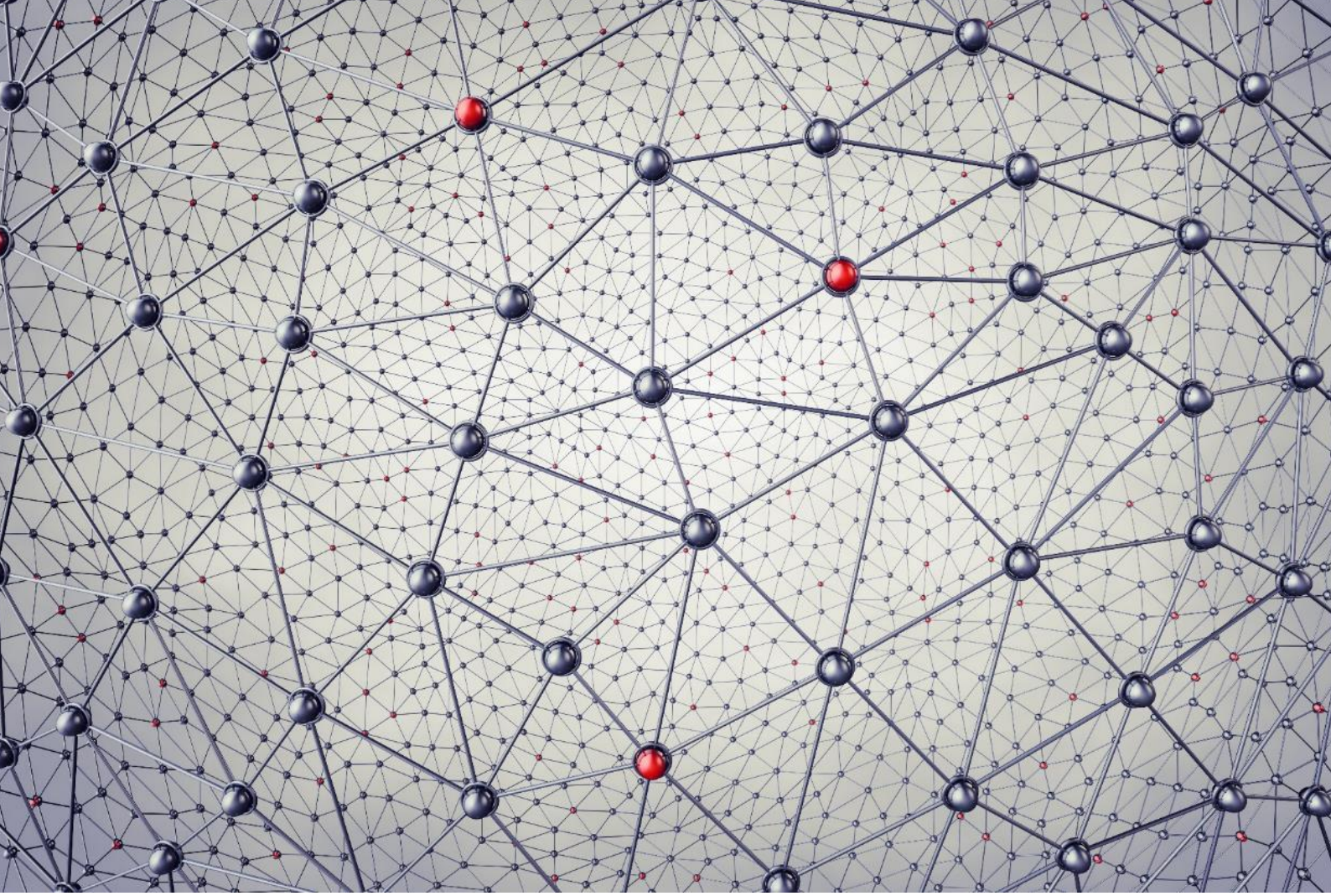
Highlights

The second Governing Council of APDIM in 2018 adopted **Information and Knowledge Repository**, **Capacity Development** and **Regional Cooperation on Transboundary Hazards** as the three key service areas for the Centre around which the activities for the period 2019-2021 were structured. The key service areas were aligned with the ESCAP strategic framework for disaster risk reduction subprogramme five which aimed at enhancing information and communications technology and disaster risk reduction and management.

The activities of the Centre expected to contribute **to strengthening regional cooperation** in **disaster risk reduction for inclusive and sustainable development** and **improved knowledge and awareness** of the Member States of **effective policies and strategies in disaster risk reduction** in the region for inclusive, sustainable and resilient development.



APDIM Key Service Areas



Key Service Area 1: Information and Knowledge Repository

As the specialised regional institute for disaster information management in Asia and the Pacific, APDIM is fast approaching to launching its regional risk data platform to serve as an information and knowledge repository in the region. This service contributes to the shared goal of disaster risk reduction through disaster information management.

