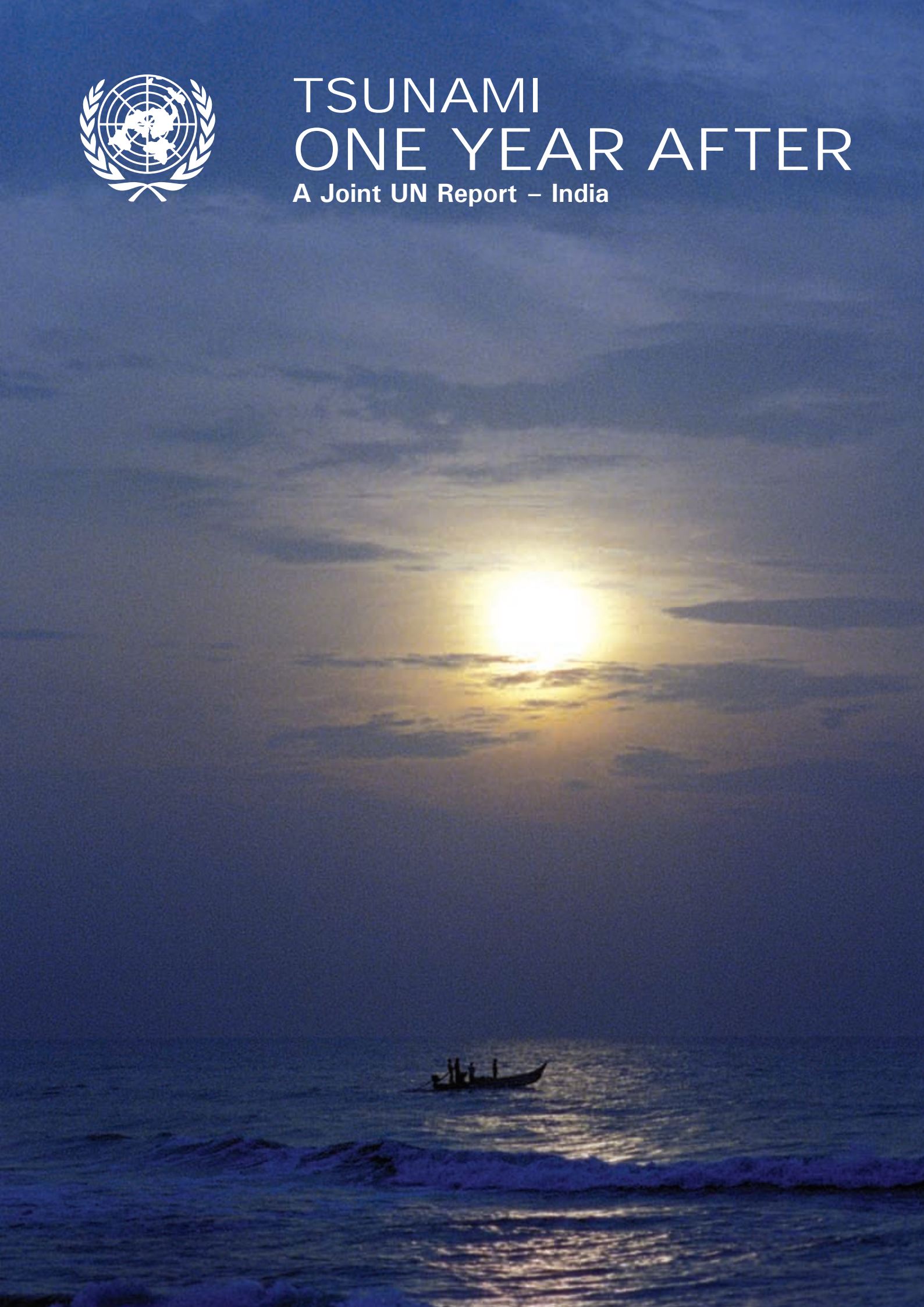




# TSUNAMI ONE YEAR AFTER

A Joint UN Report – India







# TSUNAMI ONE YEAR AFTER

A Joint UN Report – India



# CONTENTS

Glossary		1
Chapter 1	Introduction	3
Chapter 2	Response of Government and Civil Society	4
Chapter 3	Action by UN Agencies During the Relief Phase	6
Chapter 4	UN Recovery Framework	9
Chapter 5	Moving from Post-Disaster Relief to Recovery	10
Chapter 6	Restoring Livelihoods and Upgrading Infrastructure	21
Chapter 7	Prospective Risk Reduction	28
Chapter 8	Policy Support and Coordination	32



# GLOSSARY

ADB	Asian Development Bank
ANM	Auxiliary Nurse-Midwife
ATREE	Ashoka Trust for Research in Ecology and the Environment
CBO	Community-Based Organisation
CLW	Community Level Worker
CRZ	Coastal Regulation Zone
CSO	Civil Society Organisation
DRDA	District Rural Development Agency
DRM	Disaster Risk Management
ECHO	European Commission Humanitarian Aid Office
FAO	Food and Agriculture Organisation
ICDS	Integrated Child Development Services
ICT	Information Communication Technology
ICZM	Integrated Coastal Zone Management
IFAD	International Fund for Agriculture Development
ILO	International Labour Organisation
IDMS	Integrated Disaster Management System
INGO	International Non Government Organisation
IST	Indian Standard Time
MoEF	Ministry of Environment and Forests
NCRC	Nagapattinam Coordination and Resource Centre
NGO	Non-Governmental Organisation
NIE	National Institute of Epidemiology
NPO	National Professional Officers
NUNV	National United Nations Volunteer
NYK	Nehru Yuvak Kendra
PEP	Post Exposure Prophylaxis
PRIs	Panchayati Raj Institutions
PSS	Psychosocial Support
SACS	State AIDS Control Society
SHG	Self Help Group
SIFFS	South Indian Federation of Fisherman Societies
SPMU	State Project Management Unit
TDU	Technology Demonstration Unit
TNTRC	Tamil Nadu Tsunami Resource Centre
ToT	Training of Trainers
TRT	Technical Resource Team
UNCT	United Nations Country Team

UNDMT	United Nations Disaster Management Team
UNDP	United Nations Development Programme
UNDG	United Nations Development Group
UNFPA	United Nations Population Fund
USGS	US Geological Survey
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organisation
UNODC	United Nations Office on Drugs and Crime
UNTRS	United Nations Team for Recovery Support
WB	World Bank
WHO	World Health Organisation

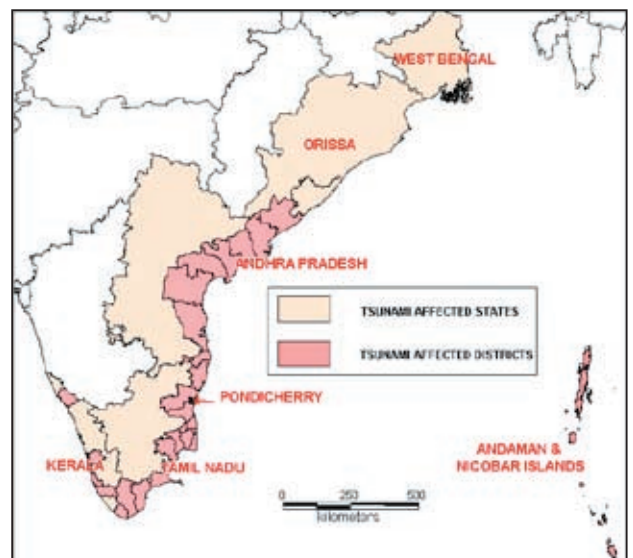


# INTRODUCTION

At 6:58 a.m. on December 26, 2004, a massive earthquake of magnitude 9.0 on the Richter scale hit Indonesia off the West Coast of Northern Sumatra. At 9:51 a.m. (IST) the same day, another earthquake of magnitude 7.3 on the Richter scale occurred 81km west of Pulo Kunji (Great Nicobar, India). The high intensity earthquakes set off giant tsunamis between 3 and 10 meters high, travelling 2,000km across the Indian Ocean, the Bay of Bengal and beyond.

In the Indian sub continent, the Andaman & Nicobar Islands were the first to be hit, causing extensive damage. The tsunami then spread along a narrow strip of land on India's east coast and Sri Lanka's low-lying portions and to a lesser degree India's west coast. Tidal waves hit the coastal districts of Andhra Pradesh, Kerala, Tamil Nadu and the Union Territory of Pondicherry around 9:50 a.m. and penetrated up to 300 meters to 3km into the mainland, causing damage to lives and property. The tsunami affected a total of 2,260km of India's coastline besides the entire group of Nicobar Islands.

At Karaikal in Pondicherry and Nagapattinam in Tamil Nadu, the sea penetrated deep into the land affecting not only ports and fishing villages but also agricultural land. Besides the Andaman & Nicobar Islands, the most critical impact was felt in a few coastal districts of Tamil Nadu, Pondicherry and Kerala. On the west coast, Kerala was hit by a wave crest, travelling in a north-westerly direction as the tsunami diffracted off the southern tip of Sri Lanka and India.



The overall damage was estimated at approximately US\$ 660 million and the losses were estimated to be approximately US\$ 410 million<sup>1</sup>.

In terms of mortality, *taluks*<sup>2</sup> in Nagapattinam district in Tamil Nadu were the hardest hit, followed by the Kanyakumari district. In Pondicherry, the Karaikal region had the highest toll as did the districts of Kollam and Alappuzha in Kerala.

According to the Government of India's Report to the Nation in June 2005, as many as 12,405 lives were lost: 8,009 in Tamil Nadu, 3,513 in Andaman & Nicobar Islands, 599 in Pondicherry, 177 in Kerala and 107 in Andhra Pradesh. The toll included 14 Indians overseas, including 13 in Sri Lanka and one in the Maldives.

<sup>1</sup> Assessment figures taken from Joint Assessment Mission Report prepared by WB, ADB and UNCT, 2005.

<sup>2</sup> A taluk is an administrative division of the Indian state that falls under a district.

# RESPONSE OF GOVERNMENT AND CIVIL SOCIETY

The Government of India as well as all the affected state governments and union territories were caught unawares but their response to the situation was quick.

## Government of India

A number of steps were taken at the national level. The Ministry of Home Affairs was designated the nodal agency for coordinating relief in the affected areas and it formed a control room with a help-line for the public. In addition, a National Crisis Management Committee was established under the chairmanship of the Cabinet Secretary. A National Crisis Management Group was formed under the chairmanship of the Secretary, Border Management and teams of representatives of various ministries led by a Joint Secretary, Ministry of Home Affairs, visited the affected states. Individual ministries also undertook ministry-specific efforts.

Based on the impact assessment, the Government of India released Rs. 700 crore (USD 155.5 million) to the affected states and union territories for carrying out immediate relief and response. This included Rs 250 crore (USD 55.5 million) for Tamil Nadu, Rs.200 crore (USD 44.4 million) for Andaman & Nicobar Islands, Rs.100 crore (USD 22.2 million) each for Andhra Pradesh and Kerala and Rs.50 crore (USD 11.1 million) for Pondicherry.

After an assessment by central teams, a special package amounting to Rs. 3644.05 crore (USD 809.5 million) was approved under the Rajiv Gandhi Rehabilitation Package for tsunami-affected areas. This covered assistance for immediate relief and response, revival of fishery and agriculture sectors, construction of temporary (intermediate) shelters and repair/restoration of infrastructure.

