

Tsunami

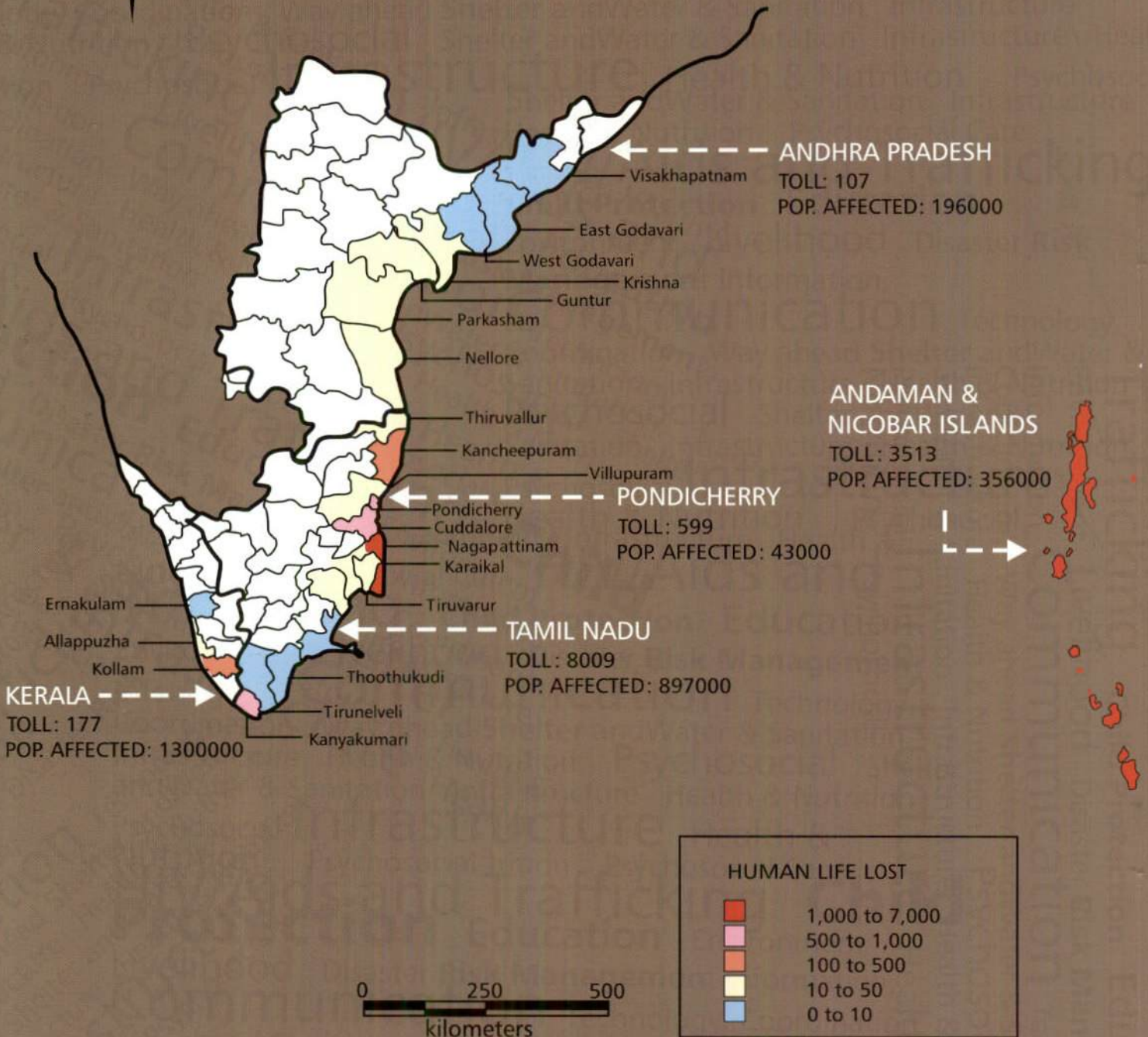


India - Two Years After

A joint report by the United Nations, the World Bank and the Asian Development Bank



Tsunami affected region INDIA



Intermet



Tsunami

India – Two Years After

A joint report of the United Nations, the World Bank and the Asian Development Bank



Glossary

ABL Activity Based Learning	INGO International Non Government Organisation	TRT Technical Resource Team
ADB Asian Development Bank	IST Indian Standard Time	UNCT United Nations Country Team
ANM Auxiliary Nurse-Midwife	JIPMER Jawaharlal Nehru Institute of Postgraduate Medical Education and Research	UNDMT United Nations Disaster Management Team
CAG Citizen Consumer and Civic Action Group	KRRRC Kanyakumari Rehabilitation Resource Centre	UNDP United Nations Development Programme
CBO Community-Based Organisation	MoEF Ministry of Environment and Forests	UNDG United Nations Development Group
CLW Community Level Worker	NCF Nature Conservation Foundation	UNFPA United Nations Population Fund
CRZ Costal Regulation Zone	NCRC Nagapattinam Coordination and Resource Centre	USGS US Geological Survey
CSO Civil Society Organisation	NGO Non Government Organisation	UNHCR United Nations High Commissioner for Refugees
DIET District Institute for Education and Training	NIE National Institute of Epidemiology	UNICEF United Nations Children's Fund
DOE Department of Environment	NPO National Professional Officers	UNIDO United Nations Industrial Development Organisation
DRDA District Rural Development Agency	NUNV National United Nations Volunteer	UNODC United Nations Office on Drugs and Crime
DRM Disaster Risk Management	NYKS Nehru Yuvak Kendra Sansthan (Organisation under the Department of Youth Affairs and Sports)	UNTRS United Nations team for Tsunami Recovery Support
DSW Department of Social Welfare	PEP Post Exposure Prophylaxis	WB World Bank
ECHO European Commission Humanitarian Aid Office	PRIS Panchayati Raj Institutions	WHO World Health Organisation
FAO Food and Agriculture Organisation	PSS Psychosocial Support	
FERAL Foundation for Ecological Research, Advocacy and Learning	SACS State AIDS Control Society	
GOI Government of India	SHG Self Help Group	
ICDS Integrated Child Development Services	SIFFS South Indian Federation of Fishermen Societies	
ICT Information Communication Technology	SMHA State Mental Health Authority	
ICZM Integrated Coastal Zone Management	SPMU State Project Management Unit	
IFAD International Fund for Agriculture Development	TDU Technology Demonstration Unit	
ILO International Labour Organisation	TNTRC Tamil Nadu Tsunami Resource Centre	
ICZMP Integrated Coastal Zone Management Plan	ToT Training of Trainers	
IDMS Integrated Disaster Management System		

Content

5	Preface
7	Introduction
8	The Impact of the Tsunami in India
9	Overview of the Relief and Recovery effort
10	The United Nations :The UN Recovery Framework
11	The Asian Development Bank : The Tsunami Emergency Assistance Project
12	The World Bank :The Emergency Tsunami Reconstruction Project
13	Funds and Donors
14	United Nations Coordination and Joint Programming
16	Social Equity and Guiding Principles
18	Progress in Tsunami Recovery
19	Shelter, Water and Sanitation
25	Infrastructure
29	Health and Nutrition
33	Psychosocial Care
38	HIV/Aids and Trafficking
42	Child Protection
47	Education
51	Livelihood
55	Environment
60	Disaster Risk Management
64	Information, Communication Technology and Coordination
69	The Way Forward
71	Contributors to this Report



Preface



For millions of people living along the coastline surrounding the Indian Ocean, the morning of 26th December 2004 will long be remembered as the day the sea showed its ugly side. A Tsunami, triggered by an earthquake measuring 9.0 on the Richter scale off the coast of Sumatra, caused death and destruction on an unprecedented scale. India, with almost 3 million people affected, over 12,000 dead and hundreds of thousands of people left homeless, was among the countries that bore the brunt.

The response from the Government of India, its people and the international community, international and national NGOs as well as the Civil Society Organisations, was overwhelming. This formed the basis for a strong collaborative relief and recovery effort that aimed not only at supporting the affected people, but also in helping people to build back better. The Government of India and its State and District level administrations played a crucial role in coordinating the relief and recovery programmes, making our work as multilateral organisations much more effective.

Two years later, much has been achieved. In 2005, people affected by the Tsunami were housed in temporary shelters with basic sanitation, childcare and nutrition services. Some of these people still live in those shelters; however, the Government has taken up the challenge to rebuild almost 100,000 new homes in all the affected States. As of November 2006, close to 30% of these

have been completed. Infrastructure such as water supply, latrines and electricity is being provided in the new sites and destroyed infrastructure like roads and fishing harbours are being rebuilt. At the same time, the livelihoods of fishing communities are being restored and strengthened through a variety of initiatives. Destroyed and damaged schools were rebuilt - some of them received furniture for the first time ever.

School children who lost school material in the Tsunami received uniforms, bags, books and other study materials. Psychosocial and healthcare programmes, aimed at dealing with the immediate physical and mental impact of the Tsunami, were initiated. These are designed to give support on a long-term basis. Livelihoods of fishermen were restored with better equipment and programmes were undertaken to increase revenues and offer alternatives to fishing.

During the past year, the recovery work has shifted gradually from immediate needs to long-term recovery. Particular attention was given to the equitable distribution of aid and benefits and to sharing best practices. The establishment of a National Disaster Management Authority has guided the expansion and acceleration of programmes for disaster risk reduction. This has facilitated the move from restoring and delivering services, to strengthening policy and capacity building and the upgrading of infrastructure with the goal to "Build Back Better".

This report reflects on progress in the past two years and the contributions made to support the Government's efforts by the World Bank, the Asian Development Bank and the United Nations Team for Tsunami Recovery Support. It ends with an outline of what still needs to be done. The strong support, trust and commitment of our donor partners have been invaluable. We would like to reiterate our commitment to continue the work started in support of the Government of India and those affected by this disaster.

