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Management issues: report on the evaluation activities of the Commission during the biennium 2018–2019 and outcomes of the evaluation/review of the Statistical Institute for Asia and the Pacific, the Centre for Sustainable Agricultural Mechanization and the Asian and Pacific Centre for the Development of Disaster Information Management

Review of the establishment of the Asian and Pacific Centre for the development of Disaster Information Management pursuant to resolution 71/11**

* ESCAP/76/L.1/Rev.1.

** The present report is being issued without formal editing.

**Independent, Comprehensive
Review of the Establishment of the
Asian and Pacific Centre for the
Development of Disaster
Information Management (APDIM)**

March 2020

Independent, Comprehensive Review of the Establishment of the Asian and Pacific Centre for the Development of Disaster Information Management (APDIM)

March 2020

**Prepared by
Madhavi Malalgoda Ariyabandu**

**Commissioned by
ESCAP**

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Madhavi Malalgoda Ariyabandu
Senior expert - disaster risk management

March 2020

List of Acronyms

ADPC	Asian Disaster Preparedness Centre
ADRC	Asian Disaster Reduction Centre
AMCDRR	Asia Ministerial Conference for Disaster Risk Reduction
APCICT	Asian and Pacific Training Centre for Information and Communication
APCTT	Asian and Pacific Centre for Transfer of Technology
APDIM	Asian and Pacific Centre for the Development of Disaster Information Management
APDR	Asia Pacific Disaster Report
APFSD	Asia Pacific Forum on Sustainable Development
ASEAN	Association of Southeast Asian Nations
APDRN	Asia-Pacific Disaster Resilience Network
BHRC	Road, Housing and Urban Development Research Centre
BIMSTEC	Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation
BNPB	Indonesian National Board for Disaster Management
CCA	Climate Change Adaptation
CESDRR	Central Asia Centre for Emergency Situations and Disaster Risk Reduction
D3R	Disaster Risk Reduction and Resilience
DDMP	Department of Disaster Mitigation and Prevention Thailand
ECO	Economic Cooperation Organization
ES	Executive Secretary
ESCAP	Economic and Social Commission for Asia and the Pacific
GC	Governing Council
GCDS	Global Centre for Disaster Statistics
HCA	Host Country Agreement
HFA	Hyogo Framework for Action 2005– 2015
HLPF	High-Level Policy Forum
ICT-DRR	Information Communication Technology and Disaster Risk Reduction
IGO	Intergovernmental Organization
IRIDeS	Tohoku Regional Data Center for Natural Disasters
IRIMO	Iran Meteorological Organization
PBO	Plan and Budget Organization
RIMES	Regional Integrated Multi-Hazard Early Warning System for Africa and Asia
SIAP	Statistical Institute for Asia and the Pacific
SDMC	SAARC Disaster Management Centre
SPC	Secretariat of the Pacific Community
SPECA	UN Special Programme for the Economies of Central Asia
SPMD	Strategy and Programme Management Division
SPREP	Secretariat of the Pacific Regional Environment Programme
TWG-D3R	Thematic Working Group on Disaster Risk Reduction and Resilience
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNDRR	United Nations office for Disaster Risk Reduction
UNEG	United National Evaluation Group
UNEP	United Nations Environment Programme
UN- GGIM	United Nations Committee of Experts on Global Geospatial Information Management
UNOCHA	Organization for Coordination of Humanitarian Affairs
WMO	World Meteorological Organization

Executive Summary

This is the report of the Review of the Asian and Pacific Centre for the Development of Disaster Information Management (APDIM), a regional institution of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) established in 2015 by the ESCAP Resolution 71/11. The Centre is hosted by the Islamic Republic of Iran, located in Tehran. The activities of APDIM focus on three service lines aligned to respective thematic areas for disaster risk reduction and resilience: information and knowledge repository, data bases and standards; capacity development training, knowledge and innovation network; regional information services for cross-border disasters. The Review was conducted between October 2019 to February 2020 in Tehran, Islamic Republic of Iran and in Bangkok, Thailand.

Purpose and scope

In resolution 71/11, member States decided to assess the performance of APDIM on the basis of the findings of an independent, comprehensive review at its seventy-sixth session to be held in 2020, and to determine continuation of operations of the centre as a regional institution of the Commission thereafter. The Review was conducted in response to the above resolution. The Review also aims to contribute to efforts to improve the overall effectiveness of ESCAP in line with Commission resolutions 66/15 and 71/1 and generate information on achievements and results under the strategic plan and programme direction of APDIM. The review focuses on providing recommendations to ESCAP member States and management on how to improve the substantive relevance and financial viability of APDIM in the context of the 2030 Agenda for Sustainable Development and the Sendai Framework for Disaster Risk Reduction 2015-2030.

The specific objectives are:

- To assess the performance of APDIM against standard criteria of relevance, effectiveness, efficiency, sustainability and gender and human rights mainstreaming
- To formulate specific and action-oriented recommendations for improving the performance of APDIM in the context of the 2030 Agenda for Sustainable Development and the Sendai Framework for Disaster Risk Reduction 2015-2030

Methodology

The Review is based on the following methods of information and data collection and analysis:

- A desk review of relevant documents
- Consultations with relevant senior government officials and stakeholders of the host country
- Consultations with the member States of the APDIM Governing Council and participating member States
- Consultations with the National Focal Points for the Sendai Framework for Disaster Risk Reduction of the member States of the Governing Council
- Consultations with the relevant national, regional and global centers of the APDIM partnership strategy
- Key informant interviews with resource institutions of ESCAP
- Key informant interviews with relevant ESCAP secretariat and APDIM staff and members of the reference group of the Review

Conclusions

The Review concluded that the mandate of APDIM remains relevant and has been reaffirmed in the context of the 2030 Agenda for Sustainable Development and the UN development reforms. Despite some limitations of administrative nature, APDIM has made significant accomplishments during its

five year of operation under each of the three pillars of its Strategic Framework. Member States find that APDIM has set several important processes in motion to advance regional and south-south cooperation in disaster information management, pursuing its intergovernmental mandate. At operational level, APDIM has enabled developing analytical frameworks and strategies for risk reduction and resilience building, mobilized expertise and networks to address critical and current disaster risk management needs of the governments, positioning itself as a functional resource organization in this domain. In the current complex disaster vulnerability and political setting of the Asia Pacific region, governments and stakeholders consulted identify APDIM as a conduit strategically positioned within ESCAP to facilitate intergovernmental dialogue and consensus on issues related to cross border disaster risk management.

The Review ascertains that APDIM has evolved as an organization proficient of serving the unmet needs of disaster information management in the Asia Pacific region, equipped with a clear strategic direction, programmatic focus and a governance mechanism. Some of the gaps experienced in the outputs and delivery are attributed to APDIM being in its initiation phase. Substantiated by these achievements, the review concluded that APDIM is in a strong position in moving forward. Based on the Review, it is recommended to the Commission the continuation of APDIM's operations as a regional institution of the Commission.

The Review identifies that current geopolitical context of the host country has some implications on the operations of the Centre. Representatives of the member States and stakeholders consulted suggest the work programme of the next phase should therefore pay due attention in determining the outputs and their delivery mechanisms, at the same time keeping in mind the establishment of APDIM in Tehran and its progressive development while facing limitations related to the geopolitical context is a significant achievement from a regional perspective.

The host country has re- iterated its financial commitment for five years made in the founding resolution¹, and significant monetary and in-kind contributions have been made over the period covered by the Review. The Review however underlines the need for securing diversified funding sources for greater efficiency and medium to long-term sustainability.

These conclusions are supported by the information derived from the comprehensive desk review of relevant documents, consultations and key informant interviews with the representatives of member States, ESCAP secretariat staff and relevant national, regional and international organizations. These conclusions are also consistent with the statements and recommendations made at the three Governing Council meetings held between 2016 -2019.

Relevance

The Review concludes that the relevance of APDIM has increased many folds with the endorsement of the Agenda 2030 for sustainable development in September 2015, that underline 'risk informed development'. Member State representatives and stakeholders consulted strongly affirm its relevance and need as a forum that unpacks and translates the global frameworks to provide policy planning and implementation guidance on disaster risk informed development practices to deliver the 2030 Agenda. Respondents to the Review and main reference documents identify APDIM as an ESCAP regional institution uniquely positioned to bring together the domain of disaster information with social and economic dimensions of populations and economies at risk to enable better understanding of exposure and vulnerability and 'impact-based forecasting'. This is an increasingly sought out approach by the member States to achieve more effective disaster risk management. APDIM has initiated to assess the baseline and relevant services and products to meet this requirement.

¹ E/ESCAP/RES/71/11 Establishment of the Asian and Pacific centre for the development of disaster information management
institutional, programmatic and operational costs for five years, up to 50 million United States dollars

Effectiveness

The Review shows that, despite facing administrative limitations, APDIM has produced key outputs under each of the three pillars of the Strategic Framework endorsed by the Governing Council. Its main accomplishments include bringing strategic dialogue on cross border and emerging disasters in the region to the forefront, conducting inter- governmental consultations on priority disaster information issues in the region, mobilizing technical expertise through south-south cooperation to support high-risk low-capacity countries, and research and advocacy on shared vulnerabilities. APDIM is accepted by the member State representatives and stakeholders as an evolving platform and a resource organization for addressing disaster information issues confronted by countries as well as at cross border settings. This conclusion is supported by the statements made by the members of the Governing Council. Analysis throws light on the long-term priorities that include investing in next generation of hazard risk information, platforms to host results with visualization, access and sharing data. The Review takes note that in entering the next phase, APDIM should carve out its niche areas and products to better support current disaster information management and capacity needs that correspond with the implementation of the Priorities of Sendai Framework and the SDGs.

Efficiency

APDIM's approach to work plan delivery and reaching out to member States through strategic partnerships and collaborations is consistent with its Partnership Strategy. In its initiation period from 2015, APDIM has adopted varying mechanisms of programme delivery such as forging partnerships, coalitions, liaising with host country academic and technical entities and leveraging on ESCAP substantive divisions. Collaborations have been formed with UN agencies taking advantage of the respective institutional expertise related to APDIM'S mandate such as disaster loss data and Sendai Monitor mechanism. External partners that were consulted; UN agencies, regional resource organizations and partners recognize the shared objectives and mutual benefits, accordingly have advanced in forging partnership with APDIM. The Review signals potential areas for further cooperation with the ESCAP resource centers and substantive divisions that are mapped out in the Strategic Direction, for optimizing programme delivery and efficiencies and for addressing highlighted issues related to the geopolitical situation of the host country.

Sustainability

The findings of the Review indicate APDIM has secured its position with the member States and partners in view of its relevance. The Host Country Agreement has been finalized in February 2020, the Government of the Islamic Republic of Iran has re-iterated its financial commitment to cover the costs of the Centre in full for five years, up to USD 50 Million. Member States and partners validate the strategic direction and thematic pillars of the Centre to guide its work conforming with the evolving requirements of the region. This status provides APDIM with a strong foundation in entering its next phase. The Review concludes on the strong need for APDIM to diversify its sources of finance to ensure medium and long-term sustainability, and to develop work programmes that are more closely aligned to the current requirements of the governments while balancing long term disaster information management issues highlighted in the Review.

Recommendations

This section includes a key, overarching, recommendation to the Commission and seven recommendations to the ESCAP secretariat, derived from the findings and conclusions of the Review drawn through the analysis of information generated on key questions raised under the four assessment criteria. The seven recommendations to the ESCAP secretariat aim at improving the operations, affirming the relevance, enhancing effectiveness and efficiency and strengthening sustainability of APDIM. These seven recommendations were presented and approved by APDIM's Governing Council on 20 February 2020.

Recommendation to the Commission

Continue APDIM's mandate as a regional institution of the Commission

The Review highlighted the continued and increased relevance of APDIM's mandate. The Review concluded that the overall performance of the centre to date, assessed against the criteria of relevance, effectiveness, efficiency and sustainability, was satisfactory and indicative of strong potential to contribute to reduce disaster risk through information management in the ESCAP region. The Review conclusions warrant the continuation of the operation of the Centre as a regional institution of the Commission.

Recommendations to the ESCAP secretariat

Recommendation 1: APDIM to develop a new multi-year strategic programme which considers the priority requirements of the countries in the evolving context and trends of disaster information management in the region.

The Review identifies priority outputs, services and strategic liaisons to be considered in the next phase of APDIM's work and ascertains the critical need to support member States to integrate disaster risk management, climate risk and sustainable development to ensure reducing disaster risk and exposure. Currently existing gaps related to gender and social inclusion in disaster information management should be addressed in the new programme strategy and outputs. The Review confirms the unique placement of APDIM that can bring together the two clearly separate domains of technical disaster information and socio-economic information that should be utilized in a more focused manner, supported with appropriate collaborations with ESCAP Divisions and external partners and through products and services that meet this requirement. To this end, consultation mechanisms with the member States need to be more closely aligned with APDIM's work planning process through the expert groups and GC meetings in order to achieve a better demand- supply balance.

Recommendation 2: A partnership strategy and a road map to be outlined in the new strategic programme to be approved by the APDIM Governing Council, defining niche products and services that closely correspond with the current and future needs of the member States.

The Review ascertains that partnerships are a key strategic element that should be pursued for achieving better effectiveness and efficiency. Partnerships to be employed as vehicle to develop niche products as well as to take the products to the country and sub regional levels. Analysis show that as a mutually beneficial and reinforcing mechanism, APDIM can function as a mechanism that convey specific disaster and SDG related outputs of ESCAP developed by relevant substantive divisions (IDD/DRR, Statistics and Social), Asia Pacific Forum for SDG, DRR Committee and other partners in order to support disaster risk informed policies, investments and planning decisions of the governments. Further, the partnership strategy should give due consideration to the recommendation of the 2019 ESCAP-WMO partnership evaluation and to envisage how to provide support to the Secretariat of the WMO/ESCAP Panel on Tropical Cyclones as appropriate.

Recommendation 3: Further to the approval of a new multi-year programmatic strategy, APDIM should develop and implement a fundraising strategy to diversify funding, attuned with increasing its utility and added value for the member States in implementing the 2030 Agenda.

The consultations showed that an important strategy to consider for enhancing contributions by the member States (including in kind contributions) is demonstrating the utility of APDIM's outputs in the short and medium term. The analysis suggests investing in developing horizontal partnerships with stronger engagement and liaison with institutions at the national level such as National Institutes for Disaster Management, universities and academia. The Review also notes this a fitting approach to enhance national capacities and encourage the utilization of the potential of the South. The Review

further indicates several strategic partnerships APDIM can harness for mobilizing resources and to deliver specific niche outputs, with UNDP, UNDRR, UNEP, Tohoku Regional Data Center for Natural Disasters-IRIDeS.

Recommendation 4: ESCAP should further strengthen integration of APDIM functions and services across its related programmes and activities.

Analysis points to significant mutual benefits that can be realized by harmonizing the work between the relevant substantive divisions and resource centers of ESCAP and APDIM. There is sizeable scope and opportunities for resource efficiency, building synergy and delivering more effectively to support the member States. This is also an action expected within the on-going UN reforms exercise.

Recommendation 5: Pursue outputs and activities that demonstrate value addition, impact, utility and visibility of APDIM, with a stronger focus on outputs and activities that support current and medium-term disaster information needs of the member States.

Consultations underline the need for supporting hazard, risk, vulnerability (HRV) assessments at sub regional, national and local levels by developing methodologies and mechanisms, placing a specific focus for more effective use of existing disaster information at country level, and increasing the range of cross-border disasters covered in APDIM's work. According to the analysis, HRV assessments supported with developing appropriate capacities at the national level is a fundamental consideration for servicing the governments, to enable more effective planning and decision making. To meet this requirement, APDIM should also consider strengthening technical capacities of the team.

Recommendation 6: APDIM business models and programmes ought to be designed considering the prevailing geopolitical context of the host country, with a view to explore how best to leverage technical support available through ESCAP divisions in Bangkok and resource centers in other locations.

Review identifies that functions such as information repository, online capacity development hubs were somewhat impeded due to the prevailing geo-political context related to the host country. Project Documents that were developed during the inception phase (2015/2016) therefore require to be reviewed, with a view to leverage collaboration with external partners as well ESCAP divisions and resource centers to overcome any impediments that have risen due to geo-political situation. The Review suggests considering joint programming and outputs, choice of suitable co-locations and implementation mechanisms in delivering the work plans.

Recommendation 7: Review and revise the capacity development approach, outputs and activities to firmly address the capacity needs of the member States confronting the limited impact realized in this area.

Consultations show there are vast capacity gaps, specifically in more vulnerable countries and sub regions, which demand lasting capacity building approaches. Potential approaches and activities identified in the review include intercountry exchange of expertise, enabling more advanced countries to convey experience and good practices, on-line capacity development hubs, strengthening capacities of the UNCTs to support governments with data analysis and application for SDG planning processes and Sendai Monitor (as opposed to one off training programmes and consultations).

Introduction

Background of the review and the topic being evaluated

The Asian and Pacific Centre for the Development of Disaster Information Management is a regional institution of the United Nations Economic and Social Commission for Asia and the Pacific established through the resolution 71/11 adopted in May 2015. APDIM was established in consideration of the important contribution of disaster information management for disaster risk reduction and building resilience to disasters, as well as to inclusive and sustainable development in Asia and the Pacific.

Purpose, objectives and scope

The Resolution 71/11 decided to assess the performance of APDIM on the basis of the findings of an independent, comprehensive review at its seventy-sixth session to be held in 2020, and to determine continuation of operations of the centre as a regional institution of the Commission thereafter. The main target users of the Review are the Commission and the ESCAP Secretariat, to inform decision by the Commission; member States in the Governing Council of the APDIM, to guide the strategic and programmatic direction and action planning; Regional Intergovernmental Organizations (IGOs) and resource centers partnering with APDIM for gaining insights for more efficient and coordinated efforts in disaster information management in the Asia Pacific region.