The Government of India set up a Core Group, in the Planning Commission, on Reconstruction, Management and Monitoring for tsunami-affected areas to plan the reconstruction efforts. The Core Group prepared a comprehensive plan for rehabilitation and reconstruction of the tsunami-affected states and union territories, with a financial outlay of Rs. 9,870.25 crore (USD 2,191.19 million). This plan is currently under revision and awaits approval of the Union Cabinet of Ministers.

Whereas no external assistance was required for immediate relief and response, Government approved external assistance from multi-lateral agencies like World Bank (WB), Asian Development Bank (ADB) and UN Agencies for long term rehabilitation/ reconstruction for tsunami-affected states/union territories. Bilateral assistance was also accepted if routed through the multi-lateral agencies. The external assistance mobilised from the World Bank is USD 528.5 million, USD 200

million from ADB, USD 34.4 million from the UN, USD 30 million from IFAD and USD 7.5 million from Japan Fund routed through World Bank and ADB. The support from World Bank is for rural water supply rehabilitation in Kerala, livelihood restoration in Andhra Pradesh, and housing and transport infrastructure restoration in Tamil Nadu and Pondicherry and support studies for longer-term coastal management. ADB is providing funds for rehabilitation of transportation infrastructure, village infrastructure and livelihood restoration in Tamil Nadu and Kerala. The UN Recovery Framework focuses on rebuilding livelihoods, shelter-habitat development, social reintegration, social equity and anti-trafficking measures, education, health, psychosocial support, capacity building for disaster risk management, policy support and coordination by development of ICT tools and establishment of knowledge networks etc.

## State and union territories

The Chief Ministers of the respective states directed the officials of the Revenue departments under the Relief Commissioner to co-ordinate search, rescue and relief efforts through the District Collectors with assistance from the police, fire and rescue services, medical/health services and other associated departments. State Relief Commissioners opened control rooms to disseminate information to the public and state government web sites relating to tsunami rescue and relief operations were developed. Supported by the army, navy, air force, coast guard and senior civil servants deputed to affected areas, each district administration identified and disposed off the dead, removed debris, rescued and moved people to safer locations, worked to prevent an outbreak of epidemics and restore basic services such as power and drinking water.

## NGO/Civil society response

Community members, individuals and non-governmental organisations (NGOs) responded



UN agencies India

to the needs of the affected states and union territories. The work of the NGOs is being coordinated by Resource Centres established at the state level such as the Tamil Nadu Tsunami Resource Centre (TNTRC) in Chennai and at the district level such as the Nagapattinam Coordination and Resource Centre (NCRC). NGOs operating in the sectors of health, psychosocial counselling, shelter, sanitation, water, education, livelihood and environment came to the fore. They included agencies such as World Vision (India), CARE (India), Catholic Relief Services (India), Project Concern International, ECHO, Oxfam, Dhan Foundation, League for Education and Development, Tamil Nadu Voluntary Health Association and Jesuits in Social Action.

## Private sector response

The affected areas received corporate donations and relief material on an unprecedented scale. It is estimated that the corporate sector in India contributed more than USD 8 million in cash, food and medicine, emergency relief supplies and other humanitarian services. In addition, Indian companies, including established business houses, banks, insurance, medical and IT companies and public sector entities, contributed over Rs. 400 million (USD 9.2 million) to the Prime Minister's National Relief Fund and made donations to established NGOs like Oxfam, CARE and Dhan Foundation.

# ACTION BY UN AGENCIES DURING THE RELIEF PHASE

The United Nations in India activated the Disaster Management Team (DMT) comprising representatives from eight UN agencies. The UN system charged the DMT with the task of ensuring prompt, effective and concerted country-level disaster preparedness and response wherever appropriate. The first post-tsunami meeting of the DMT took place on December 27, 2004. Situation reports were disseminated to all stakeholders, on-site rapid assessment was made by concerned agencies and DMT response plan and tools shared with neighboring UN Country Teams.

UNICEF, the designated lead UN agency for relief, began operations on December 26th in the affected districts. The government did not appeal for external assistance for the relief phase; however in keeping with established practices in past disasters, the UN system expanded its existing programmes to provide immediate support. UNICEF led the efforts with active support from WHO, UNHCR and ILO. Further, WHO, UNODC, UNICEF, UNFPA and UNDP initiated activities in the area of psychosocial support. UNDP supported the government's coordination efforts particularly through information gathering and organisation carried out by expert resources from the

ongoing Government of India-UNDP Disaster Risk Management (DRM) Programme.

Programme personnel also traveled to Sri Lanka, Maldives and Indonesia to provide similar support in these countries. During the relief phase, UNICEF was active in some islands on the Andaman & Nicobar group, providing education, psychosocial, water and sanitation and health and nutrition support. WHO was also active in providing health supplies to some of the islands. The activities of the other UN agencies were limited to mainland India, in keeping with the government's advice.

## Organisational arrangements within the UN system for post-tsunami recovery support

The UN DMT, in consultation with the UN Country Team set up the UN Team for Recovery Support (UN TRS) to coordinate the response under the UN Resident Coordinator mechanism, chaired by the UNDP Senior Deputy Resident Representative. Based on the findings of the Joint Assessment Mission<sup>3</sup>, UN TRS prepared a Tsunami Response

<sup>3</sup> Conducted by representatives of the World Bank, ADB and UN agencies on request of the Government of India for extending support in the recovery and reconstruction phase.



UN agencies India

Framework in February 2005. The approach proposed in the Framework reflects the values of the UN system and builds on the experience that the UN in India has gained from cyclone relief work in Orissa in 1999 and in earthquake relief work in Gujarat in 2001.

## Joint resource mobilisation

The importance of adopting a joint approach was stressed from the beginning of the recovery response. Based on this principle, a joint resource mobilisation strategy along with the decision to set up one joint UN office in Chennai was adopted. Further, in the spirit of a country-led response, the UN Country Team decided to come up with its own innovative joint implementation mechanism that was inspired by the UNDG guidelines. Under this arrangement, UNDP is the executing agency of the UN Recovery Framework on behalf of the UN Recovery Team. The participating agencies take on the implementing responsibilities for their respective areas.

A total of USD 34.4 million has been mobilised from the UN's core resource funds and various bilateral donors so far. In addition to this, negotiations are on for finalising agreements for mobilising an additional USD 5.3 million. At the time of formulating the Recovery Framework, an estimated budget was prepared for each area of intervention. Resource mobilisation in the months after the tsunami resulted in some areas receiving more funds than anticipated and other areas

facing a shortage of funds for which resource mobilisation is still being done.

A breakdown of resources mobilised by UN agencies is provided in a table on the next page.

## Joint UN office in Chennai

In order to coordinate the activities that support the government for recovery and rehabilitation, the UN TRS operates both in New Delhi and Chennai. The UN TRS in Chennai is responsible for the detailed formulation of programmes, liaisoning and co-ordination with the government in terms of programmatic direction and NGO partners for dialogue and implementation. A UN co-ordinator, seconded by UNICEF, is to be appointed in Chennai to ensure commonality of purpose and approach among the recovery activities of the UN agencies participating in the UN Recovery Framework and to enhance synergies therein. Moreover, UNDP has already appointed a Recovery Specialist for supporting coordination of the Joint UN rehabilitation programmes, building the required partnerships and to coordinate the UNDP recovery programmes. The Recovery specialist is currently in charge of the joint UN Office in Chennai, Tamil Nadu.

The collaborative work has strengthened the capacity of the UN system in India to work together within. The implementation of the UN Recovery Framework would provide further experience as to how this can proceed constructively and effectively, thereby contributing to the process of UN reform. The joint UN office helps facilitate information sharing, ensure synergies in interventions in different sectors and also encourages joint learning by UN agencies involved in the reconstruction process. The UN office is being supported by an autonomous Tamil Nadu Tsunami Resource Centre (TNTRC) in Chennai established in partnership with a range of renowned NGOs as well as the Government of Tamil Nadu. The TNTRC is networked to district resource centres as well.

The UN agencies are not only working in close consultation with one another as a UNCT but are also working in close collaboration with the government, NGOs and communities to implement the tsunami recovery programme. The goal is not

only to restore what was lost or destroyed but also to build back better for all the affected people – better schools providing quality education, better health facilities and better livelihood opportunities, better technology and coordination.

### United Nations Recovery Framework Resource Mobilisation Matrix (Million USD)

Activity	Budgeted (Recovery Framework)	Funds raised	Funds under negotiation	Total Funds Raised and Expected
Psychosocial Support	870,000	2,090,649		2,090,649
Social Reintegration to Address Trafficking	500,000	500,000		500,000
Health & Nutrition	4,470,000	7,497,486		7,497,486
HIV/AIDS Prevention and Care	1,650,000	1,265,199		1,265,199
Education	1,052,000	5,948,572		5,948,572
Rebuilding Livelihoods	5,580,000	3,225,354	290,000	3,515,354
Shelter & Habitat Development	4,513,000	1,000,000		1,000,000
Water Supply, Sanitation & Hygiene	559,000	3,328,548		3,328,548
Healthy Environment for Long Term Security and Sustainability	1,550,000	1,300,000		1,300,000
Capacity Building for Disaster Risk Management	15,000,00	6,014,566	5,000,000	11,014,566
Policy Support and Coordination	3,050,000	2,267,500		2,267,500
<b>Total</b>	<b>38,794,000</b>	<b>34,437,874</b>	<b>5,290,000</b>	<b>39,727,874</b>

# UN RECOVERY FRAMEWORK

The UNCT has identified four key areas for the UN's collaboration under the recovery framework in support of Government of India's post-tsunami rehabilitation and reconstruction programme.

## **Moving from post-disaster relief to recovery**

- Psychosocial support
- Social reintegration to address trafficking
- Health and nutrition
- HIV/AIDS
- Prevention and Care
- Education

## **Restoring livelihoods and upgrading infrastructure**

- Rebuilding livelihoods
- Shelter and habitat development
- Water supply, sanitation and hygiene

## **Prospective risk reduction**

- Healthy environment for long-term security and sustainability
- Capacity building for disaster risk management

## **Policy support and co-ordination**

- Coordination support and knowledge networking
- Information and communication technology

One of the main objectives of the UNCT is to facilitate the process of social inclusion and equity by proactively addressing issues of equitable access by all to social and economic opportunities offered by the UN interventions. Development cooperation activities initiated by the UN also consider differing interests of women and men with specific attention to the gender dimensions of safety and protection in relief and reconstruction and social equity. Work in these areas will include support to government on policy advocacy at the local and state level and the establishment of social equity targets along with a monitoring system for the entire programme. Further, to mainstream the issue of social equity into the UN Recovery Framework, the expertise of a professional will be obtained who will work in close collaboration with the TNTRC and tap its resources to disseminate this approach to NGOs and other stakeholders. To assist in policy level dialogue, collection of disaggregated data based on equity issues such as gender and other dimensions of exclusion, will be carried out to further highlight issues of social exclusion and to assist in planning and implementation processes. Direct interventions will also be implemented to address particular excluded groups, such as people living with HIV/AIDS, victims of trafficking or those vulnerable to trafficking, low-skilled women and youth.



# MOVING FROM POST-DISASTER RELIEF TO RECOVERY

## Psychosocial support

Once vital life-saving interventions addressed the immediate needs of the affected communities, attention was focused on providing psychosocial support (PSS) for the survivors. WHO and UNICEF, with initial support from UNODC and funds mobilised through UNFPA and bilateral donors, immediately started activities on the ground. The limitations in terms of personnel, time, understanding of the societal and cultural milieu of the affected society and concern for ensuring sustainability necessitated the development of a new paradigm for community based PSS in

### Responsibilities of community level workers

- Integrate PSS fully with overall relief and rehabilitation activities
- Strengthen local resources
- Provide information
- Establish support/information centres
- Involve other sectors and NGOs
- Help bereaved families
- Help the physically injured and their families
- Help severely mentally disturbed persons
- Help orphans/widows and others in special need
- Debrief rescue workers

disaster situations. WHO and UNICEF's main thrust was to provide training to volunteers from the community and teachers who then counselled the affected individuals. UNICEF focused particularly on child protection and the psychosocial rehabilitation of children.

