2004 INDIAN OCEAN EARTHQUAKE AND TSUNAMI:
LESSONS LEARNED

In 2004, the Indian Ocean earthquake and tsunami challenged humanitarian assistance to an unprecedented degree. After three years implementing programmes in eight countries, UNICEF has achieved results for over 6 million children and women in tsunami-affected areas.

Some 1.2 million children were immunized against measles and more than 3 million children received vitamin A supplementation and essential drugs, as well as emergency water and sanitation to help prevent disease outbreaks in the aftermath of the disaster. Since then, UNICEF and its partners (including governments, UN agencies, NGOs and civil society groups) have helped build capabilities that did not exist before and assisted in reconstructing and improving on what the tsunami destroyed. They have combined the training of more than 56,000 health staff, the provision of key supplies and equipment to more than 7,000 health facilities and 2 million schoolchildren, the development of child protection policies and the construction/rehabilitation so far of 107 schools, 59 health facilities, 28 child centres and water facilities serving some 700,000 people.

In doing so, lessons were learned for future humanitarian assistance. The evaluation of UNICEF’s initial tsunami response highlighted some good practices that will lead to lasting improvements. Partnerships were expanded, particularly with UN agencies, the private sector and the military. Funding was timely and abundant and, as 53 per cent of incoming funds were thematic, they were also unearmarked and long term. This allowed for their flexible use according to priorities established with national counterparts. The global corporate trigger mechanism was activated, giving emergencies full organizational priority with respect to supplies, fundraising and deployment of staff for the initial 90 days. Global financial monitoring tools were modified to permit monthly tracking and reporting to the Office for the Coordination of Humanitarian Affairs (OCHA). Country Offices’ twice-yearly reports on the results achieved in tsunami programmes allowed for a rigorous schedule of audits and evaluations. Information was widely shared through reports to donors, public UNICEF reports and the posting of evaluations and information on the UNICEF website.

The evaluations also identified several shortcomings, which bring to light six key lessons for future humanitarian support. While some have already been put in practice, follow-up actions will address remaining gaps. Many of the lessons learned are similar to the learnings of other emergencies, such as Darfur, Iraq, Liberia, Mozambique and Pakistan. They are part of a broader humanitarian reform agenda, responding to the growing number and complexity of emergencies and to the need for greater predictability, accountability and leadership in humanitarian action. This includes the drive for a greater coherence among UN agencies and for UNICEF’s proactive effort to become more effective, efficient and focused in line with its Core Commitments for Children in Emergencies (CCCs).

1. Effective coordination, partnership and stewardship are necessary to reach all children affected by an emergency

**Problem:** The number, size and complexity of emergencies exceed any one agency’s capacities. Only through collaboration and coordination with partners will UNICEF achieve its mandate on behalf of children. The needs assessment conducted by the Tsunami Evaluation Coalition (TEC) showed that the voluntary nature of the international humanitarian system leads to uneven coordination, lack of predictable leadership and accountability systems, as well as to long-standing gaps in response.

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1 The eight countries with UNICEF programmes in response to the 2004 tsunami are: India, Indonesia, Malaysia Maldives, Myanmar, Somalia, Sri Lanka and Thailand.

2 Military partnerships are carried out in line with Inter-Agency Standing Committee (IASC) norms.
**Completed:** Under the Inter-Agency Standing Committee (IASC), the international humanitarian community is tackling this problem through the *cluster approach*, which assigns leadership and support roles for emergency response to different agencies within a cluster of sector actors. The approach is increasingly providing the framework for humanitarian partnership and coordination. Globally, UNICEF is cluster lead for water, hygiene and sanitation, nutrition and education (with Save the Children). UNICEF also supports the Office of the UN High Commissioner for Refugees (UNHCR) in leading the protection cluster, provides common data services under the Emergency Telecom Cluster led by the Office for the Coordination of Humanitarian Affairs (OCHA) and plays an important role in health, logistics, early recovery and emergency shelter clusters. At the global level, advisory groups comprising UN agencies, international non-governmental organizations and donor partners are developing global work plans for each cluster. Global rosters of country coordinators were set up and coordinators trained. In the field, the cluster approach is operational in 14 emergencies to date, including the Pakistan earthquake, the Lebanon war, the Mozambique cyclone and chronic emergencies, such as Chad, Ethiopia and Liberia. Initial self-assessments found improved predictability and response capacity, clearer leadership in former ‘gap’ areas and better cooperation among UN and non-UN actors. The findings of a more in-depth evaluation, aimed at gauging the effect on quality and effectiveness of humanitarian response, were shared in late 2007.