MAXINE OLSON,
*Resident Coordinator, United Nations,
New Delhi*

RACHID BENMESSAOUD,
Acting Director, World Bank, New Delhi Office

TADASHI KONDO,
*Country Director, India Resident Mission,
Asian Development Bank*



Vanakkam – Welcome! In a Tsunami-affected village near Karaikal a woman draws a welcome drawing called Kolam in Tamil

Introduction

“ This report is a joint initiative by the World Bank, the Asian Development Bank and the United Nations”

This report - “Tsunami, India – Two Years After”, is a joint initiative by the World Bank, the Asian Development Bank and the United Nations, to critically reflect on the pace and extent of progress in Tsunami recovery efforts in India over the last two years. The report provides a comprehensive overview of the achievements, constraints and lessons learnt in relief, reconstruction and recovery efforts since the Tsunami struck in December 2004. The report is written not only for all those who are interested in the support that multilateral agencies provided to Tsunami recovery in India, but also for our donors, partners and all stakeholders involved.

The first section of this report recalls the disaster and the social and economic impacts it effected on the lives of those living along the southern coasts of India as well as on those living in the Andaman and Nicobar islands. This is followed by a brief introduction to the relief and recovery efforts undertaken in India – which are led by the Government and supported by multi-lateral organisations. Next, there is a sketch of the frameworks that underpin the recovery efforts of each of the multilateral agencies covering this report, explaining their respective approaches, intended outcomes, guiding principles and financial contributions.

There are immense challenges to ensure the sustainability of programmes for each multi-lateral agency involved, especially given the enormity of the tasks at hand. This is also true for all UN agencies involved - namely UNICEF, UNDP, WHO, ILO, FAO, UNFPA and UNESCO - which are operating in a joint programme for Tsunami recovery in India, as one (inter-agency) administrative unit. A brief description follows to provide a glimpse into the coordination mechanisms in place, as well as the principles and instruments that guide the agencies’ work.

The second, and main section of the report, is devoted to making a critical two year appraisal of progress made across each of the sectors that the UN, World Bank and the Asian Development Bank are working in. Much of this section is based on an inter-sectoral mid-term review exercise led by the Government of Tamil Nadu in August and September of 2006, supported by all multilateral organisations. However, much is also built up from a collation of data from each agency’s specific experiences in the field. Each sub-section aims to provide a snapshot view of the achievements, constraints and lessons learnt in each of the sectors in which multilateral agencies have been active – Shelter and Water and Sanitation, Infrastructure, Health and Nutrition, Psychosocial Care, HIV/AIDS and Trafficking, Child Protection, Education, Livelihood, Environment, Disaster Risk Management and Information and Communication Technology.

The report closes with an overview of recommendations culled from various studies, analyses and mid-term review exercises. It is hoped that these recommendations will inform and outline rehabilitation efforts in the next phase of Tsunami recovery.

The Impact of the Tsunami in India



“ The disaster took away lives, caused injuries and destroyed family networks, homes and livelihoods”

the loss of life of 12,405 people, causing injury to 6,913 people. A total of 647,599 people had to move to safer places. The disaster affected women and children in particular: 75 percent of the fatalities were women and children. 787 women were widowed and 530 children were orphaned. The highest human losses were reported in the State of Tamil Nadu and the Union Territory of Andaman and Nicobar Islands.

The estimated total financial losses in India - as reported by the Government of India - exceed US\$ 1.2 billion. This includes damages to infrastructure, such as roads, bridges, ports and around 154,000 houses. Public buildings, such as schools, Integrated Child Development Services (ICDS) and health centres were equally affected.

In Tamil Nadu, 376 villages were affected, which is the largest number of impacted villages. In Andhra Pradesh 301 villages suffered the brunt of the Tsunami, in Kerala 187 and in Pondicherry 33. Following the destruction of whole villages, people had to be placed in temporary shelters. Till date, the majority of those families are still living in temporary shelters. It is still proving to be a challenge to provide basic social services in maternal and child health, nutrition, education and water and sanitation to these vulnerable people.

The majority of those affected on the coast were fisher-folk. They suffered the brunt of the disaster, lost houses,

livelihoods, household goods and assets like boats and nets. But the Tsunami has had a significant impact on the livelihoods of other vulnerable groups as well many of those living below the poverty line. It is estimated that about one third of the people affected are from the underprivileged and socially excluded groups such as Dalits (lowest caste in India) or tribal people.

What was not so visible first but becomes more and more important, is the damage the Tsunami has caused to the environment. Along the affected coast, a considerable degradation of typical coastal ecosystems and coastal aquaculture has taken place since the Tsunami. The sea salt ruined land plots, which caused farmers loss in their crops.

One of the least measurable impacts though, is the effect such a catastrophe has had on the human mind and soul. The disaster took away lives, caused injuries and destroyed family networks, homes, and livelihoods. There are long lasting effects on families torn by death and injuries, for widows, single parents and their children, orphans, children separated from their families, the elderly, and the disabled. For many years to come, people will have to bear the consequences of the Tsunami. Therefore, not only is immediate relief after a catastrophic event essential, but also the recovery and rehabilitation, which looks at the long-term needs of the affected population in a holistic way.

On the morning of 26th December 2004, a massive earthquake measuring 9.0 on the Richter scale hit the west coast of Northern Sumatra in Indonesia. It set off a giant Tsunami, which travelled across the Ocean causing an immense human toll and massive damages in countries surrounding the Indian Ocean. In India, the Union Territories of Andaman and Nicobar Islands and Puducherry (Pondicherry) as well as the coastal areas of the states of Tamil Nadu, Kerala and Andhra Pradesh were the most affected.

According to reports from the Government of India, the Tsunami led to

Overview of the Relief and Recovery effort



“ The response to the Tsunami was overwhelming and unique in the history of natural disasters”

The response to the Tsunami from India as well as from the international community was overwhelming and unique in the history of natural disasters. Under the leadership of the Prime Minister and the Ministry of Home Affairs, a number of committees were established to guide the Tsunami relief and recovery efforts. Substantial funding was made available by the Government of India, through the Prime Minister's National Relief Fund (US\$ 155.5 million) and the Rajiv Gandhi Rehabilitation Package (US\$ 809.5 million). While the former focused more on the health, education and well being of affected persons, especially children, the latter aimed to support the revival of the fishery and agriculture sectors, construction of temporary (intermediate) shelters and repair and restoration of infrastructure.

Community members, individuals, INGOs and NGOs and the Indian private sector, also responded on an unprecedented scale, with their support ranging from adopting communities in temporary shelters, to providing psychosocial support and contributions in kind.

Although the Government of India did not join the international consolidated flash appeal for the Tsunami organised by the United Nations Office for the Coordination of Humanitarian Affairs, support from multi-lateral organisations like World Bank, Asian Development Bank, UN Agencies and also bilateral aid was welcomed for long term rehabilitation and reconstruction.

From the beginning, State Governments and District authorities played a crucial role in coordinating the relief and recovery work and are doing so impressively. Their work is helped by a number of NGO coordination and resource centres established at the state (such as the Tamil Nadu Tsunami Resource Centre) and at the district (such as the Nagapattinam Coordination and Resource Centre) levels.

After brief descriptions of the recovery programmes of the United Nations, the Asian Development Bank and the World Bank, the next section of this two-year report describes the achievements, constraints and lessons learnt in the following sectors: Shelter and Water and Sanitation, Infrastructure, Health and Nutrition, Psychosocial Care, HIV/Aids and Trafficking, Child Protection, Education, Livelihood, Environment, Disaster Risk Management as well as Information, Communication Technology and Coordination. This then gives way to a chapter on the way that still lies ahead.

UNITED NATIONS

The UN Recovery Framework

The needs assessment for post-Tsunami reconstruction carried out by the Joint Assessment Mission (JAM) formed the basis for development of a UN Recovery Framework to support the Government of India with the post-Tsunami rehabilitation and reconstruction. This Recovery Framework, first drafted in March 2005, is updated at the moment to include the policy recommendations, which emerged from the Stock Taking conference organised by the Government of Tamil Nadu, UN, WB and ADB in September 2006.

The UNCT has identified four key programmatic areas for 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
- » Health and nutrition
- » Trafficking, HIV/Aids and 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 coordination

- » Coordination support and knowledge networking
- » Information and communication technology

The UN Recovery Framework includes a joint mechanism for implementation and administration, the overall objective of which is to define a collaborative approach of the UN Agencies in facilitating the rapid recovery of the Tsunami affected populations in India.

Thematic Area	Lead UN Agency	Participating UN Agencies
Psychosocial Support	WHO	UNICEF, UNFPA, UNDP
Reintegration to address Trafficking and HIV/AIDS - Prevention and Care	UNDP	UNICEF
Health and Nutrition	WHO	UNICEF, UNFPA
Education	UNICEF	
Rebuilding Livelihoods	ILO	FAO, UNDP
Shelter and Habitat Development	UNDP	
Water, Sanitation, and Hygiene	UNICEF	WHO
Healthy Environment for Long Term Sustainability	UNDP	
Capacity Building for Disaster Risk Management (DRM)	UNDP	UNESCO, UNICEF
Policy Support, Coordination and Knowledge Networking	UNDP	

ASIAN DEVELOPMENT BANK

The Tsunami Emergency Assistance Project

Description

The main objective of the Project is to support the efforts of the governments of Tamil Nadu and Kerala to restore economic growth and alleviate poverty in the Tsunami affected areas. This happens through assistance in restoration of livelihoods, especially of the poor, as well as in rehabilitation and reconstruction of damaged public infrastructure.

