



ESCAP Multi-Donor Trust Fund for Tsunami,
Disaster and Climate Preparedness

Strategic Note 2017-2020

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1 Introduction

Background

An effective early warning system is a key component of disaster prevention efforts and resilience building. The costs of early warning systems are generally far outweighed by the economic benefits. In Asia and the Pacific, investments in hydro-meteorological warning services could have a benefit-cost ratio of between four and 36. A study for ESCAP estimated that on average, over the next century the Indian Ocean Tsunami Warning and Mitigation System will save the equivalent of at least 1,000 lives per year¹. Sustaining the necessary funding is a major concern, so it is important to emphasise the benefits of investing in a regional 'public good'.

Much of the investment required is in people – specifically the technical staff of national meteorological and hydrological services, to enable them to make forecasts more accurate and user friendly, and to increase warning lead times. For high-frequency, low-impact hazards, such as storms and floods the priority should be to improve local and national warning systems. However, for low-frequency, high-impact hazards, such as tsunamis, it would be more economical to take a collective or regional approach.

With improved forecasting and advanced geospatial modelling for vulnerability and exposure assessment, early warning systems are becoming more impact-based and risk-informed. Impact-based forecasting brings the risk information providers – particularly the hydrometeorological, seismological and geospatial community – closer to disaster management authorities and related sectoral ministries. It is an important multisectoral approach to make multi-hazard early warning systems more effective, and it represents a process of graduation from early warning to early action for mitigation and prevention.

Many Asia-Pacific countries have improved their early warning systems for tropical cyclones. Bangladesh has had success in combining early warnings and cyclone shelters. Over a 40-year period, fatalities have been cut dramatically: in May 2017, for example, cyclone Mora, hit southern coastal areas with wind speeds of up to 150 kilometres per hour but there were fewer than ten deaths. Another successful example is Hong Kong, China where the decrease in deaths caused by typhoons has been attributed to improved early warning systems combined with better compliance with

¹ Asia Pacific Disaster Report 2017 p.128 - <http://www.unescap.org/publications/asia-pacific-disaster-report-2017>

building codes². A recent example is typhoon Hato (24 August 2017), the most severe typhoon in 53 years to hit Hong Kong, China, where fewer than 10 deaths were recorded.

Despite the success stories, access to early warning is not yet universal. Joint action is needed to improve warning systems for shared hazards that cut across national borders. Moreover, steps also need to be taken to ensure the sustainability of early warning systems.

ESCAP's Multi-Donor Trust Fund

The ESCAP Multi-Donor Trust Fund for Tsunami, Disaster and Climate Preparedness in Indian Ocean and South East Asian Countries (“the Trust Fund”) was established in 2005 through a US\$ 10 million contribution from the Royal Thai Government. The Trust Fund’s initial, overall objective was to build and enhance tsunami early warning capacities at various levels by responding to the needs of Indian Ocean and South East Asian countries. In addition to Thailand, the governments of Bangladesh, Germany, India, Japan, Nepal, the Netherlands, the Philippines, Sweden and Turkey have all provided financial and in-kind contributions to the Trust Fund. The Trust Fund was expected to contribute to the development of an integrated regional early warning system (EWS) comprising a network of collaborative centres connected to sub-regional and regional platforms. To this end, the Trust Fund applied a multi-hazard approach in line with the principles of effective and people-centred end-to-end early warning systems. In 2011, the scope of the Trust Fund was expanded to include climate and disaster preparedness within the core areas of support, while retaining a focus on early warning for coastal hazards. In 2015, the Advisory Council endorsed the expansion of the reach of the Trust Fund to include Small Island Developing States (SIDS) of the Southwestern Pacific. Henceforth, to reflect this new geographic scope, the report will be referring to the Multi-Donor Trust Fund for Tsunami, Disaster and Climate Preparedness.

Key achievements to date

Since its establishment, the Trust Fund has contributed significantly to the progress made in building regional and national warning systems for coastal hazards. In 2011, a key milestone was reached with the operationalization of the Indian Ocean Tsunami Warning and Mitigation System (IOTWMS), which was established through the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (IOC-UNESCO). The Fund also supported the establishment of

² Asia Pacific Disaster Report 2017 p.127 - <http://www.unescap.org/publications/asia-pacific-disaster-report-2017>

the Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES), which is closely linked to the IOTWMS.

As of December 2016, the Trust Fund had supported 26 projects with a total budget of approximately US\$ 15.5 million, directly benefitting 19 countries. Projects cover most aspects of early warning, including but not limited to: monitoring and warning services that provide support to lower capacity countries; risk maps for community preparedness planning; development and testing of Standard Operating Procedures (SOPs); education and public awareness raising activities; strengthening of warning dissemination; and emergency drills.

Early warning systems in a complex Asia-Pacific region

Since the 2004 Indian Ocean Tsunami, considerable progress has been made in early warning systems and bringing disaster risk management to the fore. However, the systems are faced with some significant challenges. Among these, early warning systems: a) mostly fall short of being multi-hazard; b) often have limited coverage and do not always reach the 'last mile'; c) struggle to secure and sustain funding; d) present a level of disconnect between different initiatives; e) fail to address fragility, conflict and complex crisis; and, f) have not yet adapted to risk-multipliers such as climate change and rapid urbanisation.

In 2017, Asia and the Pacific continue to be the world's most disaster-prone region. The disaster risk largely emanates from multiple hazards with transboundary and socio-economic origins and impacts. In addition to natural hazards, the region is also plagued with several theatres of violent conflict and fragile governance which present enormous challenges for development and security in the region.

Where violence is widespread and government ceases to function, the pace of development falls dramatically, and conditions can deteriorate to extreme levels. Protracted conflicts and civil unrest in the region have resulted in displacement and politically-driven migration. This is a setback to strengthening early warning systems and resilience building efforts. Newly settled migrants and refugees may not fully be integrated in early warning systems of the host communities and countries.

Furthermore, the Asia-Pacific region stands out for its economic growth achievements, albeit in a somewhat uneven manner. Social disparities and economic development gaps between countries exist and appear to be widening in cases. According to 2016 key statistics provided by the Asian Development Bank, 330 million people are still living on less than \$1.90 a day, and approximately 1.2 billion people in Asia and the Pacific are below the poverty line of \$3.10 a day. Disasters and poverty are bidirectional in

their causative linkages, particularly in certain transboundary areas where multi-hazard risks prevail.

Harnessing regional cooperation for disaster prevention and building resilience is therefore crucial to achieving the aspirations of the 2030 Agenda for Sustainable Development. The Trust Fund is evolving to face these challenges and build on the opportunities offered by the new global and regional commitments.

2 Challenges and opportunities

Challenges

Disasters and their impact in the Asia-Pacific Region

Asia-Pacific is the most disaster affected region in the world. A study by ESCAP³ shows a person living in the Asia-Pacific region is now approximately five times more likely to be affected by natural disasters than a person living outside the region. Asia and the Pacific, which accounts for 60 per cent of the global population, had 88 per cent of the people affected by natural disasters. Since 1970, natural disasters in Asia and the Pacific have killed two million people – accounting for 57 per cent of the global death toll.

Disaster risks are on the rise. As the climate system has warmed, the number of weather-related hazards globally has tripled, and the number of people living in flood-prone areas and cyclone-exposed coastlines has doubled. The APDR notes that there will be three times the increase in the number of people and economic assets exposed to these hazards. This trend is expected to persist.

