ESCAP Trust Fund for Tsunami, Disaster and Climate Preparedness
INTRODUCTION

PROTECTING KEY DEVELOPMENT GAINS IN ASIA

The ESCAP Trust Fund for Tsunami, Disaster and Climate Preparedness supports and promotes projects that build resilience and reduce disaster risks in Indian Ocean and Southeast Asian countries. Throughout the region, several trends point to the need for additional, critical investments to develop capacities in this area.

THE REGION CONTINUES TO FACE DISASTER THREATS

Asia-Pacific is the most disaster-prone region of the world. Between 1970 and 2011, nearly two million people were killed by disasters in this region, an alarming figure that represented 75 per cent of global disaster fatalities during this period. Every year, millions of people in Asia-Pacific remain at risk to tsunamis, earthquakes, tropical cyclones, typhoons, floods and storm surges.
URBANIZATION BRINGS NEW VULNERABILITIES
Rapid urbanization heightens exposure to hazards and increases vulnerabilities, especially among the poor. In 2011, ten of the world’s 20 megacities were located in Asia. The share of the total population in Asia living in urban areas increased from 17 per cent in 1950 to 44 per cent in 2010, and will likely reach 64 per cent by 2050. Cities with the highest concentrations of people tend to be the areas with the highest risk related to disasters.

DISASTERS UNDERMINE DEVELOPMENT
Disasters exacerbate poverty, vulnerability and economic inequity. The poor in society are generally more vulnerable to disasters. Likewise, people in low-income countries are more exposed to natural hazards than those in high-income countries. Disasters can impede and even roll-back progress made towards the Millennium Development Goals (MDGs). Therefore, building resilience is an integral part of efforts to achieve the MDGs.

CLIMATE CHANGE INCREASES RISK
Adapting to the added risks brought about by climate change is a major challenge for the countries in the Asia-Pacific region. The observed effects of climate extremes and variation suggest that, while the overall number of tropical cyclones (typhoons in Eastern Asia and the Pacific) may not be increasing, the intensity of the cyclones is on the rise, making the region as a whole more susceptible to disaster losses.

COASTAL AREAS ARE HEAVILY EXPOSED
Eight of the ten countries in the world with the largest populations residing in low elevation coastal zones are found in Asia. Most have heavily populated delta regions, which are exposed to disaster risks from rising tides, tropical storms, sea level rise and high river flows. Despite these risks, coastal settlements continue to attract people and are growing more rapidly than those inland, putting additional populations at risk.

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BUILDING RESILIENCE IS COST EFFECTIVE

A person living in Asia-Pacific is four times more likely to be affected by natural disasters than someone living in Africa, and 25 times more likely than someone living in Europe or North America. For a region at such high risk, additional investments in building resilience are not a choice, but a necessity. Research has shown that every dollar spent on preparedness saves seven dollars in the aftermath of disaster. Therefore, investing in disaster risk reduction and preparedness measures is not only a moral imperative, it is financially sound.
HISTORY

CREATION OF THE TRUST FUND FOR TSUNAMI, DISASTER AND CLIMATE PREPAREDNESS

The widespread destruction wrought by the Indian Ocean Tsunami in December 2004 demonstrated the need for an effective regional disaster preparedness mechanism. In 2005, the Tsunami Regional Trust Fund was established to support tsunami early warning in Indian Ocean and Southeast Asian countries through a multi-hazard approach. In 2010, the scope of the Trust Fund was expanded to also include disaster and climate preparedness, while retaining a focus on end-to-end early warning for coastal hazards. At the same time, it was renamed the Trust Fund for Tsunami, Disaster and Climate Preparedness.

DONOR SUPPORT

PIONEERING POooled RESOURCES

A groundbreaking grant of US$ 10 million from the Royal Thai Government established the Trust Fund in 2005. The governments of Sweden, Turkey, the Philippines, Bangladesh, Nepal, and the Netherlands have also contributed generously to the Trust Fund, which serves as an example of how donors can pool their resources in order to maximize the impact achieved for vulnerable populations. Between its inception in 2005 and the end of 2012, the Trust Fund received contributions totaling US$ 13.1 million.
HOW DOES THE TRUST FUND ADD VALUE?

As one of the few regional funding mechanisms for early warning, the Trust Fund adds value by being:

NEEDS DRIVEN  The Trust Fund addresses unmet needs and gaps, and supports innovative, potentially high impact initiatives.

REGIONALLY LINKED  Priority is given to strategic initiatives at the regional level, including resource sharing arrangements and South-South cooperation, which complement national efforts.

PARTNERSHIP BASED  United Nations partners contribute to the Trust Fund’s strategy and the technical appraisal of projects. The Trust Fund also works with a broad range of other partners such as government agencies, regional organizations, NGOs and the media.

QUALITY CONTROLLED  Project proposals are reviewed by the Trust Fund’s Inter-Agency Task Force and Advisory Council according to relevance, efficiency, effectiveness, sustainability and impact. The ESCAP Grants Committee oversees financial procedures.