The specific objectives of the Review are:

- (i) To assess the performance of APDIM against standard criteria of relevance, effectiveness, efficiency, sustainability and gender and human rights mainstreaming
- (ii) To formulate specific and action-oriented recommendations for improving the performance of APDIM in the context of the 2030 Agenda for sustainable development and the Sendai Framework for Disaster Risk Reduction 2015-2030

The review focuses on providing insights on APDIM establishment, performance and recommendations to member States and management on how to improve its substantive relevance and financial viability in performing its role as an ESCAP Resource Centre in the current development and disaster risk management context laid out in the 2015 global agreements.

The final deliverables of the Review are:

- 1. Review Report (following the structure presented in the Annex to the Terms of Reference);
- 2. Summary report for submission to the Commission
- 3. PowerPoint presentation on the key findings, conclusions and recommendations

Scope

The Review is a forward-looking assessment of the APDIM based on its performance up to now within the scope of its stated objectives supporting the member States and stakeholders to implement the Sendai Framework for DRR 2015-2030, the Sustainable Development Goals, as well as to determine its 'Fit for the Purpose' within the UN reform agenda.

The Review followed the below criteria:

Relevance

Assesses the relevance the Centre's objectives and outputs in the context of 2030 Agenda for Sustainable Development in line with the priorities and requirements of the member States.

Effectiveness

Assess the results achieved and the key factors influencing the results

Efficiency

Assesses the extent to which human and financial resources were used in the best possible way to deliver activities and outputs, in coordination with other stakeholders

Sustainability

Assess the short and medium-term sustainability of the Centre

Description and Context of APDIM

Introduction to APDIM

APDIM has the following goal and objectives endorsed by resolution.

Goal²

Addressing the unmet needs of information management for disaster risk reduction and resilience

Objectives

- To reduce human losses and material damages and the negative impact of natural hazards through enhancement of disaster information management in the Asian and Pacific region.
- To strengthen the capabilities and capacities of countries and regional organizations in the fields of disaster information management and disaster risk reduction and implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 and the evolving post-2015 development agenda.
- To contribute to the enhancement of regional cooperation and coordination among countries and organizations in the region in the field of disaster information management aiming at socioeconomic 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.

APDIM is governed by a Governing Council (GC) consisting of a representative designated by the host country, the Government of the Islamic Republic of Iran, and eight representatives elected by other members and associate members of the Commission. The composition of the Governing Council elected in May 2019, at the 75th session of the ESCAP are Bangladesh, Cambodia, Fiji, India, Macao-China, Mongolia, Pakistan and Turkey³. In accordance with the paragraph 35 of the Statute of APDIM the Council shall review and endorse annual and long-term work plans consistent with the programme of work.

Products and services of APDIM⁴

- Capacity development in disaster information management: training and technical support.
- Information support and analytical works on hazard, vulnerability, exposure and risk assessment at the regional/subregional levels.
- Communications and publications:
 - Development of and support to regional and subregional disaster information networks
 - Supporting local and national capacity development initiatives and programmes in disaster information management
 - Providing information services for disaster risk management priorities

² As stated in the Concept Note for High-level Expert Consultation on Information Management Tools and Approaches for Risk-informed Sustainable Development in Asia and the Pacific, 30-31 January 2018, Tehran, Islamic Republic of Iran
<https://www.unescap.org/sites/default/files/APDIM-Concept-Notes--1-Information-Management--2-Sand-and-Dust-Storms.pdf>

³ GC 2016/2019: Bangladesh; Cambodia; Islamic Republic of Iran; Nepal; Pakistan; Sri Lanka; and Turkey with representatives of Fiji, Kazakhstan and Kyrgyzstan as Observers

⁴ as stated in 71/11 Establishment of the Asian and Pacific centre for the development of disaster information management E/ESCAP/RES/71/11

Methodology

Description of methodology

The review sought to analyze and assess the performance of the Centre against four key parameters: relevance, effectiveness, efficiency and sustainability.

Criteria	Tentative evaluation questions
Relevance <i>Assesses the relevance the Centre's objectives and outputs in the context of 2030 Agenda for Sustainable Development and in line with the priorities and requirements of the member States.</i>	<ul style="list-style-type: none"> • To what extent APDIM programme of work meet the needs and requirements of member States; Highlight key examples to illustrate APDIM relevance to the member States? Which countries have benefited from APDIM activities and how? • To what extent APDIM consult the members States in developing its programme of work and designing its activities and outputs? • What adjustments needed to be made to make APDIM more relevant to the member States in their efforts to implement to 2030 Agenda for Sustainable Development? • How did APDIM mainstream gender in the design and delivery of its programmes and other interventions?
Effectiveness <i>Assess the results achieved and the key factors influencing the results</i>	<ul style="list-style-type: none"> • What were the results & achievements of APDIM to date? • How effective was APDIM's capacity building approach? What can be done to improve its effectiveness? • How effectively did APDIM leverage on its designation as a UN ESCAP regional institution? • What adjustments need to be made to its modality of work to ensure even higher effectiveness?
Efficiency <i>Assesses the extent to which human and financial resources were used in the best possible way to deliver activities and outputs, in coordination with other stakeholders</i>	<ul style="list-style-type: none"> • What measures were in place to improve cost efficiency in delivering APDIM outputs? • To what extent did APDIM coordinate and cooperate with ESCAP substantive divisions and other organizations in the design and delivery of its outputs? How can the coordination and cooperation be further enhanced? • What adjustments, if any, can be included to maximize cost efficiencies and programme delivery?
Sustainability <i>Assess the short and medium-term sustainability of the Centre</i>	<ul style="list-style-type: none"> • Is the level of contributions to APDIM from member States sufficient to keep APDIM relevant and effective over the next five years in relation to its stated and potential programme of work? • What would be an optimal level of resource increase to achieve APDIM's planned and potential objectives? • What could be done to increase the resources of APDIM? What other sources of resources could be explored?

Assessment questions were developed based on each of the key parameters and posed to the APDIM Governing Council member countries, selected member States, National Focal Points for the Sendai Framework for disaster risk reduction of the member States of the Governing Council, relevant ESCAP secretariat staff, and the relevant stakeholder organizations. The planning and implementation processes and outputs of APDIM were also reviewed against the assessment questions. The timeframe of the assessment is from October 2019 to March 2020, as detailed in the Terms of Reference (Annex 1).

Data collection

Information for the assessment was collected over the period of October 2019 to February 2020. The assessment made use of the following methods of information and data collection and analysis which were triangulated for purposes of review:

1. **A desk review of relevant documents** including UN resolutions, ESCAP evaluation reports, APDIM project documents, concept notes and meeting reports was conducted. The key documents reviewed are listed in Annex 2.
2. **Consultations⁵ with relevant senior government officials and stakeholders of the host country**, the Islamic Republic of Iran, including with the Director General for International Environmental and Sustainable Development Affairs of the Ministry of Foreign Affairs, Deputy for International Affairs, Plan and Budget Organization, Vice Minister of Roads and Urban Development and the President, Meteorological Organization, the Islamic Republic of Iran (IRIMO), Vice President for International Affairs, University of Tehran, Director of the National Center on Combating Dust and Sand Storms, President of the Road, Housing and Development Research Center were conducted on 03- 06 November, to ascertain the support to APDIM and to identify the constraints and the way forward. These consultations were face-to face. A further consultation was held with the UN Resident Coordinator of the Islamic Republic of Iran via a telephone discussion.
3. **Consultations with the following member States of the APDIM Governing Council⁶ and participating member States** were conducted through telephone interviews: the members of the current Governing Council of APDIM - Cambodia, India, Mongolia, Pakistan and Turkey; representatives of participating member countries- the National Disaster Management Centre Afghanistan, National Flood Centre China, Indonesian National Board for Disaster Management(BNPB) and Department for Disaster Management and Prevention (DDMP) Thailand.
4. **Consultations with the National Focal Points** for the Sendai Framework for Disaster Risk Reduction of the member States for the Governing Council were conducted to obtain a better understanding on the needs and priorities related to disaster information management.
5. **Consultations with relevant APDIM and ESCAP secretariat staff and members of the reference group of the Review** were held face-to-face, primarily to get views and understanding on the strategic, planning, operational and management perspectives of APDIM, as well as to obtain advice and guidance on the Review, relevant resources and data.
6. **Consultation with the sub programmes and resource centres of ESCAP** were conducted through telephone interviews to gain a better understanding of aspects related to programme coordination, synergy and implementation modalities. These included APCICT, SIAP, APCTT.
7. **Consultations with the relevant national, regional and global centres of the APDIM partnership strategy⁷** were conducted with specific reference to the status and strategic priorities related to short, medium and long-term context and needs of disaster information management.

⁵ Annex 3 provide the list of persons interviewed and consulted

⁶ Representatives of Bangladesh, Fiji, Macao- China in the APDIM GC were not available during the consultation period, since they were in the interim of nominating representatives.

⁷ E/ESCAP/APDIM/GC(1)/2, Strategic plan and programme direction of the Asian and Pacific Centre for the Development of Disaster Information Management, November 2016.

Telephonic discussions were held with the Focal point, Working Group for Policy and Governance of the Coalition on Combatting Sand and Dust Storms (SDS), Environment Management Group- UNEP, Director, Human Resources and Sustainable Development, Economic Cooperation Organization (ECO), Regional Director, UN office for Disaster Risk Reduction (UNDRR) Asia Pacific, Advisor, United Nations Development Programme (UNDP) Team for National Disaster Loss Data Bases, Director, Global Centre for Disaster Statistics, International Research Institute of Disaster Science (IRIDeS) of Tohoku University, Japan, Executive Director, Asian Disaster Preparedness Center (ADPC) Thailand, Director, Center for Emergency Situations and Disaster Risk Reduction (CESDRR), Kazakhstan, Executive Director Asian Disaster Reduction Centre (ADRC).

The methodology followed in conducting the review did not make any significant deviations to stakeholder consultations, missions and reference documents planned at the inception.

Limitations

The success of the review was reliant on the support and cooperation of the key informants and stakeholders who provided information through the interviews. Face-to-face interviews were conducted with a limited number of stakeholders, as was feasible. There was no opportunity of any relevant regional meetings taking place during the review period to conduct face-to-face interviews with all. Therefore, most of the interviews were conducted through Skype or telephone (unless indicated otherwise). While face-to-face discussions was the preferred method, skype/phone discussions were conducted ensuring that any difference is minimal and the required information for the review questions were obtained. A few stakeholders responded the review questions in written form.

Findings

Overview

The Review findings are based on a desk review of relevant documents including UN resolutions and reports, background documents related to the Centre; key person interviews and consultations with representatives of the member States of the Governing Council; relevant senior government officials and stakeholders of the host country and selected member States; National Focal Points for the Sendai Framework for DRR of the member States of the Governing Council; sub-programmes of ESCAP and the relevant national, regional and global centers of the APDIM partnership strategy, APDIM and ESCAP secretariat staff and members of the reference group of the Review.

APDIM was established through the ESCAP Resolution 71/11 as a regional institution of the Commission located in the Islamic Republic of Iran to contribute to the ESCAP programme of work in the area of information and communications technology and disaster risk reduction. It has the status of a subsidiary body of the Commission. APDIM is envisaged as one of ESCAP's knowledge institutions to promote South-South and regional cooperation that bridge the gaps in capacity and access to information and knowledge for disaster risk reduction and resilience.

The main objectives of the Centre are: i) enhancement of disaster information management to reduce negative impact of natural hazards ii) strengthen the capacities of countries and regional organizations in disaster information management to support implementation of 2030 Agenda for sustainable development iii) enhancement of regional cooperation and coordination among countries and organizations in disaster information management for achieving internationally agreed development goals.

The Centre covers the entire Asia Pacific region, however as stated in the resolution 71/11, the Centre's activities are to focus on the more vulnerable subregions of Asia and the Pacific, including South-East Asia, South and South-West Asia as well as North and Central Asia in the first phase of its operations due to the priority for disaster risk reduction and management cooperation in these subregions. The Centre is to apply a multi-hazard approach in its planning and activities with a focus on earthquake, tsunamis, floods, cyclones/typhoons, sand and dust storms and drought as the main hazards of the region. Further, the Centre is to include all phases and sectors of disaster management and risk reduction before, during and after the occurrence of disasters.

The key products and services of the Centre as defined in the statute are:

- Capacity development in disaster information management and disaster risk reduction
- Information support and analytical works on hazard, vulnerability, exposure and risk assessment at the regional/sub regional levels
- Information and publications in disaster information management

APDIM is governed by a Governing Council consisting of eight member States and the host Government, the Islamic Republic of Iran. The Governing Council members and associate members are elected by the Commission for a period of three years, members are eligible for re-election. The Governing Council meets at least once a year. The strategic directions and the programme of work are consulted and agreed by the Governing Council. The objectives and activities of the Centre contribute to sub programme 5 on information and communications technology and disaster risk reduction and management (ICT and Disaster Risk Reduction Division) of the ESCAP strategic framework and programme of work, by enhancing regional knowledge and knowledge-sharing, strengthening capacities to manage risks and vulnerabilities and capacity building in disaster information management.

The first session of the Governing Council held in November 2016 agreed on a strategic plan and programme direction for APDIM in pursuing the above objectives, focused around three service lines/thematic pillars (Figure 1):

- information and knowledge repository for all disaster related data in the region
- capacity development, drawing on the experiences of ESCAP's other regional institutions to impart training and knowledge sharing
- delivering information services for cross-border disasters in the region

Goals, objectives and service lines of the Asian and Pacific Centre for the Development of Disaster Information Management

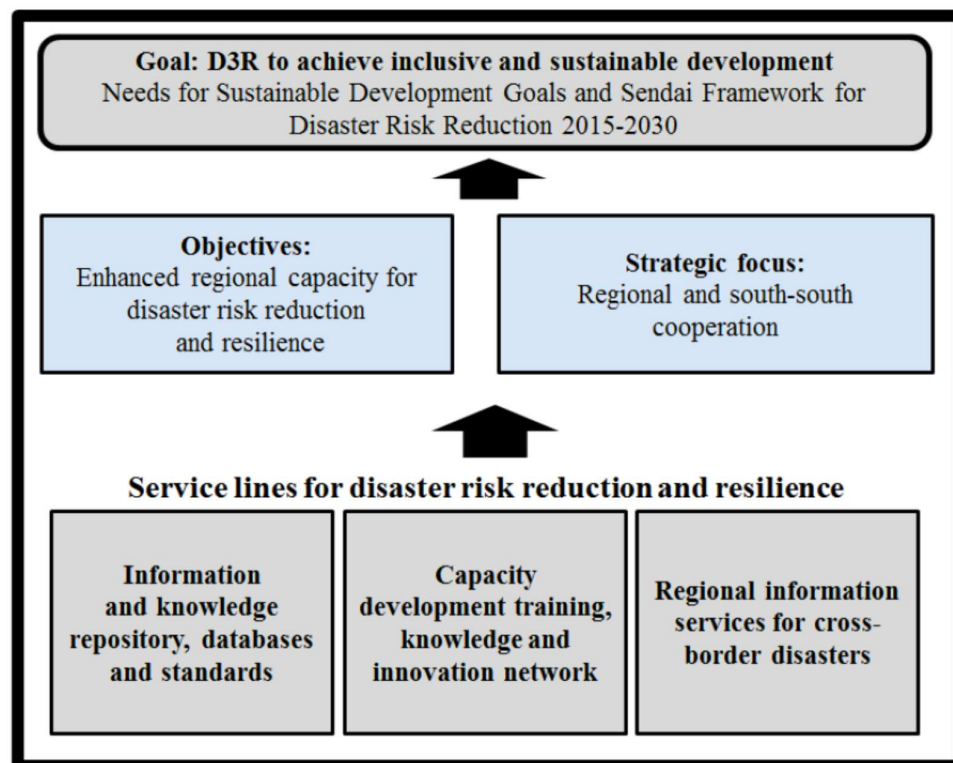


Figure 1⁸

The Parliament of the Islamic Republic of Iran approved the Host Country Agreement (HCA) in January 2019 and the Guardian Council of the Islamic Republic of Iran has ratified the Host Country Agreement in February 2020. Current staff strength of the Centre consists of Director (D1), a Senior Coordinator (P5), a National Officer (NOB) and an Administrative Assistant (G5).

While the ratification of the Host Country Agreement was in process, the Centre has embarked on programmatic work accordingly with the biennial work programmes as endorsed by the Governing Council for 2016/17 and 2018/19. Significant progress has been made under each of the three pillars of thematic focus, contributing to the overall objectives and vision south- south and regional cooperation for effective disaster risk reduction

⁸ E/ESCAP/APDIM/GC(1)/2, Strategic plan and programme direction of the Asian and Pacific Centre for the Development of Disaster Information Management, GC First session New Delhi, 2 November 2016

Key outcomes and accomplishments

1. Enhancing South-South cooperation through inter-country technical exchanges and knowledge sharing:

Following the April 2015 earthquake in Nepal, APDIM brought together experts and government officials from Bhutan, Georgia, India, the Islamic Republic of Iran, Nepal, Pakistan and Turkey to share technical knowledge on retrofitting cultural monuments for seismic resilience and building earthquake resilient cities and critical infrastructure. This exchange of technical knowledge and lessons learned supported the Government of Nepal developing its national recovery and reconstruction strategy in the aftermath of the earthquake incorporating building back better elements of resiliency, sustainable recovery and reconstruction.

APDIM 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 the country for seismic risk reduction. Geotechnical studies and databases for land use planning in urban areas and landslide databases have been used to determine structural improvements. Based on this initial assessment, a technical assistance project has been identified with implementation support from APDIM partners.

APDIM contributed to the promotion of scientific exchange and collaborative efforts in the establishment of effective early warning systems for different hazards such as 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 the Islamic Republic of Iran was achieved by leading this exercise.

2. Advancing partnerships and coalitions for impact-based decision making for effective disaster risk management:

APDIM organized an expert group meeting of UN Coalition to combat sand and dust storms for developing a regional plan of action for information sharing and capacity development in Asia and the Pacific. A 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 forged ties with technical experts from UNDRR, UNDP, Global Centre for Disaster Statistics (GCDS) and Japan International Cooperation Agency (JICA) on Disaster Information Management, with specific focus on development and management of disaster loss databases in Asia and the Pacific.

APDIM has initiated partnership with 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.