The ESCAP study links disasters to increasing well-being losses, widening inequalities, and aggravating conflicts in fragile states. Countries with Special Needs⁴ are particularly vulnerable with future expected economic losses at close to 4 per cent of their GDP. In addition, a two to threefold increase in flood losses in China, India, Bangladesh, and Pakistan by 2030 and deep future uncertainties caused by an alarming geographical shift in drought risk in South Asia and South-east Asia call for stronger and sustainable measures of disaster risk reduction.

The greatest impacts of disasters are in countries which have the least capacity to prepare for disasters, or respond to them. Between 2000 and 2015, the low- and lower middle-income countries in the region experience almost 15 times more disaster deaths than the region's high-income countries. Beyond the human costs, our research indicates that over the SDG implementation period 40 per cent of global economic losses from disasters will be in Asia and the Pacific- while the region accounts for around 36 per cent of global GDP. The greatest burden of the losses as a proportion of GDP will be borne by Small Island Developing States with average annual losses close to 4 per cent of their GDP while the least developed countries will have annual losses of around 2.5 per cent of GDP.

³ <http://www.unescap.org/publications/asia-pacific-disaster-report-2017>

⁴ <http://www.unescap.org/our-work/macro-economic-policy-financing-development/countries-special-needs>

The Asia-Pacific region accounts for over half of the world's absolute poor, and this is the group that is most severely impacted by disasters. Disasters destroy much of their already meagre assets and income, and these damages do not even begin to consider well-being losses. Well-being losses are substantially more for the poorest populations since they cannot use savings or assets to cope with the impacts on health, education, and livelihoods. Several empirical examples illustrated in the Asia Pacific Disaster Report 2017 show that post-disaster, poorer households have less food available, reduce their meal intake, remove children from school and sell their assets at a much higher rate than their wealthier counterparts. These disproportionate impacts widen socio-economic disparities, exacerbate existing inequalities, and trap them in poverty that can be transmitted from one generation to the next. Further, there are increasing complexities and interactions between disasters, poverty, inequality, and conflict. Consequently, more efforts are required to understand the complexities of disaster risk and to anticipate on potential impacts on societies and all sectors of the economy.

Impact-based forecasting

Whereas considerable progress was achieved in identifying and predicting natural hazards, greater emphasis is required to anticipate the negative impacts of such events on societies and economies. Several countries in the region, including China and Japan⁵, are moving towards 'impact-based' forecasting. It combines hazard forecasts with data on risk to highlight how people in hazard-exposed and marginal areas can be affected. Impact-based forecasting shows how natural hazards interact with existing socio-economic conditions.

Impact-based forecasting, if it is to be successful, will require a coordinated, multi-disciplinary effort among various government agencies. Early warning providers, such as the national hydrological and meteorological services, seismological early warning, and geospatial agencies, need to coordinate closely with disaster management authorities and sectoral ministries, such as agriculture, water management, public works and infrastructure.

New investments in data collection will be required, as well as cooperation to develop sharing and partnership arrangements for large-scale computing. Data and information - on hazard, vulnerability and exposure - will need to be integrated from a much wider range of sources, including from models, satellite measurements, ground observation, crowd sourcing, cloud computing, census, and damage and loss databases. Such a demand will

⁵ Asia Pacific Disaster Report 2017 p.114 - <http://www.unescap.org/publications/asia-pacific-disaster-report-2017>

require cooperation between technically advanced countries and those with low capacities.

Urgency for high-risk, low capacity countries

The links between disasters and development were extensively debated over the past few decades. Development can either increase or reduce vulnerability, and disasters can set back development or provide opportunities for development. This has been extensively documented, and resulted in significant changes such as the paradigm shift toward disaster risk management.

Recent mega disasters, such as cyclones in the Bay of Bengal, the Indian Ocean Tsunami of 2004, and typhoons and flooding in the Pacific Ocean, have led to some notable investment in risk reduction in countries in the Asia-Pacific region. The most significant changes were observed in countries such as Bangladesh, China, India, Indonesia, and the Philippines, all of which are among the top ten recipients of disaster risk reduction (DRR) assistance.

The least developed low capacity countries are particularly exposed to the threats of natural hazards, particularly in the coastal and fast growing urban centres. The trends in urbanisation in many of these countries are posing additional challenges and resulting in greater exposure to hazards and risk of other man-made disasters. Many people have migrated to cities due to natural disasters. Cities near disaster-affected areas are usually receivers of the displaced persons and their number is expected to increase in the future due to environmental change. Several Asia-Pacific countries have seen sudden increases in their populations because of conflicts. For example, Kabul has increased its population by 131 per cent (from 1.6 to 3.7 million people) from 1995 to 2010.

As a result, the Trust Fund has prioritized these countries with other low capacity countries of Asia and the Southwestern Pacific.

Transboundary disaster resilience

The transboundary nature of disasters that traverse geopolitical borders results in widespread socioeconomic and environmental impacts that disproportionately affect poor and marginalised communities. Natural and man-made disasters have had a significant impact on people living in poverty. When poor people are affected by disasters, the relative share of their wealth loss is two to three times higher than that of wealthier individuals, largely owing to the nature and vulnerability of assets and livelihoods. A considerable amount of research indicates that natural

disasters are partially responsible for the flow of households into poverty (A/71/230)⁶, and contributes to migration to urban centres.

Many of the disasters in Asia and the Pacific are transboundary in nature. Early warning technology has reached a high level of development in recent years, but still there are major disparities and gaps, particularly in countries that face high disaster risks but have low coping capacity – in ensuring fast and reliable dissemination of warnings, and in building the knowledge and capacity of communities to act appropriately – especially for transboundary hazards.

Despite progress in regional early warning systems, especially for tsunami and tropical cyclones, there are significant gaps for other hazards. Consequently, countries in Asia and the Pacific are calling for better regional early warning systems for hazards such as transboundary river-basin floods (e.g. South Asia and Southeast Asia), landslides, flash floods and glacial lake outburst floods.

‘Risk multipliers’

‘Risk multipliers’ refers to factors compounding risk, which in turn leads to greater loss of life and assets, and other cascading impacts. They amplify risks to economic, social and environmental issues and can aggravate already fragile situations and the existing vulnerability of populations. The following are particularly salient for Asia and the Pacific: effects of climate change, environmental degradation, rapid urbanisation, and armed conflict and violence.

Because hazard characteristics are changing due to climate change, traditional risk analysis is no longer sufficient. Using climate scenarios in 2030, the Asia Pacific Disaster Report 2017 shows that many buildings and critical infrastructure will have to cope with conditions that will be radically different from current ones. Similarly, climate risk scenarios also warn of deep future uncertainties due to an alarming geographical shift in drought risk in South Asia (westward) and South-east Asia (eastward) as well as track and intensity of tropical cyclones in the Pacific. The flood risk in transboundary river-basins of the region is likely to increase 2 to 6 times under moderate and severe climate scenarios.