Inter-agency emergency contingency plans are becoming common and, when combined with simulations and training, they have made a difference in effective emergency response, for example in non-cluster countries, such as Bangladesh, Djibouti, Haiti, Syrian Arab Republic and Zimbabwe. The cluster approach must be part of all multisectoral contingency planning for major new emergencies.3

Through its mandate for children in emergencies, UNICEF has contributed to new and updated inter-agency standards, policies and guidance, including the Inter-Agency Network for Education in Emergencies’ (INEE) minimum standards for quality, accountability and coordination in the education cluster. It has issued joint statements on the use of vaccines, on infant and young child feeding, on micronutrients, and on community-based management of severe acute malnutrition. With donor support, UNICEF has enhanced its capacity to guide and inform protection in emergencies. In collaboration with its partners, UNICEF has developed the *Paris Principles* on children associated with armed forces or armed groups; the IASC *Guidelines for Gender-based Violence Interventions in Humanitarian Settings*; handbooks and database tools on separated and unaccompanied children; and training packages on child protection in emergencies.

**Actions in progress:** UNICEF continues to advance cluster implementation. Building on the initial phase, cluster rosters are being expanded to include broader expertise. Sector-specific coordinator trainings (for information management) are under way to strengthen cluster technical capacities. Support is ongoing in several countries where the cluster approach was piloted, while coordination and guidance are required in chronic emergency-affected countries that have not yet formally adopted the cluster approach.

Activities to build national capacities for emergency preparedness, response and disaster risk reduction are part of UNICEF’s Country Programmes, targeting both national disaster management bodies and sectoral line ministries. Reinforced by recent emergency education funding, education has emerged as an entry point, with Guyana, the Islamic Republic of Iran, Malaysia, Mozambique and Sri Lanka and as examples where national emergency preparedness and response plans have been developed in the sector.

**Future actions:** The implementation of the cluster approach will be adjusted to evaluation recommendations. It is recognized that the strengthening of national emergency capacities has to be accelerated and institutionalized in order to reduce the need for external emergency assistance in the long run. Wider partnership with NGOs is a goal for the whole of the United Nations. As identified by its recently completed organizational review, UNICEF will need to secure adequate funding for capacity-building efforts.

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2. Children and communities should be provided with the knowledge and skills needed to identify warning signs, and prepare for and better cope with disasters

**Problem:** Recent catastrophic natural disasters, including the 2004 tsunami, have raised awareness that governments must put in place robust preparedness systems and adopt a more comprehensive and systematic view of risk management. While UNICEF has supported disaster risk reduction (DRR) projects since the 1990s, the organization needs to further scale up its support to disaster reduction initiatives and develop a more consistent risk reduction strategy in line with the ‘Hyogo Framework for Action’, endorsed at the 2005 Kobe Conference.

**Completed:** Since the launch of the International Decade for Natural Disaster Reduction, more than 15 years ago, UNICEF has collaborated in efforts to enhance governments’ and civil society’s capacities in emergency preparedness, public awareness on disaster risk, and risk education in schools. As examples, UNICEF and the UN International Strategy for Disaster Reduction (ISDR) jointly developed the *Riskland* game to raise children’s awareness on natural disasters, which has now been translated into more than 15 languages. Over the years, UNICEF has supported various national emergency training efforts and participatory community preparedness planning programmes, and provided technical expertise. In June 2007, UNICEF formally committed itself to supporting the implementation of the Hyogo Framework for Action by officially joining the ISDR. In July 2007, UNICEF held a global consultation to develop a UNICEF disaster risk reduction (DRR) strategy and a specific plan of action for the education sector.

