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**International Early Warning Programme  
Advisory Group Meeting**

First session

Bonn, 26 – 27 March 2007

**Item 3(b) Report on the Outcome of the-multi-donor initiative “Evaluation and Strengthening of Early Warning Systems in countries affected by the 26 December 2004 Tsunami”**

**Report on the Outcome of the-multi-donor initiative “Evaluation and Strengthening of Early Warning Systems in countries affected by the 26 December 2004 Tsunami”**

The 26 December 2004 Indian Ocean tsunami disaster resulted in substantial new demands on the ISDR secretariat and the UN/ISDR Platform for Promotion of Early Warning (PPEW). While these were not in the original PPEW work programme, they were fully in line with the goals of the early warning platform. The most significant factor was the multi-agency, multi-donor Flash Appeal project proposal that has been quickly produced by PPEW to support tsunami early warning systems in the Indian Ocean, and to which donors have contributed US\$10,507,208<sup>1</sup>. PPEW has developed and coordinated the implementation of the project in cooperation with UNESCO’s Intergovernmental Oceanographic Commission (IOC) and other organisations.

The project’s full title is “Evaluation and Strengthening of Early Warning Systems in Countries Affected by the 26 December 2004 Tsunami”. PPEW developed the project proposal and coordinated the project on behalf of the ISDR. A major highlight has been the establishment of partnerships and coordination mechanisms across a wide range of partners and donors and providing an example of an integrated vehicle for supporting the implementation of the Hyogo Framework for Action 2005-2015: Building the resilience of nations and communities to disasters. This partnership approach has brought an added value to the diversity of activities and a more coherent and coordinated approach to the issue, thus extending the reach and effectiveness of inputs and resources. Although the project was developed in the context of the Flash Appeal process, it fits naturally into the framework of the International Early Warning Programme and the objectives of the PPEW’s work programme.

Efforts were mainly on (i) establishing the project administration and underpinnings, particularly partner work programmes and memoranda of understanding, (ii) supporting UNESCO IOC to develop governance mechanisms and technical inputs for a regional tsunami warning system, and (iii) providing project coordination and integration. About half of the funds received have been streamed to other key agencies. Partnerships and coordination have been strengthened across many UN agencies, regional and national organisations, research institutes, and local communities.

Main partners included the UN Educational, Scientific, and Cultural Organization (UNESCO), the UNESCO-Intergovernmental Oceanographic Commission (UNESCO IOC), the World Meteorological Organization (WMO), the UN University Institute for Environment and Human Security (UNU-EHS), the UN Economic and Social Commission for Asia and the Pacific (UN-ESCAP), the UN Environment Programme (UNEP), the UN Development Programme (UNDP), the UN Office for Project Services (UNOPS), the Asian Disaster Reduction Center (ADRC), the Asian Disaster Preparedness Centre (ADPC), the Asia-Pacific Broadcasting Union (ABU), the Centre for Research on the Epidemiology of Disasters (CRED), the All India Disaster Mitigation Institute (AIDMI), Sustainable Environment and Ecological Development Society (SEEDS), and the University of Geneva.

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<sup>1</sup> Funds received: Japan - US\$3,640,000, European Commission US\$2,007,528, Norway US\$1,412,252, Sweden US\$1,400,000, Finland US\$1,293,000, Germany US\$386,542, Netherlands US\$367,225.

## UN/ISDR-PPEW's engagement

PPEW established a Project Overview Plan<sup>2</sup> and developed a web-accessible project database and information system (TEWIS). PPEW delivered substantial inputs to and participated at the international tsunami coordination meeting in Paris, at the regional tsunami coordination meeting in Mauritius, and at several high level dialogue meetings. Information was supplied on request to the Office of the Special Envoy on the tsunami (President Clinton) in collaboration with WMO and UNESCO IOC.

Some selected specific project activities undertaken or coordinated by PPEW include:

- (i) The special session on tsunami warning systems in the Indian Ocean organised at the World Conference of Disaster Risk Reduction (WCDR), 18-22 January 2005, Kobe, Hyogo, Japan.
- (ii) A high-level dialogue meeting on the development of tsunami early warning systems was held in Kobe on 22 January 2005 immediately after the WCDR.
- (iii) Policy dialogue for high level administrative policy makers on establishing a Tsunami Early Warning System in the Indian Ocean was organised by ISDR secretariat and ADRC in 22-24 February 2005.
- (iv) Two regional workshops in Bangkok from 13-16 June 2005 on “Emergency Information Flows in Disaster Situations: the Role of Broadcasters” and “Public Awareness, Preparedness and Response: the Role of Broadcasters”
- (v) One training and familiarisation event in Japan (11-14 July 2005) and as well in Hawaii (26-29 July 2005) for high level administrators from the Indian Ocean Region
- (vi) Public awareness and education workshop in Bangkok, Thailand, 7-8 September 2005
- (vii) Mid-term review process: November 25<sup>th</sup>, 2005 with participation of implementing partners and donors. 2nd review meeting took place December 7<sup>th</sup>, 2005 with the ISDR secretariat project team members including the ISDR-Asia regional team.
- (viii) Facilitation of the formation of the new working group on disaster mitigation, preparedness and response of the UNESCO IOC Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning System (ICG-IOTWS). The working group has been officially adopted in August 2006 during ICG-IOTWS III meeting in Bali, Indonesia.
- (ix) Side-event on tsunami early warning in the Indian Ocean organized during the 3rd International Conference on Early Warning (EWC III), Bonn 27-29 March 2006.
- (x) President Clinton, the UN's Special Envoy for Tsunami Recovery, presence at EWC III
- (xi) A Roundtable on Indian Ocean Tsunami Warning and Response Systems in the presence of President Clinton, 27 March 2006 during EWC III
- (xii) Translation of the early warning systems checklist “Developing Early Warning Systems: Checklist” into 19 Indian Ocean languages
- (xiii) Regional Workshop on Mitigation, Preparedness and Development for Tsunami Early Warning Systems in Bangkok, 14 - 16 June 2006
- (xiv) Workshop on the Human Impact of Tsunami and Disaster Risk Reduction in Bangkok, 16-17 June 2006
- (xv) Production of the report “Lessons for a Safer Future”

These are good examples of PPEW efforts to facilitate multi-partner initiatives and collaboration. Missions to tsunami affected Indian Ocean countries, led by UNSCO/IOC and involving UN/ISDR secretariat & PPEW staff, have commenced to help in the assessment of requirements and capacities

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<sup>2</sup> <http://www.unisdr.org/ppew/tsunami/pdf/project-overview-plan.pdf>

for effective and durable national tsunami warning and mitigation systems (16 such missions had been completed by the end of September 2005).

PPEW has become known as a useful information source on early warning issues. In the aftermath of the tsunami there was a vast demand for interviews, advice and information on early warning systems, including numerous requests for interviews from the international media such as the BBC, CNN, Deutsche Welle, International Herald Tribune and many others. New tsunami web pages with tsunami project news, key documents, meeting information and background information were established at the PPEW webpage.

With the project's groundwork in place, there had been accelerated emphasis on the role of ISDR in setting the directions and fostering implementation and supporting activities in the region, in particular on the components of integrated risk management, public awareness and education and community-based approaches (Components 2-4 of the Project Overview Plan), especially to stimulate the development of effective end-to-end multi-hazard warning capacities and wider public engagement.

### **Follow-up activities**

In December 2006, a new UN/ISDR project "Building Resilience to Tsunamis in the Indian Ocean" was approved and contract was signed by the European Community. This three year initiative focuses particularly in India, Indonesia, Maldives, and Sri Lanka. It constitutes a continuation of the Tsunami Flash Appeal initiative at building the resilience of communities and nations to disasters by strengthening national and local institutions, mechanisms and capacities for disaster risk reduction. The project will be implemented through ISDR system partners and will be monitored from the ISDR office for Asia and the Pacific with support from the ISDR headquarters in Geneva. PPEW will provide technical support and guidance with respect to assessing and supporting the strengthening of end to end national early warning systems within a regional coherent approach.

Furthermore, as mentioned above a roundtable on Indian Ocean Tsunami Warning and Response Systems was convened by UNESCO IOC and the ISDR secretariat on March 27th, 2006 in the margins of EWC III in Bonn and in the presence of President Clinton, the UN's Special Envoy for Tsunami Recovery. On the occasion of the roundtable, ISDR system partners formed a consortium to assist initially up to 10 governments with technical assistance to develop plans for an accelerated implementation of a national tsunami early warning system. The consortium partners include UNESCO IOC, WMO, UNOCHA, IFRC, UNDP, UNEP, and the World Bank and being coordinated by PPEW and the ISDR secretariat. The Governments of Comoros, Madagascar, Maldives, Mauritius, Mozambique, Pakistan, Seychelles, Somalia, Sri Lanka, Tanzania, and Thailand have officially requested the support offered by the consortium. Currently, it is envisioned the consortium partners will support the implementation of the national plan until December 2008.