Many cities are located in the areas where multi-hazard risks are growing rapidly. In the Asia-Pacific region by 2015-2030 it is estimated that the population in the ‘extreme-risk’ areas, is expected to grow more than 50 percent in 26 cities, and by 35 to 50 per cent in 72 cities. As a result, the

⁶ Report on regional cooperation mechanisms for multi-hazard risk assessment and early warning https://www.unescap.org/commission/73/document/E73_21E.pdf

number of city dwellers exposed to extreme and high risks is likely to increase significantly.

Conflicts undermine the capacity and commitments of states to prevent and respond to natural disasters and crises. Disasters, in turn, create unstable economic conditions, exacerbate social fault lines and heighten social exclusion- creating fertile grounds for conflict.

A comprehensive understanding of the interlinkages between the 'multipliers' is still missing. However, the overwhelming perception is that they pose real threats to the region and need closer attention as part of disaster prevention through early warning systems.

The nexus between DRR, climate change and conflict has been mostly overlooked. Recognising early warning systems for conflict differ somewhat from those focusing on natural hazards, there is scope for better integration. This is particularly relevant at the local level, where communities cannot afford to have separate systems. People's perception of risk at the local level will be comprised of all the threats, natural and man-made, they are exposed to. To strengthen their resilience, a multi-hazard approach is essential, as well as sufficient levels of investment.

Funding

Despite more frequent disasters and economic losses on the rise, funding to reduce disaster risk has only marginally increased. The funding levels for DRR are not meeting the current needs and the gap is only widening with newly generated risk. This was confirmed by an Overseas Development Institute (ODI) study highlighting that growth in development assistance for DRR has been 'moderate'. Between 1991 and 2010, the average annual spend was US\$681 million (constant 2010 US\$), representing only a small fraction of the total international aid finance. In comparison to the US\$3.3 trillion on development assistance from 1991-2010, the DRR spending has barely reached US\$13.65 billion. Funds globally dedicated to emergency response for example are five times higher than those used for DRR (Kellett and Caravani, 2013)⁷.

Furthermore, the same study concluded that development assistance for DRR is concentrated in a small number of countries. The top ten recipient countries in terms of DRR finance received 59% of the total finance spent between 1991-2010. The largest recipients of DRR finance (Bangladesh, China, Indonesia, India and the Philippines among others) have high mortality risk, but poorer and drought prone countries are inadequately represented.

⁷ <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8574.pdf>

The current DRR finance architecture is somewhat unpredictable. Despite calls for increased financing for disaster risk reduction, levels of funding are not expected to increase significantly. Sendai Priority 3 is a reminder that “public and private investment in disaster risk prevention and reduction through structural and non-structural measures are essential to enhance the economic, social, health and cultural resilience of persons, communities, countries and their assets, as well as the environment.” The wide range of actors competing for the limited resources presents additional challenges. The Trust Fund aims to channel funding from its multiple donors, and leverage the comparative advantages of ESCAP as a regional economic and social commission.

Securing continuous funding for countries has been and will remain one of the main challenges and priorities of the Trust Fund. Sufficient funds need to be secured over the long-term to ensure the strengthening and sustainability of early warning systems, as well as the Trust Fund’s ability to continue supporting regional cooperation in a cost-efficient manner.

Opportunities

Conducive International Agreements and Frameworks

The year 2015 has been witness to a historic alignment of global development frameworks covering sustainable development, disaster risk reduction and climate change. Within this alignment process, it is important to highlight the extent to which mainstreaming is emphasised with all the agreements explicitly calling for disaster and climate risks to be fully integrated in all future national and sectoral development plans.

Multi-hazard early warning systems offer common opportunities for addressing the DRR and resilience-related goals and targets of the SDGs and the Sendai Framework for Disaster Risk Reduction (tables below).

a) The Sendai Framework for Disaster Risk Reduction 2015 - 2030

The Sendai Framework for Disaster Risk Reduction was adopted in March 2015 and identifies the following key priority areas: (i) understanding disaster risk, (ii) strengthening disaster risk governance to manage disaster risk, (iii) investing in disaster risk reduction for resilience, and (iv) enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction. The new framework advocates for multi-hazard EWS and specifically mentions the promotion of simple and low-cost early warning equipment facilities.

The framework is designed to reduce existing levels of risk, and to prevent new risks emerging, in relation to both man-made and natural hazards. It makes no explicit references to conflict in the text. However, according to the UN Secretary-General’s Special Representative for Disaster Risk Reduction,

“the Sendai Framework does clearly identify many of the drivers of risk which can give rise to either conflict, or a natural hazard-related disaster, when little or nothing is done to mitigate or eliminate it.” (Source: Can the Sendai Framework help conflict prevention?⁸).

The Trust Fund’s work is and will continue to be consistent with the priorities and guiding principles articulated by the Sendai Framework. This includes the forging and strengthening of regional partnerships integrating the private sector; supporting country-specific plans and projects; the funding of innovative approaches and tools for ensuring access of affected population to risk information; and, the specific targeting of low-capacity high-risk countries.

Table 1: Seven global targets of the Sendai Framework

Sendai Framework for Disaster Risk Reduction, 2015-2030:
a) Substantially reduce global disaster mortality by 2030 [...].
b) Substantially reduce the number of affected people globally [...].
c) Reduce direct disaster economic loss in relation to global gross domestic product (GDP) [...].
d) Substantially reduce disaster damage to critical infrastructure and disruption of basic services.
e) Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020.
f) Substantially enhance international cooperation to developing countries [...].
g) Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people [...].

b) The 2030 Agenda for Sustainable Development

The 2030 Agenda for Sustainable Development was adopted through resolution 70/1⁹ in 2015 to build on and complete the Millennium Development Goals. The Trust Fund Strategy 2017 – 2020 is consistent with the implementation path of the agenda that, among others, calls for: strengthening international institutions; improvement of innovative partnerships between governments, business and civil society; overcoming regional and national development challenges. Special attention is required

⁸ <https://www.unisdr.org/archive/48819>

⁹ General Assembly resolution 70/1, Transforming our world: the 2030 Agenda for Sustainable Development, A/RES/70/1 (25 September 2015), available from undocs.org/A/RES/70/1.

for Least Developed Countries, Landlocked Developing Countries and Small-Island Developing States.

Table 2: Selected Goals and Targets from the SDGs

The Sustainable Development Goals, 2015-2030:
Goal 1 Target 5 (1.5): By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.
Goal 2 Target 4 (2.4): By 2030, ensure sustainable food production systems and implement resilient agricultural practices...that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters.
Goal 11 Target 5 (11.5): By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.
Goal 13 Target 1 (13.1): Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.
Goal 13 Target 3 (13.3): Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.
Goal 16 Target 1 (16.1) Significantly reduce all forms of violence and related death rates everywhere.
Goal 16.A Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime.

c) Climate Change

Climate change adaptation is a substantial element in the Paris Agreement¹⁰ (COP21 - Conference of the Parties to the UNFCCC) adopted in 2015.

The relevance and importance of addressing climate change to attain sustainable development is also emphasized through SDG 13 'Climate Action'.

In March 2017, a UN System Strategic Approach on Climate Change Action¹¹ was proposed. The Strategic Approach is guided by the system's collective commitment to improving collaboration and delivery of support on climate

¹⁰ http://unfccc.int/paris_agreement/items/9485.php

¹¹ <https://www.unsceb.org/content/un-system-strategic-approach-climate-change-action-0>

change to Member States in the 2030 Agenda for Sustainable Development era of implementation.