The programme is being supported by UNDP, UNICEF, UNODC and UNFPA with UNDP signing a Memorandum of Understanding with the Directorate of Social Welfare, Government of Tamil Nadu on behalf of the UN TRS. WHO India contacted academic institutions, government departments and NGOs for facilitating activities on the field. The agencies within the state were responsible for training and fieldwork while agencies outside the affected areas provided technical support. UNODC and UNICEF provided support in the development of the training manuals and training strategy. The service provider in Tamil Nadu was the Social Welfare Department whereas the mental health institutions and medical schools played that role in Kerala and Andhra Pradesh. NGOs and other community based organisations provided technical resources and field support.

### Achievements

The training for PSS was organised by WHO at three levels (master trainer, training of trainers



and community level workers-CLWs) in the states of Tamil Nadu, Kerala, Andhra Pradesh and Pondicherry. The orientation for master trainers in Tamil Nadu was held at the Directorate of Social Welfare, Chennai. Deliberations were held on formulating the training modules, schedules and methodology of training to be given to the trainers. The training of trainers was held in the affected districts with the participant trainers being teachers, health workers, nursing students, Nehru Yuvak Kendra (NYK) volunteers, NGOs, community-based organisations (CBOs), students, youth groups and Integrated Child Development Services (ICDS) functionaries. CLWs were chosen from the affected communities as they would be responsible for providing first level care. Trainees were selected from among health workers, auxiliary nurse-midwives (ANMs), NYK coordinators, self-help groups (SHGs), *Anganwadi*<sup>4</sup> workers (AWWs), youth groups, community volunteers, NGOs, CBOs and retired

teachers. Modules were developed for training CLWs and teachers who would take care of the needs of the children. In addition, medical officers and health workers were also trained and a referral system was established to make specialised services available. WHO has trained 5,139 CLWs in Tamil Nadu, Kerala, Andhra Pradesh and Pondicherry. These CLWs have supported more than 75,000 people and provided referral care for more than 2,000 subjects.

Further, the UNICEF Programme with children lays great emphasis on capacity building of teachers and volunteers and helping them to be engaged in systematic activities with children in schools and villages. Through counselling, art, sport, puppet shows, and theatre, UNICEF worked with government, NGOs and mental health professionals to reach many children and adolescents across Tamil Nadu, Andaman & Nicobar islands, Andhra Pradesh and Kerala.

### **Tsunami cards – bringing back smiles**

The tsunami that struck Nagapattinam left a death trail along the coast. About one-third of the reported deaths were those of children. The district administration with a special concern for tsunami affected children conducted a painting competition for them within a few weeks. The drawings brought out not only their talents but also the feelings in them. They vividly portrayed the impact of the tsunami on the lives of their families, friends and communities. Some of the drawings of these kids were selected and printed as greeting cards by the district administration through the District Rural Development Agency (DRDA).

For most, tsunami meant destruction and grief. Most of the cards depicted the engulfing waves and the sea tossing the boats and destroying their homes. For twelve year old Maideen, it

meant derailed train compartments and a mass grave!! But for some there was a brighter side as well. Eight year-old Saranya depicted the celebration of a local harvest festival known as Pongal, a joyous occasion.

These cards are being sold at Rs. 10 per card and are being marketed by the District Supply and Marketing Society, DRDA, Nagapattinam. The profit from these sales is intended to be utilized for the welfare of these children who had painted them. This novel idea drew widespread appreciation from across the world and helped in remembering the resilience shown by the tsunami affected people. This initiative also helps in giving a new life to the kids. This December, which marks the first anniversary, as the whole world remembers the tragedy these cards provide an opportunity to bring back smiles in the lives of these children.

<sup>4</sup>An *Anganwadi* is a child care centre located in the village or urban slum area and is the focal point for the delivery of services, primarily the Integrated Child Development Scheme programme that focuses on children below six years of age, pregnant and nursing mother.

Along with direct PSS activities, WHO established a dedicated cell with a full time psychologist, data manager and minimum infrastructure at the Directorate of Social Welfare in Chennai. This PSS cell helped in the co-ordination and reporting of PSS activities in Tamil Nadu. Also, in tsunami-affected states and in the Andaman & Nicobar, UNICEF is supporting work led by state governments to build comprehensive data bases on the situation of vulnerable children – a critical first

step to ensuring that the special needs of these children are programmed into child protection initiatives and policies.

UNICEF is working with the state government in Tamil Nadu on the documentation and monitoring of children without parental care (home study). The study has been completed in all the tsunami-affected districts and a plan has been prepared for strengthening the monitoring system.

### A generic model for PSS in disaster situations

#### **Phase 1 (First six weeks after the disaster)**

Mental health professionals should be a part of medical teams sent immediately after any disaster to affected areas. Manuals and modules for care in the community need to be adapted to the local culture and translated into the local language by an academic agency and made available for use in the community. The state governments' departments of health, social welfare and education should identify a nodal officer for PSS in the State. An apex co-ordinating group consisting of nodal officers from the three departments should conduct a meeting of all the stakeholders (NGOs, academic institutions, UN agencies, multilateral agencies and development partners) along with responsible persons in the affected districts from the corresponding departments. This group of people can develop an action plan for training, identification of service delivery mechanisms and monitoring.

#### **Phase 2 (First six weeks to six months)**

##### ***Selection of CLWs***

Selection of CLWs is one of the critical areas and from the experience in the tsunami-affected areas, it is felt that personnel who are under an existing department or agency would be best suited for this training. The suggested groups are teachers, *Anganwadi* Workers (AWWs), health workers, literacy mission staff and members of reputed NGOs.

The selection of unemployed youth may lead to issues of remuneration and sustainability of the programme might become a problem. Undue prolongation of 'formal engagement' of CLWs with additional areas of work could lead to unreasonable expectations on the part of such workers about the continuation as a separate cadre. It has to be kept in mind, that the CLWs are present in the community for only a short period of time (a year at the most) by which time the community would have rallied back to normalcy. The trained CLWs can remain as a community resource and continue to provide help outside a formal arrangement.

##### ***Training CLWs and co-ordination of field work***

The training has to be practical, need-based and conducted as close to the affected community as possible. Role-plays and real-life scenarios have to be enacted and the training should be sensitive to the local needs and cultural background. The CLWs should have a pamphlet that they can carry with them to the field. Posters for PSS have to be put up in the community. Periodic co-ordination at various levels is required and a representative of the education sector should also participate at all levels.

#### **Phase III (Six months to one year)**

The first six months would require close supervision and strong referral linkages. From six months to one year, the intensity can be scaled down and by the end of two years the formal arrangements should be over.

### Lessons learnt and tasks ahead

A new paradigm for PSS support was introduced to ensure sustained support to the community through trained personnel in the community itself. The modus operandi was different in different settings and offered an opportunity to assess the models. Based on the feedback and the lessons learnt, a generic model for PSS has been suggested by WHO.

The model for PSS developed and implemented in the tsunami-affected areas has proved to be feasible as a sustainable community-based approach. To ensure continuation of support to the affected people, in 2006 WHO has planned many activities that include the strengthening of the PSS cell in the Directorate of Social Welfare for co-ordination and monitoring. District-level meetings will be held for establishing linkages between health and social welfare departments. CLW's would be provided with travel kits and photo identity cards. Documentation of PSS activities along with the printing of manuals and other materials will also take place. There will be targeted programmes for prevention and control of alcohol and substance abuse amongst adolescents and for widows. Sustainability of the model will be tested out in selected districts.

Further, in 2006 psychosocial and child protection activities in Andhra Pradesh will be absorbed into UNICEF's regular programme. However, activities in Tamil Nadu, Andaman & Nicobar and Kerala would be carried forward under the tsunami recovery programme. Many of the programmes that began as psychosocial care and support for children who survived the tsunami will be embraced more broadly to create a protective environment for children. Efforts are on to work with the government to establish a database on the situation of vulnerable children. It will serve as the basis for monitoring their situation. Further, two approaches to create a protective environment for children will also be adopted. The first is through institutions, using advocacy to strengthen legislation to protect children as Tamil Nadu and Andaman & Nicobar islands are both seeking inputs into the Juvenile



UN agencies India

Justice Act. The second approach is through communities especially in Tamil Nadu and Kerala where community level structures like watchdog committees will be supported.

There is still a need to build the capacity of the health system to absorb referrals that are made by trained CLW's and an analysis is required of the data collected along with documentation of the process. Further, a tool box has to be developed containing the modules and manuals that have been prepared and made available on the internet. Focus of the work being carried out will also address targeted intervention for alcohol and substance abuse. There will also be specific programmes for children, adolescents, widows and the elderly. Efforts will be made for the inclusion of PSS in disaster preparedness programmes.

### Prevention of HIV/AIDS and social reintegration to address trafficking

It is anticipated that the tsunami has increased the risk of HIV transmission in the affected areas due to overstressed health care services, increased poverty due to loss of income and property, powerlessness and social instability. In times of crisis, the erosion of social safety nets such as family and community increases the vulnerabilities of women and children in particular. In addition, some HIV interventions were temporarily stopped or slowed down due to the tsunami. This added to the pre-tsunami vulnerabilities in the affected districts of which some have been reporting high HIV prevalence in recent years.

In the joint UN Recovery Framework a programme outline for a total amount of USD 1,650,000 was envisioned. The strategy was to prevent further spread of HIV in the tsunami-affected areas and ensure care and support for people living with HIV.

The following activities were suggested:

- Conduct in-depth analysis to assess vulnerabilities
- Mainstream HIV/AIDS in all parts of the recovery and rehabilitation programmes
- Conduct large-scale communication campaigns targeting the affected communities
- Conduct awareness campaigns targeting population groups at higher risk of HIV infection and provide access to condoms, treatment for sexually transmitted diseases and Post Exposure Prophylaxis (PEP)
- Train NGOs/CBOs working on recovery and rehabilitation to mainstream HIV prevention and counselling issues
- Review and develop personnel policies and implement AIDS workplace programmes
- Undertake livelihood support programmes for people living with HIV

The UN partner agencies to implement the programme are UNAIDS co-sponsors, in particular UNICEF, WHO and UNDP, along with the UNAIDS Secretariat.

### Achievements

The risk of HIV has been addressed by the state governments, civil society as well as multilateral and bilateral donors. State AIDS Control Societies have mobilised counsellors for providing trauma counselling, psychosocial support and HIV awareness to the affected population along with condom distribution. NGOs are, likewise, active in implementing AIDS awareness programmes and providing services to reduce the risk of HIV transmission and alleviate the impact on those living with HIV.

WHO has extended technical assistance for awareness generation on the risk of HIV and AIDS and condom promotion in the affected districts in Tamil Nadu in the initial phase. UNAIDS also



UN agencies India

provided HIV information and supplied post-exposure prophylaxis to minimise the occupation risk of HIV exposure for UN staff involved in the relief and rehabilitation process. An HIV expert took part in the post-tsunami joint assessment in February 2005 to assess the impact on HIV prevention and care efforts and recommend short- and longer-term HIV and AIDS priority interventions in the affected states.