Livelihoods (Grant Financed)

This component aims at the restoration of livelihoods of affected poor and low-income households through SHGs and other similar groups that have to be recognised by Tamil Nadu and Kerala as directly or indirectly benefiting people affected by the Tsunami. A total grant of US\$ 58.84 million for rehabilitation and development of livelihood activities are financed with allocations of US\$ 49.99 million and US\$ 8.85 million respectively, to the states of Tamil Nadu and Kerala. Of these amounts, plans of US\$ 46.3 million for Tamil Nadu and US\$ 4.63 million for Kerala have been prepared. Concept notes describing these interventions have been cleared by ADB and activities are underway. US\$ 15 million have already been disbursed by Tamil Nadu and US\$ 1.80 million by Kerala.

Transportation (Loan Financed)

The component "Roads and Bridges" finances rehabilitation of Tsunami damaged State roads, the creation of bridge connections for un-bridged crossings, replacing of temporary crossing arrangements or ferries for crossing rivers, ensuring escape routes in future disasters.

US\$ 9.10 million have been allocated for Tamil Nadu and US\$ 15.70 million for Kerala. Tamil Nadu has submitted concept reports for approval including works worth US\$ 7.6 million, which has since been approved and works tendered with award of works expected by February 2007. In Kerala, 8 road rehabilitation contracts amounting to US\$ 0.6 million have been awarded, concept reports for works worth US\$ 3.74 million have been approved, and US\$ 0.12 million have been disbursed. The environmental and social due diligence of 3 bridge works, worth US\$ 9.3 million, ensuring that good practices and ADB guidelines are followed, are being carried out.

In the component "Ports and Harbors" US\$ 17.70 million have been allocated for Tamil Nadu and US\$ 8.20 million for Kerala. Tamil Nadu has awarded nine contracts worth US\$ 3.5 million for first phase works. Concept report for second phase works amounting to US\$ 6.3 million have been approved and works tendered. In Kerala, 57 contracts worth a total of US\$ 1.57 have been awarded, many of which have been completed. About US\$ 1.14 million has already been disbursed and concept reports for procurement of dredger and dredging works worth US\$ 1.6 million have been approved by ADB.

Rural and Municipal Infrastructure

The component "Water Supply and Sanitation (Grant Financed)" includes restoration and upgrading of damaged water supply systems, sanitary facilities and solid waste management facilities, along with a sanitation and environmental

awareness campaign. A total of US\$ 23 million, for Tamil Nadu and US\$ 13 million for Kerala, has been earmarked. In Tamil Nadu, 19 works amounting to US\$ 0.6 million have been awarded and work started, another 17 works worth US\$ 5.10 million are under tendering. Additionally, 5 works including 2 major combined water supply schemes for US\$ 17.5 million have been formulated and the concept notes approved by ADB. The relevant environmental studies being underway, all contracts will be awarded and work will start by March 2007. In Kerala, 138 water supply works spread over 6 districts amounting to US\$ 1.65 million have been contracted. Concept reports for water supply works, costing about \$6.25 million, have been approved by ADB.

In the component "Other Rural and Municipal Infrastructure (Loan Financed)" a total of US\$ 8.00 million has been earmarked for Tamil Nadu. For rehabilitation and upgrading of rural infrastructure, US\$ 32.75 million for Tamil Nadu, and \$8.55 million for Kerala, have been allocated. In Tamil Nadu, the majority of works are for improvement of rural roads; 265 contracts of an aggregate value of US\$ 16.44 million have been awarded and should be completed by March 2007. An additional 75 contracts with a total value of US\$ 4.25 million have been tendered and will be awarded by December 2006. Another 16 contracts for US\$ 1.25 million are yet to be tendered. In Kerala, concept reports worth US\$ 4.0 million have been approved by ADB.

WORLD BANK

The Emergency Tsunami Reconstruction Project

Description

Through the Emergency Tsunami Reconstruction Project (ETRP), the World Bank provides technical assistance as well as financial support totalling US\$ 465 million to Tamil Nadu and Puducherry (Pondicherry). The project supports the reconstruction of shelter, water and sanitation, and other infrastructure (US\$ 410 million), the revival of livelihoods (US\$ 41 million), environmental management (US\$ 5 million), and coordination (US\$ 10 million).

With a focus on community participation and involvement of the affected communities in planning, deciding and implementing reconstruction and livelihood programmes, the project aims at reviving livelihoods and promoting recovery while promoting long-term sustainable development in the Tsunami-affected areas.

Housing Reconstruction and Infrastructure

Over the course of the last 24 months, the World Bank team has worked closely with the Government on housing reconstruction. This component of the project is comprised of three areas:

- » The provision of temporary shelters and upgrading of services in temporary shelter sites
- » Repair and reconstruction of existing houses, the construction of new houses and related community infrastructure such as roads, water supply, latrines and electrification in approximately 200 settlements

» Relocation of the families affected by the reconstruction programme. The World Bank team has supported the Government in the formulation and framing of a variety of important initiatives. Early into the reconstruction effort, the World Bank helped formulate – what has now become – a most progressive disaster housing policy and eligibility criteria for the identification of beneficiaries. The team also assisted in the development of a framework for mitigating the environmental and social impacts associated with the reconstruction effort and has regularly monitored the progress in land acquisition and payment of compensation to the affected landowners. The World Bank remains committed to the long-term sustainable development of the Tsunami-affected regions.

Restoration of Livelihoods

This component of the project aims at revitalising livelihoods of affected families through

- » Restoration of damaged fisheries infrastructure, such as harbours, patrol boats and the re-establishment of safety-at-sea systems
- » Restoration of damaged agricultural lands and horticultural lands, farm ponds and dug wells
- » Repair and reconstruction of infrastructure such as veterinary dispensaries; and
- » Promotion of sustainable management of coastal land and water resources.

One key achievement in this component is the reclamation and restoration of Tsunami-affected agricultural and horticultural lands benefiting over 10,000 affected landowners.

Environment and Disaster Risk Reduction

The World Bank recognises the critical need to use the disaster reconstruction programme as an opportunity to Build Back Better while simultaneously reducing long-term disaster vulnerability. In this connection, the World Bank has worked with the Government on a variety of disaster risk reduction initiatives such as the development of integrated coastal management plans and coastal vulnerability maps. The team has also supported awareness campaigns on coastal regulatory zone issues and provided significant input in the formulation of the demarcation of the high-tide line.

FUNDS AND DONORS

Funds

The below table gives an overview of the funding allocated to Tsunami Recovery programmes in India by the multilateral organisations from 2005-2008 in US\$.

Sector	United Nations	ADB	World Bank
Shelter, Water and Sanitation	4,824,456	36,000,000	390,000,000
Infrastructure (Roads, Bridges, etc)		100,000,000	19,000,000
Health and Nutrition	10,058,995		
Psychosocial Support	714,063		
HIV/Aids and trafficking	1,750,750		
Child Protection	2,379,398		
Education	9,705,440		
Livelihoods	3,829,257	58,840,000	41,000,000
Environment	1,407,280		5,000,000
Disaster Risk Management	6,025,000		
Policy, ICT, and Coordination	1,790,398		10,000,000
Social Equity	150,000		
Coordination, Communication, and Monitoring and Evaluation	820,000		
Grand Total	43,455,037	194,840,000	465,000,000

Donors

The recovery work would not have been possible without the generous contributions from our donors. We'd like to thank the following:

American India Foundation (AIF), Avon USA, Department for International Development of the United Kingdom (DFID), European Commission's Humanitarian Aid Department (ECHO), Ford Foundation, French Committee for UNICEF, Global Thematic Humanitarian Fund, Hong Kong Committee for UNICEF, Italian Committee for UNICEF, International Confederation of Free Trade Unions/Asia-Pacific Regional Organisation (ICFTU/APRO), ISDR (International Strategy for Disaster Reduction), IKEA, Spanish Committee for UNICEF, Swedish Committee for UNICEF, The Government of Finland, The Government of Japan, The Government of Netherlands, UNFPA, US fund for UNICEF, United Nations Foundation (UNF), United States Agency for International Development (USAID).

Apart from the above listed donors, we would also like to thank the numerous individuals in India and around the world who contributed spontaneously and generously.

United Nations Coordination and Joint Programming

Following the post-Tsunami rapid assessment and analysis conducted by the Joint Assessment Mission (JAM), the United Nations Country Team in India continued to work in the spirit of close inter-agency cooperation to design a joint programme – the UN Tsunami Recovery Framework. Participating agencies included: UNICEF, UNDP, WHO, ILO, FAO, UNFPA, UNV and UNESCO. At the national level, a Tsunami Steering Committee was established to oversee the immediate relief efforts, mobilize resources to fund the Recovery Framework, and direct the operational team working in the affected areas, i.e. the UN team for Tsunami Recovery Support (UNTRS).

As much as possible, the UN team for Tsunami Recovery Support, striving towards operating with one programme and one programming process, as one team and under the guidance of one leader, applies the UN Reform guidance developed by the UN Development Group Office (UNDGO) to further the Process.

One team

During the emergency relief stage, the UNTRS was comprised mostly of seconded UN staff and consultants. While

the programme moved from immediate relief to longer term recovery, a team of professionals was put in place. During the course of 2005, a Joint UN Office and a UN coordination unit were established in Chennai, from where the India Tsunami Recovery efforts are coordinated. The team was completed with the arrival of the UN Tsunami Coordinator in March 2006.

One Programme

The UN Recovery Framework is the 'one' programme that outlines the expected results the combined UN systems efforts in Tsunami recovery between January 2005 and end 2008. The Recovery Framework, is made up of 10 mostly joint projects, and was prepared in March 2005 based on the findings and analysis of the JAM. Joint Annual Work-plans were developed for each project, outlining the annual outputs, activities and the division of work among agencies.

Apart from 'one programme' and one joint UN office, the UNTRS agencies aimed to create a system of common operational services. UNDP was selected as the 'administrative agent' for the UNTRS. As a result, UNDP, ILO, FAO,

and components of WHO, UNICEF and UNFPA funding have been pooled in UNDP accounts. The common services approach was only partially successful, as some of the agencies managed their funds separately.