APDIM is one of the members of the 'United Nations Coalition on Combatting Sand and Dust Storms' and co-leads the working group on "Mediation and regional collaboration". The

specific strength of APDIM is recognized within the Coalition as an ESCAP Centre to contribute with socio economic aspects of the SDS prone countries and regions, to support risk and exposure assessments to inform preparedness and response planning.

APDIM engaged with the United Nations Convention to Combat Desertification (UNCCD) COP14 presenting its role and activities in sand and dust storms risk reduction and announced its preparedness to contribute substantially to the development of Sand and Dust Storms Compendium.

3. Building strategic partnerships in the Asia Pacific region:

Tehran Ministerial Declaration in July 2017 recognized the role of APDIM in developing human and institution capacities in disaster information management including Sand and Dust Storm Warning

Advisory and Assessment System (SDS-WAS). APDIM has made links with the Steering Committee of all Sand and Dust Storm Warning Advisory System (SDS-WAS) Nodes (Pan America, North Africa,

Europe, Middle East and Asia), by chairing a session on the work of UN Sand and Dust Storm Coalition at the Steering Committee meeting organized by the China Meteorological Agency in November 2019.

4. Enhancing regional cooperation opportunities for disaster risk management:

APDIM has developed a comprehensive and multi-pronged regional approach to mitigate SDS raising attention of the cross-border nature of the issues related to SDS. The report “Sand and Dust Storms in Asia and the Pacific: Opportunities for Regional Cooperation and Action” support the development of adaptation and mitigation policies related to sand and dust storm at the regional and national levels.

5. Recognition of APDIM mandate and role by the regional and global entities:

Key intergovernmental and UN Platforms have recognized APDIM’s mandate and scope to respond the unmet needs of disaster information management and regional cooperation.

The United Nations General Assembly (A/RES/72/218) recognized the establishment of the Asia Pacific Centre for the Development of Disaster Information Management as a Regional Institution of ESCAP.

New Delhi Declaration – 2016 of the Asian Ministerial Conference on Disaster Risk Reduction (AMCDRR) has acknowledged APDIM as one of the significant regional initiatives in its resolve to deliver on the commitments of the declaration for effective disaster risk management.

Typhoon Committee took note of APDIM and its initial work programme. The Committee noted the potential collaboration with APDIM for disaster information management, especially for advancing impact-based forecasting. The Committee also noted the priority of APDIM to support Working Group on Disaster Risk Reduction, Working Group on Hydrology and Typhoon Committee/ Panel on Tropical Cyclones collaboration activities⁹

UNRC, Islamic Republic of Iran commended the role of APDIM in working in collaboration with the Resident Coordinators in the region to support both regional and national objectives of the UN, such as the inclusion of the DRR component in UNDAF review in the Islamic Republic of Iran and the technical advice provided to the Government and the UNCT on flood management.

⁹ Report of the Fiftieth Session of Typhoon Committee, 28 February – 03 March 2018.

Operational modality

The relevance attached to disaster information management in the 2030 Agenda and the Sendai Framework, affirmation of APDIM's mandate by the member States, the readiness of key global and regional organizations engaged in the disaster information field to partner with the Centre coupled with the leverage and credibility of ESCAP are key attributes of APDIM the Review has ascertained. The strong political will of the host Government for disaster risk reduction, the demonstrated dedication to establish the Centre and the firm financial commitment have placed APDIM in exceptionally strong position in stepping into the next phase.

The Review observes that the prevailing geopolitical context of the host country has certain implications to the operations of the Centre, specifically concerning the work under the thematic pillar 1- Information and knowledge management. Functions such as information repository, online capacity development hubs, accessing equipment and software that are inter-operable are somewhat hindered by the current geopolitical situation. At the time of the Review an international political crisis has developed involving the host country. However, it is important to note that the establishment of APDIM in Tehran within the geopolitical context of Islamic Republic of Iran is a significant achievement from a regional perspective. Therefore, inferences related to the geopolitical context require due consideration to identify and adopt more fitting approaches to Centre's operations. This can include stronger leverage on relevant ESCAP substantive divisions and resource centers and expanding partnerships to engage organizations beyond the region.

Member States and partner organizations have provided valuable insights in this regard, specifically underlining the disaster information management aspects that would be complex for APDIM to pursue at this stage. Data generation and constituting large data bases are discouraged in light of the associated challenges a large majority of the governments/policy makers in the region face in accessing such data bases. As a UN ESCAP regional institution APDIM's comparative advantage lies in the intergovernmental work, through connecting analytical function with normative and capacity building functions. Many of the member States and partner organizations support the view that APDIM should keep to its core mandate as an inter-governmental knowledge and policy platform for disaster information management, avoiding ventures that duplicate the work carried out by other regional and global entities.

The Review points towards several key outputs under each thematic pillar to address the priority needs of the member States that have also been endorsed by the Governing Council:¹⁰

Information and knowledge repository, data bases, standards:

- Facilitate uptake of Disaster-related Statistics Framework partnering with the Statistics Division
- Develop and pilot methodologies for disaster risk and exposure assessments to inform policy decisions- a primary requirement of the member States to implement the 2030 Agenda
- Develop innovative methodologies and approaches to access, analyze and use the data available in-country (at varying sources)

Capacity development training, knowledge, innovation network:

- Provide need-based support to disaster loss databases and capacity development that would serve the purpose of monitoring the Sendai Framework and Sustainable Development Goals in partnership with UNDP and Global Centre for Disaster Statistics
- Develop innovative, sustaining capacity development to generate, update and analyze disaster information

¹⁰ ESCAP/75/11, Report of the Governing Council of the Asian and Pacific Centre for the Development of Disaster Information Management on its third session, May 2019

Regional information services for cross-border disasters

- Enhance ongoing work on cross boarder disaster information support to include water related and seismic hazards (in addition to advancing the work on sand and dust storms)
- Strengthen collaborations and synergies with the centers of excellence of the APDIM partnership group and regional organizations such as Economic Cooperation Organization (ECO), UN Special Programme for the Economies of Central Asia (SPECA), South Asia Association for Regional Cooperation (SAARC), Association of Southeast Asian Nations (ASEAN) and the Secretariat of the Pacific Community (SPC), amongst others.

The ongoing regional assessment and scoping study that has been commissioned to assess the baseline, the demand and gap analysis of disaster risk data for disaster risk reduction in the high-risk low-capacity countries in North and Central Asia and South and South-West Asia is expected to provide further insights for designing short- and medium-term outputs of APDIM. The Review takes note on the need for focused discussion on working modalities in the short and medium term by the Governing Council, the management and the key partners.

Performance assessment

The Review was conducted following four key criteria: relevance, effectiveness, efficiency and sustainability guided by questions posed under each criterion, detailed in the Terms of Reference (Annex1). The Review findings are presented below.

Relevance

1. To what extent APDIM programme of work meet the needs and requirements of member States?

The Governing Council of APDIM, which is composed of representatives of 09 member States ascertained at its first session that it would determine and prioritize disaster information management needs based on the requests expressed by member States at the expert group meetings held in different subregions. It also proposed initiating activities on cross-border disasters. The Governing Council has met 03 times over the period covered by this review to discuss and approve the strategic direction and biannual work programmes of APDIM¹¹. The biannual work programmes of APDIM (2018/19; 2020/21) in their entirety contain activities and outputs that have been recommended by the member States and the Expert Group Meetings.

Member States take specific note of the following aspects of the APDIM work programme that meet their needs:

- providing a forum that unpack the global frameworks; namely Sendai Framework and 2030 Agenda for sustainable development from disaster information perspective, providing insights to member States for planning and decision making
- developing knowledge products and methodologies that provide decision support, assist in monitoring the integration of disaster risk reduction into development processes and better monitoring of the Sendai Framework targets
- enabling inter-country technical assistance and knowledge sharing
- facilitating focused expert consultations on priority disaster risk issues in the region
- developing policy guidance and regional action plans to support disaster risk management
- facilitation of expert dialogue on cross boarder disasters, on emerging disasters in the region with a focus on mitigation measures
- providing a common platform to meet the critical need for cross-border connectivity for disaster

¹¹ E/ESCAP/APDIM/GC(1)/4 Governing Council of the Asian and Pacific Centre for the Development of Disaster Information Management First Session New Delhi, 2 November 2016

information

Examples that illustrate the relevance of APDIM to the member states are seen in the products, services and processes that have been developed, as shown in the selected examples presented in Annex 4. Below statements made by member States at various meetings further substantiate the relevance of APDIM.

Statements by the APDIM Governing Council¹²

The Council commends APDIM for fully implementing all its key activities listed under output 1 (Policymakers and disaster risk reduction experts in the Governments and related organizations obtain greater knowledge on policy options and programmes for strengthening disaster information management) of the workplan for 2017 as endorsed by the Council.

The Council noted that South-South cooperation and cross-learning with regard to good practices and lessons learned in seismic risk reduction had been substantially enhanced through the technical assistance activities of APDIM.

The Council noted with appreciation the expertise offered by the APDIM partnership group, namely the Plan and Budget Organization and the Road, Housing and Urban Development Research Centre of the Islamic Republic of Iran, for implementing technical assistance projects.

The Council noted that the analytical work had substantially contributed to promoting intergovernmental discussions on cooperation for addressing transboundary hazards.

The Council reviewed the Centre's work since its second session and expressed its appreciation to the Centre for initiating all the key programmes of the approved workplan for 2018 in accordance with the strategic plan and the three thematic pillars, which were endorsed by the Council at its first and second sessions.

2. Which countries have benefited from APDIM activities and how?

The strategic directions and the 3 pillars that bear the key thematic priorities of APDIM address the disaster information management concerns of all the countries in the region. Benefits to the countries are also realized through the positioning of APDIM within the ICT/DRR programme, through the linkages with the Disaster Risk Reduction Committee, the Statistics and Social Divisions of ESCAP, exemplified in the Asia Pacific Disaster Report and the Asia-Pacific Disaster Risk Atlas.

Further, the resolution 71/11 directs APDIM to support the most vulnerable countries in the region in disaster risk management, with a focus on disaster-prone countries in North and Central Asia and South and South-West Asia. Accordingly, APDIM extended technical support to Nepal in its reconstruction efforts post 2015 Gorkha earthquake. Bhutan's request for an assessment of earthquake risk in the capital city Thimpu was supported by a scoping mission by technical experts from Nepal and Bangladesh. The Islamic Republic of Iran benefitted from the expertise of a host of technical agencies in the region to identify flood risk management strategies following the April 2019 flood.

The integrated flood risk management framework and the recommendations developed for Iran floods are identified as applicable for flood management in other parts of the region, to be taken forward through further enhancing South-South cooperation with China, India, Pakistan and Thailand for flood risk management. Annex 5 contains details of need based support provided to several countries in the region.

¹² ESCAP/APDIM/GC(2)/4 Tehran, 31 January 2018
ESCAP/75/11, 3 rd session December 2018

APDIM's work on cross boarder disasters focusing on the sand and dust storms has benefitted the member States and sub regions where SDS are a major hazard and/or an emerging hazard including Countries on Central Asia, Iran, Turkey, Pakistan, Afghanistan.

3. To what extent APDIM consult the members States in developing its programme of work and designing its activities and outputs?

The main mechanism for consulting members States is through the Expert Group and Governing Council meetings, thematic regional consultations, partnership meetings and consultations with the host country. Since the inception in 2015, 03 Governing Council Meetings were held, 11 Thematic events, 03 Regional workshops, 01 Training workshop and one Technical mission were conducted. Regional and global advocacy and visibility events held at the Asia Ministerial Conference for Disaster Risk Reduction 2016, 2018; Global Platform for Disaster Risk Reduction in 2017, 2019. APDIM Partnership Meeting held in June 2019 with the participation of the representatives of member States provided further consultation opportunities.

Strategic plan and programme direction of APDIM has been established following a rigorous and a long-term planning process that has included research, expert consultations, supported by the work of relevant substantive divisions of ESCAP, more specifically IDD/DRR, Statistics, Environment and development, Social development, Macroeconomic policy and financing for development. Expert group meetings have been conducted in Almaty, Kazakhstan (February 2014), New Delhi (April 2014) and Bangkok (October 2014) to assess the short, medium, and long-term needs of member States.

While there is overall agreement on the mechanisms for consultations, several member States expressed a need for consultations that are more focused on the country needs and closely aligned with the work planning process through the expert groups and Governing Council meetings, as well as through joint projects with the member States. To address the non – institutional nature of Expert Group Meeting, an Advisory Council under the Governing Council that will more specifically focus on the country needs to make recommendations to the Governing Council was proposed by one of the countries consulted.

4. What adjustments needed to be made to make APDIM more relevant to the member States in their efforts to implement the 2030 Agenda for Sustainable Development?

There are significant demands on the member States for disaster information for planning and reporting of 2030 Agenda for sustainable development and the Sendai Priorities for DRR and resilience. Some of the most noted gaps and disparities in meeting these demands are in data availability, in accessing available data, lack of tools, technical knowledge for analysis and application of evidence and analysis for decision making at the national and local levels. Specific reference is made to significant gaps in understanding exposure to risk and vulnerability. Further, in the Asia Pacific region there is a felt need for data on transboundary hazards such as earthquakes, floods, cyclones, sand and dust storms, drought, tsunamis as well as for mechanisms for cross boarder connectivity for disaster information.

Member States and partners agree with the 3 pillars adopted by the GC¹³ to meet disaster information needs in the region in the current disaster risk reduction and resilience building context. However, taking into consideration the extensive scope of the three pillars, member States express the importance of identifying priorities under each pillar with a closer focus on the country needs in the current context. These include support with accessing, analyzing and application of data; utilizing the intergovernmental mandate of APDIM and the unique placement within the Commission to address the issues of data sovereignty, facilitation of communication and information coordination between countries; addressing the prevailing information and knowledge gaps, exchange of expertise,

¹³ E/ESCAP/APDIM/GC (1)/2, Strategic plan and programme direction of the Asian and Pacific Centre for the Development of Disaster Information Management, APDIM GC First session, New Delhi, 2 November 2016

experiences and knowledge. Suggested key requirements for the APDIM work plan in the next phase are summarized in Annex 6.

Adjustments related to the evolving operational context

It is important to note that the current operational context of the Centre significantly differ from that of the time it was established in 2015. Major factors contributory to APDIM's operational context that has evolved since its inception in May 2015 are, the endorsement of the 2030 Agenda for sustainable development, the new UN development reforms, and the current geopolitical situation of the host country. The Review identifies the following main considerations in approaching the outputs and work planning in the next phase:

- i. Obtaining a thorough understanding on the member country requirements of disaster information, an estimation of supply and demand, to use as a guide to inform the selection of outputs matching with the needs of the member States expressed through the Governing Council, Expert Group Meetings and thematic consultation mechanisms. A key step in this direction has been initiated with the commissioning of the study 'APDIM Regional Baseline Assessment and Scoping'¹⁴
- ii. Strengthen the technical capacities of the team, specifically risk assessment expertise, taking into consideration the priorities highlighted in the review for Hazard Risk Vulnerability (HRV) assessments at sub regional, national and local levels- critical requirement for supporting the 2030 Agenda
- iii. Examine the main considerations related to the geopolitical context of the host country and optimal division of labour in information management for disaster risk reduction with a view to identify and differentiate activities and outputs that are feasible to carry out from the Centre's location, and those which could be carried out in cooperation with relevant divisions and resource centers of ESCAP (Secretariat in Bangkok, APCICT in Incheon etc.), and through other partnerships

5. How did APDIM mainstream gender in the design and delivery of its programmes and other interventions?

National and local level actions to implement the Priority 1 of the Sendai Framework for Disaster Risk Reduction 'Understanding disaster risk' underscore the need to make information on disaster risk, hazard-exposure, vulnerability, damages and losses disaggregated by sex, age and disability, and recommend the dissemination of relevant disaggregated data and statistics to enable and ensure gender and social inclusion in disaster risk management¹⁵.

The Review indicates that only a few member States have identified the need for addressing gender aspects in disaster information. Initial steps taken include collection of disaggregated data on disaster affected persons, engaging national statistics organizations and the ministries on women's affairs in the dialogue on data requirements. Member States that are relatively more advanced with planning and implementation of the Sendai Framework priorities affirm on the greater need to systematically collect and analyze sex and age disaggregated information in order to facilitate and strengthen women's substantive role in preparedness, response, recovery and re- construction.

Member States identify addressing gender issues in disaster risk management is an area with limited progress and that governments lack methodological approaches and the required expertise. Gender

¹⁴ The purpose of this study is to assess baseline, demand and gap analysis of disaster risk data for DRR in the high-risk low capacity countries in North and Central Asia and South and South-West Asia to be used as the basis for designing APDIM's Pillar a. the information and knowledge repository and Pillar B. capacity development program.

¹⁵ Sendai Framework for Disaster Risk Reduction 2015-2030

based ratio of the representation in the programmes conducted by APDIM is 16 % of women and 84 % men, the Governing Council representation ratio is 12% women to 88% men. APDIM staff consist of 60% of women and 40% of men. Persons consulted for the Review consist of 79% men and 21% women.

Taking into account that APDIM as an ESCAP resource institution is well placed to mainstream gender considerations in the design and delivery of its work programme, member States suggest APDIM to identify specific actions and actors to integrate into the work plan and the outputs within the 3 thematic pillars.

Accordingly, addressing gender aspects in the content of its work is a priority area for APDIM to look into in developing its next work plan. Further, APDIM needs to consider engaging greater number of women experts in order to obtain women's perspectives as well as to pave way for women's leadership role in disaster risk management as recommended in the Sendai Framework for Disaster Risk Reduction. Guidance provided in the Sendai Framework and the SDG 5: 'Achieve gender equality and empower all women and girls' can serve as the main reference for addressing gender aspects in disaster information management.

Effectiveness

1. What were the results and achievements of APDIM to date?

The first biennial programme of work for the period 2016-2017 was endorsed by the first session of the Governing Council in November 2016. The Governing Council also endorsed the strategic direction of the Centre. The subsequent biennial plan endorsed was for the period 2018-19. A summary of results and achievements during the period of the Review from administrative, financial and programmatic perspectives are provided below.