**Actions in progress:** Disaster risk reduction is being addressed through both development programming and emergency response, in a comprehensive approach that includes prevention, risk mitigation, preparedness, early warning, response and recovery. UNICEF is committed to introducing DRR as part of its new cluster responsibilities in water, hygiene and sanitation, nutrition, protection and education, in close coordination with partners. One strategic UNICEF focus is formal and non-formal education, including school curricula, school safety and public awareness. For example, in the Philippines, UNICEF strives to make school buildings safer and to mainstream disaster risk reduction into school curricula. The DRR strategy proposed by UNICEF emphasizes national-level capacity-building as well as community-based initiatives, since the first responders to disasters are most often local populations, especially in disaster-prone remote areas.

**Future actions:** Given the renewed focus on risk reduction within emergency response and regular programming, UNICEF’s technical units in health, water and education are reassessing ways to integrate and accelerate risk reduction efforts. With the creation of a new unit in January 2008 UNICEF will support global risk reduction efforts and strengthen staff capacities to further emphasize risk reduction in education. In line with the development of a global risk reduction strategy UNICEF will continue to build partnerships at national and regional levels, working closely with ISDR and national authorities.

3. Effective emergency response requires the right person at the right place at the right time

**Problem:** While acknowledging the achievements of tsunami staff, the evaluation of UNICEF’s tsunami response underscored the need to expand emergency surge capacity, including strengthening staff capacity and overall preparedness.

**Completed:** The tsunami tested every possible aspect of UNICEF’s emergency response capacity. It brought to light a number of areas in need of improvement. One such area was UNICEF’s human resource (HR) surge capacity, which was underdeveloped and required more effective systems and tools to respond to and manage large-scale emergencies in a coordinated and predictable manner.

Several lessons learned and many best practices were systematically captured. This has led to the development of UNICEF’s three-pronged approach to HR surge capacity:

- Internal redeployment – UNICEF staff are identified and deployed on mission status;
• External recruitment – candidates are identified and deployed as consultants or temporary staff;
• Standby arrangements – the Office of Emergency Operations (EMOPS) in Geneva coordinates the
deployment of candidates through UNICEF’s standby partners.

Systems to monitor and coordinate emergency staff deployment have been strengthened. This has made it
possible to meet UNICEF’s Core Commitments for Children in Emergencies (CCCs) for all staff deployments
in response to the 2006 Horn of Africa drought and for the 2007 South Pacific tsunami. Since end-2006,
thanks to these strengthened systems and tools, more than half of all emergency staff deployments fulfil the
CCC target, compared to about one-third during the 2004 South-East Asia tsunami.

Additionally, three pilot regions are establishing regional rapid response mechanisms for HR surge capacity,
and two Regional Offices have recruited a Regional Emergency Focal Point for HR. The impact of these
actions as well as the improvements in systems and tools has greatly helped conform to UNICEF’s CCCs.

UNICEF has established standby arrangements with a growing number of partners, building on comparative
advantages, enhancing response capacity in key sectors and shortening staff deployment time. UNICEF,
jointly with the World Food Programme (WFP) and UNHCR, organizes twice-yearly trainings for standby
partners in the important logistics area. The support of donors in strengthening staff emergency response
capacity has resulted in new staff policies and guidance, including a comprehensive Emergency Field
Handbook, Minimum Operating Security Standards (MOSS) and mandatory security training. Some 500 staff
worldwide have completed a computer-based learning course for emergencies. More than 1,000 staff have
undertaken emergency preparedness and response training (EPRT), and emergency support at regional
level was expanded from six to twenty staff in the past three years.

**Actions in progress:** Training is ongoing, including EPRT, emergency simulations employing SWOT
(strengths, weaknesses, opportunities and threats) analysis and sector-specific emergency training. An
updated emergency training package is being developed, including cluster responsibilities and stronger
rooting in humanitarian laws, principles and guidelines. A roster of cluster coordinators where UNICEF is
cluster lead is maintained as part of the broader Global Web Roster.