One leader

The UN Tsunami Coordinator joined in March 2006 to head the UN Tsunami recovery team in India. The role of the UN Tsunami Coordinator is mainly to facilitate and establish a coordination mechanism within the team and among all stakeholders and ensure effective planning, implementation, and monitoring of the UN Recovery Framework. Furthermore, his role is to inform UNTRS donors and other key stakeholders, including the UNCT Tsunami Steering Committee, on programme plans and achievements

Unique office

The Joint UN office and the UNTRS are in many respects unique in the world. Experiences of the agencies in this new UN set-up have been positive but not without challenges. However, if the willingness of UN-agencies to work together exists, these challenges will be manageable. This has been the case within the UNTRS.



The UN Special Envoy for Tsunami Rehabilitation, Mr. Bill Clinton, visits the Tsunami-affected area in Tamil Nadu in December 2006



After the Tsunami, in the sense of Build Back Better, women became first time boat owners

Social Equity and Guiding Principles

“ Despite good intentions, inequities have manifested themselves in many different ways”

Globally, multilateral organisations are striving to adopt a human rights based approach to recovery and development. This ensures that programmes aim to further human rights in its widest sense, and basic human rights principles are applied at every stage of the development process. Hence, non-discrimination, social equity, participation, universality, and accountability are some of the key human rights principles that are embedded within efforts from multilateral agencies in each respective sector of recovery they are participants in.

A key focus of all multilateral participants lies in ensuring that aid reaches the most vulnerable of the affected groups equitably for them to rebuild their lives. Despite good intentions, inequities surfaced during the Tsunami recovery. Affected groups are, in most cases, already marginalised

and vulnerable; and include the Dalit (lowest cast in India) communities, tribal communities, differently abled people, senior citizens, widows, and women in general.

Fortunately, there have been many positive factors that have enabled the inclusion of equity issues in recovery activities. A vibrant civil society, effective action by rights groups, and an enlightened government system that was responsive to the demands of these groups were the major positive factors. In addition, the government's approach to coordinating the work of its own agencies along with I/NGOs favoured a climate that enabled healthy debate between governments, CSOs, and peoples' representatives and led to remedial action.

UN Agencies, the World Bank, and the Asian Development Bank have adopted the principle of social equity in

Women have been excluded from support after the Tsunami. To ensure that this no longer happens, measures are put in place



their programmes, ensuring that recovery aid and development support is reaching the most vulnerable groups as described above. Support from the World Bank has resulted in district administrations adopting poverty and vulnerability as the main criteria in beneficiary selection. The livelihood programme of the ADB has adopted a special focus on Self Help Groups in affected communities to empower lower income sections of society and has given special attention to women and disabled persons, particularly from the lower castes and indigenous tribal communities. UN agencies are raising awareness of equity issues and conducting policy advocacy to ensure that equity issues are addressed in a sustainable and consistent manner. A number of studies are in progress to analyse the situation of widows, differently abled people, the tribal Irulas, and salt pan workers.

Experience from other Tsunami affected countries has indicated that top-down approaches have hampered affected communities' ownership and participation levels in recovery efforts.

While Government ownership and leadership were very well organised in India, community ownership has been lacking, as has certainly been the case in recovery work supported by UN agencies. In order to better address principles of participation and sustainability, a more community driven and integrated – rather than sectoral – approach has been adopted for implementation.

It is hoped that such an approach will incorporate social equity issues at village and panchayat levels for development planning and will build linkages between the community-development needs and the district development schemes and programmes.

Progress in Tsunami Recovery

“ Apart from achievements, constraints and lessons learnt have also been identified”

Two years in Tsunami relief and recovery have been completed. The following chapters of this report will focus on what has been achieved in each of the key recovery sectors from the day the Tsunami struck, on 26th December 2004, until now. Apart from the achievements by the multilateral agencies, constraints and lessons learnt during the implementation of the programmes have also been identified. This sheds some light on the process of recovery. A lot of information in the following chapters has been derived from a comprehensive stock taking that took place in Chennai during the months of August and September of 2006. Because of its importance, the process of the stock taking exercise is outlined here.

Mid 2006, one and a half years after the Tsunami, a common need was felt to review the progress of the relief and recovery work completed so far in Tamil Nadu. Led by the Government of Tamil

Nadu, and supported by major partners such as the UN Agencies, the Asian Development Bank, the World Bank, major (I)NGOs, and the Tamil Nadu Tsunami Resource Centre (TNTRC), a Take Stock Conference was organised as a participatory mid-term exercise to critically review the progress of implementation of Tsunami recovery programmes in Tamil Nadu to date, sector by sector, and distill and adopt recommendations for the next phase of recovery.

The review exercise comprised of three steps which were followed in each sector; namely:

- » a preparatory meeting with all relevant actors from government, NGOs, civil society, and multilateral agencies.
- » the finalisation of a draft status paper.
- » a presentation of the status paper and discussion and an agreement on the recommendations at a two-day stock taking conference in Chennai.

The process and outcomes created a renewed commitment as well as partnerships for the next phase of

Tsunami recovery. A final Government report, incorporating the final status papers and an agreed action plan based on the recommendations, is in the process of being printed at the moment (November 2006).

A separate, but similar, exercise was conducted among International NGOs in India. This was led by the All India Disaster Mitigation Institute (AIDMI) and supported by the Office of the UN Special Envoy for Tsunami Recovery. It included a focus group discussion, facilitated by the AIDMI and the TNTRC in Chennai. The discussions concerned the following themes like: Accountability to Beneficiaries, Enhancing Local Capacities, INGO Professionalism, Coordination, and Human Rights in disaster response. The consultation, which was part of a global discussion, led – among other conclusions - to commitments from International NGOs to strengthen standards of professionalism, quality assurance, and community participation, as well as to improve accountability and coordination mechanisms to ensure sustainable recovery.



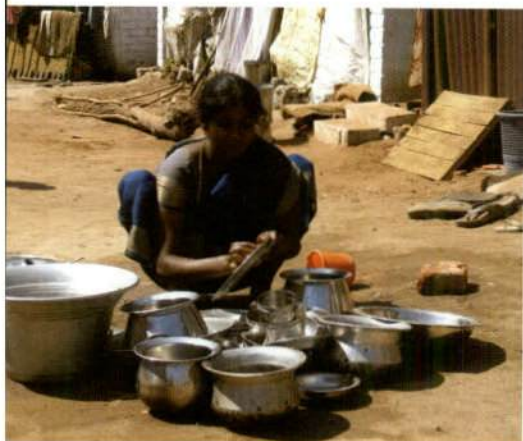


Agencies involved: WB, ADB, UNDP, UNICEF, WHO

Shelter, Water and Sanitation

“ Approximately 100,000 homes were
damaged or destroyed”

Introduction



Access to clean and safe water is part of the rebuilding process

International experience indicates housing reconstruction as perhaps the most challenging of tasks in disaster recovery programmes. In India, the scale of destruction caused by the Tsunami was vast: approximately 100,000 homes were damaged or destroyed and the entire physical infrastructure along the coastline was severely affected.

Two years after the Tsunami, the reconstruction efforts are well advanced. Clear policy direction and guidance, along with a commitment to rapid relief and rehabilitation for all affected communities has resulted in prompt and methodical disaster interventions. The Tamil Nadu Tsunami Resource Centre (TNTRC) and its counterparts in the districts were pivotal in supporting the Government to coordinate the resources and materials that poured in for recovery and facilitating the systematic reconstruction of homes and community infrastructure.

Key Achievements

Reconstruction of New Homes

Twenty-four months into reconstruction, significant progress has been made by NGOs in the housing sector. In the two years since the disaster, 27,845 houses (28 percent) of the total 98,477 required across India have been completed. In Tamil Nadu, where approximately 67 percent of the destruction occurred, over a third of the homes slated for construction have been completed and 20,128 have been handed over. The World Bank is financing the reconstruction of rural and urban houses in Tamil Nadu and Pondicherry wherever private funds are not available (current estimate is 20 to 30 percent of total reconstruction needs). In addition, the provision of infrastructural services is being financed by the World Bank in the new relocation sites.

AFFECTED STATES	HOUSES DAMAGED/ DESTROYED		NO. OF HOUSES TO BE REPAIRED/RECONSTRUCTED		NO. OF HOUSES COMPLETED		BALANCE
	NUMBER	% OF TOTAL	NGOs	STATE AGENCY	NUMBER	AS % OF TOTAL REQUIRED IN STATE	
Andaman & Nicobar Islands	9,714	9.8 %	759	8,955	0	27,845	9,714
Andhra Pradesh	1,150	1.2 %	0	1,150	59	5.1 %	1,091
Kerala	13,640	13.7 %	3,797	9,843	3,797	27.8 %	9,843
Pondicherry	8,382	8.4 %	4,984	2,583	575	7.6 %	6,992
Tamil Nadu	66,407	66.9 %	40,879	25,528	23,414	35.3 %	42,992
Total	99,293	100 %	50,419	48,059	27,845	28 %*	70,632
			98,478				

*This figure represents the percentage of completed houses, of the total number of houses that needed to be repaired or reconstructed in India. Source: Planning Commission, Government of India (November 2006).



The building process is in full swing throughout all the affected states

In Pondicherry, though 8,382 houses were reported damaged or destroyed after the Tsunami, 7,567 houses are to be constructed or repaired under the Tsunami rehabilitation programmes, as damages to the remaining houses were minor. A total of 575 homes has been completed in Pondicherry and 100 have been handed over. In Andaman and Nicobar Islands, where 9,714 homes needed to be reconstructed, the foundation work has been completed for 8,955 and the Union Territory is awaiting the delivery of materials from the mainland for further construction.