STRATEGICALLY POSITIONED  ESCAP promotes disaster risk reduction as an integral part of ensuring inclusive and sustainable development for the people of the Asia-Pacific region. The Fund’s location allows it to build on ESCAP’s role in convening regional cooperation and facilitating knowledge sharing and advocacy.
TRUST FUND STRATEGY: THREE PILLARS

The Trust Fund supports strategic approaches that respond to specific needs and opportunities in the region. Its funding strategy has three main pillars:

• Regional intergovernmental mechanisms;
• Specific country needs; and
• Civil society innovations.
BUILDING RESILIENCE THROUGH END-TO-END EARLY WARNING

The Trust Fund focuses on end-to-end early warning for coastal hazards such as tsunamis, cyclones, coastal zone flooding and storm surges, while applying a multi-hazard approach. It contributes to building more resilient coastal communities, and thus ultimately, helps save lives and reduce loss and damage from disasters.

End-to-end early warning systems can reduce the loss of life as well as the economic and social impact of disasters. Early warning is one of the five priorities for action covered by the Hyogo Framework for Action, a 10-year plan to make the world safer from natural hazards.

A complete and effective end-to-end early warning system comprises:

**RISK KNOWLEDGE**
Systematically collect data and undertake risk assessments.

**MONITORING AND WARNING SERVICES**
Develop hazard monitoring and early warning services

**DISSEMINATION AND COMMUNICATION**
Communicate risk information and early warnings

**RESPONSE CAPACITY**
Build national and community response capabilities
GEOGRAPHIC FOCUS

INDIAN OCEAN AND SOUTH-EAST ASIAN COUNTRIES

Australia, Bangladesh, Brunei Darussalam, Cambodia, China, India, Indonesia, Iran, Lao People’s Democratic Republic, Malaysia, the Maldives, Myanmar, Pakistan, the Philippines, Singapore, Sri Lanka, Thailand, Timor-Leste, and Viet Nam.
Since its inception in 2005, the Trust Fund has supported 22 projects with a total budget of approximately US$ 12.1 million, benefiting 19 Indian Ocean and Southeast Asian countries.

Projects supported by the Trust Fund have covered a number of aspects of early warning, including: development of monitoring and warning services; risk maps for community preparedness planning; development of Standard Operating Procedures (SOPs); and, education and public awareness activities.

The Trust Fund contributed to the establishment of the Indian Ocean Tsunami Warning System, which entered into operation in October 2011 with Australia, India and Indonesia as the designated regional service providers. In April 2013, the regional service providers assumed full responsibility for issuing international tsunami warnings. It is estimated that the system will contribute to the saving of 1,000 lives per year, on average, over the next 100 years. The Trust Fund's support for the development of the Indian Ocean Tsunami Warning System included adaptation of SOPs for tsunami warning procedures and emergency response.

The Regional Integrated Early Warning System for Africa and Asia (RIMES) was established as a result of Trust Fund-supported projects. RIMES, a collective resource for member countries, provides a range of cost-effective early warning and climate application services. These have led to improvements in early warning systems and capacities, especially in low capacity countries such as the Maldives and Myanmar.
KEY RESULTS BY TECHNICAL AREA

A. RISK KNOWLEDGE
Disaster vulnerabilities of target coastal communities in countries including the Maldives and Sri Lanka were assessed and priority risk reduction measures were identified.

The understanding of the tsunami hazard from the Makran Fault was improved using paleotsunami studies in Iran and Pakistan.

In India and Bangladesh, community preparedness was improved using scientifically developed hazard maps.

B. MONITORING AND WARNING SERVICES
More cost-effective regional observation and monitoring networks were developed and data availability was improved through the establishment of RIMES. Countries were also assisted in applying hydro-meteorological disaster risk information for decision making.

C. DISSEMINATION AND COMMUNICATION
SOPs for tsunami warning and response were developed and strengthened in countries including Indonesia, Pakistan, the Philippines, Sri Lanka, and Viet Nam.

Warning communication was enhanced for tsunamis and other coastal hazards. Broadcasters in eight countries developed their early warning messages, better integrating the media into national warning systems.

D. RESPONSE CAPACITY
A regional depository for tsunami awareness and training materials was set up based on materials from Indonesia, the Philippines, and Thailand.
TRUST FUND PARTNERS

The Trust Fund works with governments, international and inter-governmental organizations, NGOs, media and civil society to build resilience to natural disasters in Indian Ocean and Southeast Asian countries.

Its United Nations partners include the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (IOC-UNESCO), the United Nations Office for Disaster Risk Reduction (UNISDR), the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), and the World Meteorological Organization (WMO).

The Trust Fund’s main donors are the Governments of Thailand and Sweden. Contributions have also been received from Turkey, the Philippines, Bangladesh, Nepal and the Netherlands.