In February 2005, UNDP launched a five-year long programme Prevention of Trafficking, HIV and AIDS in Women and Girls. The programme was initially envisioned to cover 10 states of India, including Andhra Pradesh and Kerala. But in the wake of the tsunami, the programme was expanded to also include Tamil Nadu. Trafficking prevention measures have been taken in the seven worst affected districts of Tamil Nadu, eight districts in Andhra Pradesh and six districts in Kerala. These include the establishment of community-level anti-trafficking committees. Support is also being provided to state governments to strengthen police, judicial systems and services for the prevention of trafficking. Recruitment for a HIV/AIDS tsunami programme co-ordinator for all four states is underway. In Tamil Nadu a State Programme Management Unit (SPMU) has been set up in the State AIDS Control Society(SACS) and the Technical Resource Team (TRT) (including Department of Women and Child Development and SACS) has been constituted. The TRT has agreed to work with the department of Labour to mainstream trafficking issues. In Andhra Pradesh the State Government has decided to set up a special cell

for Prevention of Trafficking in the Directorate of Women and Child Development. This cell will work on the State/ District plan of action on trafficking on the lines of the National Plan of Action. In Kerala the proposal for setting up the SPMU is awaiting State Government clearance.

UNICEF supported the intensifying of HIV awareness and providing life skills for young people in school and for those who are living in vulnerable communities in Tamil Nadu. Life skills equip young people with knowledge they need to protect themselves and access HIV services and learn to be compassionate and supportive of people living with HIV. The young are being reached in two ways. First, through the school AIDS Education Programme that targets those between 13 and 18 years of age. In 2005, the programme covered 4,328 schools in all 13 tsunami-affected districts. UNICEF also supported training of 350 district institutes of education faculty members, who in turn, trained 8,522 teachers and peer educators. Secondly, UNICEF has supported NYK in the training of 750 peer educators in five tsunami-affected districts.

Assuring access to post-trauma and psychosocial support, education, livelihood opportunities as well as early rehabilitation, as described in other parts of the report, have also contributed to reducing the vulnerabilities of the affected populations. According to a recent study the tightly knit fishing villages have support mechanisms in place to care for widows and orphans. This mitigates the vulnerability for widows to be exploited and for children to be trafficked. The same study also found that there had only been a few reported incidents of violence against women tsunami survivors and abuse against children.

The issue of trafficking is, however, being integrated into UNICEF's ongoing psychosocial and child protection programmes. A core group consisting of UNICEF, Save the Children, Childline NGOs and Department of Social Defense and Social Welfare has been set up under the auspices of TNTRC in Chennai. About 900 village Watchdog

Committee members have been trained in the three most affected districts.

### **Lessons learnt and tasks ahead**

Mainstreaming of HIV/AIDS in the recovery and reconstruction could happen at the very outset of the design of the framework. This might ensure funding and integration with other programmes and, hence, earlier implementation. Following the tsunami, orientations were given to NGOs and Government officials on the issue of trafficking that might arise after the tsunami which helped in creating awareness on the issue. Supported by UNICEF, consultations were also held for co-ordination and strengthening of services in the tsunami-affected districts. Childline, a helpline for children in distress, was also supported with communication materials so as to enhance the effectiveness of its services. Training programmes were conducted for functionaries of protective homes.

Currently, a plan is being developed for the utilisation of funds that have been raised by the UN TRS. In addition, a HIV vulnerability assessment is being undertaken in the tsunami-affected areas in Pondicherry and Tamil Nadu. This assessment will provide information on the response so far and assess the possible medium and long term increased vulnerabilities and risks associated with HIV in the reconstruction phase. This will provide the evidence for planning for 2006.

UNICEF activities to promote HIV/AIDS awareness in Tamil Nadu will continue into 2006 with support for behavior change communication for young people in vulnerable communities and for the establishment of red ribbon clubs in schools. Further, the monitoring system for youth HIV prevention programmes at state and district level will be strengthened.

The AIDS Section of the Recovery Framework was one of the last components to be fully funded. This created some delay in implementing the programmes envisioned. Instead, ongoing programmes in the affected areas have been scaled up or expanded to include affected states



and districts. The recovery programme has, therefore, been an opportunity to build on and accelerate interventions in HIV/AIDS that UN agencies are already carrying out under their regular programmes.

## Health and Nutrition

The tsunami destroyed or damaged 80 hospitals and health centres in the worst-hit districts of Tamil Nadu and Andaman & Nicobar islands. However, the rapid response to the disaster ensured that no child died as a result of preventable disease. In relief centres in Tamil Nadu and Andaman & Nicobar islands, UNICEF and WHO supported the mass vaccination and Vitamin A distribution covering over 103,600 children. Subsequent to this mass distribution of Vitamin A immediately after the tsunami, a second dose of Vitamin A was administered across the Andaman & Nicobar islands, covering 87 per cent of children in the age group of 9-72 months. Further, WHO is represented in the UN Coordination Cell in Chennai by two National Professional Officers (NPO) who co-ordinate health-related activities with the government of Tamil Nadu. The NPOs of the relevant clusters for health and nutrition (Family and Community Health and Communicable Disease Surveillance) provided technical guidance for the WHO activities.

Malaria is endemic in Andaman & Nicobar islands and an intensive effort to fight malaria through the distribution of bed nets, mosquito repellents and

improving drainage brought down the number of reported cases in the Nicobar island group from 1,900 in the three months following the tsunami to around 500 in the subsequent quarter. UNICEF helped public health authorities to strengthen the islands' disease surveillance programme, by equipping field technicians with field diagnostic kits, and helping to establish in Port Blair, a centralised surveillance laboratory that is now leading investigations on disease cases and potential outbreaks.

The recovery programme was an opportunity for UNICEF to support the introduction of the Integrated Management of Neo-natal and Child Illnesses (IMNCI) programme in the three worst-affected districts. IMNCI is the main thrust of India's national child health strategy (2004-2009). It is an intervention package and strategy that addresses the most common causes of infant and child deaths and illnesses: pneumonia, diarrhea, malaria, anaemia and malnutrition. Under the IMNCI protocol, a trained community worker visits mothers and newborns in their homes at least three times in the first 10 days of birth to make sure both are doing well and to get timely medical attention.

AWWs, in particular, have become the backbone of the IMNCI programme. This year, they have been trained alongside ANMs who are government community health workers in charge of antenatal care, delivery, postnatal health and immunization. This year, Nicobar became the first district in India to start implementing the two-worker IMNCI model that is so important to child survival in areas where there is no doctor. In relief shelters in Tamil Nadu, UNICEF supported training for 1,080 women to become *Anganwadi* volunteers to support workers in providing counselling to mothers on feeding and care practices.

### Achievements

UNICEF supported the Government in restoring immunization, antenatal care and emergency obstetric services in 954 health facilities in Tamil Nadu, Andaman & Nicobar islands, Kerala and Andhra Pradesh. They also supported the



UN agencies India

restoration of services provided by over 9,500 *Anganwadi* centres where workers track the growth and development of children to detect and address signs of malnutrition, and provide nutrition counselling to mothers. A year after the tsunami, targeted *Anganwadi* centres in Tamil Nadu, Andaman & Nicobar islands, Andhra Pradesh and Kerala now have basic equipment such as weighing scales, growth monitoring cards, Oral Rehydration Solution packets, salt-testing kits for iodine and counselling material which they had previously lacked. In many communities, *Anganwadi* centres are becoming distribution points for services like Vitamin A and iron supplementation.

### Strengthening maternal, newborn and child health

WHO partnered with the Obstetric and Gynaecological Society of Southern India (OGSSI) based in Chennai to ensure the placement of skilled and qualified obstetricians, and pediatricians at the General Hospital (GH) in Nagapattinam district of Tamil Nadu. From March 2005, the GH has had additional obstetricians and sanitary workers supplementing the existing staff. The number of outpatients and inpatients has shown a steady increase because of the availability of additional personnel. The Superintendent of the GH, Head of Department of gynaecology, pediatrics and the general surgeon were of the opinion that the additional person power has had a definite effect on the quality of services.

#### They defined quality as:

- A decrease in the waiting time for the patients.
- The women feel more comfortable since all the gynaecologists now are women.
- Since there were fewer gynaecologists, many of the obstetric surgeries were done by general surgeons. Now there is more adherence to standard protocols of services.
- There is more time to interact with the patient to provide counselling for ante-natal care, family planning, nutrition etc.

UNFPA provided financial support of USD 110,000 through UNICEF and WHO for the procurement of medical equipment, expendables and supplies for the district hospital in Nagapattinam in Tamil Nadu, so as to make the labour room functional as well as provide access to quality emergency obstetric care services.

In all, over 11,200 *Anganwadi* workers in Andaman and Nicobar and Andhra Pradesh were provided training to enhance their knowledge and skills aimed to improve survival of children under three years of age. Responding to the urgent nutritional needs of the young children in Andaman & Nicobar, UNICEF provided 87 metric tons of fortified high protein/energy biscuits for distribution through *Anganwadis* in the tsunami-affected areas.

In Andhra Pradesh, to build capacity of health professionals to reduce neonatal mortality in the tsunami-affected areas, UNICEF trained 225 doctors and 175 nurses/ANMs in resuscitation skill and management of complications in newborns. In addition, health systems were strengthened through the supply of essential neonatal care equipment to 136 Primary Health Centres and 10 First Referral Units in the high infant mortality districts of Prakasam and Nellore districts.

UNICEF has supported the setting up of the central surveillance laboratory at Port Blair, and the training of 80 laboratory technicians to strengthen disease surveillance throughout the islands.

Nursing care during emergencies and outreach services through integrating Indian Systems of Medicine in the outreach services were strengthened by WHO. Further, health issues in emergencies are being introduced in the undergraduate curriculum of the schools of nursing in Tamil Nadu. The Tamil Nadu Nursing Council, and the State Mental Health Authority, has joined hands with INC and WHO in this endeavor.

A training module CD on post-disaster disease surveillance was developed along with the Medical Officers' manual for disease surveillance

and Health Workers' manual for disease surveillance. A Rapid Health assessment was conducted by a joint team of WHO, the National Institute of Communicable Diseases (NICD) and National Institute of Epidemiology (NIE) in the six worst affected districts in Tamil Nadu, Pondicherry and Kerala to identify gaps in disease surveillance and on-the-spot recommendations. Subsequently a health assessment was done in six other districts. Due to the placement of epidemiologists in the affected districts and the involvement of local medical colleges in disease surveillance no major outbreaks were reported from the affected districts except for few cases of measles, chicken pox and malaria.

### Lessons learnt and tasks ahead

Disasters exacerbate the vulnerability of women, children and adolescent girls but little attention is paid to their needs in the early relief and restoration work. Special efforts are needed for responding to their needs with adequate supplies for reproductive health, emergency obstetrics care, newborn and child health services. The vaccinations provided for Polio and DPT may not be followed up and completed unless the schedule of vaccination is sustained through outreach services. The government decision was to provide measles vaccination to the children in the age group of six months to five years but this was also needed for children between five and 15 years as one third of measles cases occurred in these older age groups. Recognition is required for nursing personnel for their contribution in relief and roles they play in providing essential health services and also in the larger development phase. It is important to enhance the co-ordination with different stakeholders for designing appropriate responses to different needs of the people and also to avoid duplication. Sharing appropriate technical guidelines and related capacity-building of health care providers at different levels is needed. Documentation and disseminating activities to stakeholders is essential. Effective media management for communicating the right messages is also required.