Capacity-building for disaster resistant housing construction

In Tamil Nadu, a comprehensive technical guideline for shelter construction was developed with the assistance of the UN. Mandated by the State Government, a techno-social assessment of planning and construction of houses was carried out in 7 districts of Tamil Nadu by the UN in collaboration with the NGO Hunnarshaala and various coordination and resource centres like NCRC. The survey indicated that the majority of reconstructed houses comply with technical standards. In addition, the UN, in coordination with the State Government and Resource Agencies, has brought out guidelines for retrofitting and handbooks on safe construction practices and also has taken up training programmes for engineers and masons as well as provided technical support for a construction-monitoring clinic at Nagapattinam in coordination

with NCRC. Technical Demonstration Units (TDUs) were built at the community level to demonstrate various disaster resistant construction practices with multiple choices of technology and retrofitting options. The World Bank is providing studies on the vulnerability of the coastal areas which will serve in reducing risk and help to form the foundation for the development of a culture of disaster risk reduction. All these initiatives have brought greater awareness of the need for rigorous planning and safe construction practices beyond the immediate reconstruction programme.

Promotion of public-private partnership

There has been a strong collaborative relationship between NGOs and state level governments which serves as an exemplary example of public-private partnership in disaster reconstruction. UN has promoted state-level resource initiatives such as the creation of the Tamil Nadu Tsunami Resource Centre (TNTRC) and supported district-level resource centres such as NCRC to bring various reconstruction actors to a common forum for effective coordination during the reconstruction phase. Partnership with resource organisations like Auroville Earth Institute, Pondicherry, Gandhigram Rural Institute, Dindigul, COSTFORD and Habitat Technology Group, Kerala, Society for Environment Protection, Gujarat and local entrepreneur, Florida Construction were made to train construction workers and promote appropriate disaster-

resistant technologies. In the Andaman & Nicobar Islands, an NGO coordination committee was created to form the foundation for an efficient and systematic process of coordination between the 70 NGOs involved in recovery and the state governments. Weekly, or even daily, coordination meetings were conducted between reconstruction agencies and the Collectors at the district level. This created a high degree of interaction and opportunities for trust-building.

Water, hygiene, and environmental sanitation

Significant progress has been made in the area of water, hygiene and environmental sanitation. The World Bank has been working closely with the Governments of Tamil Nadu and Pondicherry to ensure the provision of sustainable infrastructural services. The UN and NGOs have initiated shelter-based wastewater management programmes and hygiene promotion campaigns which have contributed towards an increase in the use of toilets and hand washing to 60 percent – a remarkable achievement given that toilets were rare among coastal communities. Two cadres of volunteers, mostly women, have been selected from the community and have been providing leadership as volunteers to connect NGOs, authorities and shelter residents to raise awareness about hygiene. Sanitation Animators have also been trained to promote hygiene among children and WATSAN children's clubs.

Houses under construction in Nagapattinam:
Still many more have to be built



Land acquisition

The speed, process, and scale of land acquisition by the state laid the foundation for a rapid transition from relief to reconstruction. Early into the reconstruction programme, the World Bank worked with the Government to help formulate a framework for the identification of beneficiaries and resettlement. With a few exceptions now, all land has been acquired for Cuddalore and Nagapattinam, the most affected districts in India. In Cuddalore, 25.6 hectares were acquired from 41 private owners and in Nagapattinam, 221.5 hectares from 234 private owners. In Pondicherry, 107 hectares were acquired from 265 landowners, 25 hectares from temples and 5 hectares from government lands. The World Bank has assisted in the development of a framework for mitigating the environmental and social impacts associated with the reconstruction effort and has also regularly monitored the progress in land acquisition and payment of compensation to the affected landowners. Land is provided free of cost by the Government to NGOs participating in reconstruction efforts.

Constraints

Focus on providing infrastructural services and amenities

In some states such as Tamil Nadu, reconstruction tasks were divided, with NGOs responsible for shelter construction and the Government

responsible for infrastructure. In some such sites, infrastructural services such as electricity, water and sanitation and access to roads have not kept pace with housing construction. The result is that some newly completed homes are on sites that lack basic infrastructure. It is critical to shift focus to aspects of the reconstruction programme that will provide infrastructural services and amenities.

Operation and maintenance

As new assets such as sewage treatment plants are proposed and created in coastal communities, there is a need to take operation and maintenance requirements into account. As in other urban low-cost sanitation programmes for example, community ownership of these assets needs to be clarified. At the same time, the capacity of local bodies should be developed to work with the community for regular maintenance. Costs will be incurred to maintain these assets and provisions should be made within the state and district budgets to meet these costs.

Knowledge of post-disaster reconstruction planning

Post-disaster planning should factor changes such as manpower shortages and escalation in the cost of construction materials and transportation. Such calculations can be extrapolated through previous disaster data and experience, as well as through current supply and demand trends. Planning around regular

seasonal hazards such as floods is equally important. Major flooding occurred in the monsoon period in October and November 2005. Drainage channels were blocked due to roads or other infrastructural developments, or because of indiscriminate filling of nearby sites, which caused the local drainage pattern for surface runoff to change.

Quality and monitoring

Concerns have been expressed regarding the variable quality of construction in some of the housing projects. The accelerated pace of construction compromised the quality in a few cases of the reconstructed buildings. The quality control system needs to be strengthened to ensure high quality construction of all houses. Substandard houses would require further retrofitting measures.

Beneficiary consultation and community involvement

NGOs have cited their desire for greater community participation in the reconstruction process. The degree of community participation and beneficiary consultation in decision making and construction management varied throughout the different phases. Significant efforts were undertaken by the authorities to identify suitable land in a fully inclusive approach. Concerns however, were raised that more attention should have been given to the involvement of beneficiaries in housing design and construction supervision. In other areas

such as Andhra Pradesh, most of the beneficiaries were daily labourers and preferred taking up construction work during off-seasons.

Lessons learnt

Building a culture of safe construction practice is achievable

A culture of safe building practice has emerged not only in the Tsunami affected areas but also in the private construction sectors. From the beginning, disaster-resistant reconstruction practices were a priority and safe building practices emerged. Trained masons and engineers continue to build safe buildings and in Nagapattinam, a rural training centre concept is emerging, keeping the "Building Centre" in a central role.

Habitat planning

NGOs and Government must continue to work together to develop integrated habitat plans in a participatory manner that are culturally sensitive, enable economic and livelihood opportunities, and protect communities against future

natural disasters. Coming to a mutual consensus on housing, habitat design and layout is a time consuming process that involves repeated consultation and negotiation between external agencies and community members. Planning should reflect this issue. Infrastructural services and amenities need to be rapidly developed in sites to allow beneficiaries to move into their new homes. For houses that have not been built, a total site planning approach should be adopted to ensure that infrastructure and housing construction occurs simultaneously.

Establishing and maintaining sanitation and solid waste management

Sanitation arrangements have to be in line with community needs. For this purpose, the Government should consult with representatives of the NGOs and communities prior to finalising sanitation arrangements. The choice of sanitation arrangements have to take into account the technical capacities available for maintenance as well as the community's ability to afford

operation and maintenance. Apart from sanitation, the Government should also streamline solid waste management practices in the permanent shelters by building the required capacity with the respective departments.

Site-level Technical Support

Major infrastructure projects such as roads and sewer treatment plants are best planned and executed at the state level. But most reconstruction decisions are at the village or district level. Mechanisms need to be put in place at the site level to provide backup support for technical solutions on various reconstruction issues in relation to design, execution, and habitat planning. One possibility is district-level centres, each supported by a team comprising of a civil engineer, a sanitation engineer and a social specialist. This team should work with engineers executing the project, to solve technical issues, strengthen the technical capacity of NGOs and artisan guilds, and promote disaster resistant technologies.



Sanitation has to be in line with community needs



By December 2006 one third of the houses that have to be built is completed



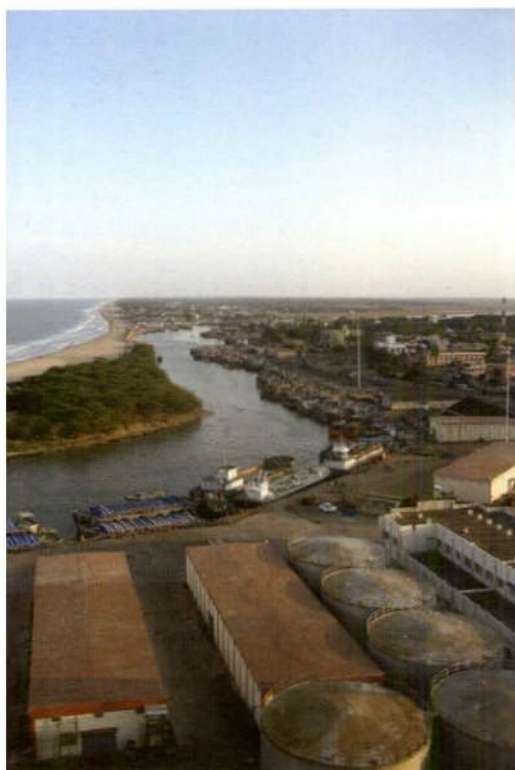
Agencies involved: ADB, WB

Infrastructure

“ The criticality of roads and bridges is indisputable”

INTRODUCTION

The harbour of Nagapattinam was heavily affected, but infrastructure is being build back



During disaster situations, roads and bridges serve as links not only for launching rescue and transporting for relief and rehabilitation, but also as escape routes. Therefore, the criticality of roads and bridges is indisputable. Similarly, public buildings are places from where rescue and relief is launched and coordinated; they are also used as temporary shelters and therefore form a critical part of infrastructure used during disasters.

The Joint Assessment Report (JAR)¹ while describing the short and mid-term reconstruction needs for roads, bridges and public buildings in Tamil Nadu and Kerala, indicated the following financial requirements (in million US\$) for post Tsunami rehabilitation and reconstruction efforts.