To lay a solid foundation for the establishment of the upcoming regional risk data platform in line with supporting Member States in the development of disaster-related statistics for the Sendai Framework Monitoring, APDIM has been actively engaged in existing and evolving disaster information management initiatives and mechanisms in the region. In 2020, APDIM conducted a detailed regional needs assessment and examined existing resources and capacities in disaster information management in consultation with potential partners, relevant UN entities and regional organizations.

Understanding and Addressing Gaps and Needs for Disaster Risk Information and Data Management Platforms

Understanding hazard and risk in all its dimensions is fundamental for designing effective risk reduction measures and development plans that will not contribute to increased risk. In the Sendai Framework for Disaster Risk Reduction 2015-2030, understanding disaster risk is the first priority for action: "*policies and practices for disaster risk management should be based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics and the environment*."

During the decade following the adoption of the Hyogo Framework for Action 2005-2015, substantial progress was made in advancing science and technology, developing tools for hazard and risk assessment, and producing risk information at different levels and scales across the world. Nevertheless, globally, including in Asia and the Pacific region, there is a persistent gap at regional, national, and sub-national levels when it comes to understanding risk, accessing the available risk information, and using the information to inform resilience policies. More importantly, the challenge remains for decision-makers and policy designers to use the available information in policy design and investment.

In 2020 APDIM published the **Preliminary Assessment of the Gaps and Needs for Disaster Risk Information and Data Management Platforms in Asia and the Pacific Region** to assess current capacities, available services, and needs of the regional and national stakeholders for disaster risk information and risk data management in Asia and the Pacific region. The assessment provides a set of suggestions for international and regional support to enhance risk data management and use of risk information in disaster risk reduction at the national level. The suggestions, among others, were used as inputs into APDIM's multiyear strategic programming process for designing its programmes and services targeting current and future demands of stakeholders in the region and sub-regions.

The assessment used a combination of online review datasets and data platforms, online surveys, and interviews to conduct research on available hazard and risk information at the regional and sub-regional level and to understand the needs and challenges faced by national and regional disaster risk reduction practitioners.

The assessment was done at regional and national levels. Four pilot countries were selected based on specific criteria and reviewed more in depth for the report, these were Bangladesh, the Islamic Republic of Iran, Nepal and Tajikistan.

“APDIM aimed at having a better understanding of the supply and the demand for disaster risk information management in the region to inform the development of its new multi-year programme of work. APDIM plans to work with countries who ask for technical support to facilitate the sharing of data at national level in a way that fits that particular country’s needs in disaster risk governance and disaster risk information management.”

Director of APDIM, Ms. Letizia Rossano at virtual discussion on Disaster Risk Information Management in Asia and the Pacific: Developing Capacities and Enhancing Collaboration, 25 January 2021

Findings on Challenges, Supply Gaps and Needs for Disaster Risk Information and Data Management Platforms

There is a significant need to increase the use and application of risk information in policy and planning at the national and regional level.

Countries need support to access and analyse existing data and to conduct new hazard and risk assessment.

Countries need support for enhancing risk data management and governance.

Using the Sendai Framework as the benchmark exposes significant gaps in the availability of many types of risk information.

There are major gaps in hazard and risk data availability for droughts and sand and dust storms.

Cross-boundary collaborations need the support of regional institutions.

Risk information developed by international entities is a valuable resource but not without its challenges.

There is not one central platform for accessing risk data in Asia and the Pacific and establishing such a platform could benefit national and regional actors.

Suggestions for the Way Forward: Supporting Countries in Understanding Risk for Disaster Risk Reduction

The shocks and stresses from disaster and climate risk are a threat to the social and economic well-being of people in the short term and can set back the gains from years of investments in development and achievement of long-term goals. The objective of disaster risk management and of building resilience is to ensure society as a whole would bounce back from the shock and get back on the same track of socio-economic growth in a timely manner. It is worth recalling here that resilience is defined as the ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions (UNDRR Terminology on Disaster Risk Reduction 2009). Risk assessments and data management platforms are tools to serve the process of identifying, designing, and implementing disaster risk management measures.

In all the suggestions listed below, the successful outcome is contingent on keeping a sharp focus on the stakeholders' objectives in building disaster resilience at the national and local levels as the main objective.

To reduce the risk of disasters, the context needs to be identified, the characteristics need to be understood and the knowledge should be applied to our work.

For enhancing risk data and information management in Asia and the Pacific region Assessment of the Gaps and Needs for Disaster Risk Information and Data Management Platforms in Asia and the Pacific Region provided the below suggestions.

- Facilitating dynamic dialogue, collaboration, and co-design of initiatives and products by convening multidisciplinary teams from national, regional, and international entities.

- Supporting national entities to enhance national risk data governance and establish a national risk data platform when the required conditions exist.