**Future actions:** Based on these successful pilots in sub-Saharan Africa and in the Latin America and
Caribbean regions, the concept of Emergency Focal Point should expand globally. In addition, the Division of
Human Resources, EMOPS and the Executive Office will review the next steps to consolidate all efforts and
initiatives in order to create a sustainable structure for a global rapid response mechanism for HR surge
capacity. Standby arrangements will be enlarged as part of cluster responsibilities, expanding private sector
partnerships. The Global Web Roster of external candidates will be further developed to facilitate the
identification of pre-screened talents available for emergency response.

4. Providing the right supplies in the right place at the right time can go far
in addressing emergency needs

**Problem:** Large-scale emergencies stretch UNICEF’s capacity to deliver the most appropriate supplies
where and when needed. The tsunami response evaluation noted the need for improvement in emergency
supply.

**Completed:** UNICEF conducted a comprehensive review of emergency supplies to:
  o set improved sectoral supply lists based on common emergency scenarios and delivery times for
each type of supply;
  o determine the best mix of central, local, supplier-managed and UN partner procurement;
  o determine the best location for stockpiling, including establishing new standby agreements with
governments and private sector.

To further reduce delays and improve in-country tracking of supplies, tsunami programmes have supported
the roll-out of the UniTrack supply and logistics tracking system in 20 Country Offices so far, including
Afghanistan, Ethiopia, Indonesia, Lebanon, Pakistan, Somalia, Sri Lanka and the Sudan. Field staff who make use of UniTrack are able to watch all supplies from initial procurement to temporary storage at transit centres as well as inland transportation and delivery to implementing partners. Programme staff and donors can more easily follow up with end users and assess whether supplies meet beneficiary needs in terms of timeliness, quality and cost, while supply managers at country and global levels can make better choices from available options. Most Country Offices have updated their emergency preparedness and response plans, identifying supply needs and sources.

**Actions in progress:** An improved version of UniTrack capable of managing multiple sites per country will be integrated into UNICEF’s financial information systems. It will be rolled out in up to 60 offices.

Packaged supplies (e.g., essential drug kits, recreational and ‘school-in-a-box’ kits) designed to meet some of the most common emergency needs can be delivered quickly. UNICEF is piloting ways to customize kit components to minimizing delays and is testing new kits for family tracing, interim centres and early childhood development. To ensure the proper use of such kits, UNICEF is developing new guidance, both for the users and for programme officers who manage and monitor their use.

**Future actions:** In chronic emergency countries, UNICEF will support the use of commodity assessment tools to analyse the supply chain, from production to utilization, with a view to strengthening national capacities at all levels, including the manufacture of needed items. As a key component of global stockpiling strategies, Country Offices will increasingly purchase themselves and preposition emergency supplies, but have so far faced funding constraints.

5. Reliable information is essential in order to target the most vulnerable, and plan, monitor, coordinate and be accountable to stakeholders

**Problem:** The Tsunami Evaluation Coalition (TEC) needs assessment and the evaluation of UNICEF’s tsunami response point out that, in general, programming decisions and reports are not sufficiently based on objective assessment evidence and on regular monitoring and evaluation information.

**Completed:** As part of the cluster approach, an initial rapid assessment tool (IRA) encompassing water, hygiene and sanitation, nutrition and health was developed, peer-reviewed and tested in six emergency-affected countries. Intended for use by generalists within the first 72 hours, it provides a common, objective basis for emergency response decisions within those sectors.

Experience in monitoring programme results during the tsunami emergency has fed into the development of tools to monitor UNICEF’s progress against its Core Commitments for Children in Emergencies (CCCs), including EmergencyInfo, a custom version of the UN DevInfo software, which is being used in several countries, such as Afghanistan, the Maldives, Nepal, Thailand and Timor-Leste. Other countries, like Indonesia, Myanmar, Solomon Islands, Sri Lanka and Viet Nam, are using handheld computers (PDAs) to enter data in the field.