STATE / ITEM	SHORT TERM	MEDIUM TERM	TOTAL
Tamil Nadu			
Public Buildings	7.72	1.89	9.61
Internal / Rural Roads	2.56	6.00	8.56
Road reconstruction	4.73	0.00	4.73
Bridges reconstruction	3.26	5.74	9.00
Kerala			
Public Buildings	0.09	0.36	0.45
Internal / Rural Roads	0.44	1.09	1.53
Road reconstruction	1.77	3.67	5.44
Bridges reconstruction	0.00	3.33	3.33

Roads, bridges, and public buildings are components of public infrastructure, and have traditionally been provided by the Government. Rebuilding efforts in this sector therefore are almost completely handled by the Government through its various departments.

However, while the JAR identified reconstruction needs based on damage assessment, to meet the Government's objective of 'Build Back Better' a bigger effort, which includes building of critical and missing infrastructure, has been launched.

¹ At the request of the Government of India, the Asian Development Bank, the United Nations and the World Bank put together a joint team which undertook an assessment of the socioeconomic and environmental impact of the 26th December, 2004 Tsunami in the states of Andhra Pradesh, Kerala, and Tamil Nadu and the Union Territory of Pondicherry.

Key Achievements

Restoration of linkages to facilitate rescue and relief operations in many areas

This included clearing of debris from roads, restoration of damaged road surfaces and drainage channels, as well as providing temporary crossings where cross drainage works were washed away. Restoration of public buildings did not form a major part of the operation as

hardly any public building was damaged to the extent that urgent rehabilitation or restoration was required. However, in the current rebuilding phase, many public buildings like community halls, public distribution shops, fishing related activity centres, and others, are constructed. Below is a table of the detailed state-wise account of physical achievements and targets:

AGENCY	ROADS		BRIDGES		PUBLIC BUILDINGS	
	Km	Million US\$	No.	Million US\$	No.	Million US\$
TAMIL NADU - COMPLETED WORKS						
Rural Development Department	234.34	1.91	8	0.0	556	2.69
Director of Town Panchayat	40.39	1.18	10	0.0	23	0.11
TN Highways Department	433.52	13.64	2	0.4	0	0.00
Total	708.25	16.73	20	0.5	579	2.80
TAMIL NADU - PROPOSED WORKS						
Rural Development Department	1014.73	31.67	8	0.5	804	4.75
Director of Town Panchayat	200.85	5.92	0	0.0	91	2.14
TN Highways Department	354.47	11.92	21	19.8	0	0.00
Tamil Nadu-Total	1570.05	49.51	29	20.4	895	6.89
KERALA - COMPLETED WORKS						
Public Works Department	65.46	1.45	2	8.2	0	0.00
Harbor Engineering Department	42.89	1.02	0	0.0	0	0.00
Total	108.35	2.46	2	8.2	0	0.00
KERALA - PROPOSED WORKS						
Public Works Department	751.00	26.74	1	3.5	0	0.00
Kerala-Total	751.00	26.74	1	3.5	0	0.00
TOTAL - TAMIL NADU & KERALA	3137.65	95.44	52	32.5	1474	9.69



Women building new escape roads

The World Bank is also providing financing of on-site infrastructure for approximately 200 settlements and the reconstruction of four fishing harbours as well as a range of public buildings including hospitals, clinics, and schools.

Constraints

Procedural delays

Restoration and rebuilding efforts in this sector was, unlike in other sectors, predominantly carried out by government agencies with little or no effort from NGOs or CBOs. It is therefore natural that governmental procedures, designed for normal periods and situations, could not cope with the emergent requirements that Tsunami rescue and relief as well the recovery phase presented.

Procedures such as schedule of rates, obtaining quotations, and tendering were some of the major deterrents in providing quick response and continue to be so. There are also the additional procedures of external financing agencies, which are, at times, new to people who are dealing with it.

Availability of resources: human and material

This was identified as a key constraint, as evident from the efforts of various departments which are still struggling to staff their implementing arms with adequate skilled manpower in sufficient numbers. For all government departments involved in the rehabilitation efforts, the

Tsunami restoration work is in addition to their normal operations. With successive governments banning new recruitments, mostly at field level, there is a shortfall of manpower and, coupled with additional work, the problem worsened. Large rebuilding efforts in a limited area have given rise to shortage of building material such as bricks, sand, and aggregates. The market rate of building material is now about 20-30 percent more than the rate in the Schedule of Rates which is followed by government agencies for preparation of engineer's estimates. General increase in prices of other materials, some of which - such as fuel, bitumen, and cement - are still largely controlled by the Government, has substantially increased the cost of construction beyond the level of the yearly revision in schedule of rates. This has resulted in lukewarm response from contractors and repeated calls for tenders by government, leading to wastage.

Poor technical knowledge and awareness

The communities as well as government staff, lack awareness of the use of appropriate methods, technology and standards in critical features of design such as multi hazard resistant construction. Bad geometrics of approaches for bridges, acute turns, restricted widths, lack of proper access to some buildings have been observed in many areas. These need to be changed. Adherence to proper

technical and functional standards for public infrastructure should be made non-negotiable.

Lessons learnt

Hazard resistant construction

The need to build infrastructure with multi-hazard resistant features, to withstand common disasters as well as extreme ones like the Tsunami, has been recognised by technocrats, administrators, and other decision makers. The superficial economy of choosing the cheapest option is being rejected in favour of appropriate standards of disaster resistance.

Maintenance in normal times

Some of the infrastructure – like cyclone shelters – created for use in times of disaster was found to be unusable when required because they were poorly maintained. It is now recognised that such structures have to be multi-activity based to ensure continuous use.

Economics not the only criterion

Economic justification is not essential for every infrastructural asset. It cannot be assumed that a bridge is not required if the expected traffic is below the threshold level. If it provides a potential evacuation route or a proper road to a habitation where only a few hundred persons reside, its construction is justified. This will create assets, which can save lives and enable the government to respond better, faster and more efficiently during times of need.



Agencies involved: WHO, UNICEF, UNFPA

Health and Nutrition

“ The Tsunami Recovery Programme was an opportunity to strengthen health services for mothers, newborns and children”

Introduction

The Tsunami affected the health infrastructure and service accessibility considerably. A number of Primary Health Centres and Sub-centres (peripheral health care facilities in the rural areas, run by the Government) were damaged. The UN agencies partnered with Government efforts to restore and strengthen health and nutrition facilities with the aim of improving the overall quality of health services provided.

Key Achievements

Disease Prevention and Surveillance

Following the Tsunami, Government and humanitarian agencies moved quickly to relocate the affected people to temporary shelters. Poor sanitation and overcrowding created ideal conditions for mosquitoes and other disease carriers. Without adequate vector control measures and intensive preventative vaccine programmes, children and families living in shelters were at increased risk to outbreaks of communicable disease such as diarrhoea, dysentery, cholera, acute respiratory tract infections, malaria, typhoid, dengue, acute encephalitis, measles and meningitis etc.

The UN supported the implementation of plans, led by the Union Ministry of Health and Family Welfare, in coordination with the Government of Tamil Nadu Department of Health, to prevent mortality and morbidity of children under the age of five years. In Tamil Nadu and in the Andaman and Nicobar Islands, assistance was provided in the vaccination against Measles and supply of Vitamin A to 103,629 children, immediately after the Tsunami.

The UN provided technical assistance to reinforce the capacity of government health workers to plan immunisation sessions to increase the reach and to cover all communities across all inhabited islands in the Andaman & Nicobar. As a result, immunisation coverage rose from 91% in 2004-2005 to 96.3% in 2005-2006. For the first time, the islands planned and implemented a biannual Vitamin A supplementation programme. This year, 23,180 children (89%) between 2 to 6 years of age were administered Vitamin A.

The district health services of the Government of Tamil Nadu,, the UN and other partner agencies deployed medical staff and additional teams in affected districts to spread messages on health, sanitation, and hygiene. UN-supported supplies to protect populations included Oral re-hydration salt sachets to treat diarrhoea, bleaching powder to purify drinking water, soap, and pamphlets on the importance of hygiene and sanitation. Emergency cholera kits that could treat 2,400 people were provided to the Department of Public Health. One thousand chloroscopes were provided to

Workers from the village health care centre are trained to treat infant health problems





Enhanced health services for women, especially for mothers have been introduced

monitor the quality of drinking water. Forty thousand insecticide treated bed nets were distributed. Subsequently, the post-disaster disease surveillance in affected districts was intensified through networking with National Institute of Communicable Diseases (NICD) in Delhi and the National Institute of Epidemiology (NIE) in Chennai, as well as medical colleges. In Andaman and Nicobar, the planning, implementation and monitoring capacities of the Health Department were strengthened, with vector control measures reaching to all the villages across the islands. Portable laboratories are able to reach these remote islands, confirm cases and ensure that the sick receive timely treatment.

Enhanced services for mothers, newborns, and children

The Tsunami recovery programme was an opportunity to strengthen health services for mothers, newborns and children. The UN provided medical equipment and essential supplies to the District Hospital in Nagapattinam and peripheral health facilities in Tamil Nadu. To support the referral system from primary care facilities, services for mothers, newborns and children at the General Hospital at Nagapattinam were strengthened in partnership with Obstetric and Gynecology Society of Southern India (OGSSI) and Indian Academy of Pediatrics (IAP). The UN initiated the adaptation of Integrated Management of Childhood Illnesses in emergencies, and initiated the implementation of Integrated

Management of Newborn and Childhood Illnesses (IMNCI). Health and Anganwadi workers were trained in IMNCI. The focus was to strengthen the health systems for improved access to quality of services through enhanced capacities and outreach. In Andaman & Nicobar, support to the recently established GB Pant Hospital in Port Blair has contributed to saving 300 newborns.