Administrative: The establishment of the Centre to assume its stated functions has faced some limitations of administrative nature, such as the finalization of the Host Country Agreement (HCA), subsequent Administrative and Financial Agreement of the Centre (AFA) and staff recruitments. The Host Country Agreement was signed between ESCAP and the Islamic Republic of Iran on 31 January 2018. The Islamic Republic of Iran's Majlis (Parliament) approved it in January 2019; the final ratification of the Host Country Agreement by the Guardian Council of the Islamic Republic of Iran was completed in February 2020.

A Governing Council consisting of 09 member States, a Director and staff accordingly with the structure endorsed by the Governing Council have been hired. Staffing of the Centre has been strengthened for the implementation of 2020-21 programme of work. Current Staff strength consist of Director (D1), a Senior Coordinator (P5), a National Programme Officer (NOB) and an Administrative Assistant (G5). While the ratification of the HCA was in process, the Director was not based at the location of the Centre in Tehran. However, Director's visits to oversee the activities of the Centre were well facilitated and visas to the country have been granted on regular basis.

Financial: In accordance with the Paragraph 2 of Resolution 71/11, the Centre is being funded through voluntary contributions from the host Government. The Government of the Islamic Republic of Iran has committed to contribute up to USD 50 million during the first five years of operation of the Centre¹⁶. The Financial and Administrative Agreement includes a provision for a yearly contribution of USD 2.5 Million by the host country which is expected to be paid on a regular basis as soon as the Financial and Administrative Agreement is finalized¹⁷.

While the ratification of the Host Country Agreement and the negotiation of the Administrative and Financial Agreement were still in process, the Government of the Islamic Republic of Iran has made

¹⁶ 'to bear institutional, programmatic and operational costs for five years, up to 50 million United States dollars'

¹⁷ The Financial and Administrative Agreement is under negotiations between the United Nations and the Islamic Republic of Iran. At the time of writing, ESCAP is seeking the advice of the Office of Legal Affairs in New York on some specific clauses of the agreement.

financial contributions to UN ESCAP for APDIM's operationalization and programmatic activities since 2016, amounting to a total of USD 4,409,030 (monetary) and USD 738, 678 (in kind) (Table 1). While the amounts contributed from 2016-2018 were comparatively higher to that of 2019, they were fully sufficient for the continued implementation of the agreed programme of work, including the staffing table, as mandated by the Governing Council.

The review indicates that APDIM has the necessary resources to deliver the Programme of Work approved by the Governing Council in February 2020 at its current staffing level. As recommended by the Review, the Governing Council has requested the secretariat to submit a multi-year strategic programme of work at its next session. It would be advisable that the programmatic objectives, outputs and related financial requirements for the Centre beyond 2020 be aligned with the availability of resources at the time of the development of the multi-year strategic programme of work.

Table 1: Summary of Financial Contributions by the Islamic Republic of Iran

Year	Financial contribution by Islamic Republic of IranIslamic Republic of Iran (USD)	
	Monetary	In kind
2016	361,500	
2017	2,673,972	
2018	988,515	
2019	385,043	
Total 2016-2019	4,409,030	738, 678 ¹⁸

Further, two member States have made financial contributions: the Government of Macao China with USD 30,000 and the Government of Cambodia with USD 2,000. The Resolution also encourages the United Nations and other international organizations and agencies, as well as non-governmental organizations in the relevant fields to provide support, to make voluntary contributions and cooperate in achieving the objectives and the implementation of APDIM work programme.

Programmatic: Informed by the recommendations of the Expert Group meetings in the context of the 2030 agenda for sustainable development and the priorities for action of the Sendai Framework for Disaster Risk Reduction, the strategic direction of APDIM consisting of 03 priority thematic focus areas and service lines have been defined and endorsed by the Governing Council. APDIM work plan is aligned with the ESCAP sub programme 5 on ICT-DRR. A partnership strategy for delivering the outputs of the work programme has been agreed upon, key partnerships have been identified to include national, regional and global resource centers, development partners, Inter- governmental and UN organizations.

Member States and partners consulted for the Review have identified the key achievements of the Centre. APDIM is recognized as a uniquely positioned entity to lead disaster information management needs of the 2030 Agenda for sustainable development at policy and practice levels. The foremost aspects of this position are associated with being an ESCAP regional institution that enables connecting disaster information with the body of information on key development sectors such as infrastructure, transport, trade, environment, social and economic development and its intergovernmental function.

¹⁸ In-kind contributions (office space, equipment and services) value at USD 738,678, one-time USD 440,703 and recurrent on a yearly basis USD 297,975.

APDIM has developed work and delivered concrete outputs under each of the 03 service lines over the period covered by the Review. Current needs of the member States, specifically on national disaster loss data bases have been responded in partnership with UNDRR and UNDP. Specific resource products such as the Asia Pacific Risk Atlas, Asia Pacific Disaster Report have been developed to support the member States and partners for risk informed decision making. These knowledge products support planning processes as well as capacity building at the country level. Assessment of disaster information needs have been initiated with a study commissioned to assess the baseline, demand and gap analysis of disaster risk data for disaster risk reduction in the high-risk low-capacity countries in North and Central Asia and South and South-West Asia.

Intercountry exchanges to enhance capacities and technical support have been enabled. Several key partnerships have been identified to advance with capacity development requirements, with a view to build a regional programme of capacity development in data and information management. Member States recognize the technical assistance APDIM provided to countries with capacity gaps on seismic risk management (Bhutan), post-earthquake recovery (Nepal), and technical capacity provided to the host country (Islamic Republic of Iran) for post- flood response and recovery, assuming its mandated key role. Centers' work on cross boarder hazards; on sand and dust storms and seismic risks has brought attention on some of the key dimensions of transboundary disaster risk management, leading to the formulation of regional and global expert groups on the topic, consideration of regional mitigation approaches that include risk and vulnerability assessments, early warning and preparedness. Member States and partners take note that outcomes at country level are limited owing to the short time span of APDIM's operations and recognize the possibilities for delivering need-based outputs in the next programme cycle.

Member States consider the accomplishments of APDIM during its first five-year period with a forward-looking view, as summarized below¹⁹.

- The Governing Council appreciated that from its first session in November 2016 until its second session in January 2018, all key activities listed under the Output 1²⁰ of the work plan for 2017 have been implemented.
- The Governing Council acknowledged that South-South cooperation and cross-learning with regard to good practices and lessons learned in seismic risk reduction had been substantially enhanced through the technical assistance activities of APDIM²¹.
- APDIM has been incorporated into the Committee on Disaster Risk Reduction of ESCAP. The Committee noted with appreciation the progress in the work programme implementation and recognized APDIM as one of the important regional mechanisms for the realization of the targets and priorities of the Sendai Framework²².

2. How effective was APDIM's capacity building approach? What can be done to improve its effectiveness?

The Strategic Direction of APDIM has specified streams for capacity building as (i) regional capacity development hub of exchange of expertise, experiences and knowledge (ii) providing demand driven and customized training services to address the information and knowledge gaps. APDIM has taken steps forward in both streams, by bringing together regional experts for thematic and focused discussions, by facilitating exchange of experience and knowledge through scoping missions, south-south exchange of expertise and capacity development and training workshops, as well as by

¹⁹ Excerpts from the GC meeting reports

²⁰ Output1: Policymakers and disaster risk reduction experts in governments and related organizations obtain greater knowledge on policy options and programmes for strengthening disaster information management.

²¹ ESCAP/APDIM/GC(2)/4 APDIM Report of the Governing Council of the Asian and Pacific Centre for the Development of Disaster Information Management on its second session, Tehran, 31 January 2018

²² E/ESCAP/APDIM /GC(2)/1 APDIM Governing Council Second session Tehran, 31 January 2018

responding to requests from the member States. Annex 7 provides a list of consultations, training and capacity development workshops conducted by APDIM in collaboration with relevant partners.

The review of relevant documents and the consultations with key informants suggest that capacity building as an area that require modifications based on the priority requirements of the member States to deliver the priorities of the Sendai Framework for Disaster Risk Reduction and the corresponding SDGs. The Review identifies the following considerations for attention that can be addressed based on the APDIM Regional Baseline Assessment and Scoping study currently under way.

Address varying capacity needs: approach capacity development strategies and options based on the status of disaster information in the subregions/by country, given that each country has a system for generating disaster data and information supported with varying levels of expertise and capacities.

Member States suggest that the wide capacity variations between countries require prioritization focusing on those with weaker capacity and the types of capacities required, in order to strengthen and build on existing capacities. Consultations indicate the countries requiring priority attention as Afghanistan, Bangladesh, Cambodia, Pakistan, Mongolia and the countries in the Central Asia sub region.

Sustained capacity: consider achieving sustained capacity (further to conducting training programmes) through modalities such as exchange of experts between institutions and countries, developing in house capacity to assist with the Sendai monitor, peer learning between countries affected by similar disasters, and technically advanced countries taking on to develop capacities of others in selected areas.

Sendai Monitor support: capacity gaps in developing Sendai Monitor reports was indicated by several member States, specifically those whose overall disaster risk management capacities are at a relatively low level. High-level Expert Consultation on Disaster Information Management held Tehran, 18–19 December 2018 provided specific recommendations to be implemented in partnership with UNDRR, UN Country Teams, UNDP and the Global Centre for Disaster Statistics (Annex 8).

New technologies and approaches: explore and apply innovations to data access and analysis such as Big Data, artificial intelligence, as well as connecting with the local level with limited awareness and access to ICTs.

Scaling up: work with the partners to scale up capacity building opportunities, linking up with national, regional and global training and data management institutions, the Statistics Division of ESCAP, paying specific attention to the areas under-served by other agencies.

3. How effectively did APDIM leverage on its designation as a UN ESCAP regional institution?

Member States and partners recognize the strength of APDIM as a UN ESCAP regional institution uniquely positioned to carry out the mandate of disaster information management, to facilitate effective implementation of Sendai Framework for Disaster Risk Reduction and the 2030 Agenda for sustainable development in the Asia Pacific region. More specifically, attention is drawn to its distinctive ability to bring together technical elements such as meteorological and seismic information with the social and economic parameters, i.e. exposure to risk, vulnerability, gender and social aspects of disaster risk. Disaster risk informed policy and practices that yield disaster mitigation and resilience practices are a key requirement and central to achieving Sustainable Development Goals and the broader objective of leaving no-one behind.

The need to address shared vulnerabilities through the prioritization of multi hazard early warning systems for transboundary disasters is recognized in a number of ESCAP policy documents, notably the Regional Roadmap for Implementing the 2030 Agenda for Sustainable Development in Asia and

the Pacific and the 2017 Ministerial Declaration on Regional Economic Cooperation and Integration in Asia and the Pacific²³.

Recommendations of the South-South and Regional Cooperation for Flood Risk Management held in Tehran October 2019, the ESCAP High-level Expert Consultation on Information Management Tools and Approaches for Risk-informed Sustainable Development in Asia and the Pacific held in January 2018 in Tehran have identified priority outputs and activities in this direction to be led by APDIM.

More specifically, the recommendations include: specialized capacity development training and workshops such as spatial land use planning, resilient infrastructure on flood risk management; information management solutions to promote systematic baseline data and adequate risk profiling of countries to assist in designing and prioritizing risk reduction activities; tools and techniques for the assessment and communication of earthquake risk to support risk-informed decisions in partnership with the Global Earthquake Model (GEM); providing a platform for implementing the UN Global Geospatial Information Management (UN-GGIM)'s strategic framework on geospatial information and services for disasters.

Member States attach a strong significance to how APDIM is evolving as a platform addressing cross border disaster issues through regional and south-south cooperation. Stakeholders in the region who are engaged in varying aspects of disaster risk management appreciate the convening function of APDIM, specifically exemplified through the advancements made in the work on sand and dust storms through the adoption of Tehran Ministerial Declaration on Combating Sand and Dust Storms dated July 2017, that agreed to cooperate on combating sand and dust storms at sub-regional, regional and international scales.

4. What adjustments need to be made to its modality of work to ensure even higher effectiveness?

Based on the review of relevant documents and consultations with the member States and partner organizations the following are suggestions for consideration for achieving a higher effectiveness of the resources and efforts of APDIM:

- **Information and Knowledge**

Develop horizontal partnerships: Develop liaisons with institutions at the national level such as National Institutes for Disaster Management, universities and academia for greater outreach, to enable national organizations to make the best use of the disaster information available in the countries as well as for enhancing national capacities and to encourage the potential of the South.

Focus on greater utility: In developing knowledge repository and data bases, instead of options that require member States to have high levels of technical capacities to access - such as meta data platforms, focus on avenues that are more accessible.

Take advantage of the 'Era of Platforms': Exercise the coordinating and convening mandate as a key aspect of the APDIM implementation strategy. Focus on investing on platforms for exchange of experience, for systematic and comprehensive ways of supporting the member States by linking demand for knowledge and capacity through the platforms.

- **Capacity Development**

²³ The Ministerial Declaration on Regional Economic Cooperation and Integration in Asia and the Pacific, Bangkok, 21–24 November 2017. Second Ministerial Conference on Regional Economic Cooperation and Integration in Asia and the Pacific.
http://www.unescap.org/sites/default/files/MCREI-2_L3_E.pdf

Work as a 'centre point' on disaster information management for member States: Carry out knowledge management and knowledge development activities, develop research and training facilities with virtual links connected to all member countries.

Enhance inter-country sharing and learning: APDIM is requested to facilitate sharing cutting edge and proven knowledge and experiences between countries, the practices that can be taken from one-member state to another. More specifically, there are member States (Turkey, Iran, Japan, Indonesia, India) who offer to share their advancements and expertise in disaster information management with the countries that are requesting learning experiences (Afghanistan, Bhutan, Cambodia, Thailand, Nepal, countries in the Central Asia region).

Provide more space for consultation: Member States propose to provide more space for technical discussions, by engaging relevant agencies dedicated to disaster information to exchange views and challenges, with a view to identify specific products, partnerships that can serve member State requirements more effectively. APDIM Side event at the DRR Committee Meeting, the Expert group meeting on combating sand and dust storms held in August 2019, Bangkok is cited as an example of a focused technical consultation. A further suggestion is to build closer connections between the high-level expert group meetings and the agenda of the Governing Council meetings.

- **Regional Cooperation**

Inter- governmental role: Focus on concrete changes APDIM can bring to the member States as a UN intergovernmental Centre. In the complex disaster vulnerability and political context of the Asia Pacific region, governments identify APDIM as a conduit, an entity who can facilitate dialogue and consensus, specifically concerning cross border information issues. A specific example cited in this regard is enabling neighboring countries to support disaster risk management in Afghanistan.

Add value to regional cooperation programmes: Connect with ongoing work on strengthening regional cooperation such as Heart of Asia Istanbul process confidence building measures, South Asia Environment Cooperative programme, Ministerial process of the Economic Cooperation Organization (ECO) to add value and strengthen the collective efforts.

- **Modalities of work**

Be mindful of the current geopolitical context in relation to the host country: Review varying options and opportunities in light of the prevailing regional and national political context. Explore opportunities to leverage ESCAP resources in Bangkok and in other locations to carry out some of the functions of the Centre, to achieve better effectiveness in the next phase.

Enhance visibility: Make the mandate and relevance of APDIM more visible, its presence felt in short and medium term by conducting activities/events to highlight the disaster information management requirements in the current disaster risk management context, such as the urgency of setting the DRM baseline to meet the Sendai Framework target (e); engage countries with innovative approaches to disaster data analysis; provide direct support to selected countries to meet specific needs.

Efficiency

1. What measures were in place to improve cost efficiency in delivering APDIM outputs?

APDIM has adopted following measures to be cost efficient in delivering outputs:

- Leveraging on the strong national capacities in the host country, APDIM engaged national officers in the staff, individual contractors in the extended team and expertise of the national technical institutions in the expert groups. Taking into account the opportunities and

strengths the Islamic Republic of Iran has to offer from a disaster risk reduction perspective, the Centre used the organizational facilities of the host country, including the UN country team to conduct events.

- Working with the IDD/DRR and Statistics Divisions to access available information and technical expertise to develop joint products such as APDR 2019, Asia Pacific Disaster Atlas, and to convey and advocate key messages of the products through the ESCAP advocacy and communication mechanisms.
- Organizing joint workshops, consultations and back to back events with ESCAP events (such as thematic consultations on SDS and disaster data management) with the aim of reaching out to a greater number of countries and organizations through the well-established networks and liaisons of ESCAP
- Organizing advocacy and visibility sessions at the global and regional events such as the Asia Ministerial Conference for DRR and the Global Platform for DRR to expand on the regional and global groupings engaged in disaster information

2. To what extent did APDIM coordinate and cooperate with ESCAP substantive divisions and other organizations in the design and delivery of its outputs? How can the coordination and cooperation be further enhanced?

The Strategic direction and partnership strategy of APDIM²⁴ has mapped the partnerships with relevant Divisions and resource centers of ESCAP. The Governing Council asserted the Centre's comparative advantage in managing information and knowledge for disaster risk reduction and resilience by forging close strategic linkages with the relevant ESCAP sub programmes, namely IDD/DRR, environment and development, and statistics as well as the Regional institutions of ESCAP; APCICT in developing training modules on disaster risk management and climate change adaptation; SIAP on capacity-development training related to disaster statistics, geospatial information management and big data analytics for DRR and resilience. The interlinkages are mutually reinforcing and add value to organizational strategic priorities.

Accordingly, strategic partnerships and coordinated outputs have been developed with IDD-DRR, and planning discussions were held with the Statistics Division demonstrating synergy in research, analysis and advocating key messages through joint products such as the Asia Pacific Disaster Report and the report 'Sand and Dust Storms in Asia and the Pacific: Opportunities for Regional Cooperation and Action'. APDIM also collaborated with the Statistics Division on the pilot training on Disaster-related Statistics, hosted by the Central Bureau of Statistics (BPS) Indonesia. These activities and outputs are examples which combine the insights and the strengths of research and technical expertise from multiple Divisions, specifically IDD/DRR, Environment and Development and Social Development. Further, expert groups, regional consultations and liaisons APDIM has forged with strategic partners were drawing on the strengths of ESCAP.