- Supporting national and sub-national science and policy stakeholders in conducting risk assessments, understanding risk information, and applying it in policy and planning.

- Mobilizing global and regional expertise and resources to move towards closing the gaps in hazard and risk data available for disaster risk reduction.

- Investing in the design, implementation, and maintenance of one regional risk data platform.

"Through this study (the Preliminary Assessment of the Gaps and Needs for Disaster Risk Information and Data Management Platforms in Asia and the Pacific Region)**, Nepal learned the importance of having risk data hosted at the national level and understood the need to look at federal, provisional local and district levels."**

Chief Executive of the National Disaster Risk Reduction and Management Authority of Nepal, Mr. Anil Pokhrel at the virtual discussion on Disaster Risk Information Management in Asia and the Pacific: Developing Capacities and Enhancing Collaboration, 25 January 2021

The assessment reconfirmed the persisting challenges in using risk information in public policies and plans due to many factors with the following as the key ones:

- Disaster risk reduction and climate change adaptation are yet not integrated into all sectors' policy design, planning, and operations. This means the use of hazard and risk assessment is not well established and embedded in the planning processes.

- The weakness in connections and relationships between science and policy entities is a barrier to aligning the objectives, approaches, and communication of risk information for risk reduction policies.

- The majority of the risk assessments conducted by technical institutions are focused on the objective of research and scientific advancement and their success is measured by indicators that are commonly used in the research and academia (i.e. the published articles). These objectives are not well aligned to understand disaster risk to do effective disaster risk management in the real world with limited resources and capacities especially in developing countries.

- The majority of risk assessments do not diagnose the causes of risk, are not accompanied by risk reduction options and do not evaluate the performance of those options including the risk reduction opportunities. This means the audience of risk assessment results is left with an unanswered question of: What can we do?

It is essential to dedicate financial and technical resources to enhance mainstreaming disaster risk reduction into planning and operations in various sectors and to develop methods and capacities for understanding and using risk information by planners, policy designers, and decision-makers.

The assessment was commissioned by APDIM to Ms. Sahar Safaei, Director and Principal Consultant at Sage on Earth Consulting Ltd who is the lead author of the report.

Experts from the following institutes actively contributed to the preliminary assessment: Aga Khan Agency for Habitat, International Water Management Institute (IWMI), Asian

Development Bank (ADB), Asian Disaster Reduction Centre (ADRC), Asian Institute of Technology (AIT), Bangladesh Bank, Branch of Aga Khan Agency for Habitat in Tajikistan, Department of Environment (DoE) of the Islamic Republic of Iran, Economic Cooperation Organization (ECO), Global Earthquake Model Foundation (GEM), Institute of Earthquake Engineering and Seismology (IIEES), National Disaster Management Organization (NDMO) of the Islamic Republic of Iran, National Society for Earthquake Technology, Nepal (NSET), Natural Disasters Research Institute (NDRI) of Iran, Nepal Centre for Disaster Management, Nepal National Disaster Risk Reduction and Management Authority (NDRRMA), Plan and Budget Organization (PBO) of the Islamic Republic of Iran, UNESCO National Chair on Natural Disasters Management Natural Disasters Research Institute, United Nations Resident Coordinator Office and United Nations Office for the Coordination of Humanitarian Affairs in Tajikistan, United Nations Development Programme Bangkok Regional Hub, United Nations Resident Coordinator Office in Bangladesh, United Nations Resident Coordinator Office in Nepal, World Health Organization (WHO), ICT and Disaster Risk Reduction (IDD), Statistics and Environment and Development Divisions of ESCAP.

APDIM used the findings and suggestions from this assessment for strengthening and escalating its succeeding programmatic activities to ensure that the priority requirements of the countries in the region are considered and all Member States of ESCAP can benefit from the services of the Centre.

Key Service Area 2: Capacity Development

APDIM disaster information management capacity development activities including training and technical support contribute to the global efforts of the international community to reduce and manage disaster risk. Capacity development activities of APDIM include training of governments officials on disaster information management with a particular focus on disaster statistics and the Sendai Framework Monitor together with enhancing institutional capacities.

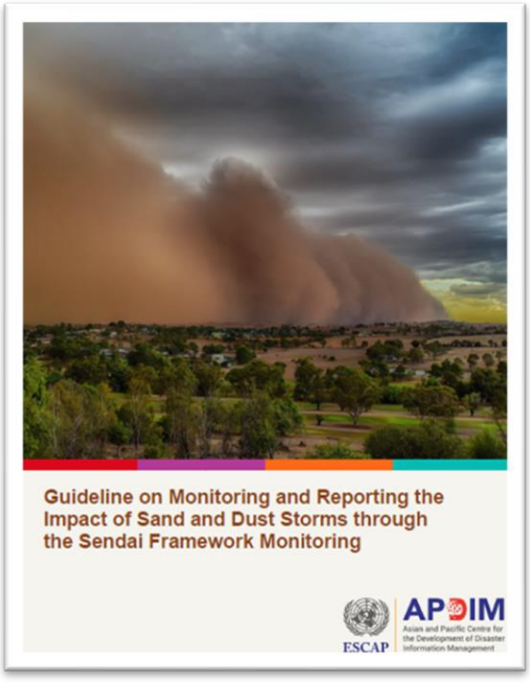
Enhancing Capacities to Collect, Collate, Understand, and Use Data for Combating the Negative Impact of Sand and Dust Storms