Nutrition

Together with the Government of Tamil Nadu Directorate of Social Welfare, the UN facilitated the distribution of a double ration of complementary food and midday meals. The government decided to provide Anganwadi services at larger temporary shelter locations and the 14 model centres were established as a prelude to supporting the re-establishment of all Anganwadi centres. Additional staff was provided in 531 temporary ICDS centres. The centres were equipped with weighing scales to monitor the growth of children. Training of 15,600 Anganwadi workers on infant and young child feeding practices will be completed soon. The adaptation of infant and young child feeding guidelines in emergencies were developed, training modules were initiated and it was proposed to train all Anganwadi workers on infant and young child feeding practices. Similar strategies were adopted in Andaman and Nicobar, where the UN ensured the continuation of the training of Anganwadi workers and auxiliary nurse midwives (ANMs). Additionally,

Child Development Motivators (CDMs) have been trained to provide on-the-job support to Anganwadi workers as well as monitor the quality of care. Preliminary results from CDM now show early decline in malnutrition rates from 48.5% in April/May 2005 (National Institute of Nutrition, Hyderabad) to 33.56% in 2006. The workers are able to use the Mother-Child Protection (MCP) card in counselling pregnant women on feeding practices, keeping track of their children's growth and immunisation schedules. Iron and Folic acid supplements are distributed through Anganwadi centres and schools for pregnant women and adolescent girls.

Initiation of 'Adolescent Friendly' health services (AFHS)

In a disaster or emergency setting, the vulnerability of adolescents (10 to 19 years) increases due to population displacement, breakdown of social structures and mental stress. Young people are particularly vulnerable to nutrition deficiencies including anemia; psychological and social problems including substance abuse; reproductive and sexual health problems including unplanned pregnancies, abortions, Reproductive Tract Infections (RTIs), Sexually Transmitted Infections (STIs), HIV and sexual violence. An 'Adolescent Friendly' health centre was established at the General Hospital in Nagapattinam with plans to link this with eleven peripheral health centres. In Villupuram, the faculty members in Health Manpower



To keep up health conditions in temporary shelters is a challenge

Development Institute (HMDI) have been trained in AFHS, as have 100 medical officers and 300 Village Health Nurses and Sector Health Nurse in the district of Nagapattinam.

Knowledge and skills on 'Health Action in Crisis and Emergency' strengthened

In collaboration with the Indian Nursing Council, the subject 'Health Action in Crisis and Emergency' was included in the nursing curriculum. More than 45 nursing schools in Tamil Nadu have adopted villages and shelters near their schools to provide students experience of managing health conditions in emergency situations. The UN supported the development of training module "Reaching Out: Nursing care in emergencies" and trained the faculties.

Documentation of efforts and lesson learnt intensified

The UN supports a data resource centre at the Directorate of Public health in Chennai. The resource centre will be the repository of guidelines, Standard Operating Procedures (SOPs), reports, studies, surveys and data from the field.

Sanitation interventions with community participation

In some shelters, overcrowding and unhygienic practices like open defecation were creating health risks. The construction of basic sanitation facilities and hygiene awareness, campaigned about by NGO partners and the UN, helped to minimise the risks of water borne diseases. In Tamil Nadu and in the Andaman &

Nicobar, the introduction of community-level management and monitoring of water sources and sanitation facilities and awareness raising on appropriate hygiene practices, helped to improve living conditions. Sanitary latrines have afforded a sense of privacy and security for women living in shelters.

Constraints

Human resources

Vacancies and a high turnover of trained staff working in health facilities complicate long range planning. Maintaining the specialist services in health facilities is important and non-availability of these is a constraint to access to quality services. A limited number of health facilities in the coastal areas and an inadequate knowledge and training of health personnel in acute trauma care further limits the access.

Translation of guidelines

Translation of many guidelines in local language takes time.

Coordination

Coordination of efforts of different organisations responding to disaster is lacking. This results in duplication of efforts, especially in medical treatment, resulting in irrational dispensing of drugs.

Burden of Diseases

High Maternal anaemia and high Neonatal Mortality Rate, still a major problem in Tamil Nadu, was made more acute in disaster situations.

Lessons Learnt

Ownership:

Early response and involvement of Government partners has been central to the activities as it encourages ownership and networking with NGOs has complimented the efforts.

More funds

With additional funds available, the health and ICDS systems can be further strengthened.

Timely recruitments of specialists

Government's ability to recruit specialists and other human resources on time allows continuous services for communities.

Communicating the right messages

Good media management is essential in order to communicate the right messages.

Preparedness

Preparedness for disaster management is critical. A good example is Cuddalore district, where all stakeholders and communities coped well with the 2005 floods because of the preparedness training they received followed the Tsunami.



Agencies involved: WHO, UNICEF, UNFPA

Psychosocial Care

“ The objective of psychosocial support is to help people to normalise their life as early as possible ”

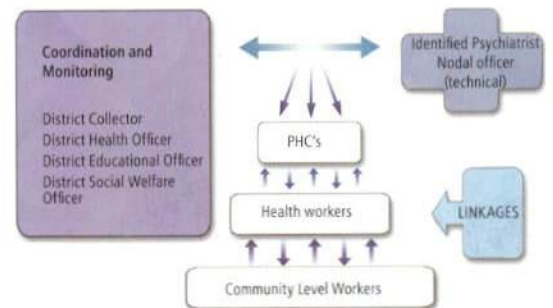
Introduction

Intensely traumatic events can lead to acute and long term mental health problems and psychosocial consequences. The objective of psychosocial support is to help the people to 'normalise' their life as early as possible. To do this, a community-based approach has been developed, with people living within the community trained as Community Level Workers (CLWs). The CLWs were then each made responsible for 20 families (approximately 100 individuals) and provided support in the form of counselling, assisted with social needs and referred individuals for further care to the health system. The UN team for Tsunami Recovery Support has developed this approach into a community based sustainable model (see Fig. 1 & 2)

Fig. 1



Fig. 2



Children in Cuddalore: Dancing and singing to restore mental balance



Key Achievements

Enabling psychosocial support as part of disaster management through governments and partners

In Tamil Nadu, the Department of Social Welfare of the Government of Tamil Nadu was designated as the nodal department for psychosocial support with technical support from the National Institute of Mental Health and Neurosciences (NIMHANS) in Bangalore, the Vidyasagar Institute of Mental Health and Neuroscience (VIMHANS)

in New Delhi, the Schizophrenia Research Foundation (SCARF), SNEHA (organisation working in health care) and the TT Ranganathan Clinical Research Foundation (TTRCRF) in Chennai. A psychosocial cell was established in the department for coordination. The UN supported the development of a training strategy and provided financial support for the training of health workers, as well as community level workers. Through the Education Department and Nehru Yuvak Kendra Sansthan (NYKS) teachers



The children stage puppetshows, not only for fun, but also to spread messages to other children

and youth volunteers were trained to address the special needs of children. A range of methods such as play activities, workshops, or puppet shows, were used to deal with issues of psychosocial care. The UN also supports the Sarva Shiksha Abhiyan (SSA – a government programme for universalisation of elementary education) to pilot a multiple intelligence programme that covers overall developmental needs of children by giving them musical or life skills training for example. TTRCRF is engaged in training the CLWs in Tamil Nadu for prevention and control of alcohol abuse.

In Kerala, the State Mental Health Authority (SMHA), with the Director of Medical Education and the Director of Health Services, were the focus point for implementing the programme. Clinical psychologists and social workers were made available to support individuals in need of specialised care. A targeted intervention programme provides capacity building for faculty, both in schools and District Institutes of Education and Training (DIET) has been started through PEEJAYCL (NGO in Kerala) in 6 districts in Kerala.

The UN collaborated with the Department of Social Welfare, Government of Kerala and People's Council for Social Justice (PCSJ), an NGO, to address psychosocial and child protection issues in the three worst affected districts.

In Andhra Pradesh, the State Mental Health Authority (SMHA), in collaboration

with the UN was in charge. The social workers and a nodal psychiatrist in each district supported the work of the CLWs. The programme continues with UN support and includes training of school teachers as well as alcohol abuse prevention.

In the Union Territory of Pondicherry, the Jawaharlal Nehru Institute of Postgraduate Medical Education and Research (JIPMER) was the UN partner. These workers provided support to the affected community, identified individuals requiring further care, and provided follow up care.

In the Andaman & Nicobar Islands, severely traumatised Tsunami affected children remain a concern for UNICEF, the only UN-agency present on the islands. 2,000 teachers were trained on psychosocial support. 600 of them were middle school teachers and educated to teach life skills to adolescents. Doctors and paramedical staff from primary and community health centres were trained to identify trauma-induced illnesses. This was key in building an effective referral service for children who need specialised care. UNICEF supports children and young people also through life-skills and child rights awareness programmes.

Community Level Workers trained

In all, 13,000 CLWs were trained and assisted a total of 275,000 affected people. 52,000 people received additional counselling. Through various support programmes in all the affected areas,

120,000 children were reached. The district authorities can continue to use the services of CLWs for various social support and disaster preparedness programmes.

Networking, linkages and public-private-NGO partnerships established

The psychosocial programme was made possible through the active participation of various Government departments, UN-agencies, the private sector, NGOs and other partners. A network has been established and can be called upon in the future for various situations where technical support is required.

Training manuals and modules

During the last 18 months, substantial number of training materials and manuals were developed. Among others, a facilitator's manual, a handbook for field workers, various pamphlets, a manual for helping children and adolescents as well as a training manual for prevention and management of alcohol abuse, have been made available.

Introduction of telemedicine

SCARF has introduced telemedicine (Telemedicine is the delivery of medical treatment from a distance, using information and communication technologies). There is a dearth of trained mental health professionals and telemedicine is an option for providing expert consultation in a disaster situation.