Table 3: Selected passages of the Paris Agreement and United Nations Strategic Approach on Climate Change Action

Paris Agreement - Article 2 explicitly calls for:

- (b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience;
- (c) Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.

United Nations Strategic Approach on Climate Change Action is to:

- (a) Respond to the comprehensive and ambitious sustainable development and climate change architecture recently established including, but not limited to: the 2030 Agenda for Sustainable Development, the Paris Agreement on Climate Change, the Sendai Framework for Disaster Risk Reduction, and the New Urban Agenda; as well as to the growing challenges that climate change presents for sustainable development, responding to humanitarian need, and sustaining peace;
- (b) Promote the UN's role in advancing climate change action and sustainable development as one coherent and mutually reinforcing agenda. This includes support to Member States for implementation, to avoid duplication in activities, and to capitalize on available expertise across the UN system; and
- (c) Enable, inspire and guide the UN system, building on existing activities and seeking to enhance the leveraging of synergies.

While the Trust Fund refers to climate preparedness, the previous strategy only focussed on coastal hazards. Climate adaptation and climate early warning, however, also covers non-coastal hazards such as drought, heat waves, and floods among others. Trust Fund's members, UN agencies and implementing partners are supporting and conducting preliminary work on climate forecast and early warning especially in the generation and actual use of climate forecast by relevant end-users including national and sub-national government ministries and agencies including directly to agricultural communities most affected by the changing climate.

Unprecedented regional commitments and mechanisms

Asia

The re-alignment process undertaken at international and national levels is also taking place within regional cooperation agreements, e.g. the South Asia Association for Regional Cooperation (SAARC) and Association of Southeast Asian Nations (ASEAN). Each region is further identifying its own priorities within the agreement frameworks and determining the way they are to be collectively achieved. In the Southeast Asian region, for example, cooperation on disaster management between countries is largely undertaken based on the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) that came into effect in 2009, now implementing its second phase of the Work Plan¹². This legally binding agreement between ASEAN member nations sets in place regional policies, operational, and logistical mechanisms to enable member states to seek and extend assistance in times of disaster and carry out collaborative undertakings on disaster mitigation, prevention, preparedness, response, and recovery and rehabilitation.

Pacific

Two frameworks are particularly relevant for this sub-region, the SAMOA Pathway (2014)¹³ and the Framework for Resilient Development in the Pacific (2016)¹⁴.

At the Third International Conference on Small Island Developing States, with the overarching theme of ‘the sustainable development of SIDS through genuine and durable partnerships’, Heads of State committed to the SAMOA Pathway (or SIDS Accelerated Modalities of Action). The call for support for the efforts of Small Island Developing States explicitly requested:

- (a) To build resilience to the impacts of climate change and to improve their adaptive capacity through the design and implementation of climate change adaptation measures appropriate to their respective vulnerabilities and economic, environmental and social situations;
- (b) To improve the baseline monitoring of island systems and the downscaling of climate model projections to enable better projections of the future impacts on small islands;
- (c) To raise awareness and communicate climate change risks, including through public dialogue with local communities, to increase human and environmental resilience to the longer-term impacts of climate change;

¹² <http://www.asean.org/storage/2016/02/AADMER-Work-Programme-2016-2020-v1.6.pdf>

¹³ <http://www.sids2014.org/index.php?menu=1537>

¹⁴ <http://www.forumsec.org/resources/uploads/embeds/file/Annex%201%20-%20Frame%20work%20for%20Resilient%20Development%20in%20the%20Pacific.pdf>

(d) To address remaining gaps in capacity for gaining access to and managing climate finance.

A second ground-breaking commitment was the endorsement by Pacific Island Forum Leaders in September 2016 of the Framework for Resilient Development in the Pacific (FRDP). This constitutes a unique integrated approach to address climate change and disaster risk management through a regional framework that provides high-level strategic guidance to different stakeholder groups on how to enhance resilience to climate change and disasters, in ways that contribute to and are embedded in sustainable development. This integrated approach advocates for a more efficient use of resources, to rationalise multiple sources of funding which address similar needs, and for more effective mainstreaming of risks into development planning and budgets.

The Trust Fund's new strategy will compliment and promote cooperation among existing and planned regional agreements. As the new global development frameworks are expected to result in adjustment and modification of existing plans and agreements, determining the key regional and sub-regional organizations and cooperation mechanisms to support (e.g. RIMES, AADMER, SAARC, SAMOA Pathway, etc..) as well as determining the most effective options and approaches to promote and develop multi-hazard EWS capacity building and development, will require initiating discussions with, or at least monitoring the progress and direction of, these regional cooperation mechanisms.

Trend towards multi-hazard early warning systems

Each hazard has its own specific warning requirements and lead times. However, early warning indicators for one type of hazard may also be relevant to another. For example, indicators for violence potential may also apply to drought (e.g. forecasted yields of crops, livestock losses, competition over resources, and environmental degradation). Where possible, early warning for individual hazards should be integrated into a multi-hazard system. This brings benefits in terms of economies of scale, sustainability and efficiency. The more often a multi-hazard system is activated, the more likely it will be maintained and be readily available for hazards such as tsunamis that occur infrequently. Such integrated systems may also help the public better understand the range of risks they face and the need to prepare and to respond to warnings.

In line with the vision of the Sendai Framework, several cities and countries have moved to multi-hazard systems. For example, in Hong Kong, China, an effective multi-hazard early warning system provides alerts on tropical cyclones, storm surges, and extreme temperatures, as well as on floods,

diseases, physical damage and other impacts¹⁵. In India, the Government has integrated the EWS for tsunamis and storm surges, as a step towards bringing together warning information for a wider range of hazards.

One of the problems in developing multi hazard early warning systems is that responsibilities can be distributed across different departments and ministries. It can be difficult to combine the different systems. The Trust Fund has supported several initiatives to promote greater synergies and efficiencies, including the CAP on the Map project aiming to improve institutional responsiveness to hazards through multi-agency situational awareness.

Asia-Pacific Disaster Resilience Network and the regional platform for multi-hazard early warning systems

To further address gaps in regional cooperation for early warning and to strengthen coherence between the 2030 Agenda and other internationally agreed frameworks, the ESCAP secretariat brought together the efforts of ESCAP pertaining to disaster risk reduction and resilience together under an Asia-Pacific Disaster Resilience Network. By doing so, the secretariat “accords priority to synchronizing multi-disciplinary support to member States in the mainstreaming of disaster risk reduction in [...] development strategies” as emphasized by the Commission in its resolution 73/7¹⁶, and implement its work on multi-hazard early warning systems in accordance with the Sendai Framework and the 2030 Agenda.

To support the regional road map for implementing the 2030 Agenda in Asia-Pacific, one of the pillars of the network is the platform for multi-hazard early warning systems. The regional platform presents a systems approach aligned with the strategic role of ESCAP in multi-hazard early warning systems, providing multiple benefits. The regional platform integrates the different initiatives in a cohesive and mutually supportive manner. Secondly, it strengthens the linkages between early warning service providers and disaster risk reduction and sustainable development policymakers at the regional level. Furthermore, the platform takes stock of unmet needs, including requirements for capacity development, and addresses them through ESCAP work programme activities and partnership strategies. This includes aligning the activities and initiatives of ESCAP and the ESCAP Multi-Donor Trust Fund with the Climate Risk and Early Warning Systems initiative, and the International Network of Multi-Hazard Early Warning Systems. It thus combines immediate needs with long-term imperatives that strengthen coherence between the Sendai Framework and 2030 Agenda.