As a meteorological phenomenon, sand and dust storms derive mainly from arid and semi-arid areas and spread across large parts of the region. Major events can transport dust over great distances so that their impacts occur not only in the areas where they originate but also in communities far from the source areas, frequently across international boundaries. The Asia-Pacific region is the world's second largest in terms of mineral dust emissions, and four main sand and dust storm corridors are recognised: (i) East and North-East Asia; (ii) South and South-West Asia; (iii) Central Asia; and (iv) the Pacific subregions.

Sand and dust storms have many negative impacts on the environment, economy, and society in the region, all of which directly and indirectly have an impact on the socio-economic development of communities and their well-being.

While the occurrence of sand and dust storms can be scientifically determined, quantifying their impact on society, the environment and the economy is more difficult due to the lack of relevant data and the absence of a disaster-impact database that records and systematically quantifies sand and dust storms activity and impacts. This, in turn, hampers the development of policies – especially including more than one country – to tackle their impact.

To contribute to answering this gap in knowledge, in 2020, APDIM developed and published **Guideline on Monitoring and Reporting the Impacts of Sand and Dust Storms through the Sendai Framework Monitoring** to provide the Member States with a practical step-by-step guide to support their efforts to monitor and report the impact of sand and dust storms through the Sendai Framework monitoring.



This guideline adopts a hazard-specific approach to the Sendai Framework Monitoring reporting and should be used as a complementary resource to the comprehensive UNDRR Technical Guidance for Monitoring and Reporting Against Global Targets of the Sendai Framework. Out of the seven global

targets of the Sendai Framework, this Guideline puts emphasis on targets and indicators which can be disaggregated by hazard type and custom indicators which can be tailored to monitor additional sand and dust storm impact. The Guideline also gives guidance on how sand and dust storm monitoring and reporting interact with all the Sendai Framework indicators.

The Guideline aims to:

- **Enhancing capacities of Member States to collect, collate, understand, and use data** for the monitoring and reporting of the negative impact of sand and dust storm through the Sendai Monitor.
- **Building an evidence base on the negative impact of sand and dust storm using the Sendai Framework monitoring process** for policy and decision-making.

The target audience of the Guideline includes government officials working on sand and dust storms and the monitoring of the implementation of the Sendai Framework in Asia and the Pacific. Furthermore, the Guideline may provide useful inputs for implementing partners including the United Nations System (UNS), the International Red Cross and Red Crescent Movement, INGOs, Civil Society Organizations (CSOs), academia, donors and other actors supporting data collection and monitoring and reporting of the impacts of sand and dust storms. While the Guideline focus specifically on the Asia-Pacific region, its application is possible by all countries affected by sand and dust storms who wish to become systematic in reporting on their impact as part of the broader impact of disasters covered by the Sendai Framework.

Experts from the University of Oxford, United Nations Convention to Combat Desertification (UNCCD); United Nations Office for Disaster Risk Reduction (UNDRR); Food and Agriculture Organization of the United Nations (FAO) and the ICT and Disaster Risk Reduction (IDD) Division of ESCAP provided technical inputs throughout the development of the Guidelines. Feedback on the guidelines was also sought at a technical level from a number of national disaster management agencies.

Going forward APDIM plans to support a few countries in the Asia Pacific region that are particularly affected by Sand and Dust Storms events to initiate systematic reporting on their impact through the Sendai Framework monitoring, thereby encouraging a more comprehensive approach at the national level towards all hazards.

Mainstreaming Disaster Risk Reduction in Development Plans

Integrating disaster information management and risk reduction practices in development policies, plans and strategies contribute to risk-informed development and achieving sustainable development. The COVID-19 pandemic brought to light the urgency of understanding the multi-dimensional aspects of disaster risk and the importance of adopting a risk-informed approach towards national development plans and policies. Risk-informed development is the key to sustainable and resilient communities and achieving sustainable development at all levels and needs to be supported by risk information. Both the 2030 Agenda and the Sendai Framework for Disaster Risk Reduction 2015-2030 strongly affirm the importance of risk-informed decision making.