In 2006, WHO and UNICEF activities in Tamil Nadu and Andaman & Nicobar islands will focus on

- Expansion of IMNCI training to cover more health workers and at the community level. Communication material on key family practices such as exclusive breast-feeding will be disseminated to more people within the tsunami-affected districts. In Andaman & Nicobar, the establishment of paediatric stabilisation units in each district hospital is being planned.
- End use monitoring of medical equipment supplied to health facilities, and providing support to monitor the skills and competencies of newly-trained front-line workers.
- Training and organisational support to primary health care staff for information, education and communication activities on key family care practices to improve child survival indicators.
- Improving services provided through the *Anganwadi* centres. In Tamil Nadu, this will cover six districts and the entire Andaman & Nicobar islands. This will expand training to update skills of *Anganwadi* workers. Subsequent to the training and material support provided by UNICEF to the ICDS in Andaman & Nicobar islands, for the first time growth of children is being regularly monitored in the *Anganwadis*. UNICEF will supply material and equipment (e.g., desk, chair, storage cabinets, utensils, play material) to re-constructed centres in Andaman & Nicobar islands.
- Strengthening micro-nutrient programmes. This will focus on a monitoring system for effective iron folic acid distribution in Tamil Nadu beside the compliance and biannual Vitamin A distribution in Tamil Nadu and Andaman & Nicobar islands. Iron supplementation for adolescent girls through schools and *Anganwadi* centres will be a key task. They will continue comprehensive efforts to increase the availability and use of iodized salt, continuing salt-testing initiatives, and increasing awareness among the general population, traders, shopkeepers and advocacy among policy-level decision-makers.
- Continuing support improve access to regular and quality immunisation services, particularly in the remote islands where UNICEF has



already initiated capacity-building among government health authorities in micro-planning, training, providing auto-disable syringes, and data collection.

- Controlling malaria outbreaks and reducing malaria case fatality in the islands. Specific activities include re-impregnating bed nets that were previously supplied, providing rapid diagnostic kits and providing training to medical officers on surveillance, detection and case management, and covering each village with an intensive mosquito eradication measure.
- WHO will strengthen the outreach services in Cuddalore and Nagapattinam for reproductive and child health and for reproductive and child health by use of Indian Systems of Medicine drugs.
- WHO will establish a web-based reporting system in 62 Comprehensive Emergency Obstetric and Newborn Care (CEMONC) centres across Tamil Nadu.
- Establishing adolescent friendly health services. It is proposed that the General Hospital in Nagapattinam will be the nodal centre for implementing adolescent friendly health services in and around Nagapattinam. The national implementation guide will be adapted for disaster setting for planning adolescent friendly health services.
- Proposal is being finalised for the establishment of a Data Resource Centre, including a data warehouse, at the Directorate of Public Health in Tamil Nadu.
- Documentation of the activities and creation of guidelines and manuals from the lessons learnt is being initiated in the following areas of intervention: provision of psychosocial support, water quality monitoring and environmental sanitation, management of neonatal and childhood illnesses and infant nutrition in displaced population clusters following a disaster.

## Education

The tsunami destroyed and damaged 360 primary and secondary schools (239 in Tamil Nadu;

119 in Andaman & Nicobar islands and two in Pondicherry). In emergencies, getting children and teachers back to school is vital in restoring a sense of normalcy to the lives of children and to help them overcome psychological trauma and other forms of stress. Most tsunami-affected schools in India re-opened within two or three weeks of disaster. While the government worked to repair damaged and destroyed schools, some classes were temporarily relocated to other buildings.

### Achievements

In affected primary schools in Tamil Nadu, Andaman & Nicobar, Andhra Pradesh and Kerala, UNICEF supplies for primary schools reached over 215,600 children. Supplies included: text books, readers, basic stationery, blackboards, furniture, and recreation kits. UNICEF replaced desk and chairs that were lost in the destruction in Andaman & Nicobar. Furniture has had a major impact in Tamil Nadu and Andhra Pradesh, where prior to the tsunami, rural government schools had none. In conservative caste-based society, lower caste children are perceived to have no right to sit on chairs. For many of these children, their new furniture has come to symbolize that equal opportunity is everyone's right.

In the recovery period, UNICEF supported governments to improve the quality of education for tsunami-affected children through the introduction of the Quality Education Package (QP) to 1,500 schools. The QP sets out pre-defined quality specifications on school environment, teacher-training and support, teaching and learning



materials in the classroom, and community involvement. UNICEF worked with education authorities to provide training to over 1,700 teachers and academic support staff on child-centred, participatory teaching methods – a progressive departure from traditional learn-by-rote approach. Teaching is supported by relevant teaching-learning material and hands-on resources for children. Another important component of the QP includes improving the physical environment of schools, for example, making sure that schools have an adequate water supply and separate toilets for girls. This initiative was important particularly in the poorest tsunami-hit villages where low school enrolment and attendance rates suggest that many children are working.

UNICEF has also worked with governments to raise enrolment and retention rates in school. In tsunami-affected districts of Tamil Nadu, over 2,000 children were identified as out of school. UNICEF is supporting state-run bridge courses where out-of-school children can have a few intensive months of academic instruction so that they can catch up to their school-going peers and be mainstreamed into the regular government school system.

In Andaman & Nicobar, island-wise academic resource support groups were formed to monitor quality interventions in primary schools and provide training support locally. As many as 75 teachers and 12 resource persons travelled to mainland for training on multi-grade and multi-level teaching. This training was first of its kind for the teachers that focused on specific quality issues and motivated them to start innovative child centered experiments in their schools. 15 model schools were set up under the quality package programme to demonstrate the quality school concept and effective classroom practices. One school in each of the major islands has been selected as a model school with an intention to

scale up the interventions to all primary schools in the future.

### **Lessons learnt and tasks ahead**

In 2006, activities in the area of education in Andhra Pradesh and Kerala will be absorbed into UNICEF's regular programme. From the very beginning the emergency was looked upon as an opportunity for change. The new paradigm for Quality Education was introduced to ensure Education for all. The model is highly appreciated by the Government Education authorities. Community involvement in education is a key to successful implementation of the programme. Quality Education is a major concern since the community is still in temporary shelters and efforts are being made to ensure this.

In Andaman & Nicobar and in Tamil Nadu, plans include:

- Consolidating Quality Education initiatives that have been initiated and supporting the government to implement the Quality Package as part of its Education for All programme.
- Strengthening evaluation and knowledge base on the effectiveness of interventions. This includes monitoring end use of supplies, and building the capacity of block- and local-level resources to collect, analyze and report on data related to primary school education.
- Mobilising communities to become more active in improving and managing schools and supporting awareness campaigns to encourage parents and communities to send their children, especially girls, to school.
- Continuing to build the capacity of primary school teachers and academic support systems at block- and cluster-level. This includes expanding coverage of training in Quality Education, enhancing children's reading skills, and hygiene education.
- Ensuring that children who are not in school can enroll in age-appropriate bridge courses.

# RESTORING LIVELIHOODS AND UPGRADING INFRASTRUCTURE

## Rebuilding livelihoods

Livelihood restoration is a key component of the UN Recovery Framework. Given that livelihood is all encompassing, it is mainstreamed in all components of the Framework. However, a specific component – restoring livelihoods and upgrading infrastructure<sup>5</sup> – is also included to deal mainly with rebuilding of the assets through technical support in restoring existing livelihoods and identifying new and more remunerative activities as well as access to credit. Central features of the component include measures to provide training and support for new skills, improving labour market information systems and the access of poor and other disadvantaged groups to resources and opportunities, support to recovery of affected households including existing SHGs and other community-based organisations.

In the months after the tsunami, UNDP and UNIDO carried out an assessment and managed to secure funding from the European Commission Humanitarian Aid Office (ECHO) for a year-long project providing community based support

to rehabilitate livelihoods of tsunami survivors and enhance capacities and safety of fisher communities. Agencies currently working on livelihood issues are ILO, FAO and UNDP. Under the overall objective of restoring livelihoods in the tsunami-affected areas, each agency is focusing on areas where it has competitive advantage.

Major livelihoods in the coastal areas depended on the existence of a vibrant local economy supported predominantly by fishing, and fish processing, agriculture, livestock and other non-agricultural activity. These fishing communities provided a market to nearby communities and enterprises that looked at them as a livelihood source. The collapse of the fishing communities meant that these communities as well as the neighbouring communities suffered through loss of markets for their products and labour. In this context, the response towards livelihood restoration emphasised the need to revive the local economy by restoring existing livelihoods and highlighted the urgent need to diversify people's income earning activities so as to spread the vulnerability arising from over-dependency on one major sector.

<sup>5</sup>Although the title mentions "infrastructure" the actual programmed projects all relate mainly to non infrastructure assets.

To this end, a three-pronged strategy is being pursued:

- Restoration of existing livelihoods, mainly fishery and agricultural, with due attention to the environmental sustainability of resuming such activities on the same scale as before
- Identification of non-fishery alternative employment/jobs focusing on future growth sectors (such as tourism, hotel industry, craft-making, services such as driving, mechanics including fishery-related equipment repair).
- Facilitating the revival of the local economy through strengthening the socio-economic infrastructure (access to state welfare board schemes through membership of trade unions, re-equipping and organizing into SHGs, credit access, revival of business development services).

### Achievements

Project documents were formulated and resources jointly mobilized by ILO, FAO and UNDP. Most of the progress being reported up to this point relates to setting up of the project infrastructure so as to ensure full implementation of these long term livelihood interventions from the new year onward.

Furthermore, in response to the need to provide alternative income generation activities in the immediate aftermath of the tsunami, series of skills training programmes were launched by ILO in Chennai, Kanchipuram, Cuddalore, Nagapattinam, Kanyakumari districts in Tamil Nadu in collaboration with local workers and employers organizations. By December 2005, a total of 1,100 women from

the affected districts would be trained in skills such as incense-stick production, tailoring, envelop-making, coir-making, soap and other household cleaning chemical making, footwear production, training on computer skills, electrical and auto repair works. Activities are commencing for Training of Trainers for business development skills, primarily through the methodology of start and improve your business. The skill-training has also been followed up with links to market linkages through trade unions and employers organisations. Through these linkages, women beneficiaries are able to sell their products and are earning Rs. 30 to Rs 50 a day. For many, this has been the only source of income, especially in the monsoon season when fishing could not take place, and for those who have opted not to pursue fishing as a livelihood option for various reasons.

In the Nagapattinam and Cuddalore districts of Tamil Nadu, the immediate needs of tsunami-affected fishing communities for new boats have already been addressed through a range of Government and NGO interventions. It has been estimated that pre-tsunami there were some 7,000 engines in use with the inshore glass-fibre day boats. The project providing community based support to rehabilitate livelihoods of tsunami survivors and enhance capacities and safety of fisher communities is being implemented by UNDP through a programme of training of boat engine mechanics and the establishment of one central and four district level repair workshops that has been drawn up. Working closely with SIFFS (South Indian Federation of Fishermen Societies), the project will establish and equip workshops at the SIFFS site and train mechanics and staff in the maintenance, repair and overhaul of the most commonly used marine engine types. The project will also implement a programme of boat safety awareness to identify, address and mitigate risks faced by fishing communities. Attitudinal change towards boat safety, acceptance of the vital nature of safety and rescue equipment, and promotion of storm early warning/distress communications through the cellular telephone network are a high priority.



UN agencies India

### Lessons learnt and tasks ahead

Although fishing has resumed in most tsunami-affected coastal areas, operations have not returned to complete normality. Fishers are yet to get the bigger and heavier fishing nets used for large catches. Hence, they are currently venturing only up to 40-50km into the sea. The problem was also compounded further as the north-west monsoon set in much earlier and stopped the fishermen from venturing into the sea on a regular basis. In some areas, conflicts between various fisher groups, the big boat owners and the workers who go on these boats are common. Given this situation, additional and alternative income opportunities are the need of the hour. These groups of potential beneficiaries are in urgent need of new, sustainable livelihood opportunities as they are presently either unemployed or earning meagre incomes. There is also a need to keep a very close watch on the progress of the skills development activities, with due regard to long term employability of the beneficiaries. The balance between market demand and supply would need to be constantly monitored as well as identification of future growth areas to develop new curricula

accordingly. Business skills development training need to be strengthened, providing new entrepreneurs a dynamic livelihood option.