¹⁵ Asia Pacific Disaster Report 2017 p.127 - <http://www.unescap.org/publications/asia-pacific-disaster-report-2017>

¹⁶ https://www.unescap.org/commission/73/document/E73_RES7E.pdf

UN Secretary General's commitment to resilience building and prevention

UN Secretary General António Guterres stated in his remarks to the Security Council Open Debate on “Maintenance of International Peace and Security: Conflict Prevention and Sustaining Peace (10 January 2017) “The interconnected nature of today’s crises requires us to connect our own efforts for peace and security, sustainable development and human rights, not just in words, but in practice”.

The vision on prevention outlined by the Secretary General encompasses not only violent conflict but other kinds of avoidable man-made and natural crisis, recognising that long standing distinctions between types of crisis have eroded in the face of complex, interconnected sources of fragility. Preparedness and responses need to adapt accordingly.

The need to invest more to help countries build strong and inclusive institutions and resilient communities was highlighted. Early warning systems are among the tools required. Ultimately, development is the key to prevention.

The broad vision of prevention is consistent with recent intergovernmental agreements on Sustainable Development (A/RES/70/1), Sustaining Peace (A/RES/70/262 and S/RES/2282 (2016)) and Women, Peace and Security (S/RES/2242), which recognized the multiple, interlinked causes of crises and the imperative of tackling them in a holistic, joined up manner bringing all the UN’s development and political tools to bear.

In the words of Secretary General Guterres, “Prevention is not merely a priority, but the priority. If we live up to our responsibilities, we will save lives, reduce suffering and give hope to millions.”

3 Comparative advantages

a) The regional cooperation mandate and convening power of ESCAP

As the regional development arm of the United Nations for the Asia-Pacific region, ESCAP provides a forum for regional cooperation and collective action for its 53 Members States and 9 Associate Members. The region is home to 4.1 billion people or two thirds of the world’s population, many of whom are particularly at risk of natural hazards.

ESCAP gives strong participation to the smaller and often left out voices of the region, the least developed countries, the Small Island Developing States and landlocked States. It works to overcome some of the region’s greatest

challenges by providing results oriented projects, technical assistance and capacity building to member States.

ESCAP is committed to a resilient Asia and the Pacific and uses its convening power to bring countries together to address issues through regional cooperation. One such platform is the ESCAP Commission that meets annually at the senior officials and ministerial levels. Every two years, ESCAP convenes the Disaster Risk Reduction Committee to discuss policy options and strategies, and regional cooperation mechanisms for disaster risk management. With the World Meteorological Organization, it is also a co-facilitator of the two intergovernmental regional bodies dealing with tropical cyclones, the Typhoon Committee (TC) and the Panel on Tropical Cyclones (PTC).

Considering the high exposure and vulnerability of the South-Western Pacific to tropical cyclones, ESCAP has sought ways to extend regional cooperation mechanisms to this subregion. This approach is aligned with the Nuku'alofa Ministerial Declaration, adopted on 24 July 2015 at the First Pacific Ministerial Meeting on Meteorology, and the Framework for Resilient Development in the Pacific.

Additionally, ESCAP and WMO, through the WMO Regional Association V Tropical Cyclone Committee for the South Pacific and South-East Indian Ocean, are working on extending the inter-agency cooperation framework of the Typhoon Committee and the Panel on Tropical Cyclones to the Pacific Member States.

This approach was supported by the Pacific Member States, which, at the sixteenth session of the WMO Regional Association V Tropical Cyclone Committee for the South Pacific and South-East Indian Ocean, recognized that the ESCAP/WMO partnership could contribute to enhanced operational capacity in cyclone early warning and preparedness and could serve as an important means of sharing experiences from Asia with the Pacific. This subject will be taken up again at the next session of that Committee, in 2018.

In addition, ESCAP has a role in promoting rigorous analysis and peer learning in core areas of work. It translates these findings into policy dialogues and recommendations, and provides good development practices, knowledge sharing and technical assistance to member States in the implementation of these recommendations. Every two years, it launches the flagship Asia-Pacific Disaster Report that provides an overview of the state of disaster resilience in the region and other key issues.

b) Coherence with the SDGs and Post 2015 agreements

All ESCAP's work is now underpinned by the Sustainable Development Goals. ESCAP resolution 72/6 'Committing to the implementation of the

2030 Agenda for Sustainable Development in Asia and the Pacific' requests the Executive Secretary to "strengthen support to Member States in their efforts to implement the 2030 Agenda in an integrated approach, inter alia, with analytical products, technical services and capacity-building initiatives through knowledge-sharing products and platforms, and to enhance data and statistical capacities".

In addition, Member States, in the third session of the Asia-Pacific Forum on Sustainable Development (APFSD) highlighted how the 2030 Agenda provides an opportunity to shift away from "business as usual" and to more effectively address multi-sectoral challenges. More holistic approaches that integrate the social, economic and environmental dimensions of sustainable development were considered as indispensable to the achievement of the 2030 Agenda.

The Executive Secretary is leading the Regional Coordination Mechanism of the United Nations system to support a coherent response as we continue to work with the wider United Nations system and other partners to build regional consensus, undertake evidence-based policy analysis and formulation, build capacity, exchange best practices and lessons learned, and facilitate regional integration and cooperation in support of member countries.

The Trust Fund strategy makes a direct contribution to the Goals and targets of the Sustainable Development Goals. The new programmatic approach is designed to be further aligned with this ambitious framework particularly the following Goals: *No Poverty* (Goal 1), *Zero Hunger* (Goal 2), *Industry, Innovation and Infrastructure* (Goal 9), *Sustainable Cities and Communities* (Goal 11), *Climate Action* (Goal 13), and *Peace, Justice and Strong Institutions* (Goal 16). One such illustration of the alignment is Target 1.5 "By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters".

c) Building on a decade of achievements supporting EWS

After ten years of existence, the Trust Fund has gained experience and acquired a solid reputation as a dedicated multi-donor funding mechanism promoting innovation and cooperation in the field of early warning systems. As new funding streams and initiatives emerge from the international agreements on Climate Change (UN System Strategic Approach on Climate Change Action), scope for sharing good practice and further cooperation exist.

The Trust Fund is considered a distinct vehicle providing coordinated multi-donor EWS grant financing to specific sub-regions and countries. It can be

used to supplement bilateral and multilateral aid especially where there are perceived gaps.

According to an independent evaluation, the donors have lauded the contribution of the Trust Fund for the establishment of early warning systems across two regions. The most notable successes are the establishment of the IOTWMS and RIMES.

d) A geographic coverage allowing for greater synergies and sharing of learning and good practice across sub-regions

The coverage of the Trust Fund enables enhanced synergies between initiatives from different regions and sharing the learning from countries with more technically advanced EWS to support the strengthening of low income and high-risk countries of Asia and the Pacific.

An example of successful collaboration is the partnership between the TC and the PTC. Experts from National Meteorology and Hydrology Services from both regions have gained new knowledge and skills through tailored national and regional level capacity development, sharing expertise and data, and participating in joint events. This South-South cooperation model was specifically requested by member countries at the Joint Session of the TC-PTC in 2015.