Following an interest on part of the Government of the Islamic Republic of Iran to address risk reduction across its 7th Five-year National Development Plan (2022-2026), a **Scoping Workshop on Disaster Risk Reduction Mainstreaming in Development Plans** was organized on 14 and 15 September 2020 by the Plan and Budget Organization of the Islamic Republic of Iran (PBO) in cooperation with APDIM and with the technical expert contribution of the CIMA Foundation.

The workshop was attended by planning managers and officers from all major ministries and administrations from the Islamic Republic of Iran and discussed approaches and options to mainstream risk reduction across the national development planning process. The workshop also provided an opportunity to introduce the context for possible future work that could be undertaken between PBO and APDIM in this field.

Scoping Workshop on Disaster Risk Reduction Mainstreaming in Development Plans, 14 and 15 September 2020

In addition to the specific collaboration with the Government of the Islamic Republic of Iran, APDIM will be gathering important learnings from this process to share with other countries in the region. This is especially relevant as there are very few examples available in the world of mainstreaming risk reduction in a systematic and strategic way across national development plans.

Key Service Area 3: Regional Cooperation on Trans-Boundary Disasters

Disaster risk reduction for transboundary hazards requires transboundary cooperation. APDIM is well-positioned as a regional subsidiary body of the ESCAP Commission to contribute to the enhancement of regional cooperation and coordination among countries and organizations 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 2030 Agenda for Sustainable Development.

APDIM facilitates regional collaboration benefiting from various cooperation opportunities and mechanisms at national and regional levels promoting South-South, North-South, and triangular cooperation. APDIM bridges the gap for regional information services for transboundary hazards, with a focus on regional slow-onset disasters.

Assessing and Understanding Risk of Sand and Dust Storms as a Trans-boundary Hazard in Asia and the Pacific

APDIM is conducting the **Sand and Dust Storms Risk Assessment in Asia and the Pacific** to provide a long-term horizon of the risk and potential socio-economic losses associated with sand and dust storms and to address the lack of understanding the risk of sand and dust storms as a meteorological hazard. The report of the assessment will be published in 2021.

The need to conduct a sand and dust storms risk assessment for Asia and the Pacific region was highlighted at the Expert Group Meeting on Sand and Dust Storms in August 2019. Experts emphasized the importance of the risk assessment as the evidence base upon which to develop a regional action plan to combat the negative impacts of sand and dust storms in Asia and the Pacific and requested APDIM to work in this regard.

APDIM is conducting this assessment with the support and collaboration of ESCAP, the UN Coalition to Combat Sand and Dust Storms, scientists from renowned universities and research centres in the region, as well as national meteorological institutes and the World Meteorological Organization.

A methodology to assess the impact and associated risk of sand and dust storms in Asia and the Pacific as a complex transboundary disaster affecting sustainable development is being developed by the Asian and Pacific Centre for the Development of Disaster Information Management in consultation with WMO, the Japan Meteorological Agency, the China Meteorological Administration, Tohoku University, the Barcelona Supercomputing Centre, UNEP and the United Nations Convention to Combat Desertification. The Asian and Pacific Centre is also developing a guideline for reporting on the impact of sand and dust storms through the Sendai Framework online monitoring tool to support countries in reflecting the impact of sand and dust storms in addition to those of other hazards to monitor progress towards the achievement of the global targets of the Sendai Framework and the 2030 Agenda.

Report of the Secretary-General to the General Assembly on Combating Sand and Dust Storms, A/75/278, 30 July 2020

The risk assessment covers multiple sectors including human health, transport, energy, agriculture, and the environment with a transboundary approach at a regional scale.

To conduct this assessment, APDIM has been leveraging its existing cooperation mechanisms and significantly expanded its network of partnerships over the course of this work. The risk assessment was enriched substantially and received technical support and inputs through experts meetings, on a weekly basis for several months and voluntarily, from experts from Tohoku University, Barcelona Supercomputing Centre, Finnish Meteorological Institute, Spanish Council of Scientific Research in Barcelona, Oxford University, Risk Nexus Initiative, European Institute on Economics and the Environment, Department of Environment of the Islamic Republic of Iran.

APDIM is also benefiting from advice of experts in other parts of the United Nations system, specifically from the World Health Organization office (WHO) in Iran, and globally from the World Meteorological Organization (WMO), the United Nations Convention to Combat Desertification (UNCCD), the United Nations Environment Management Group

Secretariat, and the Food and Agriculture Organization of the United Nations (FAO). The ICT and Disaster Risk Reduction and the Statistics Divisions of ESCAP also contributed to the work.

The required data for the Sand and Dust Storms Risk Assessment were gathered by APDIM through direct collaboration with organizations including the Finnish Meteorological Institute, the International Air Transport Association (IATA), Japan Meteorological Agency (JMA), World Meteorological Organization (WMO), Sand and Dust Storm Warning Advisory and Assessment System (SDS-WAS) Network, the China Meteorological Administration, Statistics, Energy, and Transport Divisions of ESCAP. A number of open-source data were used, including the NASA Global Modelling and Assimilation Office (GMAO) Modern-Era Retrospective analysis for Research and Applications, version 2 (MERRA-2), NASA Socioeconomic Data and Applications Centre (SEDAC), and the Global Land Cover by National Mapping Organizations (GLCNMO) of Geospatial Information Authority of Japan, Chiba University and collaborating organizations.