For the UNDP implemented boat safety project, the international and national consultants are in places as well as project staff and the project will be operational in early December 2005. The locations of the workshops will be finalised and any refurbishments commenced. The workshops will also be equipped and staffed and training courses for the workshop managers-cum-storekeepers-cum-bookkeepers will be initiated with a specialized training institute.

Boat safety surveys and needs analysis will be carried out in the target areas; and existing boat safety training materials will be collated and prepared for dissemination. Work on new material will be initiated and engine population surveys and needs analysis will also be carried out. The requirements of an opening stock of engine spare parts will be identified and costed with suppliers. An awareness campaign will be prepared for the boat engine repair services, which will become available from early 2006.

### In the driver's seat – Women show the way

For the four enthusiastic adolescent girls of South Vizhundhamavadi village, it's a dream come true. Even the rain didn't dampen their spirits as they attended their regular driving practice sessions held on the village main road. Each one of them was preparing for her driving test to obtain a license which would enable her to drive light vehicles.

The girls, Sasikala, Annalakshmi, Vennila and Victoria, are part of a unique initiative by *People's Development Association* (PDA), a Madurai-based NGO which started working here after the tsunami. The idea of training women in driving was mooted when it was learnt that the women travel to far away markets by bus to sell the daily fish catch. The village is located three and a half kilometers from the Nagapattinam-Vedaranyam

highway. It was then proposed to train adolescent girls from the village to drive three-wheeler load vehicles. Initially 20 girls enrolled for the classes but most couldn't continue. Only four remained till the end but these were confident and said that they would train their friends in the coming days. PDA arranged for driving classes for about two months through an experienced driver from nearby Velankanni.

When asked how the community reacted to this idea, the girls said that earlier the boys used to tease them and wanted to know why they were not preferred for this training over the girls. Gradually they could see their potential and now the whole community is very supportive. The girls were also confident of making a profit through this venture.



## Shelter and Habitat

Seventy percent of the 68,609<sup>6</sup> destroyed houses in India are expected to have been replaced by mid 2006, although land availability remains an ongoing challenge. Progress has been slower in the Andaman and Nicobar Islands in part because of the remoteness of the islands and the level of destruction of key logistical facilities. UNDP is currently working only in Tamil Nadu on the issue of shelter where the government of Tamil Nadu, NGOs and CBOs have been proactively taking up reconstruction measures. 30,415<sup>7</sup> houses, across seven districts in Tamil Nadu are in various stages of construction. The designs differ from place to place, according to soil condition and need of the people of that area.

### Achievements

UNDP is playing a large role in supporting the government of Tamil Nadu and disseminating cost-effective and disaster resistant construction technology, for integrated habitat development to build the capacity of the community through a participatory process.

This is being done by:

- Networking with professionals/development agencies working in the field of disaster resistant and cost effective technologies
- Providing policy support for adoption of codes and standards for habitat development
- Mainstreaming of quality control mechanisms in the recovery process
- Promotion of insurance schemes in the new permanent houses
- Collaboration with development organisations, academic institutions and professionals as strategic partners for imparting training, bringing in technology, design and construction support for Technology Demonstration Units (TDUs) and technical system development.



UN agencies India

- Promotion of public-private partnerships and partnership with community level organisations like SHGs, Panchayati<sup>8</sup> Raj Institutions, CBOs and local government

The government of Tamil Nadu, with technical support from UNDP, came out with the technical guidelines on layout and design of disaster-resistant houses. A workshop was organised to disseminate these guidelines and the Coastal Regulatory Zone (CRZ) study findings that was commissioned by UNDP in consultation with NGOs/institutions/ government agencies. More than 100 key stakeholders involved in reconstruction of shelters participated and identified issues and developed a long-term rehabilitation strategy in shelter and habitat development. To resettle the affected, the government formulated a housing policy under which permanent shelters would be built as per the CRZ notification, and would also facilitate public private partnerships.

A state-level workshop was organised to analyse various appropriate technologies for disaster-resistant materials in building tsunami shelters and evolving various models that can be used in the construction of habitats by UN TRS in collaboration with TNTRC and government of Tamil Nadu.

<sup>6</sup> Figure collated by the Planning Commission of India

<sup>7</sup> Figure collated by UNV's working at the district level of Tamil Nadu

<sup>8</sup> As defined by the Constitution of India, *Panchayats* shall be given power and authority to function as institutions of self government.

The powers and responsibilities to be delegated by *Panchayats* at the appropriate administrative levels are: 1) preparation of plans for economic and social development 2) implementation of schemes as per the 29 subjects of the 11th schedule of the Constitution 3) to levy and collect appropriate taxes, tolls and fees.

One model layout for the relocation of a village in Cuddalore district was delineated by UNDP to address the environmental issues and cluster activities. A training programme focussing on multi-hazard resistant construction and quality control aspects was subsequently organised in coordination with the state government for the engineers associated with the tsunami reconstruction. Four district level and one state level training programmes have been organised in collaboration with the state government and the resource centres. Five UN Volunteer engineers/architects are being positioned at the district level for supporting the reconstruction effort.

A state level shelter core group was formed with facilitation by UNDP to address major issues pertaining to the implementation. The group has representation from NGOs, academic institutions, practitioners and the Government. This group meets once a month to focus on areas of community participation, quality assurance mechanism, services/amenities and inter agency

coordination to take up matters with the government and implementing agencies. Insurance as a risk-transfer measure is being adopted.

### **Lessons learnt and tasks ahead**

The quality of shelters built by different agencies for tsunami affected areas was variable. In many cases the temperature inside the shelters was excessive and unsuitable for healthy living. Flooring was absent in many shelters, and, where present, the quality standards were variable.

UNDP is organising various training programmes for masons, engineers, supervisors across the tsunami-affected areas for skill upgradation and application of proper construction practices during the shelter reconstruction phase. Awareness generation is being done, to build safe shelters and it will percolate down through orientation programmes. Strategic partnerships between UNDP and Auroville Earth Institute and COSTFORD are being implemented to impart training and build Technology Demonstration Units. Strategic

### **Alaimagal: Daughter of the waves**

*Alaimagal*, which means 'Daughter of Waves' in Tamil is the story of how the tsunami-affected women in Nagapattinam district came together to put behind the tragedy and rebuild their lives with the support of the district administration. Deprived of their livelihoods these women have made a spirited comeback by learning new trades and skills.

The district administration early on sensed the opportunity that the tsunami recovery phase provided. With a large number of permanent shelters to be constructed in the district (more than 17,000) the administration through its District Rural Development Agency (DRDA) motivated the Women Self Help Groups (SHGs) to venture into hitherto unknown territories. Market surveys conducted in the affected areas to identify viable income generation activities for the SHGs revealed the demand for building materials

such as Micro-Concrete Roofing (MCR) tiles, Stabilized Earth Blocks, Vertical Shaft Brick Kiln (VSBK) Bricks, etc.

The women were provided training in various trades by the DRDA. Apart from skill training they were also provided with necessary machineries and economic assistance to the tune of Rs. 2.5 lakhs per group under the Swarnajayanti Gram Swarojgar Yojana (Self Employment scheme) infrastructure. Assistance for a workshed for MCR tiles production and an energy saving brick kiln (VSBK Technology) for brick production were also provided by the administration.

Apart from the above construction materials, the SHGs produce a variety of other products such as footwear, incense sticks, terracotta products, palm leaf products, perfumed candles, etc. These products are registered in the name of *ALAIMAGAL* and marketed through them.

partnerships with Gandhigram Rural Institute, Anna University and TNSCB are underway for technical support in capacity building programme and incorporating “quality control aspects” within the reconstruction process. The initiative will try to set up a sustainable development process for building safe and better habitat by linking disaster to development.

## Water and Sanitation

WHO and UNICEF are currently the UN agencies working in the area of water and sanitation. There are four main components to the strategy adopted by them:

- Providing safe and adequate drinking water to all families in shelters, homes and to children in schools and *Anganwadi* centres
- Providing sanitation in shelters, homes, and schools
- Hygiene education in shelters, homes and schools
- Partnership, network and coordination with key stakeholders and government.

WHO has provided technical assistance to district authorities for strengthening monitoring of drinking-water quality, hygiene education and waste management in Nagapattinam, Cuddalore and Karaikal through partnership with the Gandhigram Rural Institute. A project to assess the changes in drinking-water quality after the tsunami in coastal areas in seven affected districts of Tamil Nadu was initiated in collaboration with the Tamil Nadu Water and Drainage Board. The project proposals for support and technical assistance for improving Management of Health Care Waste in 10 tertiary care hospitals attached with medical colleges in Tamil Nadu have been initiated.

UNICEF supported interventions in water supply, sanitation and hygiene were concentrated in temporary shelters in the three worst affected districts in Tamil Nadu; the Nicobar group of islands; and in the three worst affected districts of Andhra Pradesh.



UN agencies India

### Achievements

UNICEF-assisted construction of basic sanitation facilities (5,000 latrines were constructed and materials for 12,000 latrines was supplied) and hygiene awareness campaigns in relief centres kept down the incidence of diarrhea and other diseases spread by contaminated water. This was also helped by the introduction of shelter-based waste management system and monitoring of key water sources and sanitation facilities. Intensive public awareness-raising on hygiene practices helped improve living conditions in some of the shelter communities where over-crowding and unhygienic practices like open defecation and indiscriminate disposal of solid and liquid waste were creating a health risk. Sanitary latrines have afforded privacy and security for women living in shelters and their participation in UNICEF-supported training to build latrines, repair hand pumps, and mobilise their neighbours on following good hygiene and sanitation practices. 592 link volunteers and sanitation animators recruited from the shelter community have been instrumental in maintaining shelter conditions and creating a sense of self-reliance and ownership of asset installed.

In addition to this environmental sanitation projects were set up in 14 villages in collaboration with the Gandhigram Rural Institute and a 1,000 chloroscopes were provided to monitor the quality of drinking water in affected areas by WHO. As many as 20,000 insecticide-treated bed nets were also provided in the affected districts in Tamil Nadu and 30 tons stable bleaching powder



was provided in Cuddalore district. During the emergency, clean water arrived immediately for children and families in relief centres. More than 5,000 water tanks were supplied to shelters in Tamil Nadu and Nicobar and to affected villages in Andhra Pradesh. These will be re-located to people's permanent homes when they are built. Chronic shortage of fresh water in Nicobar villages and along the coast of Andhra Pradesh is being alleviated by the introduction of rooftop rainwater harvesting units. As many as 110 Nicobar youth assisted in installing 290 water harvesting units. Demonstration units installed in 10 selected schools and *Anganwadi* centres in Andhra Pradesh may provide a sustainable model to respond to the lack of fresh water due to salinity in the coastal area and drought in landlocked districts.

### **Lessons learnt and tasks ahead**

Many unsanitary pit latrines were built by different relief providers without due consideration to appropriate technical guidelines. Hence the Government had to face the additional burden of rectifying such issues in accordance with WHO/UNICEF guidelines. Similar problems were faced in disposal of waste. Menstrual hygiene is being recognised as an issue; some women's self help groups have begun to make low-cost sanitary napkins and UNICEF will support ways to make these available to adolescent girls in school.