The widening of the geographic scope of the Trust Fund to the Pacific offers new opportunities for cooperation between the sub-regions, and sharing of experience and good practice on multi-hazard early warning systems and providing improved climate risk management solutions (e.g. impact forecasting).

e) The Fund's ability to partner with diverse partners including the United Nations, Government Agencies, INGOs, inter-governmental bodies, research institutes and civil society

The Trust Fund has a broad base of existing and potential partners. This includes United Nations organisations (e.g. United Nations Development Program, World Meteorological Organisation, UNESCO, OCHA), intergovernmental institutions and mechanisms (e.g. RIMES, IOC-UNESCO, ESCAP/WMO Typhoon Committee), Member State specialised institutions (Disaster Management Agencies, NHMSs), and non-profit organisations and academia (e.g. Asian Disaster Preparedness Centre or ADPC, Asian Institute of Technology, Asian Broadcasting Union, NGOs).

The diversity of eligible partners allows tapping into a wealth of specialised technical expertise and prioritising initiatives addressing critical gaps to promote multi-hazard early warning systems and regional cooperation. The

four key elements of an end-to-end early warning system have this way received attention. Some partners have been best placed to focus on promoting *Risk Knowledge*, through their expertise in risk assessments and mapping. *Monitoring and Warning* has been enhanced through provision of necessary hardware and software. The ability of some partners in *Dissemination and Communication* has been leveraged to promote greater awareness of the risk and responsiveness to warning information. The fourth element of *Response Capability* has been enhanced and tested through drill exercises at regional, national and local levels.

Specialised staffs of early warning centres and NMHSs are now part of a wider network of disaster risk management practitioners, and have direct access to counterparts from other ESCAP member states and beyond.

ESCAP's partnerships with the United Nations Development Program, the Office for Coordination of Humanitarian Affairs, civil society and academia offers great opportunities to scale-up efforts for multi-hazard early warning systems in areas affected by conflict, to support prevention and ensure that all segments of society are prepared.

f) Dedicated Trust Fund secretariat providing 'hands-on' support

The Trust Fund is managed by ESCAP on behalf of the member states in cooperation with key stakeholders. The management structure and decision-making process has been in place since the establishment of the fund in 2005. The key governance bodies include the Advisory Council, the inter-Agency Task Force, the Grants Committee and the Trust Fund secretariat.

The Trust Fund secretariat provides day to day management of the Trust Fund and consists primarily of a Programme Officer who is provided with administrative support. The secretariat capacity has been increased with fixed-term Associate Expert funded by a donor, consultants and young professionals. Additionally, generous technical support and guidance is provided by other professionals from ESCAP's substantive division on Information and Communications Technology and Disaster Risk Reduction.

The secretariat is responsible for tracking financial resources, periodically updating the Fund's website, conducting technical monitoring missions to approved projects, and oversees the preparation of strategic plans, annual reports, reports on regional unmet needs, project evaluation and other reports. The team is also actively involved in providing technical guidance to partners to maximise the outcomes of the projects and promote synergies across initiatives. It is actively involved in resource mobilisation and promotion of the Trust Fund.

This 'hands-on' Trust Fund secretariat has played a key role in the successes of the fund over the past decade. A 2015 independent evaluation noted that

the Secretariat is perceived as professionally managed by highly qualified personnel with an impressive and diverse membership base.

g) Synergies with other ESCAP initiatives and beyond

Embedded in ESCAP's biennium strategies, the Trust Fund benefits and contributes to other risk reduction work implemented by ESCAP and partner institutions. Adopting such an approach has helped shape the Trust Fund and maximise the outcomes of individual projects. Moving forward, a programmatic approach will further ensure complementarity and synergy between Trust Fund projects and across ESCAP's resilience-enabling programmes.

Through the Regional Space Applications Programme, ESCAP is a participating organization of the Group on Earth Observations, which is developing the Global Earth Observation System of Systems, a global network of existing individual systems and infrastructure that uses common standards to share Earth observation information with a broad range of users. As a participating organization, ESCAP can help augment access for member States, especially linking up low-capacity countries to multiple arrays of observation systems. In turn, ESCAP contributes to the Global Earth Observation System of Systems by linking regional good practices and needs to the global Earth observation community.

ESCAP will lead the regional implementation of the International Network for Multi-Hazard Early Warning Systems, a key outcome of the Third United Nations World Conference on Disaster Risk Reduction held in Sendai, Japan, in 2015. Specifically, during the forty-third session of the WMO/ESCAP Panel on Tropical Cyclones, held in New Delhi in May 2016, ESCAP and WMO agreed to focus on impact-based forecasting and risk-informed early warning for coastal hazards including tropical cyclones in the Bay of Bengal and the Arabian Sea. The members of the Panel expressed support for pilot projects for impact-based forecasting in selected countries.

This work was taken forward when at a thematic session of the seventh Asian Ministerial Conference on Disaster Risk Reduction, co-organized by ESCAP and WMO, it was agreed to increase availability of and access to multi-hazard early warning systems by augmenting the engagement of the WMO/ESCAP Panel on Tropical Cyclones, the ESCAP/WMO Typhoon Committee and related stakeholders. The specific needs of information users were identified, such as users in the agricultural sector, disaster management agencies, communities and individuals in disaster-prone areas. Information on recent technological and policy developments was shared, and regional experiences on how best to connect space-based technology with communities and individuals at risk for end-to-end warning systems were exchanged. The outcome of the session contributed substantially to the Asia

Regional Plan for Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 and helped shape the regional component of the International Network for Multi-Hazard Early Warning Systems.

Finally, the Trust Fund actively pursues complementarity with other initiatives implemented through the UN system and the Asia-Pacific Disaster Resilience Network. This is enabled by the close collaboration with other United Nations organisations through the Inter-Agency Task Force and other regional coordination mechanisms.

4 Strategic focus: four pillars

Over the period 2017 to 2020, the Trust Fund will continue strengthening regional cooperation for effective and sustainable end-to-end early warning systems for coastal hazards such as tsunamis, tropical cyclones, flooding and storm surges, while increasingly promoting a multi-hazard approach that considers both man-made and natural threats. It will contribute to building more resilient communities, and thus ultimately, help save lives and reduce loss and damage from disasters.

To this end, the Trust Fund will focus its support on the following pillars: (i) expanding and interlinking regional early warning cooperation mechanisms and partnerships, (ii) strengthening 'last mile' MHEWS in complex situations of human insecurity, (iii) investing in climate risk management, and (iv) harnessing innovation, science and technologies including from civil society and the private sector.

Pillar I Enhanced early warning regional cooperation

Focus First and foremost, the approach will deepen and extend regional cooperation mechanisms and partnerships, particularly in contexts of transboundary disasters, to strengthen early warning systems for the benefit of high-risk and low capacity countries in both the Indian Ocean and Pacific basins.