APDIM plans to officially launch the Sand and Dust Storms Risk Assessment Report in 2021 and convene expert discussions with the Member States towards the development of a regional plan of action with a specific focus on transboundary initiatives to tackle the areas most impacted by sand and dust storms.

“Recognizing the highly important mission of APDIM in the region, the Government of the Islamic Republic of Iran, as the host country to the Center, is committed to providing its utmost support to APDIM in order to achieve our shared goals and objectives in compliance with Sustainable Development Goals and Sendai Framework for Disaster Risk Reduction”

Deputy Vice-president, Plan and Budget Organization of Islamic Republic of Iran, H.E. Dr. Seyed Hamid Pourmohammadi at the Fifth session of APDIM Governing Council, 26 January 2021

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Growing Collaborations and Partnerships

APDIM successfully implemented the recommendations from the APDIM Review and recommendation of the Council in its 4th session to increase its visibility with the Member States and stakeholders, strengthen its partnership networks and forging new partnerships with United Nations entities and other global and regional development organizations as well as national and international academic and research institutions besides leveraging technical support available from ESCAP divisions and resource centres.

APDIM also advocated for the broader application of technical data for risk reduction in policymaking and planning and took steps to establish its role as a thought leader on disaster risk information management and its application across broad policy areas by contributing to important regional, global and national online events, web talks, workshops, training and meetings.

The APDIM Review recommended that APDIM strengthen existing partnerships and forge new partnerships with United Nations entities and other global and regional development organizations as well as national and international academic and research institutions besides leveraging technical support available from ESCAP divisions and resource centres.

In 2020, APDIM actively contributed to online global, regional, and national workshops, meetings and events leveraging global and regional networks and cooperation mechanisms.

APDIM chaired the opening session of the First Technical Working Group on Disaster-related Statistics and shared its experiences and updated on its work at the 6th Annual Meeting of Sand and Dust Storm-Warning Advisory and Assessment System (SDS-WAS) Steering Committee (SC).

APDIM participated in the third and fourth Governing Board of the Global Earthquake Model Foundation (GEM) to establish potential partnerships also towards the suggestion from the APDIM Preliminary Assessment of the Gaps and Needs for Disaster Risk Information and Data Management Platforms in Asia and the Pacific Region to establish a Regional Data Platform for sharing specific hazard/risk and loss data.

In the interest of increased visibility, APDIM raised its profile with the Member States and extended its commitment to advocate for the broader application of technical data for risk reduction in policymaking and planning by contributing, as a facilitator of a session, in the ESCAP virtual Executive Training on Environment and Development organized from 23 to 27 November 2020. At this training, APDIM emphasized the interconnectedness of climate change and disasters and the ways through which climate change impose economic costs to communities and introduced the possible ways that new technologies and big data innovation can contribute to mitigating the challenges of climate change including risk analytics, forecasts and risk-informed early-warnings.

APDIM is also establishing its role as a thought leader on disaster risk information management and its application across broad policy areas. In this connection, contributed as an invited speaker to a web talk on 12 May 2020 on the Operational Linkages and Synergies Between Disaster Risk Reduction and Security Sector Reform and Governance organized by the Geneva Centre for Security Sector Governance (DCAF).

At the 3rd and 4th meeting of the United Nations Sand and Dust Storm Coalition, APDIM exchanged experiences and expertise with the members of the Coalition which led to widening APDIM network of partnerships for the development of the Guidelines on Monitoring and

Reporting the Impacts of Sand and Dust Storms through the Sendai Framework Monitoring and the Sand and Dust Strom Risk Assessment in Asia and the Pacific. APDIM also took the first steps in exploring potential collaboration with the United Nations Economic and Social Commission for Western Asia (ESCWA) in the sand and dust storm domain.

In 2020, APDIM also advocated for disaster risk reduction and climate-related disasters and showcased APDIM's role in this connection as an invited Expert Speaker at the Virtual Special High-Level Panel on Disaster and Climate Resilience in South Asia organized for the 4th South Asia Forum on Implementation on the Sustainable Development Goals (SDG) Fostering Sustainable and Resilient Recovery from COVID-19 in South Asia.

During the International Working Group of Iran's National Committee to Combat Sand and Dust Storms organized by the Department of Environment of the Islamic Republic of Iran, APDIM role as a regional institution of ESCAP in the forthcoming strategy and plan for regional cooperation and action on sand and dust storms of the Islamic Republic of Iran was acknowledged.