## Timeline of main highlights

### 2005

- 11 Jan 2005 Tsunami Flash Appeal pledging meeting in Geneva. Flash Appeal includes proposal developed by PPEW for ISDR in cooperation with UNESCO IOC “Evaluation and Strengthening of Early Warning Systems in Countries Affected by the 26 December 2004 Tsunami”. ISDR receives pledges for the full requested US \$8,000,000 by the following day.
- 22 Jan 2005 Immediately following the World Conference on Disaster Reduction, Kobe. Hyogo, Japan, a PPEW-organised special event was held at the Kobe venue “Scoping Meeting on the Development of a Tsunami Early Warning Systems”, attended by several hundred delegates.
- 22-24 Feb 2005 Dialogue for High Level Administrative Policy Makers on Establishing a Tsunami Early Warning Mechanism in the Indian Ocean, Tokyo.
- 3-8 Mar 2005 International Coordination Meeting for the Development of a Tsunami Warning and Mitigation System for the Indian Ocean within a Global Framework, organized by UNESCO IOC in Paris.
- 14-16 Apr 2005 Second International Coordination Meeting for the Development of a Tsunami Warning and Mitigation System for the Indian Ocean, Mauritius, organized by UNESCO IOC.
- 30 Apr 2005 Revised and expanded Project Overview Plan on the Tsunami Early Warning Strengthening Project released by PPEW.
- 24-26 May 2005 11th meeting of the Inter-Agency Task Force for Disaster Reduction, Geneva: PPEW reports on tsunami flash appeal project.
- June 2005 Establishment of UN/ISDR-Asia and Pacific Office in Bangkok
- 13-16 Jun 2005 Two regional workshops organised in Bangkok to improve linkages between broadcast media and tsunami and weather warning experts
- 11-14 Jul 2005 Study tours for national experts from twenty-six Indian Ocean countries organised by UNESCO IOC, ISDR secretariat, and ADRC in Japan & Hawaii
- 26-29 Jul 2005
- Sept 2005 Launch of the Tsunami Early Warning Information System (TEWIS), a web-based database
- May-Sept 2005 Sixteen needs-assessment missions to Indian Ocean countries were organised by UNESCO IOC, ISDR PPEW, WMO and other organisations supported by multidisciplinary expert teams.
- 7-8 Sept 2005 Public awareness and education workshop in Bangkok
- 14-15 Oct 2005 An international workshop on the role of micro-finance in tsunami risk mitigation and recovery was coordinated by AIDMI and the ISDR secretariat in New Delhi, India
- 14 Oct 2005 Launch of the Field Library by the ISDR secretariat in Indonesia and India in October 2005 in collaboration with UNDP’s country offices and national governments.
- 17-19 Oct 2005 Regional consultative meeting on early warning for the east coast of Africa was organised by ISDR-Africa office in Nairobi.
- 16-18 Nov 2005 The Danish Government hosted an international workshop in Copenhagen on “Strengthening the resilience of local communities to cope with water related natural hazards”.
- 25 Nov 2005 The 1st mid-term review with participation of implementing partners and donors.

7 Dec 2005 2nd review meeting with the ISDR secretariat project team members including the ISDR-Asia regional team

## 2006

27-29 Mar 2006 Side-event on tsunami early warning in the Indian Ocean at Third International Conference on Early Warning (EWC III), Bonn, Germany

27 Mar 2006 A roundtable on Indian Ocean Tsunami Warning and Response Systems was convened by UNESCO IOC and the ISDR secretariat in the presence of President Clinton, the UN's Special Envoy for Tsunami Recovery

11-13 May 2006 Regional workshop on tsunami, related coastal risks and education in Africa

13 -14 Jun 2006 Media and Disaster Reduction workshop, Nairobi, Kenya

14 - 16 Jun 2006 Regional Workshop on Mitigation, Preparedness and Development for Tsunami Early Warning Systems in Bangkok, Thailand

16-17 Jun 2006 Workshop on the Human Impact of Tsunami and Disaster Risk Reduction, Bangkok, Thailand

13 - 14 Jul 2006 Training of the government officials, staff of NGOs and the members of the community in Africa

Apr - Aug 2006 National public awareness workshops on disaster risk reduction for community leaders in Comoros, Kenya, Madagascar and Tanzania

Jul-Sept 2006 National workshops on disaster risk communication have been organized by ADPC in Myanmar (17-18 July 2006), Maldives (11 June 2006), Sri Lanka (21-22 September 2006) and Thailand (16-18 August 2006) with the goal to improve community response to warnings.

28 Oct 2006 BBC Earth Report "After the wave"

18-19 Nov 2006 BBC Earth Report "Disaster class"