Consultations point to several areas for further improvement, first and foremost is overall harmonization of the work with relevant substantive divisions of ESCAP, by working with the Statistics Division for operationalizing the 'Disaster Related Statistics Framework' with the member States, developing stronger collaboration with the ESCAP regional institutions, namely SIAP, APCICT and APCTT for delivering relevant outputs in the work plan. Greater cooperation among regional Centers to share knowledge and resources is one of the key considerations under the UN Development System Reforms. Such collaborations may also provide added advantages in addressing some of the limitations related to the geopolitical context of the location of the Centre.

Potential areas of cooperation are:

²⁴ E/ESCAP/APDIM/GC(1)/2

- Collaboration with the IDD/DRR, Social Development and Statistics divisions to overlay disaster data with socio- economic information to formulate and provide policy advice to member States;
- Work with the Statistics Division in data collection, data management to deliver joint products and services also to avoid duplication in meeting the requirements of the member States;
- Collaboration with IDD-DRR for research elements of APDIM work, for balancing outputs between the 3 pillars with specific emphasis on capacity building;
- Engage with the Asia Pacific Forum on Sustainable Development (APFSD)²⁵ as relevant to integrate data aspects in disaster risk reduction and SDG agendas, and to reach out to more countries.

3. What adjustments, if any, can be included to maximize cost efficiencies and programme delivery?

APDIM was not operating at an optimal level during its five years of operation due to limitations of administrative nature. In addition to the required improvements in its operationalizing, consultations suggest collaborative work and partnerships as key strategy to achieve better programme delivery, enhancing the scale and outreach and to maximize cost efficiency. Further to strengthening collaborations with ESCAP Divisions and resource centers, partnerships are suggested as a way to develop niche products of APDIM as well as to take the products to the country level. UNDP and National Cartographic Centre of the Islamic Republic of Iran at the country level, UNDRR at regional level, UNEP and WMO at the global level are cited as examples of key partnerships to focus on.

A further suggestion with reference to niche products is partnership with the International Research Institute of Disaster Science (IRIDeS) at the Tohoku university, specifically to meet the member State requests for support with the Sendai Monitor. Joint programmes with the member States and/or partners is another strategy encouraged by the resource centers such as APCTT, SIAP, APCICT as a proven approach for cost effectiveness as well as to gain ownership of the member States.

Sustainability

1. Is the level of contributions to APDIM from member States sufficient to keep APDIM relevant and effective over the next five years in relation to its stated and potential programme of work?

Financial contributions to APDIM include those made by the Government of Iran within the commitment stated in the Resolution 71/11 (see Table 1), and the contributions received from two other members of the Governing Council: government of China Macau (USD 30,000) and government of Cambodia (USD 2,000). The Government of Pakistan has hosted the 2020 Governing Council meeting providing in country support, the Government of Turkey has expressed an interest to host the next Governing Council meeting.

The resource commitment of the host government endows APDIM with a strong foundation in mobilizing further resources. Contributions made by the governments of China Macau and Cambodia also give out a positive signal. The Government of the Islamic Republic of Iran has reiterated continued support in keeping with the commitments made, at the same time underlining the necessity for contributions by the member countries and UN agencies towards the programmatic costs, including those in kind. Considering that APDIM is entering into a more significant and expansive programme of work, a resource mobilization scheme closely aligned with the proposed multi-year strategic programme of work need to be considered.

²⁵ A 'regional road map' for implementing the 2030 Agenda was endorsed by the ESCAP Commission through resolution 73/9 at its 73rd Commission Session. The road map recognizes that transboundary challenges such as climate change and natural disasters, have important bearings on the ability of nations to achieve SDGs.

2. What would be an optimal level of resource increase to achieve APDIM's planned and potential objectives?

The vision for programme funding in the short and medium term is a combination of resource utilization during the last five years and the outputs envisaged in the next phase. Resource utilization in 2019 estimated approximately at USD 1 million, provide an indication in determining the resource requirements for the next years, with due consideration to the staff requirements and costs of delivering the outputs in the new work plan to be endorsed by the Governing Council. The Review has identified key requirements of member States under each service line, that include sizeable expansions in capacity building and in facilitating cross boarder disaster information through regional and south- south cooperation. Several outputs have been determined in the Expert Group Meetings and thematic consultations, such as supporting the regional action plan for the SDS, risk and vulnerability mapping for cross boarder disasters. On this basis, APDIM senior management estimates an annual 2.2 to 2.4 million USD resource requirement as basic minimum funding towards the next phase.

3. What could be done to increase the resources of APDIM? What other sources of resources could be explored?

Key documents and views of the respondents support that overall progress of the Centre is satisfactory for its first five-year period, and that the achievements that have been made provide a firm foundation to build on, entering the next phase. Below is a summary of suggestions for resource increase obtained in the consultations.

- Develop partnerships with relevant agencies, global and regional resource centers in order to mobilize additional resources to implement the programme in more effective and efficient manner.
- Identify a core set of capacities required by the member States with the APDIM stamp, to generate regular funding to enable their implementation.
- Pursue dialogue with donors specifically interested in supporting disaster information management. There are on-going discussions with the Governments of Sweden and Germany to support programmatic work of APDIM. Initial discussions with the Government of Sweden indicate interest to support the APDIM programme as a whole. Similar possibilities can be pursued for selected products and services.
- Pursue member States for contributions including 'in kind' contributions, aligning with the programme of work for the next phase.

Conclusions

General Conclusions

Based on the Review, it is concluded that the mandate of APDIM remains relevant and has been reaffirmed in the context of the 2030 Agenda for Sustainable Development and the UN development reforms. Despite some limitations of administrative nature, APDIM has made significant accomplishments under each of the three pillars of its Strategic Framework. Member States find that pursuing its intergovernmental mandate, APDIM has set several important processes in motion to advance regional and south-south cooperation in disaster information management, a concern central for the Asia Pacific region. In the current complex disaster vulnerability and political setting of the Asia Pacific region, governments and stakeholders consulted identify APDIM as a conduit with the appropriate mandate and strategic positioning within ESCAP to facilitate intergovernmental dialogue and consensus on issues related to cross border disaster risk management.

The Review finds that at operational level, APDIM has enabled developing analytical frameworks and strategies for risk reduction and resilience building, mobilized expertise and networks to address critical and current disaster risk management needs of the governments, positioning itself as a functional resource organization in this domain. The foremost global and regional organizations engaged in the field of disaster information express readiness to partner with APDIM to support member States delivering the 2030 Agenda.

The Review ascertains that APDIM has evolved as an organization proficient in serving the unmet needs of disaster information management in the Asia Pacific region, equipped with a clear strategic direction, programmatic focus and a governance mechanism. Member States strongly affirm its relevance and need as a forum that unpacks and translates the global frameworks to provide policy planning and implementation guidance on disaster risk informed development practices. The review conclude that based on these achievements, APDIM is in a commanding position in moving forward from the inception phase.

The Review identify that current geopolitical context of the host country has some implications on the operations of the Centre. Representatives of the member States and stakeholders consulted suggest the work programme of the next phase should therefore pay due attention in determining output delivery mechanisms. At the same time, it is underlined that the establishment of APDIM in Tehran and its progressive developments while facing limitations related to the geopolitical context is a significant achievement from a regional perspective. Financial sustainability of APDIM in the short term is secured with firm financial commitment by the host government. The Review underlines the need for securing diversified funding sources for greater efficiency and medium and long-term sustainability.

These conclusions are supported by the information derived from the comprehensive desk review of relevant documents, consultations and key informant interviews with the representatives of member States, ESCAP secretariat staff and relevant national, regional and international organizations. These conclusions are also consistent with the statements and recommendations made at the three Governing Council meetings held between 2016 -2019.

Specific Conclusions

Relevance

Member States and partners are in unanimous agreement on the validity of the mandate and the need for APDIM to serve the member States to implement the SDG s and the Priorities of the Sendai Framework. Respondents of the Review observed that the relevance of APDIM has increased many folds with the endorsement of the Agenda 2030 for sustainable development in September 2015 that underline risk informed development.

The re-iteration of the need for disaster information management services and technical assistance to the member States at the High-Level Policy Forum (HLPF) on SDG s held in September 2019 has re-

affirmed the relevance of APDIM in the Asia Pacific, the most disaster-prone region. Regional declarations such as the New Delhi Declaration, the statements by member States at the venues of GC meetings, DRR Committee Meetings and commission sessions testify on the relevance of APDIM. A majority of the Member State representatives and partners alike identify the added value APDIM can bring to the table within its mandate. APDIM is identified as a uniquely positioned ESCAP resource centre to bring together the hitherto compartmentalized domains of technical information on hazards and risk with the social and economic dimensions of populations and economies, to provide the member States with policy guidance for risk informed development planning and more effective disaster risk management. The Review observes this as an opportunity APDIM is well placed to seize in contributing to better understanding the exposure to risk and vulnerability and 'impact-based forecasting', an increasingly sought out approach by the member States to guide disaster risk management in realizing the 2030 Agenda.

The Member States and key partners identify the three pillars of the APDIM Strategic Framework (2016) to aptly provide the overarching scope and focus to develop its outputs and work plans. Accomplishments specifically in the areas of cross boarder disasters, emerging disasters such as sand and dust storms, technical assistance extended to the governments on request, and its role in facilitating regional and south-south cooperation is commended by a majority who participated in the Review. At the same time, representatives of the member States expressed the view that some of the critical disaster information issues governments are dealing with have not been adequately supported in the initial years of APDIM. The Review underlines the need for prioritizing outputs more closely aligning with the requirements of the member States in the next programme phase.

There is overall agreement on the existing mechanisms for consultation through the Governing Council, Expert Group Meeting and thematic consultations. Several member States expressed the need for consultations through these mechanisms to be more focused on the country requirements as well as the necessity for a strengthened expert consultation mechanism that is aligned with the work planning process.

Effectiveness

APDIM has produced key outputs under each of the three pillars of the Strategic Framework endorsed by the Governing Council in 2016. A group of regional experts on disaster information has been developed and several strategic partnerships have been established over the work plan implementation process. Respondents of the Review strongly identify with the work APDIM has initiated in cross boarder and emerging disasters and bringing the regional cooperation aspects of disaster information to the forefront.

The Review identified capacity building is an area that requires attention and improvement, based on the specific requirements of the member States. The Review also established that member States wish to draw attention to lasting and sustainable capacity development approaches such as inter- country exchanges, innovative on- line capacity development hubs corresponding with widely varying capacity requirements of the countries and sub regions.

The review concludes that APDIM is accepted by the member State representatives and stakeholders as an evolving platform and a resource organization addressing disaster information issues confronted by countries as well as at cross border settings in support of 2030 Agenda for sustainable development. This is exemplified in the inter- governmental consultations on sand and dust storms, mobilizing technical expertise through south-south cooperation, research and advocacy on shared vulnerabilities and disaster risks hotspots in the region through the Asia Pacific Disaster Report 2019 and the Asia Pacific Disaster Atlas. Consultations identify a greater scope that remains to be explored leveraging on multi-sectoral expertise, convening power and strategic presence of ESCAP in the subregions. The analysis throws light on the long-term priorities, including investing in next generation of hazard risk information (such as Big data, Artificial Indigence), platforms to host results with visualization, access and sharing data.

Member States and partners alike attribute any limitations in the work programme to administrative issues related to the establishment process. Limitations in the effectiveness are accepted on these

grounds, however expect APDIM to address priority needs of member States in approaching the next phase, such as accessing disaster information and capacity strengthening to report on the Sendai Monitor system, lasting and consistent in-country capacities, knowledge and skills for hazard-risk-vulnerability analysis, capturing a broader range of cross boarder hazards including floods, drought, seismic hazards. The Review takes note that APDIM is yet to carve out its niche areas and products within the given mandate in response to the above-mentioned disaster information needs. Consultations also underlined that visibility and the presence of APDIM as an area that require further improvement.

Efficiency

APDIM has adopted varying mechanisms of programme delivery such as: forging partnerships, coalitions, joint programming, liaising with host country academic and technical entities and leveraging on ESCAP substantive divisions. The Review takes note of the strategic partnerships and coordinated outputs that have been developed with ESCAP substantive divisions, specifically with the IDD-DRR and the engagement with the Statistics Division on the pilot training on disaster-related statistics. Risk Atlas, APDR and research on sand and dust storms are examples which combine the insights from the work of multiple Divisions. Collaborations have been formed with UN agencies taking advantage of the respective institutional expertise related to APDIM'S mandate such as generation of disaster loss data and Sendai Monitor mechanism. External partners that were consulted, UN agencies, regional resource organizations recognize the shared objectives and mutual benefits in forging partnership with APDIM.

Consultations indicate potential areas for further cooperation with the ESCAP resource centers and substantive divisions within the strategic linkages mapped out in the Strategic Direction of APDIM. External partners have proposed several specific areas of collaboration. The Review concludes on the importance of taking advantage of the common objectives and the need for taking measures to implement the Partnership Strategy endorsed by the Governing Council, prioritizing strategic partnerships and joint outputs in stepping into the next phase in order to optimize efficiency in programme delivery.

The Review observes that the prevailing geopolitical context of the host country has certain implications to the operations of the Centre, specifically concerning the work under the thematic pillar 1- Information and knowledge management. Functions such as information repository, online capacity development hubs, accessing equipment and software that are inter- operable are somewhat hindered. Inferences related to the geopolitical context require due consideration to identify and adopt more fitting approaches to Centre's operations, including stronger leverage on relevant ESCAP substantive divisions and resource centers and expanding partnerships to engage organizations beyond the region.

Sustainability

APDIM has secured its position with the member States with a clear-cut recognition of its mandate and the need for its services in meeting the demands of implementing the 2030 Agenda. This positioning provides APDIM with a strong foundation in entering its next phase with confidence. Leading global and regional resource organizations have expressed willingness to partner and coordinate with APDIM in supporting member States implementing the 2030 Agenda and the Sendai Monitor.

As the review of the relevant documents show, governing mechanism for APDIM has been established through the Governing Council and a team of core staff has been put in place. The strategic direction and thematic pillars to guide the work programming has been endorsed by the Governing Council. The ratification of the Host Country Agreement in February 2020 will enable closing any procedural gaps that existed previously.

With reference to financial sustainability, the host country government has re-iterated its financial commitment to cover the costs of the Centre in full for five years, up to a USD 50 Million. Further contributions made by two other member States in the Governing Council convey a positive sign. The host Government echoes the views of several member States on the importance of diversifying

funding sources, specifically from the member States, including in kind contributions supported by ESCAP. The Review notes the diversification of funding sources based on estimated programme costs of the proposed multi-year strategic programme at the February 2020 Governing Council meeting as an area for priority attention.

SWOT Analysis of APDIM

<p style="text-align: center;">Strengths</p> <ul style="list-style-type: none"> • Strong relevance of the mandate accepted by member States and stakeholders to support Sendai priorities and 2030 Agenda • Unique positioning within ESCAP to integrate technical and social economic DRM information to support risk informed development • UN Inter- governmental mandate that enable facilitation transboundary hazard risk management, regional and south - south cooperation • Partnerships with foremost global and regional resource institutes in the sphere of disaster information and DRM • Firm financial commitment of the host country • Support of countries with strong experience in disaster information, DRM 	<p style="text-align: center;">Weaknesses</p> <ul style="list-style-type: none"> • Gaps in the alignment of programme outputs with the priority requirements of the member States in the short and medium term • Inadequate collaboration with ESCAP Divisions and Centers to generate integrated information/outputs to support member States • Poor visibility of the Centre; its work and outputs • Gaps in focus on niche areas and priority value addition options that carry APDIM stamp
<p style="text-align: center;">Opportunities</p> <ul style="list-style-type: none"> • Relevance and mandate of APDIM strongly corresponding with the member State requirements to deliver the 2030 Agenda • Increasing demand for disaster information management for cross boarder disasters • Willingness of member States and prominent resource organizations in DRM to partner with APDIM • Position as a strong resource Centre in the UN development reforms • Scope and opportunities for resource mobilization from member States and donors 	<p style="text-align: center;">Threats</p> <ul style="list-style-type: none"> • Delays in fully establishing the Centre implicating on effectiveness and efficiency • Geopolitical situation of the host country that impose limitations to work plans/procurement/implementation mechanisms • Limited diversity of funding sources

Recommendations

This section includes a key, overarching, recommendation to the Commission and seven recommendations to the ESCAP secretariat, derived from the findings and conclusions of the Review drawn through the analysis of information generated on key questions raised under the four assessment criteria. The seven Recommendations to the ESCAP secretariat aim at improving the operations, affirming the relevance, enhancing effectiveness and efficiency and strengthening sustainability of APDIM. These seven recommendations were presented and approved by APDIM's Governing Council on 20 February 2020.

Recommendation to the Commission

Continue APDIM's mandate as a regional institution of the Commission

The Review highlighted the continued and increased relevance of APDIM's mandate. The Review concluded that the overall performance of the centre to date, assessed against the criteria of relevance, effectiveness, efficiency and sustainability, was satisfactory and indicative of strong potential to contribute to reduce disaster risk through information management in the ESCAP region. The Review conclusions warrant the continuation of the operation of the Centre as a regional institution of the Commission.

Recommendations to the ESCAP secretariat

Recommendation 1: Develop a new multi-year strategic programme which considers the priority requirements of the countries in the evolving context and trends of disaster information management in the region.

The Review identifies priority outputs, services and strategic liaisons to be considered in the next phase of APDIM's work and ascertain the critical need to support member States to integrate disaster risk management, climate risk and sustainable development to ensure reducing disaster risk and exposure. Currently existing gaps related to gender and social inclusion in disaster information management should be addressed in the new programme strategy and outputs. The Review confirms the unique placement of APDIM that can bring together the two clearly separate domains of technical disaster information and socio-economic information that should be utilized in more focused manner, supported with appropriate collaborations with ESCAP Divisions and external partners and through products and services that meet this requirement. To this end, consultation mechanisms with the member States need to be more closely aligned with the APDIM work planning process through the expert groups and GC meetings in order to achieve a better demand- supply balance.