Resettlement and rehabilitation of families affected by any disaster is a long process. The solution lies in convergence of services among stakeholders and the affected community. Continuous rain has led to delay in identification of suitable sites for permanent houses and construction. Creation of structures is not the only solution unless the local community participates. Sustained efforts for hygiene promotion is the need of the hour and involvement of link volunteers and sanitation animators in influencing the families, towards using toilets, proper disposals and key hygiene practices would definitely bring a change. Link

volunteers can play a pivotal role in sustenance of the activities.

No interventions under the tsunami recovery programme are planned for Andhra Pradesh or Kerala in 2006 by UNICEF. However, in Tamil Nadu and Andaman & Nicobar islands, some of the water and sanitation activities are:

- Providing safe and adequate drinking water to families in shelters and homes and to children in schools and *Anganwadi* centres by:
  - Implementing water quality monitoring systems through training.
  - Supporting the establishment of water tanker and water tank monitoring systems.
  - In Andaman & Nicobar islands, continue support for the installation of 2,480 rooftop rainwater harvesting systems.
- Sanitation in shelters, homes and schools by:
  - Completing sanitary latrines.
  - A renewed emphasis on keeping latrines clean by establishing 20 community-based caretakers in town based shelters in Tamil Nadu.
  - Taking forward plans to expand the School Sanitation and Hygiene Education programme in Tamil Nadu to reach all primary and middle schools in the three worst-affected districts
- Hygiene education in shelters homes, schools and *Anganwadi* centres by:
  - Intensifying hygiene education in shelters.
  - Conducted refresher training for link volunteers and sanitation animators in seven districts in Tamil Nadu and hygiene education teams in 1,020 schools in tsunami-affected states.
  - Training both children and workers in hygiene education in schools and *Anganwadi* centres in Andaman & Nicobar islands.
- Partnership, networking and coordination with key stakeholders and government by:
  - Holding review meetings with government and NGOs on the status of shelter conditions
  - Monitoring and assessment
  - Development of advocacy plan in Tamil Nadu and total sanitation proposal for Andaman & Nicobar islands to be funded by the government.

# PROSPECTIVE RISK REDUCTION

## Healthy environment for long-term security and sustainability

The long-term environmental impact of the tsunami is likely to be large, from both the human as well as the ecological perspective. It is crucial that efforts should be geared at understanding and supporting the innate resilience of coastal communities in the face of social and natural catastrophes.

UNDP has been assisting the Government of India's Ministry of Environment and Forests (MoEF) and also the Government of Tamil Nadu in establishing a strong legal framework for coastal polices and in integrated coastal zone management by fostering greater participation of civil societies and local communities particularly in the post-tsunami recovery and development initiatives.

The emphasis of this programme, coordinated by the UNDP, in the initial phase has been to study the impacts of the tsunami on coastal populations and the ecosystems they use, in the context of rapid coastal development, increasing resource needs, and changing legislative mechanisms. More importantly there is an urgent need to understand and augment the position of the law regarding potential rehabilitation efforts along the Tamil Nadu coast including that of the CRZ notification (1991), as housing interventions were immediately

needed. Towards this end, in the first phase the focus was on providing assistance to Ashoka Trust for Research in Ecology and the Environment (ATREE) and MoEF to address the crucial issues mentioned above.

### Achievements

A detailed study, commissioned by UNDP in collaboration with ATREE, entitled "Statement on the CRZ notification and post-tsunami rehabilitation in Tamil Nadu" is an analysis on the position of the law regarding potential rehabilitation efforts along the coast including that of the CRZ. It greatly facilitated dissemination of information on this issue amongst all the stakeholders.

UNDP also supported the MoEF on the issues and methods related to the demarcation of a Vulnerability Line all along the Indian coastline. This is a follow up to the recommendations of the committee chaired by Professor M.S. Swaminathan to review the CRZ Notification (1991). The major recommendation of the Swaminathan Committee was a more holistic approach in the form of Integrated Coastal Zone Management (ICZM) that emphasises participatory management rather than regulation. The study would result in a vulnerability map based upon natural hazards, to replace the existing arbitrary set back line as defined in the CRZ Notification (1991).

Similarly a review of the report by the expert committee headed by Professor Swaminathan on the CRZ was necessitated as interpretation and implementation of the recommendations of this report will have significant impact on the way coastal areas will be legislated over and managed. The review findings have the potential to strengthen the legal framework for coastal policies and coastal zone management, particularly in the tsunami-affected states.

### Lessons learnt and tasks ahead

The initial focus on the CRZ regulations and its implications on rehabilitation have proved to be beneficial to all stakeholders as all housing interventions initiated by the state government and CBOs are drawing heavily on this study. There is an immediate need to initiate similar studies addressing the impacts of tsunami on the unique coastal ecosystems and the need and means of their restoration. These studies will help the government agencies to undertake recovery measures within an agreed framework rather than undertake restoration interventions on an ad hoc basis.

Detailed assessments and studies are needed to understand and support the innate resilience of coastal communities in the face of social and natural catastrophes. Information gathered from these assessments and targeted research studies will be applied to effect on-ground changes in the way coastal planning and resource management is done in the tsunami-affected states. Community networks will be established to enable local groups to manage their own resources and ensure sustainability. It is expected that these would lead to changes in the way local communities and state governments use, regulate and develop coastal environments.

Eco-restoration efforts will focus on three ecologically sensitive and unique ecosystems along the coast: (a) Mangroves (b) Wetlands and (c) Tropical Dry Evergreen Forest. The first two systems were impacted by the tsunami while the third has been historically decimated by human action. Since mangroves are being proposed as a



UN agencies India

major coastal-protection initiative, restoration will be undertaken based on a careful review of the information on past distribution and the impact of the tsunami on them. Wetlands play an important role in the lives of local communities in providing them with fresh water as well as supporting livelihoods especially fishing. Based on a survey of the coastal wetlands, a few affected wetlands will be chosen for restoration. These will serve as pilots for restoring the other affected wetlands.

Tropical dry evergreen forests are amongst the globally most endangered forest types. The restoration effort for this forest will involve consolidation and expansion of the ongoing efforts. All restoration work will involve capacity building of local communities and forest department staff. In addition, the environmental sustainability dimension will be integrated with livelihood restoration activities supported by the UNCT, both in the fisheries and non-fisheries sectors.

### Capacity building for disaster risk management

There is a need for a more holistic approach to disaster preparedness and effective mitigation planning. To meet this need the Disaster Risk Management (DRM) Programme was started in 2002 and is being executed by the Ministry of Home Affairs which is a joint initiative Government of India and UNDP in 169 districts across the 17 most multi-hazard prone states in the country. The programme emphasises capacity building for

sustainable disaster risk reduction at all levels in these states, with a particular focus on community-based disaster preparedness.

The activities undertaken prior to the tsunami under the DRM programme (such as village/ward based multi-hazard preparedness, response plans and capacity building programmes) were instrumental in saving many lives in the coastal district of Tamil Nadu. The programme initially covered six multi-hazard prone districts in Tamil Nadu. After the tsunami, the need to expand the programme was realised and covered seven more districts in Tamil Nadu.

The emphasis of the DRM programme is on sustainable disaster risk reduction through capacity building at all levels using community based and gender sensitive approaches to institutionalise the DRM system in India. The constitution of state, district, block, village disaster management committees for institutionalising DRM, development of multi-hazard disaster management and mitigation plans and strengthening of state and district level emergency operation centres are some of the activities which are at different stages of completion. Specialised training programmes in early warning dissemination, search and rescue operations and first aid are being imparted to the disaster management teams to enhance their skills to effectively carry out their responsibilities during emergency situations. Mock drills are being organised at regular intervals to enhance preparedness, coordination and effective response mechanism.

UNICEF is also implementing an Emergency Preparedness and Response Project in collaboration with its government counterparts such as the nodal ministry for disaster management in India, relevant state governments' departments, UNDP, NGOs with proven track record and CBOs. Efforts will be made to ensure synergy between the DRM programme and UNICEF's project in order to avoid duplication. The strategy will be community awareness campaigns aimed at raising awareness of educating about disaster prevention



UN agencies India

and preparedness at the local level in vulnerable communities by training teachers, pupils, and families. Government, NGO and CBO counterparts will also participate in the training, which will then be replicated in the process.

### **Achievements**

Under the UNDP - GoI DRM programme, the State Steering Committee meeting reviewed the implementation process and approved the increase in numbers of villages from 3,027 to 4,651 and urban local bodies from 17 to 66.

Panchayati Raj Institutions (PRIs) are involved in preparedness and mitigation planning at local levels to ensure sustainability and integration of the disaster management plan within the development plan of the areas. So far, 369 PRI members have been trained on DRM interventions at district and block levels who in turn are assisting the village communities in preparation of multi-hazard Disaster Management and Mitigation Plans. In order to enhance the capacities of women for effective response and sustainable recovery in disaster situations, participation of the women in various training programmes has been given importance. Representation of women in different committees has been emphasised.

In Tamil Nadu, the revenue administration department has been re-designated as revenue administration disaster management and mitigation department with enhanced areas of responsibility that include mitigation and prevention apart from the present responsibilities of relief and

rehabilitation. A comprehensive state disaster management policy has been enunciated to provide statutory authority for disaster preparedness, mitigation activities and mainstreaming disaster management into the planning and development process.

### **Lessons learnt and tasks ahead**

One of the success stories of the capacity building of the community under the DRM programme in Tamil Nadu is the case study of Samiyarpettai village in Cuddalore district. The community was trained through cost-effective techniques to enhance their survival skills and increase general disaster awareness. This made it possible to put in place an early warning system consisting of basic communication chains. Some village volunteers were organised into permanent specialised task forces like search and rescue, warning dissemination, logistics, relief aid, first aid. Mock drills were conducted and villagers were taught about higher safe spots in case of a flood and how to prevent drowning using empty barrels and banana stems. Early warnings were disseminated in the area when the tsunami struck and made it possible for the villagers to activate

their emergency plan mechanisms. The survivors mentioned that many more would have been killed had we not done what we were trained for. Twenty-two lives were lost in the disaster as compared to a neighboring village like Pudukkuppam where death toll was higher.

The need for a community based disaster management approach is being rapidly realised with the DRM Programme being expanded to cover vulnerable districts in Andhra Pradesh and Pondicherry as well.

In the aftermath of the tsunami, several international meetings were held to concertedly address threats from tsunamis, recognising the trans-boundary nature of the hazard. Early warning system needs to be end-to-end, linking hazard detection systems with warning communication, preparedness, mitigation, and response along with a feedback mechanism that allows post-event assessment to provide guidance to warning system managers and operators. Hardware component of Early Warning Systems will be extended in Andhra Pradesh, Pondicherry and Tamil Nadu by building the capacities of the respective state governments.

As many as 1,419 first aid Disaster Management Team (DMT)<sup>9</sup> members were trained at the block level, on first aid and search and rescue out of which 32 members were women.

218 first aid Village DMT members were trained in Cuddalore district at the Gram Panchayat level, 87 of whom were women.

Similarly at the village level 2,706 first aid DMT members were trained in five districts.

In Kancheepuram district, DMT training at the village level for volunteers has been completed.

Lack of data and regular reports on existing and emerging patterns of disaster risk, has been a major constraint for effective recovery management, policy and programme decisions in the aftermath of the tsunami. UNDP with the support of LARED (Network for Social Studies on Disaster Prevention in Latin America) has adapted and implemented an existing methodology called DesInventar, to help build systematic disaster inventories in Asia. These inventories capture time-series, local-level impacts of disaster events (specially small and medium scale disasters). DesInventar, once customized, will be put in use in these states under the UNDP regional capacity building programme.