Partners Whilst inviting opportunities of collaboration with new institutions, regional partnerships and mechanisms facilitated by ESCAP will be bolstered and interlinked, including the ESCAP/WMO Panel on Tropical Cyclones and Typhoon Committee, the Asian and Pacific Centre for the Development of Disaster Information Management, the Disaster Risk Reduction Committee, and the Regional Cooperative Mechanism on Drought Monitoring and Early Warning. The Intergovernmental Coordination Group of the IOTWMS will continue to be an important partner. Efforts will also be made to strengthen linkages to sub-regional organizations such as the Association of Southeast Asian Nations (ASEAN) and ASEAN Research and Training Centre for Space Technology and Applications, and the South Asian Association for Regional Cooperation (SAARC). New partnerships are to be initiated in support of Small Island Developing States in the Southwestern Pacific.

The Trust Fund will work with local organizations and businesses through regional partners such as RIMES, ADPC and the Asia-Pacific Broadcasting Union.

Pillar II Strengthening 'last mile' multi-hazard EWS in complex situations of human insecurity

Focus Complex situations of human insecurity include a variety of contexts, where human life and well-being is threatened. This can include fragile and conflict affected communities, precarious urban informal settlements, agro-economic zones exposed to pollution, environmental degradation and the negative effects of climate change, contexts of forced migration, among others. Early warning systems often do not reach the people living in such contexts, or the systems available may not address the specific threats. The priority under this pillar is to consolidate good practice and/or pilot new approaches to promote comprehensive people-centred multi-hazard early warning systems. By learning and sharing what works (and what has proven unsuccessful and why), countries in Asia-Pacific will be equipped to expand the scope of their warning systems to undeserved areas and so ensure that all residents have access to awareness and warning in the event of a hazard (natural or man-made). Partnerships may allow identifying solutions to broaden the multi-hazard approach to include both natural and man-made threats. Exchange between countries, relevant UN bodies, civil society organisations and academia will contribute to developing the body of knowledge on DRR in complex situations of human insecurity, thus contributing to disaster prevention and resilience building efforts.

Partners ESCAP's partnerships with the United Nations Development Program, the Office for Coordination of Humanitarian Affairs, civil society organisation, think-tanks and academia offer great opportunities to scale-up efforts for multi-hazard early warning systems in areas of complex situations, to ensure that all segments of society are prepared.

Pillar III Investing in climate risk management

Focus The Trust Fund, directly and indirectly, has a role to play as a provider of funding and an advocate for greater investments in key areas of work, particularly for climate risk management. The secretariat will work with partners to capitalize on recent achievements and scale-up gains from Trust Fund projects and other ESCAP initiatives on El Niño/La Niña and drought. In line with the WMO Global Framework for Climate Services, the Trust Fund will present an important and cost-effective opportunity to contribute to

development, disaster risk reduction and climate change adaptation in the affected countries. Alongside enhancing seasonal forecasting, long-term risk analysis, and impact-based forecasting, the Fund will also consider tools for managing and adapting to drought.

Extending the Trust Fund to the Pacific: In the light of the high exposure and vulnerability of the South-Western Pacific to tropical cyclones, and based on the Commission resolution 71/12 providing the basis for the expansion of the Trust Fund to include Pacific SIDS, further support will be provided to extend relevant regional cooperation mechanisms to Pacific small island developing states.

Partners

The Trust Fund will support partners with a track record of addressing climate risk management and will collaborate with regional partners such as RIMES, the PTC, the TC and regional Climate Outlook Forums such as the South Asian Climate Outlook Forum (SASCOF). The Monsoon Forums initiated through previous Trust Fund projects will be further supported to enable the downscaling and customizing of climate projections to for use by local authorities and stakeholders. Greater interlinkages are envisaged with the ESCAP Regional Cooperative Mechanism for Drought Monitoring and Early Warning, which operates under the guidance of its Regional Space Applications Programme for Sustainable Development.

In the Pacific, ESCAP and WMO, through the WMO Regional Association V Tropical Cyclone Committee for the South Pacific and South East Indian Ocean, are working on extending the inter-agency cooperation framework of the Typhoon Committee and the Panel on Tropical Cyclones to the Pacific Member States. In July 2016, ESCAP and the Pacific Community agreed to establish monsoon forums supported by the Trust Fund. This partnership is expected to help strengthen the framework for downscaling climate information and data supported by RIMES, WMO and the Secretariat of the Pacific Regional Environment Programme (SPREP).

Pillar	IV Harnessing innovation, science and technologies
Focus	Ensuring that benefits of science, technologies and communications advances relevant to early warning systems, particularly in the fields of geo-informatics and space technology, reach high-risk and low capacity countries, particularly the 'last mile' i.e. communities at risk.
Partners	<p>The Trust Fund will further promote regional cooperation in developing innovations, and support well-established ESCAP networks, notably the Regional Space Applications Programme for Sustainable Development and its relevant partners in the region, and encourage demonstration projects for the purpose of bringing innovative ideas and lessons to the national and regional levels.</p> <p>The Trust Fund will cooperate with academia, civil society and the private sector, focusing on the identification and application of innovative approaches. Academia and civil society innovations may include modern software, the use of hazardous weather information and means to support empowerment at the local level. Business sector initiatives would aim to increase their involvement in disaster preparedness (e.g. warning services and dissemination), and to document and share good practices.</p>

5 Way forward

The Trust Fund operates according to the following principles:

Partnerships. UNISDR, UNDP and IOC-UNESCO remain close partners of the Trust Fund and technical advisors. The Trust Fund will also maintain close coordination with WMO, OCHA and UN Environment. It will continue to work with regional and sub-regional organizations, NGOs and government agencies in the region, and will strengthen such partnerships as appropriate. Communication between the Secretariat and other UN agencies as well as other national organizations and initiatives working with disaster risk reduction will remain essential to maximise the benefit and effectiveness of the Trust Fund considering its limited resources. Key partnerships will be strengthened through the newly adopted programmatic approach.

Programmatic approach. Adopting a programmatic approach refers to working more closely, and continuously, with key regional cooperation partners according to a jointly agreed medium-term partnership strategy. It is a shift away from a project-by-project basis system, towards one whereby the Council periodically decides on extensions of the programme, with well-defined outcomes and activities, without having to resort to requesting new proposals from the partner. The new approach can take the shape of a programme in phases, each one subject to additional funding and decision by the Advisory Council. This avoids unnecessary interruptions in the implementation of the programme occurring with the call-for-proposal system i.e. funding gap between the end of a cycle and the new one. The adoption of a programme-based approach is conducive to an effective use of the funds available and leverages ESCAP's comparative advantage. It will strengthen and capitalise on ESCAP's core mandate of promoting regional cooperation and allow for continued support to low capacity high-risk developing countries.

Broaden partnerships and outreach to civil society and the private sector. The programmatic approach does not exclude new partnerships. It allows working more closely with institutions and programmes able to deliver results aligned with the Trust Fund's regional cooperation objective. The Trust Fund will identify relevant initiatives from civil society and the private sector, and reach out to potential partners willing to broaden and strengthen regional cooperation on multi-hazard early warning systems. This can include partnerships with initiatives such as the Climate Risk Early Warning System (CREWS) and leverage collaboration under the International Network for Multi-Hazard Early Warning Systems (IN-MHEWS). This approach will contribute to coordinated efforts and making the Trust Fund fit-for-purpose and sustainable.

Promote cooperation networks among project partners. To increase the outcomes of each projects, the Trust Fund supports systematic linkages

between projects and facilitates best practice, innovation and knowledge sharing. For this purpose, the Trust Fund secretariat periodically organises partner and expert group working meetings, as well as explores opportunities for closer cooperation between partners to amplify the project results. In addition, the Trust Fund will promote the further dissemination of this experience and technical know-how to other newly developing programmes such as IN-MHEWS and CREWS initiative.