Recommendation 2: A partnership strategy and a road map to be outlined in the new strategic programme to be approved by the APDIM Governing Council, defining niche products and services that closely correspond with the current and future needs of the member States.

The Review ascertains that partnerships are a key strategic element that should be pursued for achieving better effectiveness and efficiency. Partnerships to be employed as vehicle to develop niche products as well as to take the products to the country and sub regional levels. Analysis shows that as a mutually beneficial and reinforcing mechanism, APDIM can function as a mechanism that convey specific disaster and SDG related outputs of ESCAP developed by relevant substantive divisions (IDD/DRR, Statistics and Social), Asia Pacific Forum for SDG, DRR Committee and other partners in order to support disaster risk informed policies, investments and planning decisions of the governments. Further, the partnership strategy should give due consideration to the recommendation of the 2019 ESCAP-WMO partnership evaluation, to provide support to the Secretariat of the WMO/ESCAP Panel on Tropical Cyclones as appropriate.

Recommendation 3: Further to the approval of a new multi-year programmatic strategy, APDIM should develop and implement a fundraising strategy to diversify funding, attuned with increasing its utility and added value for the member States in implementing the 2030 Agenda.

The consultations showed that an important strategy to consider for enhancing contributions by the member States (including in kind contributions) is demonstrating the utility of APDIM's outputs in the short and medium term. The analysis suggests investing in developing horizontal partnerships with stronger engagement and liaison with institutions at the national level such as National Institutes for Disaster Management, universities and academia. The Review also note this a fitting approach to enhance national capacities and encourage the utilization of the potential of the South. The Review further indicates several strategic partnerships APDIM can harness for mobilizing resources and to deliver specific niche outputs, with UNDP, UNDRR, UNEP, Tohoku Regional Data Center for Natural Disasters-IRIDeS.

Recommendation 4: ESCAP should further strengthen integration of APDIM functions and services across its related programmes and activities.

Analysis points to significant mutual benefits that can be realized by harmonizing the work between the relevant substantive divisions and resource centers of ESCAP and APDIM. There is sizeable scope and opportunities for resource efficiency, building synergy and delivering more effectively to support the member States. This is also an action expected within the on-going UN reforms exercise.

Recommendation 5: Pursue outputs and activities that demonstrate value addition, impact, utility and visibility of APDIM, with a stronger focus on outputs and activities that support current and medium-term disaster information needs of the member States.

Consultations underline the need for supporting hazard, risk, vulnerability (HRV) assessments at sub regional, national and local levels by developing methodologies and mechanisms, placing a specific focus for more effective use of existing disaster information at country level, and increasing the range of cross-border disasters covered in APDIM's work. According to the analysis, HRV assessments supported with developing appropriate capacities at the national level is a fundamental consideration for servicing the governments, to enable more effective planning and decision making. To meet this requirement, APDIM should also consider strengthening technical capacities of the team.

Recommendation 6: APDIM business models and programmes ought to be designed considering the prevailing geopolitical context of the host country, with a view to explore how best to leverage technical support available through ESCAP divisions in Bangkok and resource centers in other locations.

Review identified that functions such as information repository, online capacity development hubs were somewhat impeded due to the prevailing geo-political context related to the host country. Project Documents that were developed during the inception phase (2015/2016) therefore require to be reviewed, with a view to leverage collaboration with external partners as well ESCAP divisions and resource centers to overcome any impediments that have risen due to geo-political situation. The Review suggests considering joint programming and outputs, choice of suitable locations and implementation mechanisms in delivering the work plans.

Recommendation 7: Review and revise the capacity development approach, outputs and activities to firmly address the capacity needs of the member States confronting the limited impact realized in this area.

Consultations show there are vast capacity gaps, specifically in more vulnerable countries and sub regions, which demand lasting capacity building approaches. Potential approaches and activities identified in the review include intercountry exchange of expertise, enabling more advanced countries to convey experience and good practices, on-line capacity development hubs, strengthening

capacities of the UNCTs to support governments with data analysis and application for SDG planning processes and Sendai Monitor (as opposed to one off training programmes and consultations).

Annexes

Annex 1: Terms of Reference

1. INTRODUCTION

1.1 Background of the evaluation

Evaluation at ESCAP is an important function that seeks to determine as systematically and objectively as possible the relevance, effectiveness, efficiency and sustainability of its sub programmes, projects or initiatives. Recognizing the value of an independent evaluation in guiding efforts to improve ESCAP's overall performance and effectiveness, the Commission adopted resolution 66/15 on "Strengthening of the evaluation function of the secretariat of the Commission", which requested the secretariat to ensure that its programmatic work, including the work of divisions, sub regional offices and regional institutions, is evaluated periodically.

To further reinforce the importance of evaluation, the Commission decided through resolution 71/11 on "Establishment of the Asian and Pacific centre for the development of disaster information management (APDIM)" to assess the performance of the centre, on the basis of the findings of an independent, comprehensive review at its seventy-sixth session, and to determine continuation of operations of the centre as a regional institution of the Commission thereafter.

Furthermore, the Commission also decided through resolution 71/1 on "Restructuring the conference structure of the Commission to be fit for the evolving post-2015 development agenda" to review the continued substantive relevance and financial viability of each regional institution every five years. In response to this mandate, the secretariat's evaluation plan include review of APDIM to be conducted in 2019.

APDIM is a regional institution of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) established through resolution 71/11 adopted in May 2015. The objectives of APDIM include:

- (1) To reduce human losses and material damages and the negative impact of natural hazards through the enhancement of disaster information management;
- (2) To strengthen the capabilities and capacities of countries and regional organizations in the fields of disaster information management and disaster risk reduction and implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 and the 2030 agenda for sustainable development and
- (3) To contribute to the enhancement of regional cooperation and coordination among countries and organizations in the region in the field of disaster information management aiming at socioeconomic development of nations and achieving internationally agreed development goals.

APDIM's programme of work is focused around three service lines. Firstly, it serves as a knowledge and information repository for all disaster related data in the region. Secondly, APDIM focuses on capacity development, drawing on the experiences of ESCAP's other regional institutions to impart training and knowledge sharing. Thirdly, APDIM delivers information services for cross-border disasters in the region.

1.2 Purpose and objectives

The review will inform the assessment on the performance of the centre by the Commission at its seventy-sixth session to be held in 2020. The review is forward looking, with a focus on providing recommendations to ESCAP member States and management on how to improve the substantive relevance and financial viability of APDIM in the context of the 2030 Agenda for Sustainable Development and the Sendai Framework for Disaster Risk Reduction 2015-2030.

The specific objectives are:

- (iii) To assess the performance of APDIM against standard criteria of relevance, effectiveness, efficiency, sustainability and gender and human rights mainstreaming;
- (iv) To formulate specific and action-oriented recommendations for improving the performance of APDIM in the context of the 2030 Agenda for Sustainable Development and the Sendai Framework for Disaster Risk Reduction 2015-2030.

1.3 Scope

Scope of the review:

The following shows the tentative questions to be answered by the review under each criteria. These questions may be further refined during the inception period in consultation with ESCAP management and APDIM stakeholders.

Criteria	Tentative evaluation questions
Relevance <i>Assesses the relevance the Centre's objectives and outputs in the context of 2030 Agenda for Sustainable Development and in line with the priorities and requirements of the member States.</i>	<p>To what extent APDIM programme of work meet the needs and requirements of member States; Highlight key examples to illustrate APDIM relevance to the member States? Which countries have benefited from APDIM activities and how?</p> <p>To what extent APDIM consult the members States in developing its programme of work and designing its activities and outputs?</p> <p>What adjustments needed to be made to make APDIM more relevant to the member States in their efforts to implement to 2030 Agenda for Sustainable Development?</p> <p>How did APDIM mainstream gender in the design and delivery of its programmes and other interventions?</p>
Effectiveness <i>Assess the results achieved and the key factors influencing the results</i>	<p>What were the results & achievements of APDIM to date?</p> <p>How effective was APDIM's capacity building approach? What can be done to improve its effectiveness?</p> <p>How effectively did APDIM leverage on its designation as a UN ESCAP regional institution?</p> <p>What adjustments need to be made to its modality of work to ensure even higher effectiveness?</p>

Efficiency <i>Assesses the extent to which human and financial resources were used in the best possible way to deliver activities and outputs, in coordination with other stakeholders</i>	<p>What measures were in place to improve cost efficiency in delivering APDIM outputs?</p> <p>To what extent did APDIM coordinate and cooperate with ESCAP substantive divisions and other organizations in the design and delivery of its outputs? How can the coordination and cooperation be further enhanced?</p> <p>What adjustments, if any, can be included to maximise cost efficiencies and programme delivery?</p>
Sustainability <i>Assess the short and medium-term sustainability of the Centre</i>	<p>Is the level of contributions to APDIM from member States sufficient to keep APDIM relevant and effective over the next five years in relation to its stated and potential programme of work?</p> <p>What would be an optimal level of resource increase to achieve APDIM's planned and potential objectives?</p> <p>What could be done to increase the resources of APDIM? What other sources of resources could be explored?</p>

2. METHODOLOGY

An independent consultant will be recruited to undertake the review. The review shall yield useful information and result in action-oriented, relevant, and useful recommendations. The consultant is expected to produce evidence-based analysis and utilize appropriate and best-practice data collection methods. He/she will undertake a transparent and participatory **process** in consultation with the ESCAP reference group, involving staff and, where possible, partners at all stages of the review. The review will be conducted in line with the ESCAP Monitoring and Evaluation Policy and Guidelines and the UNEG norms and standards for evaluation.

The methodology will cover but not be limited to the following:

1. A desk review of relevant documents, including APDIM's programme of work, relevant project documents and progress reports, concept notes, programmes and completed feedback questionnaires and list of participants of the capacity-building activities, relevant ESCAP evaluation reports;
2. Missions to ADPIM in Tehran and to ESCAP in Bangkok to conduct face-to-face key informant interviews/focus group discussions with staff, partner institutions and member states;
3. Interviews with selected focal points of APDIM member States for in-depth discussion and assessment of APDIM's results and performance;
4. Focused-group consultations to develop a theory of change approach so to draw some ideas/recommendations for the way forward.
5. Follow-up interviews as may be required to clarify responses provided through the online questionnaire.

In assessing the results achieved, the review will make use of a **theory of change approach** to understand the actual results achieved and the process of achieving results. The development of the theory of change should be guided by the results framework of the centre and the actual implementation strategy and delivery of outputs.

Data will be disaggregated by sex and other relevant social categories. The review will undertake a transparent and participatory evaluation process that will involve male and female stakeholders

identified in the stakeholder analysis, including: the reference group, development partners and target beneficiaries in all key evaluation tasks.

In analyzing the data, the review will use qualitative and quantitative approaches, and provide charts and direct quotations. Using the data to assess evaluation against the selected criteria. Data analysis will enable useful, evidence-based findings, the conclusions and recommendations.

The following outputs will be delivered to ESCAP's management and the reference group through the Strategy and Programme Management Division:

1. Inception report, including a work plan and framework detailing the approach of the evaluator (see Annex 1)
2. First draft and final review reports
3. Summary report for submission to the Commission
4. Presentation (ppt) on the findings, conclusions and recommendations

The draft review report, including preliminary findings and recommendations, will be shared with the reference group prior to finalization for their review and suggestions. A summary report will be submitted to the Commission and posted on the ESCAP's public and internal websites.

3. ROLES AND RESPONSIBILITIES

3.1 Reference group

The review will be managed by a review reference group comprising the Deputy Executive Secretary responsible for APDIM (Chair); Director, Strategy and Programme Management Division (SPMD); Director, APDIM; Director, IDD and Chief, Evaluation Unit, SPMD (secretariat).

ESCAP uses the reference group to provide oversight and enhance stakeholder participation as well as substantive support to the review. The group should be gender balanced and have an appropriate mix of skills and perspectives. It provides technical and methodological guidance to the process; reviews and agrees on the terms of reference and inception report; reviews and agrees on a short-list of qualified consultants for selection and approval by the ES; provides quality assurance support to the preparation of the report and validation of recommendations; ensures adherence to ESCAP Monitoring and Evaluation Policy and Guidelines and UNEG norms and standard for evaluation; and support the dissemination of the review results and the formulation of the management response and follow-up action plan.

3.2 Consultant

An external consultant will assume overall responsibility for carrying out the review in an objective and independent manner. This includes, among other activities, managing the work, ensuring the quality of interviews and data collection, preparing the draft report, presenting the draft report and producing the final report after comments have been received in line with standard templates provided by ESCAP. The consultant must have:

- Knowledge of the United Nations System; principles, values, goals and approaches, including human rights, gender equality, cultural values, the Sustainable Development Goals and familiarity with the operations of United Nations Economic and Social and Economic Commission for Asia and the Pacific and its governing structure;
- Professional and technical experience in conducting evaluations and substantive reviews in the UN system and able to apply the UNEG evaluation norms, standards and ethical guidelines and

the relevant organizational evaluation policy and promotion of evaluation and evidence-based learning.²⁶

- Knowledge and experience related to disaster risk reduction, information management and related areas of APDIM's work.

In the absence of an evaluation consultant with strong technical knowledge and experience on disaster information management, the review may engage an expert in disaster information management in an advisory role to provide technical inputs to the evaluation design and support the formulation of recommendations for enhancing the results-orientation, relevance and effectiveness of APDIM.

The review report will be developed following the ESCAP standard evaluation report template provided in Annex II and reviewed by the reference group according to the ESCAP quality criteria shown in Annex III).

ESCAP evaluations adhere to the UNEG norms and standards and UNEG Ethical Guidelines and Code of Conduct in evaluation and all staff and consultants engaged in evaluation are required to uphold these standards. To this end, ESCAP has developed a Consultants Agreement form that evaluators are required to sign as part of the contracting process (see Annex IV).

4. TENTATIVE WORKPLAN

Evaluation phase	Activities	Outputs	Tentative Dates
Phase 1: Planning and Preparation	<ul style="list-style-type: none"> • Set up a reference group • Prepare TOR and approval of TOR by the reference group • Select a consultant and obtain approval from the ES • Recruit the consultant 	<ul style="list-style-type: none"> • Reference group established • TOR approved • Consultant approved by ES • Consultancy contract issued 	May-July 2019
Phase 2: Inception	<ul style="list-style-type: none"> • Review documents • Mission to ESCAP in Bangkok to consult with the reference group and APDIM staff • Interview selected ESCAP staff and external stakeholders • Prepare and approval of an inception report, including detailed methodology • Approve the inception report • 	<ul style="list-style-type: none"> • Detailed methodology is approved • 	July-August 2019

²⁶ See Standard 3.1. Competencies, UNEG. 2016. *Norms and standards for evaluation*.

Phase 3: Data collection and analysis	<ul style="list-style-type: none"> • Mission to Tehran (APDIM) and consult with host government and APDIM partners • Review documents • Interviews with GC members and other stakeholders • Analyse data • Hold theory of change workshop on potential way forward for APDIM 	<ul style="list-style-type: none"> • Data collected and analysed • Theory of change developed 	August-September 2019
Phase 4: Report Preparation	<ul style="list-style-type: none"> • Draft report • Obtain comments from reference group • Present preliminary findings and recommendations to the reference group • Prepare review report 	<ul style="list-style-type: none"> • Draft report reviewed • Comments from reference group incorporated • Review report submitted 	September 2019
Phase 5: Finalization of report	<ul style="list-style-type: none"> • Submit review report to the GC • Present findings and recommendations to the GC 	<ul style="list-style-type: none"> • Final review submitted to ESCAP for submission to the Commission 	December 2019

ANNEXES

Annex II. Contents of the inception report

This report sets out the conceptual framework to be used in an evaluation and details the evaluation methodology, including the evaluation criteria and questions, indicators, method of data collection and analysis, gender mainstreaming approach and risk and limitations. It allows the evaluator to clarify his/her understanding of what is being evaluated and why and to present their preliminary findings based on initial review of documents and consultation with the evaluation reference group and other stakeholders.