APDIM also contributed to the Forty-Seventh Session of the WMO/ESCAP Panel on Tropical Cyclones by sharing experiences and technical information on research and forecasting operations for mitigating the socio-economic impacts of tropical cyclones.

Upgrading APDIM Portal

In 2020, APDIM developed the concept of its online presence towards a fully functioning online portal to provide and facilitate the exchange of data, information and knowledge for disaster management and risk reduction. APDIM online portal and website were developed adhering to ESCAP-specific and broader UN web guidelines and policies.

The Portal is the main gateway for APDIM to connect with experts in the Member States, partners, and stakeholders. It is a key tool for APDIM to delivering its mandate under all its three key service areas. The portal will eventually feature three key services including the Regional Risk Data Platform and Learning and Knowledge Hub which is currently under development and is expected to go live in the coming year.

The first phase of the website features the Knowledge Hub as a repository of awareness materials, databases, and data platforms, laws, plans and policies, maps, technical reports and guidelines, UN resolutions and reports. APDIM will also use this platform to deliver its messages and advocate for disaster risk reduction and disaster risk information. Through the Portal, APDIM will also promote all its activities and services to raise awareness and to build and nurture its partnerships.

How Countries and Organizations in Asia and the Pacific, Working with Regional and International Partners, can Leverage Collaboration on Disaster Risk Information Management

Running up to the Fifth session of APDIM Governing Council, APDIM organized on 25 January 2021a virtual discussion on **Disaster Risk Information Management in Asia and the Pacific: Developing Capacities and Enhancing Collaboration**.

One hundred leaders, senior government representatives and disaster risk reduction practitioners from the academia and research institutes such as AIT, IIEES and the University of Tehran, as well as senior managers and experts from the United Nations and the International Organization including ESCAP, ESCWA, WMO, ITU, WMO, FAO, UNDRR, UNDP, ADPC, ADRC, ADB and the European Commission, discussed leveraging collaboration on disaster risk information management in Asia and the Pacific joining the conversation from different corners of the world, including Afghanistan, Australia, Bangladesh, Belgium, Egypt, Finland, France, Germany, Islamic Republic of Iran, India, Italy, Japan, Lebanon, Mongolia, Nepal, Pakistan, Singapore, Spain, Tajikistan Thailand.

Senior government officials from the Islamic Republic of Iran, Afghanistan and Nepal highlighted how important it is for countries in the region to address disaster risk information management. Several expressed appreciations for APDIM's plans to establish a regional risk data platform to host data and information at the regional level while also supporting countries establishing their own national disaster risk data portals to support risk-informed decision making.

The discussion brought to light the importance of effective collaboration between scientists and administration/Government for the application of risk data processes, analytics, and its usages, considering that the primary producer and the end-users of data are not the same.

The value of APDIM's role was pointed out highlighting its unique position to consolidate, analyse and share disaster risk data and information in the region with special attention to the socio-economic impact of disasters. The discussion referred to COVID-19 as a very good example which showed the need for anticipating future risks for planning and undertaking measures with a multisectoral approach to disaster risk management.

APDIM virtual discussion on Disaster Risk Information Management in Asia and the Pacific: Developing Capacities and Enhancing Collaboration, 25 January 2020

Fifth Session of APDIM Governing Council

Fifth Session of APDIM Governing Council held virtually on 26 January 2021

The Fifth Session of the Governing Council of the Asian and Pacific Centre for the Development of Disaster Information Management (APDIM) was convened virtually on 26 January 2021, hosted by the Islamic Republic of Iran.

APDIM Governing Council elected the Islamic Republic of Iran as the Chair and the Republic of Turkey as Vice-Chair for its new term until the next Session of the Council.

Delegates from the Governing Council member countries; Bangladesh, Cambodia, India, Islamic Republic of Iran, Mongolia, Pakistan, and Turkey attended the Fifth Session of the Governing Council and delegates from Georgia, Japan, Kazakhstan, Maldives, Myanmar, Nepal, Singapore, Sri Lanka, and Turkmenistan attended the session as observers.

Ms Letizia Rossano, Director of APDIM presented to the Council the Reports on activities of the Centre since the Fourth Session of the Governing Council and its financial and administrative status as well as details of APDIM Multi-year Strategic Programme of Work (2020-2030) and Programme of work for 2021-2022. The Council acknowledged the reports and endorsed APDIM's Strategic and biennium Programme of Work.

The decade ahead of APDIM: Strengthened Programme of Work 2021-2030

Based on the recommendation of APDIM Independent Review in 2019, at its fourth session, the Governing Council requested APDIM to develop its **Multi-Year Strategic Programme of Work 2021-2030** applying a **Theory of Change** methodology which was endorsed at the fifth session of the Governing Council in January 2021.