Maximising technical expertise and in-kind contributions from Council members. Considerable technical expertise lies with the members of the Advisory Council. As of 2017, the Council included the Governments of Germany, India, Japan and Thailand, all of which have extensive practical experience with managing the risk of disasters, and highly relevant scientific and technical expertise related to early warning systems. As part of this new phase of the Trust Fund strategy, efforts will be deployed to maximise this opportunity. To do so, the secretariat will request Council members to increase their involvement in all work processes, wherever possible, from selecting project proposals, formulating new strategies to conducting thematic studies and evaluations, etc. From 2018, the membership of the Inter Agency Task Force will be broadened to include non-UN specialised agencies and stakeholders to gain a different perspective and aspect of a project proposal. The Council will be called upon to identify relevant national specialised agencies able and willing to provide technical inputs relevant to individual initiatives, or when identifying strategic approaches for the Trust Fund. Council members may voluntarily provide in-kind technical support to projects, resulting in possible budget savings.

Resource mobilisation. By demonstrating results, the Trust Fund seeks continued support from existing donors and makes efforts to further broaden its donor base. A resource mobilization strategy will be developed and periodically updated in close collaboration with ESCAP's Strategy and Programme Management Division (SPMD) to explore options with new actors, including the private sector and foundations. It will consider innovative options for sustainable funding.

The importance and benefits of the Trust Fund will specifically be clarified to the private sector to encourage contributions and the Fund will also consider attracting new donor countries. As requested in ESCAP resolution 73/7, the ESCAP secretariat will endeavour to reach out to new potential donors, where appropriate, and explore innovative resource mobilisation opportunities to strengthen the Trust Fund. Co-financing and in-kind contributions will be encouraged as appropriate. The Council Members also play a key role in identifying and reaching out to potential new donors.

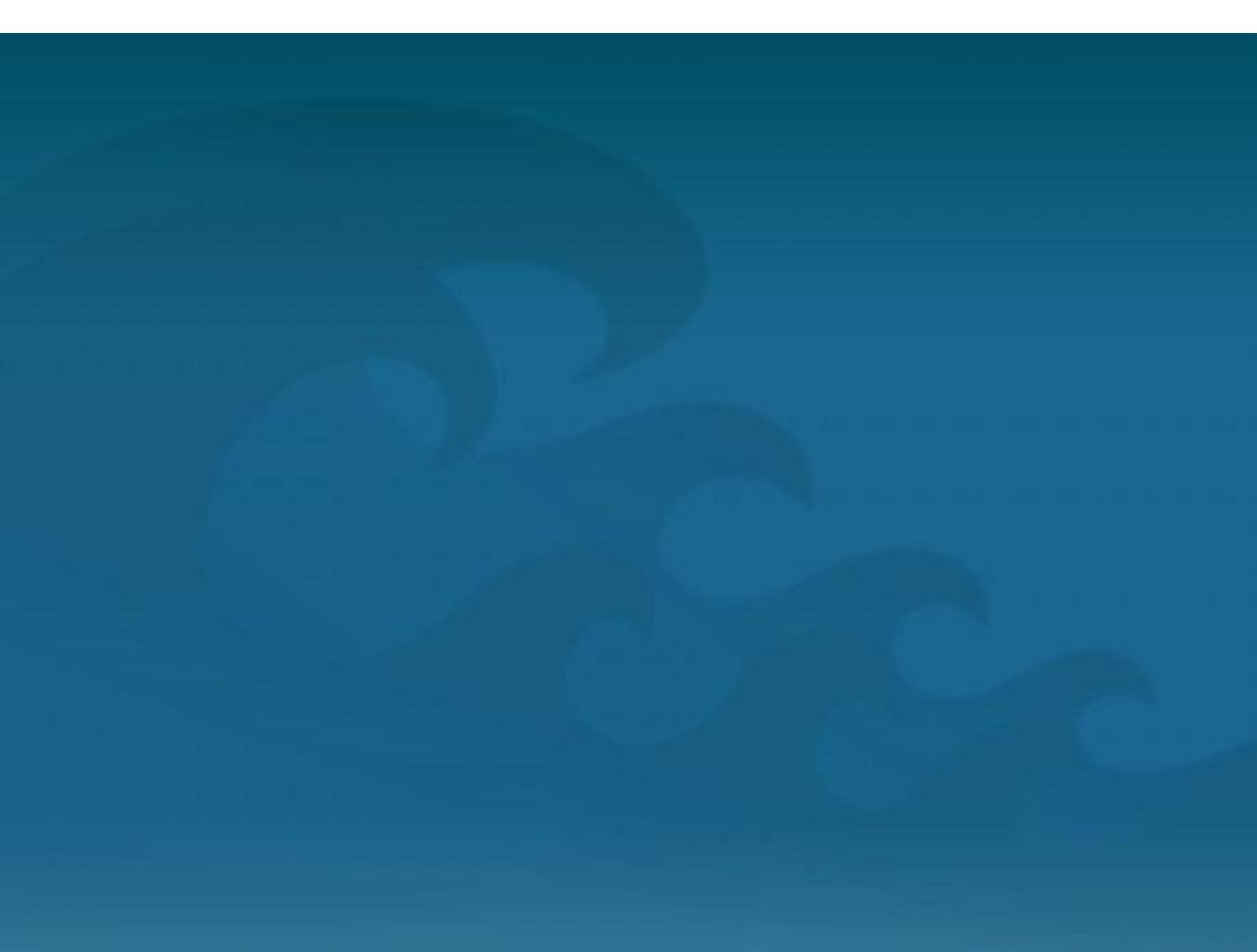
Streamlined process for new projects. In response to calls to simplify and fast-track the selection and funding of new proposals, revised Trust Fund terms of reference aim to better define the scope for future calls for proposals

to facilitate access to the fund for relevant implementing partners, link up initiatives and avoid unsuitable submissions. A focused and pre-defined resource allocation process, based on more specific technical needs and geographical gap analyses with a focus on innovations and focused interventions, will increase the efficiency and effectiveness of the Trust Fund. As mentioned above, a greater role is anticipated for donors willing to contribute technical expertise and guidance. A review of internal ESCAP procedures and processes will seek to ensure fast selection and signing of new letters of agreements with the partners.

Communication and Visibility. A key aspect of the resource mobilisation strategy is to increase the visibility of the impact achieved through projects funded by the Trust Fund. Presentation materials and case studies on finalized and ongoing projects will be updated or developed with the implementing partners.

The Trust Fund website and social media will serve as an interactive platform to share highlights of key best practices and achievements. It will seek to be more appealing and reach a broader audience using infographics and maps.

The achievements of the Fund will be presented during key workshop and conferences, and particularly during the ESCAP organised biennial Disaster Risk Reduction Committees and other relevant platforms. Project partners are encouraged to present outputs during events such as the Asian Ministerial Conference for DRR, and regional and Global Platform for Disaster Risk Reduction, by actively engaging in respective plenaries and thematic sessions on early warning, and other topics as relevant.



ESCAP Multi-Donor Trust Fund for Tsunami,
Disaster and Climate Preparedness