Nº	Report Section	Contents
1	Introduction	<ul style="list-style-type: none"> Title of the review Very short description of the centre being reviewed Short reason for the review (will be expanded on under 2 below) Short introduction of the context Timing of the review
2	Review purpose	<ul style="list-style-type: none"> Rationale for the review, why it is needed at this time Expected users and expected use by each of these of the review results
3	APDIM background	<ul style="list-style-type: none"> About APDIM, its goal and objectives and how it tries to achieve these (present a theory of change of APDIM) Coverage in terms of countries / regions and time frame concerned Partners for implementation, including government, other IEs, other UN agencies at country/regional level Stakeholders that have an interest in APDIM and their interest in the evaluation APDIM resources Past evaluations / assessments / studies, if available
4	Review scope, objectives and questions	<ul style="list-style-type: none"> What the review will cover in terms of outputs and activities, coverage of geographical area, time frame and otherwise Objectives of the review, i.e. what the review will accomplish, including what criteria will be covered and rationale concerned Review questions, organized by criteria, with the number of questions
5	Methodology of the Review	<ul style="list-style-type: none"> Methodological approach and rationale Methods for data gathering and methods for data analysis Identification of primary data gathering and rationale for country selection Data availability Limitations to the methodology and ways to address the challenges identified
6	Organization of the review	<ul style="list-style-type: none"> review process and work plan Management issues including roles and responsibilities Review deliverables
7	Annexes <i>(obligatory contents in italics)</i>	<ul style="list-style-type: none"> <i>TOR</i> <i>Detailed theory of change of APDIM</i> <i>Review Matrix</i> <i>Detailed Review schedule</i> <i>List of acronyms used</i> <i>References to secondary information sources</i>

Annex II. Contents of the evaluation report

CONTENT	PAGES (estimate)	COMMENTS
Title page	1	Title, date of publication Names of the evaluators Name of ESCAP or division that commissioned the evaluation
Acknowledgments	1	Prepared by the evaluation team
Table of contents	1	List of chapters, sections and annexes
List of acronyms	1-2	In alphabetical order; these are written out in full the first time they are used in the report
Executive summary	1-3	Background of the review (one paragraph) Purpose and scope (one paragraph) Methodology (one paragraph) Main conclusions (one-sentence conclusions with brief explanation if needed) Recommendations (one-sentence recommendations) Other comments or concluding sentence
1. Background, purpose and scope	1-3	1.1 Background of the review and the topic being evaluated 1.2 Purpose, objectives and scope
2. Object of evaluation description and context	1	Describe object of review – location, target group, budget, timing, relevant norms standards and conventions Goals, objectives of ADPIM.
3. Methodology	1-3	3.1 Description of methodology: activities, timeframe, changes compared to TOR, and reasons for selecting sample reports, countries, sites, case studies, and interviewees 3.2 Limitations: limitations of the methodology and scope and problems encountered
4. Findings	Varying length	4.1 Overview: supporting information for the performance assessment 4.2 Performance assessment: assessment against relevant criteria (relevance, sustainability and efficiency)
5. Conclusions	1-4	Main conclusions, both positive and negative, of the review that follow logically from the findings Ratings table with ratings for standard evaluation and additional criteria and a brief justification
6. Recommendations	1-4	Recommendations based on the conclusions. Can be addressed to ESCAP management, staff, donors and other relevant stakeholders

CONTENT	PAGES (estimate)	COMMENTS
Annexes		I. Terms of reference II. List of documents reviewed III. List of interviewees IV. Data tables and analysis Other annexes as required

Annex III. Quality criteria used to review evaluation reports

Report content	The report is structured logically and is well written
<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> The report follows the table of contents outlined in the TOR and includes the relevant annexes The executive summary is 1-2 pages and highlights the key findings, conclusions and recommendations The report uses consistent grammar and spelling in line with UN rules, written in good English and is easy to read. Main messages are clearly distinguished from the text
Purpose, objectives	The report meets the purpose, objectives and scope of the evaluation stated in the TOR
<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> The report gives a clear description of the object of evaluation. The expected results chain is clearly outlined. Key stakeholders are listed. The report clearly explains the evaluation's purpose, objectives and scope, including main evaluation questions, and limitations The report describes and explains the chosen evaluation criteria Evaluation objectives and scope address gender and human rights
Evaluation method	The evaluation methodology and its application are explained clearly
<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> The methodology is clearly explained and applied throughout the evaluation. The report describes data collection methods and analysis and consultation. Methods are appropriate for effective gender and human rights analysis The limitations and their implications for the validity of the findings and conclusions have been explained
Findings	The findings and conclusions are credible
<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> Findings respond to the evaluation criteria and questions detailed in the scope and objectives section of the report Findings are based on evidence gathered using methodology identified in the report Findings are based on rigorous analysis, are evidence based and objective Findings are adequately substantiated, balanced and reliable The relative contributions of stakeholders to the results are explained
Conclusions	Conclusions are relevant, evidence based and insightful
<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> The conclusions derive from the findings and are evidence based Conclusions relate to the purpose and key questions of the evaluation Conclusions are logically connected to evaluation findings
Recommendations	The recommendations are useful

<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> • The recommendations are clear and follow logically from the findings and conclusions • Recommendations are realistic, concrete and actionable within a reasonable timeframe • Recommendations for ESCAP should be clearly within ESCAP's mandate
Gender human rights	Gender and human rights principles are mainstreamed
<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> • The report discusses the extent to which the project integrates gender equality and human rights perspectives in: project design, implementation and outcomes. • The evaluator collects and analyses data disaggregated by sex and other social groups. • Findings, recommendations and lessons learnt provide information on gender • The report uses gender sensitive and human rights based language.

Annex IV: Evaluation Consultants Agreement Form

Evaluation Consultants Agreement Form

UNEG norms and standards for evaluation

UNEG Code of Conduct for Evaluation in the UN System

To be signed by all consultants as individuals (not by or on behalf of a consultancy company) before a contract can be issued. This is an agreement to abide by the UNEG norms and standard for evaluation and UNEG [Code of Conduct for Evaluation in the UN System](#).²⁷ specifically to the following obligations, among others:

- **Independence.** Evaluators shall ensure that independence of judgement is maintained and that evaluation findings and recommendations are independently presented.
- **Impartiality.** Evaluators shall operate in an impartial and unbiased manner and give a balanced presentation of strengths and weaknesses of the policy, program, project or organizational unit being evaluated.
- **Conflict of Interest.** Evaluators are required to disclose in writing any past experience, of themselves, which may give rise to a potential conflict of interest.
- **Competence.** Evaluators shall accurately represent their level of skills and knowledge and work only within the limits of their professional training and abilities in evaluation.
- **Accountability.** Evaluators are accountable for the completion of the agreed evaluation deliverables within the timeframe and budget agreed.
- **Confidentiality.** Evaluators shall respect people's right to provide information in confidence and make participants aware of the scope and limits of confidentiality.

Name of Consultant: _____

Name of Consultancy Organization (where relevant): _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at (place) on (date)

²⁷ <http://www.unevaluation.org/document/detail/100>

Annex 2: List of key documents reviewed

Terms of Reference, Independent, comprehensive review: Pursuant to Resolution 71/11 on the Establishment of the Asia and Pacific Centre for Disaster Information Management (APDIM)

Economic and Social Council resolution: 2015/31 Establishment of the Asian and Pacific centre for the development of disaster information management

Economic and Social Commission for Asia and the Pacific resolutions:

67/4 Establishment of the Asian and Pacific centre for the development of disaster information management

70/13 Regional cooperation for building resilience to disasters in Asia and the Pacific

71/1 Restructuring the conference structure of the Commission to be fit for the evolving post-2015 development agenda

71/11 Establishment of the Asian and Pacific centre for the development of disaster information management

71/12 Strengthening regional mechanisms for the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 in Asia and the Pacific

72/7 Regional cooperation to combat sand and dust storms in Asia and the Pacific

E/ESCAP/APDIM/GC(1)/2 Strategic plan and programme direction of the Asian and Pacific Centre for the Development of Disaster Information Management, October 2016

Evaluation Report, evaluation pursuant to resolution 67/4: establishment of the Asian and Pacific Centre for the development of disaster information management, March 2015

E/ESCAP/APDIM/GC(1)/3 Consideration of the Work plan for 2016-17 & programme of work for the bi-annum 2018-2019

E/ESCAP/APDIM/GC(1)/4 Report of the Governing Council on its first session, December 2016

ESCAP/APDIM/GC(2)/4 Report of the Governing Council of the Asian and Pacific Centre for the Development of Disaster Information Management on its second session, 31 January 2018

E/ESCAP/APDIM /GC(2)/1 Report on activities of the Asian and Pacific Centre for the Development of Disaster Information Management, Governing Council Second session, Tehran, 31 January 2018

ESCAP/75/11 Report of the Governing Council of the Asian and Pacific Centre for the Development of Disaster Information Management on its third session

ESCAP/CST/2018/CRP.2 Committee on Statistics, Disaster-related Statistics Framework, October 2018

UNESCAP/WMO Report of the Fiftieth Session of Typhoon Committee Ha Noi, Viet Nam 28 February – 03 March 2018

UNESCAP, WMO Evaluation of the ESCAP-WMO Partnership for Strengthening Regional Platforms on Tropical Cyclones, 2019

UNESCAP, Asia-Pacific Disaster Report 2019, The Disaster Riskscape Across Asia-Pacific: Pathways for Resilience, Inclusion and Empowerment

UNESCAP, Sand and Dust Storms in Asia and the Pacific: Opportunities for Regional Cooperation and Action 2018

UNESCAP/APDIM Project Document January 2016 – December 2018

UNESCAP/APDIM Project Document 2019-2021

UNDRR, Sendai Framework for Disaster Risk Reduction 2015-2030

Annex 3: List of persons interviewed and consulted

I. Members of the APDIM Governing Council

H.E Korm Ribaun, Secretary General of National Committee for ESCAP and Deputy Secretary General of National Committee for Disaster Management Phnom Penh, Royal Government of Cambodia

Mr. Kamal Kishore, Member, National Disaster Management Authority (NDMA), India

Mr.Mohsen Esperi, Director General, International Environmental and Sustainable Development Affairs, Ministry of Foreign Affairs (MoFA), Islamic Republic of Iran

Mr.Seyed Hamid Pourmohammadi, Deputy Vice President, Plan and Budget Organization (PBO), Islamic Republic of Iran

Mr. Hijaba Ykhanbai, Director, Environment and Development Association (JASIL), Mongolia

Mr.Muhammad Idress Mahsud, Member- (Disaster Risk Reduction), National Disaster Management Authority NDMA, Pakistan

Mr. Muhammet Maruf Yaman, Information Officer, Disaster and Emergency Management Authority (AFAD), Prime Ministry, Turkey

II. Members of governments associated with APDIM

Mr. Mohammad Qaseem Haidari, Deputy Minister for Policy, Coordination and Planning, State Ministry for Disaster Management and Humanitarian Affairs, ANDMA, Kabul, Afghanistan

Dr. Hua Zhong, Senior Engineer, National Hydraulic Research Institute, People's Republic of China

Dr. Raditya Jati, Director for Disaster Risk Reduction, Indonesian National Board for Disaster Management (BNPB), Indonesia

Mr. Thada Sukhapunnaphan, Executive Advisor, Office of Hydrology and Water of Thailand, Thailand

III. National Government Focal Points for the Sendai Framework for DRR of the APDIM Governing Council member States

Ms. Gao Kun, Deputy Director, Department of International Cooperation and Rescue, Ministry of Emergency Management, People's Republic of China

Ms. Vasito Soko, Director, National Disaster Management Office. Ministry of Rural & Maritime Development & National Disaster Management, Fiji

Mr. Kamal Kishore, Member, National Disaster Management Authority, India

General Badral Tuvshin, Chief, National Emergency Management Agency (NEMA), Mongolia.

Muhammad Idress Mahsud, Member- (Disaster Risk Reduction), National Disaster Management Authority NDMA, Pakistan

Mr. Ozgur Tuna OZMEN, Geophysical Engineer, Disaster and Emergency Management Authority (AFAD), Sendai Focal Point, Turkey

Ms. Yeliz Teker, Geological Engineer, Planning and Risk Reduction Department (Focal point for Sendai Monitor), Disaster and Emergency Management Authority (AFAD), Turkey

IV. United Nations partners

Mr. Sanny Jegillos, Disaster and Governance Advisor, UNDP team for National Disaster Loss Data Base, Asia Pacific Regional Office, United Nations Development programme (UNDP), Bangkok, Thailand

Ms. Lori Hieber Girardet, Regional Director Asia Pacific, UN office for Disaster Risk Reduction (UNDRR), Bangkok, Thailand

Mr. Hossein Fadaei, Senior Programme Management Officer, United Nations Environment Programme (UNEP), Geneva, Switzerland

Ms. Ugochi Daniels, United Nations Resident Coordinator, Iran

V. National Institutes and Technical Centers- I.R Iran

Dr. Mohammad Shekarchizadeh, President, Road, Housing and Development Research Center (BHRC)

Dr. Mahmoud Nili Ahmadabadi, President of University of Tehran, Chair of Special Reporting Committee on Iran Flood 2019

Dr. Ali Mohammad Tahmasebi Birgani, Director, Department of Environment (DOE)- National Center on Combating Dust and Sandstorms

Dr. Sahar Tajbakhsh Mosalman, Vice Minister of Roads and Urban Development, President of I.R. of Iran Meteorological Organization (IRIMO), Permanent Representative of I.R. of Iran with WMO

VI. Regional Organizations and Centers

Mr. Hans Guttman, Executive Director, Asian Disaster Preparedness Center (ADPC), Thailand.

Mr. Koji Suzuki, Executive Director, Asian Disaster Reduction Centre (ADRC), Japan.

Mr. Dzhergalbek Ukashev, Director, Center for Emergency Situations and Disaster Risk Reduction (CESDRR), Almaty, Kazakhstan

Mr. Kaan Sayin, Director, Human Resource and Sustainable Development, Economic Cooperation Organisation (ECO), Tehran, Iran

Mr. Yuichi Ono, Professor, International and Regional Cooperation Office, International Research Institute of Disaster Science (IRIDeS), Tohoku University, Japan.

VII. ESCAP Secretariat staff

Mr. Adnan Aliani, Director, Strategy and Programme Management Division (SPMD)

Ms. Tiziana Bonapace, Director, Information Communication Technology and Disaster Risk Reduction (ICT-DRR) Division

Mr. Edgar Dante, Programme Management Officer, SPMD

Ms. Sahar Safai- ESCAP Consultant for APDIM Regional Baseline Assessment and Scoping study

Mr.Sanjay K Srivastava, Chief, Disaster Risk Reduction, ICT-DRR Division

Ms.Gemma Van Halderen, Chief of Service, Statistics Division

Mr.Kaveh Zahedi, Deputy Executive Secretary, UNESCAP

VIII. ESCAP Regional Centres

Mr.Kiyoung Ko, Director, Asia Pacific raining Centre for Information and Communication Technology for Development (APCICT), South Korea

Ms.Michiko Enomoto, Director, Asian and pacific Centre for Transfer of Technology (APCTT), India

Mr. Ashish Kumar, Director, Statistical Institute for Asia and the Pacific (SIAP), Japan

Ms.Letizia Rossano, Director, Asian and Pacific Centre for the Development of Disaster Information Management (APDIM), Geneva

Mr.Mostafa Mohaghegh, Senior Coordinator, APDIM, Tehran

Mr. Amin Shamseddini, National Programme Officer, APDIM, Tehran

Annex 4: Relevance of APDIM to the member States- key examples

Examples summarized below²⁸ reflect APDIM contribution to its main objective, 'Enhanced regional capacity for disaster risk reduction and resilience', keeping to both the thematic focus articulated in the 3 pillars and the strategic focus of the Centre: 'Regional and south- south cooperation' endorsed by the GC²⁹.

Pillar 1- Knowledge repository

Partnerships have been built at the regional level for a risk data platform with the United Nations Development Programme (UNDP) and the International Research Institute of Disaster Science of Tohoku University in Japan (IRIDeS) under the Global Centre for Disaster Statistics, and at the national level with the National Cartographic Centre of the Islamic Republic of Iran.

Asia-Pacific Disaster Risk Atlas serve as the foundation for an online database repository of multi-hazard risk information related to cross-border disasters. A multi hazard approach to DRM is demonstrated in the work on Sand and dust storms (SDS), by showing its inter-connectedness with drought, land degradation and desertification in arid and semi-arid subregions of Central Asia, West Asia and by identifying risk management strategies for SDS.

In consultations with the World Meteorological Organization, a methodology was defined to model hazardous impacts of SDS in the region in the long-term, as a basis to provide evidence of future outlook to inform the regional plan of action for SDS.

Asia Pacific Disaster Report 2019 'The Disaster Riskscape Across Asia-Pacific: Pathways for resilience, inclusion and empowerment, and analytical document developed in partnership with ESCAP 'Sand and Dust Storms in Asia and the Pacific: Opportunities for Regional Cooperation and Action' highlight hazard risk hotspots and SDS as an emerging disaster in the region and provide information to guide planning and investment decisions.

Pillar 2- Capacity development for disaster information management

Accordingly with its strategic direction to support high risk low capacity countries, APDIM has facilitated inter- country technical assistance to carry out Seismic micro zonation in Bhutan, and retrofitting of cultural monuments in Nepal post Gorkha earthquake. The Regional Workshop on Seismic Risk Reduction conducted in collaboration with the Plan and Budget Organization (PBO) of the Islamic Republic of Iran and the APDIM partnership group held in Tehran and Bam in Iran identified retrofitting needs based on expert deliberations.

Collaborations have been developed with the UNDP and the Global Centre for Disaster Statistics for strengthening national capacities on the Sendai Framework monitor and disaster loss databases, prioritizing work in Pakistan, Sri Lanka and in selected countries in Central Asia region.

Pillar 3- Information services for cross-border disasters

APDIM activities provide a platform for the member States and relevant UN agencies; United Nations Convention to Combat Desertification (UNCCD), the United Nations Environment Programme (UNEP) and the World Meteorological Organization, who have on-going programmes on sand and dust storms to share regional experiences including the challenges of addressing transboundary effects.

²⁸ E/ESCAP/APDIM /GC(2)/1 Report on activities of the Asian and Pacific Centre for the Development of Disaster Information Management, January 2018

ESCAP/75/11 Report of the Governing Council of the Asian and Pacific Centre for the Development of Disaster Information Management on its third session, ESCAP 75 th Session, Bangkok, 27–31 May 2019

²⁹ E/ESCAP/APDIM/GC(1)/2, Strategic plan and programme direction of the Asian and Pacific Centre for the Development of Disaster Information Management, APDIM GC First session, New Delhi, 2 November 2016

APDIM is a member of the 'United Nations Coalition on Combatting Sand and Dust Storms'. The specific strength of APDIM as a ESCAP Centre in the coalition is to contribute with socio economic aspects of the SDS prone countries and regions, to support risk and exposure assessments to inform preparedness and response planning.

The report 'Sand and Dust Storms in Asia and the Pacific: Opportunities for Regional Cooperation and Action' has provided a framework for establishing a partnership network for slow-onset and cross-border disasters and for initiating an implementation plan to build a regional network and sand and dust storm alert system. A methodology to model the long-term sand and dust storms hazardous impact on region has been deliberated at the technical workshop, co-hosted with the World Meteorological Organisation.

Asia Pacific Disaster Risk Atlas present an overview of the extensive and increasing infrastructure investments within the region, a key element in economic production, trade and wellbeing of population, and its exposure to disaster risk. The Atlas highlight the need for infrastructure investments to be risk informed and provide necessary information for policy makers to make such risk informed decisions.

Strategic Direction:

Regional Cooperation

APDIM's work on combatting SDS address gaps existing in three aspects: information, cooperation, and capacity. Expert Group meetings have identified the need to deepen cooperation between countries that are SDS hotspots and the affected areas at regional as well as inter-regional levels, coherence among the various initiatives and strengthening capacities of countries exposed to SDS with well-informed risk-sensitive plans of action.

The Centre has initiated a mechanism for regional cooperation to combat SDS in South and South West Asia as well as North and Central Asia. The role of APDIM in developing human and institutional capacity through strengthened regional cooperation in disaster information management is recognized in the Tehran Ministerial Declaration.