<sup>9</sup> Disaster Management Teams are formulated under the DRM programme at all levels (state through village) and are divided into sub groups based on key areas such as early warning, search and rescue, shelter management, water and sanitation etc.

# POLICY SUPPORT AND COORDINATION

A coordination and knowledge centres network is being established at various levels. The state level Tamil Nadu Tsunami Resource Centre (TNTRC) has successfully started functioning since August, 2005. TNTRC is a unique example of best practice, since it is a joint initiative of UNDP, UNICEF, Government of Tamil Nadu and INGOs like Oxfam, World Vision, Christian Aid, Caritas India, Save the Children, Catholic Relief Services, etc., to coordinate and facilitate the recovery process in the post-tsunami phase. It has turned out to be an effective forum for all stakeholders and takes up issues highlighting the vulnerable sections in the recovery process. TNTRC

is networked to a second level of district coordination and resource centres like NCRC Nagapattinam, KRRC Kanyakumari, and the Auroville Resource Centre which are further connected to a third level of village ICT kiosks accessible to the communities.

## Achievements

Coordination meetings are regularly held to help refocus on areas needing attention, reallocate resources and to make joint strategies for specific programmes needing attention.

- Information on Sphere<sup>10</sup> humanitarian standards helped CBOs to understand the

## NCRC

The Nagapattinam Coordination and Resource Centre has been supported by UNDP through partner organizations SIFFS and SNEHA. Four major areas of focus have been actively pursued by NCRC; Information Exchange and communication to various stakeholders in the district; community facilitation support; sectoral support and advocacy. In these focus areas it has:

- Developed a uniform data management system
- Conducted rapid studies on emerging issues
- Set up village information centres and

facilitation units across the district

- Provided a wider platform for the discussion and dissemination of perspectives, policies and best practices
- Validating the information given by NGOs in its coordination meetings through extensive field visits
- Provided vital inputs to the district administration in consultation with NGOs communities and experts
- Activated the public private partnerships to support the district administration

<sup>10</sup> The Sphere Project, which aims at developing a Beneficiaries Charter and Minimum Standards in humanitarian response, represents an effort to establish an ethical framework that will advance effective humanitarian action by agencies.



relevance of the humanitarian standards in the reconstruction process.

- The meet on women and the elderly helped to bring out some recommendations to guide the work of the organisations. The most important was the need for livelihoods support to vulnerable women with special reference to women headed families.

To strengthen and consolidate strategies among all partners, core groups have been formed in sectors such as shelter and habitat, livelihoods, water and sanitation and child focused activities. These groups are currently being facilitated by organisations such as Oxfam, Save the Children, CRS, UNICEF and UNDP with expertise and skills in the specific sectors.

### Shelter

- The presentations on the status of temporary shelters led to a survey of temporary shelters with special reference to water and sanitation aspects as a joint strategy by NGOs in Kanyakumari and Nagapattinam.
- The meeting on community initiatives and participation provided recommendations for strengthening the community participation strategies and community ownership in shelter reconstruction.
- The importance of insurance for housing as a strategy for disaster preparedness was introduced.

### Livelihood

- Presentation on agricultural land damages and issues led to a better understanding of the needs of the sector and building INGO-NGO partnerships.
- Situation analysis of the agricultural scenario in Cuddalore and Nagapattinam districts and recommended strategies for NGOs and the Government was shared in a wider consultation.

### Child focus

- Concept paper on minimum standards for child participation in disaster situations has been shared in a wider consultation. (The process



UN agencies India

is led by a group of agencies consisting of UNICEF, Save the Children, Plan International, TN Forces and ICCW).

- Mapping of child focused interventions has been done. UNICEF and TNTRC jointly did a mapping of child focussed interventions. The Mapping is being supplemented by further data collection.
- Monitoring of Children without Parental Care (home study). It is a project being implemented by Department of Social Defence supported by UNICEF. A working group has been set up within TNTRC to look into strengthening the initiative. The committee consists of UNICEF, Save the Children, ICCW and Department of Social Defence and Social Welfare.

All these recommendations are being regularly shared with the government. The Tamil Nadu Department of Social Defence had accepted the concept paper on strengthening monitoring systems for children without parental care and single parent. It is working on the operational aspects. TNTRC facilitated a workshop on appropriate building materials in shelter reconstruction sponsored by UNDP and also facilitated the mid term review of the World Bank, UN and ADB by arranging meetings with government officials and NGOs on livelihoods and shelter. It has also conducted an impact study on government and NGOs programmes in Nemakkuppam and Solarikattukuppam.

### Lessons learnt and tasks ahead

TNTRC will organise a capacity building training of the Collectorate staff in Public health Water and

### UN volunteers (UNV's) role in rehabilitation and reconstruction

The participation of UNVs to the recovery process in Tamil Nadu can be split in two main phases, involving two different teams. A team of experts coming from UNDP Orissa hub in the immediate aftermath of the tsunami to provide expertise in multi-disaster-resistant housing and infrastructure construction technologies that it acquired during the operations that followed the super-cyclone hitting Orissa in 1999. The team worked in close coordination with district officials and the Special Relief Commissioner of Tamil Nadu and assessed damage on houses and livelihoods and set technical guidelines for the Tamil Nadu Government. Soon after, it developed the housing and habitat reconstruction design. This team provided its support till the first half of February 2005.

In the second phase, a new team of District Recovery Facilitator-UNVs was formed to support the long-term rehabilitation and reconstruction programme. The new team of five people is based in the District Collectorate of the five most affected districts namely, Nagapattinam, Kanyakumari, Cuddalore, Chennai and Kancheepuram and covers the affected coastal districts among itself. These volunteers have been representing the district administration at various forums to convey the rehabilitation work being done in their districts through slide show presentations, discussions and by contributing articles to the UNV newsletter. The volunteers are also supporting the activity of the Tamil Nadu Tsunami Resource Center

(TNTRC), by providing reports from the field and facilitating the networking of TNTRC with the district recovery centres.

The UNVs also have had a very important role to play in terms of coordination and information management. They facilitate the work of district administration officials, including the District Rural Development Agency, the Department of Public Health and the Forestry department. They act as the interface between the affected community, NGOs, Corporate bodies, district administration and the UN agencies. They have been supporting the district administration in monitoring and reporting on the progress of the recovery process and collection of household data for better implementation of the recovery framework. This is effectively portrayed through a devoted district recovery portal on the web which the UNVs host. These activities are supplemented by effective documentation of the recovery process through photographs, field notes, lessons learnt and case studies.

The role of the present District Recovery Facilitator-UNVs has been enhanced to supplement and facilitate the work of the sectoral UNVs being recruited by the UN Team for Recovery Support. The team of UNVs working for the effective implementation of the UNCT recovery framework has been substantially strengthened with the recruitment of UNVs for technology transfer, and for the shelter and habitat initiative. More UNVs will soon be joining the team for different projects under the recovery framework.

Sanitation at Kanyakumari district. The Training of Trainers (ToT) of Nehru Yuva Kendra volunteers in Disaster Preparedness in most affected districts is in process. ToT in Water quality testing for SHG members and NGO animators is also in process. Since TNTRC is functioning as nodal State level resource centre, it has established close coordination and networking with district resource

centres like Nagapattinam Coordination and Resource Centre (NCRC), Kanniyakumari Resource Centre, Auroville Resource Centre, Trinet and CNCC Chennai in order to exchange information, get periodic reports and feedback from the district level.

TNTRC has been effectively carrying out information and knowledge networking through its



interactive website ([www.tntrc.org](http://www.tntrc.org)). The website is an important means of dissemination of information. Information/data from the government is hosted along with the resources, case studies and other relevant information from the stakeholders. The centre also launched a newsletter named *Sangamam*. The purpose of the newsletter is to be an effective forum for all stakeholders in the post-tsunami recovery phase to freely express their views, to provide information on the progress achieved and to highlight the concerns of the vulnerable sections of the affected communities.

TNTRC has also become the focal point for various NGOs in need of information on where and how they can contribute to the rehabilitation and reconstruction activities. A database of CSOs in all the tsunami-affected districts in Tamil Nadu is being hosted on the website for the benefit of all stakeholders and would enable them to get recovery related information and NGO activities. A resource directory of specialists is in the process of being finalised in order to access expertise on a particular sector.

TNTRC is conducting independent research/studies to gather reports on the ground situation in the recovery process. It is inclusive and covers all the different stakeholders in the recovery process. Through TNTRC and a network of district coordination and resource centres like the NCRC, linking resources to gaps has become a possibility, and a reality.

## Information and Communication Technology

The need for comprehensive Information and Communication Technology (ICT) solutions in the post tsunami recovery process and for the long-term needs of the community has been acknowledged by the governments of the affected states.

The project for designing an Integrated Disaster Management System (IDMS), a web based application has been awarded to Price Waterhouse Coopers Pvt. Ltd. The project commenced on



UN agencies India

September 28, 2005. The team has finished its systems study and has submitted the draft. This application is planned to be deployed latest by third week of December and will be accessible by various government departments, CSOs, NGOs and community. It has been envisaged that a web-based ICT solution would be designed and deployed to support coordination and recovery planning, monitor the delivery of Government recovery packages and track stakeholders' activities to avoid overlaps and gaps. The Department of Revenue Administration and Disaster Management & Mitigation has agreed to ensure effective partnership with the other departments at the state, district and block level, institutions of local governance such as the *panchayats* and municipalities; and non-governmental agencies collaborating the recovery efforts. TNTRC would act as the main information provider for all stakeholders.

To make the IDMS accessible at various levels, the process of setting up of IT kiosks/ Community Centres/Knowledge Centres has been initiated. UNDP is already in discussion with NASSCOM Foundation which has been its long-term partner in Orissa for setting up of Community Knowledge Centres. To facilitate the flow of information, IT kiosks/Community Information/Knowledge Centres with internet connectivity will be established at district/block levels. The kiosks would function as multifunctional community information, communication, training and activity centers that are integrated to the various livelihood extensions, IEC and BCC services of the government; and the existing

as well as proposed disaster early warning systems. Apart from disseminating information for social and economical development, especially that benefiting the poor, these centres would help increase the capabilities of the rural communities to use IT and internet and reduce the existing digital divide.

To complement the government of Tamil Nadu in its efforts, the process of setting up of a community radio system has already commenced. UNDP has joined hands with VOICES and Aid India to set up this radio system in Nagapattinam with extended support from NCRC. VOICES, a Bangalore based NGO, has considerable experience in this sector including it's work in community driven radio system at Namma Dhwani. VOICES will be responsible for establishing the radio system and addressing the gender component under this

programme. Aid India, because of its extensive field presence and accessibility in Tamil Nadu, will support VOICES in achieving the goal by mobilising community, creating awareness and building the capacity. The programmes are scheduled for broadcast from the first week of January.

This community radio system would be used to:

- Set up a credible and legitimate platform for information sharing between all the stakeholders, Government, NGOs and Community.
- Provide stakeholders with a better understanding of ground realities which, in turn, would enable them to develop and disseminate appropriate responses.
- Develop and enable community based networks to actively participate in the relief, rehabilitation and preparedness process.

*For more information please contact:*  
**The UN Team for Recovery Support**  
54 Apex Towers, 2nd Main Road, R.A. Puram  
Chennai - 600 028  
Tel: +91 44 5230 3551  
E-mail: [chennai.in@undp.org](mailto:chennai.in@undp.org)

*Photo Credit:*  
UN agencies in India have provided  
all the photographs taken from  
various different sources.