To analyse what works and what does not work in emergency response, UNICEF is increasingly using real time evaluation (RTE) methodologies to obtain feedback during the early implementation of emergency programmes, as was the case in Niger. UNICEF also realized real time evaluations in collaboration with other IASC partners during the Horn of Africa drought, the Pakistan earthquake, and the Mozambique and Pakistan floods.

A web-based Early Warning/Early Action system has been established with the participation of more than 130 Country Offices to monitor emergency preparedness globally. The system alerts the UNICEF network to potential threats and provides Country Offices with guidance on essential preparedness actions.

**Actions in progress:** Through the cluster approach, the initial rapid assessment tool is being further developed. Sectoral assessment tools for more in-depth follow-up assessment during the first three to six weeks are also in preparation. CCC performance monitoring and EmergencyInfo will be tested in additional
countries and further refined. To help ensure necessary pre-emergency baseline data, UNICEF is slated to scale up support to household surveys. UNICEF will contribute to the OCHA-led information management (IM) agenda, including systems that show who is doing what, and where, in emergency response.

**Future actions:** UNICEF will help develop tools for clusters to identify and monitor gaps in emergency response. Planned evaluations will assess outcomes and impacts of tsunami programmes.

**6. Adequate funding and adaptable financial and administrative procedures are necessary for rapid response to sudden onset emergencies**

**Problem:** The evaluation of UNICEF’s tsunami response pointed out that emergencies are times when large amounts of money have to be disbursed quickly, posing significant risks for UNICEF. Avoiding such risks by emphasizing process over results has delayed implementation, discouraged partnership and tied up staff time, underscoring the need for improved access to information on financial and administrative procedures in emergencies. Unlike the tsunami case, humanitarian response is typically underfunded. Funds that are delayed, earmarked or valid for too short a duration often constrain humanitarian response and recovery.

**Completed:** In 2007, UNICEF completed and launched a website repository of simple, accessible emergency policies and procedures and has recently completed a simple guide for emergency programme managers.

Though all programmes are audited, special audit guidelines first developed for the tsunami were also applied to the Pakistan earthquake. The guidelines include management of needs assessments and transition from relief plans to recovery plans.

The tsunami marked a watershed in long-term, unearmarked, thematic funding. Its continued encouragement has seen thematic humanitarian funding rise from about US$ 4 million in 2003 to a cumulative total of US$ 752 million as of 31 October 2007.

To institutionalize timely availability of funds, UNICEF increased its Emergency Programme Fund (EPF) to US$ 75 million per year. The General Assembly introduced an upgraded Central Emergency Response Fund (CERF) that now includes grants. In 2006, CERF funds were the second largest single source of UNICEF’s emergency funds.

Based on lessons from the tsunami financial management, new guidelines were issued, specifying how future thematic funds should be allocated and how Country Offices should code projects in financial information systems so as to facilitate global and multi-agency financial monitoring and reporting in future emergencies.

**Actions in progress:** The guide on emergency policy and procedural options is being aggressively promoted in the field through three levels of training. All Country Offices and programme and operations staff will have greater access to and understanding of simplified policy guidance and will begin to put these options into practice. In addition to regular audits of emergency programmes, an initial audit of emergency preparedness sampled nine Country Offices worldwide. Country Office preparedness will continue to be audited in the future. Follow-up audits of tsunami programmes continue. The recruitment process for emergency staff is being streamlined in order to minimize delays.

**Future actions:** Lessons learned from the tsunami financial monitoring will be used to improve UNICEF’s financial tracking systems in general. UNICEF will support the improvement of multi-agency financial systems and provide data on contributions and expenditures against appeals. UNICEF will work with media and donors to promote a more equitable, needs-based distribution of emergency funds in accordance with the principles of the Good Humanitarian Donorship initiative.
Conclusion

Thanks to generous support, UNICEF’s tsunami programmes have achieved a great deal and continue to build on results for children and women. At the same time, it is acknowledged that programmes could have been even more successful. Applying the lessons learned from tsunami successes and shortcomings will obviously not happen overnight, but the process is well under way with encouraging results in recent emergencies. Above all, UNICEF remains open to modifying the way it works and committed to the principle of continuous improvement.