Expert Group meeting was convened in Bangkok in August 2019 to look at the hazardous impact of SDS in the region with a view to support the development of a regional plan of action also in coordination with operationalizing of the Asia-Pacific Disaster Resilience Network (APDRN).

South- South cooperation

APDIM work has led to create a group of experts and knowledge and information network that strengthen South-South cooperation, such as regional network for capacity development in disaster information management.

Cross-learning of good practices and lessons in seismic and flood risk reduction was facilitated responding to the needs expressed by Bhutan, Nepal and Iran following the 2015 Gorkha earthquake in Nepal, and the in the aftermath of the 2019 March/April severe floods in Iran. Technical inputs on retrofitting buildings and cultural monuments in post-earthquake reconstruction were facilitated with the engagement of the representation from Bhutan, Georgia, India, Islamic Republic of Iran, Nepal, Pakistan and Turkey. Technical inputs were provided to flood risk management discussions in Islamic Republic of Iran.

Annex 5: Need based support provided to countries in the region

- Post 2015 Gorkha earthquake in Nepal, APDIM brought together experts and government officials from Bhutan, Georgia, India, Islamic Republic of Iran, Nepal, Pakistan and Turkey to share technical knowledge on retrofitting cultural monuments for seismic reliance and building earthquake resilient cities and critical infrastructure. Nepal has further benefited from a field visit to Bam where the Islamic Republic of Iran shared its experiences and operational practices for retrofitting of Bam, a UNESCO world heritage site, much of which was previously destroyed in the 2004 earthquake. This was contributory to the Government of Nepal developing its national recovery and reconstruction strategy with a 'building back better' approach, incorporating elements of sustainable recovery and reconstruction.
- Government of Bhutan was supported with technical assistance for seismic risk reduction of Thimphu with a scoping mission consisting of senior experts from Bangladesh, Islamic Republic of Iran and Nepal, who shared their experiences in the seismic micro-zonation of cities drawing from national experiences. Based on the on-the-ground exchange of information that resulted in a better understanding of the gaps and needs of Bhutan for seismic risk reduction, further data collection, analysis and a more detailed plan on land use management and resilient city planning followed this initial scoping. A technical assistance project has been identified, to be implemented by APDIM with the Road, Housing and Urban Development Research Centre (BHRC) of Islamic Republic of Iran in close collaboration with the authorities of Thimphu Municipality, the Department of Disaster Management, the Department of Geology and Mines and other relevant stakeholders.
- Following three spells of heavy rainfall during March-April 2019 that resulted in unprecedented floods causing enormous loss of lives, assets and infrastructure in the Islamic Republic of Iran, a Knowledge Sharing and Capacity Development Workshop promoting South-south and regional cooperation for Flood Risk Management was organized in Tehran in October 2019. Representatives from inter-governmental organisations, regional irrigation and water management institutions contributed with global and regional experiences to identify flood risk management strategies with a host of national agencies. Expertise that were brought together included Asian Institute of Technology (AIT), Hydro-Informatics Institute (HII), Institute of Mountain Hazards and Environment, Chinese Academy of Sciences (IMHE), International Centre for Water Hazard and Risk Management (ICHARM), International Water Management Institute (IWMI)/CGIAR), Nanjing Hydraulic Research Institute (NHRI) Regional Integrated Multi-Hazard Early Warning System for Asia and Africa (RIMES).

Based on these comprehensive surveys and studies, the workshop identified a theoretical framework on urban resilience to floods and suggested four-fold strategies for urban and rural flood risk management at national, provincial and local levels. The framework addresses integrated flood management through spatial planning, integrated urban water management, integrated watershed management. A set of recommendations for action for improving flood risk management was agreed to be further developed.

Annex 6: Key requirements for APDIM multi-year strategic programme and work plan

Pillar 1: Information and knowledge repository, data bases and standards

Pillar 1 aims to support regional repository of data bases, information and knowledge; and to develop as a regional hub of new tools, techniques and standards for information management.

Support with accessing, analyzing and application of data:

- Building on the existing data and information at the country level, support the organizations who are mandated with the planning and monitoring of SDGs and Sendai Framework implementation and monitoring with innovative tools and methodologies for hazard-risk-vulnerability(HRV) assessments, for accessing, analyzing and application of data in the planning processes,
- Enable countries to use existing data through examples; how countries have overcome constraints of generating and accessing, the innovations that have emerged through the experiences in managing disasters
- Access the work of global and regional organizations on national sub national hazard risk information (such as World Bank, JICA), enable broader availability and accessibility
- Develop methodologies for overlaying technical information on hazards and risk with the social and economic information to support and strengthen risk, vulnerability and exposure assessments to enable risk informed planning and investment decisions
- Engage the national statistical institutions, facilitate engagement of other relevant government agencies including those focal for Sendai Monitor

Inter- governmental mandate:

- Utilizing the inter- governmental mandate of APDIM and the unique placement within the Commission:
 - address the issues of data sovereignty, enable data sharing through information repository
 - facilitate communication and information coordination between countries

Develop information and knowledge:

- Develop knowledge and information, new technologies focusing on DRR, innovative data management techniques, good practices.
- Enable sharing between the member States, support technology transfer through joint projects, online hubs
- Facilitate accessibility of advancements of science and technology in disaster information by making results understandable and accessible to decision makers (through modeling, other approaches to read data, convert data into context related information, developing capacities)
- Provide guidance on the use of data for modelling, for improving early warning (rainfall, typhoon, SDS data)
- Consider supporting a group on Hydrology similar to the Typhoon Committee

Pillar 2- Capacity development training, knowledge and innovation network

Pillar 2 entails a regional capacity development hub of exchange of expertise, experiences and knowledge; providing demand driven and customized training services to address the information and knowledge gaps

Address the information and knowledge gaps:

- Assess and prioritize capacity needs based on the wide capacity variations between countries, Support the countries who have prioritized DRM, but weak in implementation capacity, such as Afghanistan, Cambodia, Bangladesh, Pakistan, Mongolia, Central Asia sub region
- Identify and apply innovative approaches for sustained capacity development such as developing online learning hubs
- Promote models/examples for transferring knowledge to the local level, simple ways to reach the local level where technology options are limited
- Provide guidance for investment decision making, i.e. how to match appropriate DRM solutions/options for structural measures, non-structural measures with the available investments with the member States

Exchange of expertise, experiences and knowledge:

- Encourage and support South- South cooperation and exchanges
- Facilitate capacity exchanges between countries who share similar disasters (floods, earthquakes), and technologically advanced countries (Japan, China, Turkey, Iran, Indonesia) supporting others
- Enable countries that have advanced in specific areas to share their advancements i.e. Indonesia system for mapping and compiling data for potential risk in coordination with line ministries, Hydro meteorological institutes, Center of statistics on demographic and population data and integrated planning on climate risk; advancements in the PR China in data management by respective departments and ministries

Pillar 3 - Regional Information services for cross-border disasters

Pillar 3 aim to provide specialized services (geospatial and statistical) and regional information (maps, and data bases) for cross boarder disasters

Strengthen regional cooperation, inter- governmental function

- Build information base on cross boarder disasters with research, data, evidence, analysis, management strategies
- Expand the coverage of cross boarder hazards to include seismic and water related hazards
- Facilitate cross boarder connectivity to improve flow of information on transboundary water and river systems, seismic information, meteorological information, air quality issues
- Further strengthen intergovernmental platform for regional cooperation on cross border disasters

Most of the member States and partner organizations support the view that APDIM should keep to its core mandate as an intergovernmental knowledge and policy platform for disaster information management. Consultations also provided insights on the aspects that APDIM ought to attach relatively less priority in its next phase of operations. Suggestions for de-prioritization are:

- **formation of large data bases**, considering the limited utility in relation to the current needs, and associated challenges a large majority of the governments and policy makers in the region face in accessing such data bases
- **generation of specific fields of disaster data** constrained by the geopolitical context of the host country
- **taking on implementation role**, to avoid duplication of work carried out by regional and global partner organizations.

Annex 7: Summary of APDIM programmes/events

Programme/Event	Location/Date	Host organization
Regional expert consultations		
Expert Consultation on Disaster Information and Knowledge	Bangkok, Thailand, 9-11 October 2017	ESCAP-APDIM
Experts Consultation on Regional Cooperation for Building Resilience to Slow-Onset Disasters including Sand and Dust Storms and Information Management for Cross-border Disasters in Asia and the Pacific	Tehran, Islamic Republic of Iran - 5-6 November 2018	ESCAP-APDIM, in partnership with the Plan and Budget Organization (PBO), Islamic Republic of Iran
High-level expert consultation - Regional Cooperation to Combat SDS	Tehran, Islamic Republic of Iran, 30-31 Jan 2018	ESCAP-APDIM, the Government of the Islamic Republic of Iran
High-level Expert Consultation on Disaster Information Management	Tehran, Islamic Republic of Iran, 18 -19 December 2018	ESCAP-APDIM, the Government of the Islamic Republic of Iran
High-level expert consultation - Regional Cooperation to Information Management	Tehran 30-31 Jan 2018	ESCAP-APDIM, the Government of the Islamic Republic of Iran
Expert Consultation on seismic risks	Tehran, 9-11 Oct 2017	
Regional workshops		
Regional Workshop on Seismic Risk Reduction	Tehran and Bam, Islamic Republic of Iran, 9-11 December 2017	ESCAP-APDIM, Tehran, Iran, The Plan and Budget Organization (PBO) and the Road, Housing and Urban Development Research Centre (BHRC) of the Islamic Republic of Iran.
Building partnership networks: Information Management for cross-border disasters	Tehran, Islamic Republic of Iran, 5-6 November 2018	APDIM
APDIM Partnership Meeting	Global Platform for DRR, Geneva, 13-17 May 2019	APDIM
Workshop to develop a methodology for a regional risk assessment for sand and dust storms	WMO, Geneva, 30-31 October 2019	ESCAP-APDIM, World Meteorological Organization
Thematic events		
Thematic session – Disaster Information Management	Asia Ministerial Conference for DRR (AMCDRR) 4 Nov 2016, New Delhi, India	ESCAP-APDIM, UNDRR
Governing Council meetings		
First Session - Governing Council of the Asian and Pacific Centre for the Development of Disaster Information Management	New Delhi, India, 2 November 2016	ESCAP-APDIM
Second Session - Governing Council of the Asian and Pacific Centre for the Development of Disaster Information Management	Tehran, Islamic Republic of Iran, 31 January 2018	ESCAP-APDIM
Third Session - Governing Council of the Asian and Pacific Centre for	Tehran, Islamic Republic of Iran, 19 December 2018	ESCAP-APDIM

the Development of Disaster Information Management		
Side events (at global/regional venues)		
Side-event on Disaster Information Management and Sustainable Development	Asia Ministerial Conference for DRR New Delhi, India, November 2016	ESCAP-APDM
Side-event on Disaster Information Management and Sustainable Development	Bangkok, Thailand, 74 th Commission Session, 15 May 2018	ESCAP-APDM
Side event on “Building resilience to slow-onset disasters: implications for regional cooperation”	Asia Ministerial Conference for DRR, Ulaanbaatar, Mongolia- 3-6 July 2018	APDIM, Government of Mongolia, Islamic Republic of Iran,
Expert group meeting of an coalition to combat sand and dust storms on regional plan of action for information sharing and capacity development in Asia and the Pacific	ESCAP-DRR Committee Meeting, Bangkok, Thailand 27-28 August 2019	APDIM
Expert Consultation on Disaster Knowledge and Information	ESCAP-DRR Committee Meeting, Bangkok, Thailand, 27-28 August 2019	
Technical missions by APDIM		
APDIM’s Scoping Mission for Micro-Zonation Capacity Development	Thimphu, Bhutan, 10-13 September 2017	ESCAP-APDIM, The Municipality Government of Thimphu
Technical Workshops		
Training workshop on Disaster Loss Databases and Sendai Framework Monitoring	Tehran, Islamic Republic of Iran, 22-24 April 2019	ESCAP-APDIM, UNCT- Islamic Republic of Iran, UNDP, UNDRR
South-South and Regional Cooperation for Flood Risk Management in Islamic Republic of Iran: Knowledge Sharing and Capacity Development Workshop	Tehran, Islamic Republic of Iran, 9-10 October 2019	ESCAP-APDIM, UNCT- Islamic Republic of Iran, Planning and Budget Organization
Conferences		
High-level Regional Conference on Information Management for Disaster Risk Reduction and Resilience	Tehran, Islamic Republic of Iran, 30-31 January 2018	ESCAP-APDIM

Annex 8: Recommendations for providing Sendai Monitor Support

High-level Expert Consultation on Disaster Information Management, Tehran, 18–19 December 2018

The expert meeting recommended that APDIM initiate capacity development programme on Sendai Framework Monitoring in 2019 with the first national activities in the Islamic Republic of Iran and Pakistan as the initial pilot countries, respectively with the National Disaster Management Organization (NDMO) of the Islamic Republic of Iran and the National Disaster Management Authority (NDMA) of Pakistan, in partnership with the United Nations Office for Disaster Risk Reduction (UNISDR) and in coordination with United Nations Country Team (UNCTs). The national training would also include database development and management, including structure design and applications that are specific to country needs.

The meeting also recommended that a pilot retrofitting on disaster loss databases that would serve the purpose of monitoring the Sendai Framework and Sustainable Development Goals (SDGs) be undertaken in the Islamic Republic of Iran addressing country specific context and needs, in partnership with UNDP and Global Centre for Disaster Statistics (GCDS).

Capacity development in disaster loss databases could also be carried out by APDIM in other countries. In this respect, APDIM could provide support to two ongoing pilot countries of UNDP, namely Nepal and Sri Lanka.

In addition, UNDP and APDIM would work jointly to support Bangladesh, Kyrgyzstan and Tajikistan.

APDIM could also support the United Nations Office for Disaster Risk Reduction (UNISDR) and UNDP to further strengthen capacity of Afghanistan in disaster database for Sendai Framework monitoring. APDIM to also consider supporting the United Nations Office for Disaster Risk Reduction (UNISDR) in expanding capacity development programme on Sendai Framework Monitoring to the Pacific Island Countries (PICs) in the medium term.

The expert meeting advised that APDIM consider providing capacity development support to member countries upon request, for developing their national strategies on disaster risk reduction that would complement the strengthening of national capacities for Sendai Framework monitoring, in partnership with the United Nations Office for Disaster Risk Reduction (UNISDR).

Source: 3rd Governing Council Report ESCAP/75/11, Commission session Bangkok, 27–31 May 2019, Report of the Governing Council of the Asian and Pacific Centre for the Development of Disaster Information Management on its third session, Annex II page 8

Annex 9: Review questions - Asia and Pacific Centre for Disaster Information Management (APDIM)

In consideration of the mandate given to APDIM (<https://apdim.unescap.org/>) by the Resolution E/ESCAP/RES/71/1130 to support the requirements of the member States in implementing Priorities of the Sendai Framework and the 2030 Agenda- Sustainable Development Goals (SDG s):

Assessment Criteria	Review Questions
1. Relevance Assesses the relevance the Centre's objectives and outputs in the context of 2030 Agenda for Sustainable Development in line with the priorities and requirements of the member States.	What are the functions of APDIM that most closely correspond with meeting the current disaster information needs of member States?
	To what extent APDIM programme of work meet the needs and requirements of member States? Highlight key examples to illustrate APDIM relevance to the member States
	Which countries have benefited from APDIM activities and how?
	What are the activities/outputs that have evolved and prioritized by the member States in addition to the work plans approved by the Governing Council?
	What are the outputs that APDIM can priorities to support the requirements of the member States in disaster data management within the below mentioned 3 pillars proposed by the Governing Council for the period 2019-21? -As a source of knowledge and information -Capacity development: training and knowledge sharing -Providing information services for cross-border disasters
	How did APDIM mainstream gender in the design and delivery of its programmes and other interventions?
	To what extent APDIM consult the members States in developing its programme of work and designing its activities and outputs?
	What adjustments needed to be made to make APDIM more relevant to the member States in their efforts to implement 2030 Agenda for Sustainable Development?
2. Effectiveness Assess the results achieved and the key factors influencing the results	What were the results & achievements of APDIM to date?
	What could be the modalities and working arrangements to carry out the mandate of APDIM, to service the member States more effectively?
	How effective was APDIM's capacity building approach? What can be done to improve its effectiveness?
	How effectively did APDIM leverage on its designation as a UN ESCAP regional institution?
	What are the Institutions /Resource Centers APDIM should partner with to be more effective in servicing the member States?

³⁰ E/ESCAP/RES/71/11. Establishment of the Asian and Pacific centre for the development of disaster information management

	What are the limitations and drawbacks in APDIM's modality of work to achieve the desired results at national and sub-regional level?
	What adjustments need to be made to its modality of work to ensure even higher effectiveness?
	<i>In the backdrop of several procedural limitations and delays experienced in setting up of APDIM since the Resolution 71/11:</i>
	What are the management strategies APDIM can adopt to deliver the work plans navigating the limitations, for turning limitations into opportunities?
3. Efficiency Assesses the extent to which human and financial resources were used in the best possible way to deliver activities and outputs, in coordination with other stakeholders	What measures were in place to improve cost efficiency in delivering APDIM outputs?
	To what extent did APDIM coordinate and cooperate with ESCAP substantive divisions and other organizations in the design and delivery of its outputs?
	How can the coordination and cooperation be further enhanced?
	What are the Business model options to be considered within the political context and the scope of APDIM to meet the priorities expressed by the member States?
	What are the suggestions for more cost effective and result-oriented partnerships?
	What adjustments, if any, can be included to maximize cost efficiencies and programme delivery?
4. Sustainability Assess the short and medium-term sustainability of the Centre	Is the level of contributions to APDIM from member States sufficient to keep APDIM relevant and effective over the next five years in relation to its stated and potential programme of work?
	What would be an optimal level of resource increase to achieve APDIM's planned and potential objectives?
	What could be done to increase the resources of APDIM? What other sources of resources could be explored?
	Who are the potential donors to mobilize resources in line with a realistic assessment of funding requirements?
	What are the suggestions for a five-year resource mobilization plan