APDIM developed the key elements of its strategic programme of work with the advice of an **ad hoc Reference Group** of key stakeholders and experts through two online workshops on 10 and 11 November 2020 as well as the advice of two international consultants' expert in programme development and Theory of Change methodology. During the workshop, the Reference Group discussed the key recommendations of the APDIM Independent Review and the findings of the Assessment of the Gaps and Needs for Disaster Information Management in the region with a view to shape APDIM's Strategic Programme of Work in a result-oriented and effective manner considering the priority requirements of the countries in the evolving context and trends with regard to disaster information management in the region.

Members of the ad hoc Reference Group included the United Nations Office for Disaster Risk Reduction (UNDRR) Regional Office for Asia and the Pacific, Asian Disaster Preparedness Centre (ADPC) as well as ESCAP divisions and regional institutions including the Strategy and Programme Management (SPMD), Statistics, ICT and Disaster Risk Reduction (IDD) Divisions, the Statistical Institute for Asia and the Pacific (SIAP), the Asian and Pacific Training

Centre for Information and Communication Technology for Development (APCICT), the Plan and Budget Organization and the Ministry of Foreign Affairs of the Islamic Republic of Iran.

APDIM multi-year strategic programme of work 2021-2030 defines its expected impact in a way that risk information; information capacity and usage; and regional cooperation are in place to support the achievement of sustainable development in the region.

“Our region, even without the COVID-19 pandemic, is one of the most disaster-prone regions in the world.

Disaster risk reduction and resilience is therefore not a question of choice, but a collective imperative for achieving the 2030 Agenda for Sustainable Development, as well as the Sendai Framework for Disaster Risk Reduction 2015 to 2030. Many SDG targets will not be accomplished in our region unless we address disaster impacts and reduce vulnerabilities.

Therefore, I would like to stress the importance of reducing and preparing for all risks and hazards, including floods, draught, sand and dust storms, earthquake, typhoon, tsunami and other emerging hazards which constantly impose heavy human and material losses on countries and communities of our region.

APDIM is a very well-suited platform for regional cooperation and developing capacities to improve information and knowledge management for disaster risk reduction and resilience building in the region.”

Executive Secretary of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), Ms. Armida Salsiah Alisjahbana at the Fifth session of APDIM Governing Council, 26 January 2021

2021-2022 Biennium

Looking ahead to 2021 and 2022, APDIM will implement and report on its programmatic activities according to its multiyear strategic and biennium programme work which was endorsed by the Fifth session of APDIM Governing Council in January 2021.

APDIM Governing Council endorsed the ten-year vision of the Centre: **Effective disaster risk information is produced and used for sustainable development in Asia and the Pacific** by tackling key priorities towards the achievement of three Long Term Outcomes in the areas of Risk Information, Capacity Building and Regional Cooperation with a view to addressing the significant demands placed on member States to produce and analyse disaster information for planning and investing as well as reporting towards the achievement of the 2030 Agenda for sustainable development and the Sendai Framework Targets for disaster risk reduction and resilience. The three long-term outcomes and corresponding deliverables are closely interconnected and sometimes sequential in nature.

Long Term Outcome 1: Risk Information in Place

To ensure access to effective disaster risk information is enabled and facilitated at the regional and national level, APDIM will produce a report, develop guideline, and organize a national level workshop to demonstrate how development planners can use and apply data/analysis in disaster risk reduction integrated planning to enable achievement of SDGs.

To support impact-based risk assessment and planning, APDIM will conduct impact-based risk assessments and impact-based forecast for sand and dust storms based on data available at the global and regional level with interpretation and visualization of disaster information and data and APDIM will keep maintaining a close connection with country teams as well as global and regional cooperation mechanisms/projects in the region including UN Coalition for Sand and Dust Storms, Typhoon Committee, ESCAP Drought Mechanism, ECO, ASEAN, etc to ensure UN Country Teams are supported in mainstreaming disaster risk information management into country assessments, strategic frameworks and UN operations and plans.

In 2021, APDIM will capitalize on establishing its Regional Risk Data Platform accompanied by expanding and establishing key partnerships at the global, regional, and national level to ensure data sharing.

Long Term Outcome 2: Capacity Building

APDIM will involve development planners with risk reduction experts to ensure disaster risk information is understood by policymakers and development planners at the national level and regional level as an integral component of development planning across different sectors as necessary to protect development gains. APDIM will also produce online video tutorials with language subtitles to bridge supply and demand for risk information management at the policy design level by involving policy planners/practitioners.

Long Term Outcome 3: Regional Cooperation

Increased understanding at the regional level of transboundary impact of hazards will be achieved by introducing a systemic risk analysis at the transboundary level through a discussion at the regional level, facilitating regional discussion on the basis of APDIM produced and/or facilitated hazard analysis through sand and dust storms regional plan of action, developing guidelines to facilitate the sharing of data at regional level for monitoring of risk hazards with a priority focus on trans-boundary hazards.

APDIM

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