Supporting even the smallest:
A child care centre in Nagapattinam

Constraints

Unprecedented phenomenon

The Tsunami was an unknown phenomenon, there was no prior experience in handling such a situation and the scale of operations needed in relief and recovery was a challenge. Therefore, a new approach to sustained care was introduced: service delivery had to be taken through different departments like social welfare, which is a move away from the traditional approach through health departments.

Lack of trained mental health professionals and support systems

Personnel in the mental health sector are not readily available in all affected districts. Since psychologists and counsellors are not part of the regular system of care, this led to difficulties in providing referral care.

Lack of clarity

Psychosocial support was traditionally viewed under the health sector. The paradigm shift to working through the

community for the community was a new concept. This created confusion about the term "psychosocial support". Many people who provided support in various sectors were calling their actions psychosocial support activities. Subsequently, counselling was also taken lightly.

Work focused on areas of media attention

In the initial phase, many agencies were trying to provide training and many of the trained personnel could not be traced anymore later. There was a tendency among the agencies to do more work in the areas which received media attention. But psychosocial support has to be extended to all the vulnerable people in the areas affected by the disaster and not only the ones under the spotlight.

Lessons Learnt

Networking

Psychosocial support is an integral part of the disaster mitigation and management programmes. Sustained community based support is essential and this can be provided through existing governmental networks with active collaboration of UN agencies, academic institutions and NGOs. CLWs can provide various types of assistance. Government departments such as Social Welfare, Health and Education have extensive networks and a cadre of officers who can provide the leadership, coordination and monitoring of the psychosocial programme.

Standardised training

Given the multiplicity of agencies and perceptions regarding psychosocial support, it is important to standardise the training, keeping in mind, the skills and competencies that can be acquired by lay members of the society. Trained CLWs were able to interact with the community, provide psychosocial support through lay counselling and identify those who need further care.

Collaboration

The work done in psychosocial support after the Tsunami demonstrates that it is possible to bring together NGOs, academic institutions and key government departments. The Department of Social Welfare and Education took the lead and helped together with the UN to pool the resources and develop synergies.

Long term needs

The needs of the society changed during the various phases from relief to recovery to rehabilitation. The psychosocial programme needs to take this into account and respond accordingly. The trauma due to the disaster will fade away and more pressing problems of livelihood and property will emerge and the psychosocial support volunteers have limitations in these areas. There has to be a planned withdrawal strategy where other sectors move in to address the concerns.



One of the least measurable impacts is the effect the Tsunami has held on the human mind and soul



Agency involved: UNDP, UNICEF

HIV/Aids and Trafficking

“ In times of crises the erosion of social safety nets heightens the vulnerability of women and children”

Introduction

Tamil Nadu has one of the highest HIV-prevalence rates in India. In the Tsunami affected districts, the prevalence is as high as 0.88 per cent among pregnant women. In times of crises, the erosion of social safety nets heightens the vulnerability of women and children. The destruction of social and family structures can lead to new relationships, some of which may be with high-risk behaviour. Some of them might happen in an environment that encourages violence, sexual abuse, exploitation and trafficking. Subsequently, this can lead to infection with HIV.

Responses to address vulnerability to trafficking pose a challenge, considering that trafficking is a relatively 'invisible' activity. Other factors such as inadequate, under-used sanitary facilities and lack of privacy in the crowded temporary shelters, adversely affect the already at-risk families that were affected by the Tsunami. There is a strong and inevitable linkage between trafficking of women and children and spread of HIV/Aids. Trafficked women have virtually no bargaining power on condom use and sex trafficking exposes women to the highest risk of becoming infected with HIV/Aids and then spreading the disease themselves.

In this context, the UN, in partnership with key stakeholders, is implementing projects in Tsunami affected districts of Tamil Nadu, Andhra Pradesh and Pondicherry. The projects address the immediate needs of those affected, particularly women, girls and boys at risk of being trafficked, as well as trafficking survivors. The priority is to prevent further spread of HIV/Aids and provide care and support services by working strongly with positive networks, NGOs, Government and civil society.

Key Achievements

Life skills for the young

The UN has supported government and partner efforts to promote HIV-awareness and to provide life skills for young people through schools and in vulnerable communities

Study about trafficking

A study has been initiated to assess the vulnerability of trafficking and HIV in the context of the Tsunami. The first draft is currently being reviewed. The recommendations emerging from this assessment are being incorporated into ongoing UN programmes.

Training

In partnership with 14 NGOs in 21 Tsunami affected districts in Tamil Nadu, Andhra Pradesh, Kerala and Pondicherry, the UN has initiated training of District officials, village level watchdog committees, more than 2000 women (through SHG groups), Panchayat leaders and 400 peer educators on trafficking and HIV issues.

Strengthen the networks

In collaboration with the Indian Network for People living with HIV/Aids (INP Plus), an assessment of HIV-positive



The UN has initiated training on HIV and trafficking issues

people in the Tsunami affected areas was conducted. Based on this, the UN initiated a project to improve the quality of life of people living with HIV and Aids (PLHA) in the Tsunami affected districts. 10 new networks of people living with HIV were set up and the 10 existing networks were strengthened. Through these networks, PLHAs and their families will be supported through livelihood options backed by technical skills training and marketing linkages.

Sensitise key stakeholders

All key stakeholders such as legal services authority, law enforcement agencies, line departments, village level leaders in all the affected states are sensitised on trafficking and HIV issues in all the four Tsunami affected states, in partnership with National Legal Services Authority and Nehru Yuvak Kendra Sansthan (NYKS) through the national UNDP Trafficking and HIV/Aids project.

School Aids Education Programmes

Young people are reached through the School Aids Education Programme, which targets adolescents between 13 and 18 years old, Statewide. The programme has covered 4,328 schools in all 13 affected districts. The UN supported training for 350 faculty members of District Institute of Education and Training (DIET), who

in turn have trained 8,522 teachers and peer educators. In the academic year 2006/07, the training of new teachers and students from classes 9 (14 years) and 11 (16 years) will be continued. In all the 13 affected districts of Tamil Nadu, the 968 block level resource teacher educators were trained intensively on HIV/Aids, human rights and child protection issues for the first time. In turn, they will be training approximately 30,000 primary school teachers as part of their regular training programme under the guidance of India's national education programme, Sarva Shiksha Abhiyan.

The UN, in collaboration with Nehru Yuvak Kendra Sansthan, is supporting the training of 1,999 peer educators in five affected districts, reaching 52,043 children and young people in Tamil Nadu.

Capacity Building

In 2006, the UN supported the Tamil Nadu state Aids Control Society in building the capacity of Prevention of Parent to Child Transmission (PPTCT) teams in 279 centres in 13 Tsunami affected districts. Monitoring and quality assurance of PPTCT is also a major component of UN's programme. In 2006, nearly 95,000 pregnant women in the Tsunami affected districts of Tamil Nadu have been reached through PPTCT services.

Constraints

Migrants

The sudden influx of human resources for the recovery process resulted in the presence of a very high percentage of migrant population in the communities consisting mainly of construction workers. They came to help in rebuilding damaged infrastructure and buildings. Intervention with these groups was difficult and challenging as they came to work and would leave again. Hence they showed little interest for awareness programmes. This, compounded with unsafe shelters, increased the risk of trafficking and the spread of HIV.

Stigma

Secrecy with regards to the issue and the stigma attached to it leads to poor knowledge about HIV/Aids, its symptoms, as well as prevention, and consequences of an infection.

Neglect in initial relief phase

Organisations involved in relief did not wholly understand the sexual and reproductive health needs of the men and women caught in the disaster situation. For example, sanitary pads and condoms were not included among relief supplies in the initial stages. Health camps also did not give specific importance to menstrual hygiene and HIV-prevention in the initial stages of relief.

Lessons Learnt

Programmes from day one

Sexually Transmitted Infections (STI), HIV, and Aids programmes should be incorporated in all health projects from day one of recovery efforts.

Database essential

Maintaining a database of available services relevant to trafficking and HIV and making this available to community-based groups such as community leaders, youth groups, watchdog committees and SHGs helps them protect the vulnerable.

Sport to raise awareness

Recreational methods such as sports and competitions are effective in spreading the HIV-message by ensuring a broader reach and a wider participation among children and youth.

Ensuring privacy

Separate counselling camps for HIV-infected persons will identify and stigmatise them. Including such counselling in general health camps will help ensure privacy and inspire confidence.

Increased networking

Strengthening mothers' groups, child protection groups and children's parliaments as well as increased networking with these groups through relevant government departments who are dealing with women and child welfare, health, or education will decrease vulnerability.

Awareness, knowledge and confidence building helps prevent HIV/Aids and trafficking





Agencies involved: UNICEF

Child Protection

“ The initial focus of psychosocial care expanded from immediate recovery support to a support of children and young people in life-skills”

Introduction



Official government figures indicate that across India, the Tsunami left 480 children orphaned and 787 women widowed. This group is particularly vulnerable to exploitation and abuse. To avoid trafficking, child labour, abuse, violence as well as child marriages, the capacities of schools and communities have to be built and additional protection measures for children in conflict with the law as well as children separated from their guardians need to be put in place.

The UN, in collaboration with governments and NGOs in Tsunami-affected communities in Tamil Nadu, Kerala, and the Andaman and Nicobar Islands, focused on the longer-term goal of creating a protective environment for children.

Activities that were put in place strengthened the child protection and anti-trafficking systems. Children participated in issues of child rights and protection and made their voices heard. The initial focus of psychosocial care expanded from immediate recovery support after the Tsunami to a support of children and young people in life-skills.

Key Achievements

Advocacy for the children and policy changes

Advocacy and trying to influence policy on behalf of children have been central to the UN approach to Build Back Better. In Tamil Nadu, the review of the existing legal framework on child rights is ongoing. The goal is to develop one comprehensive Child Act that would bring all child rights issues under one legislative framework.

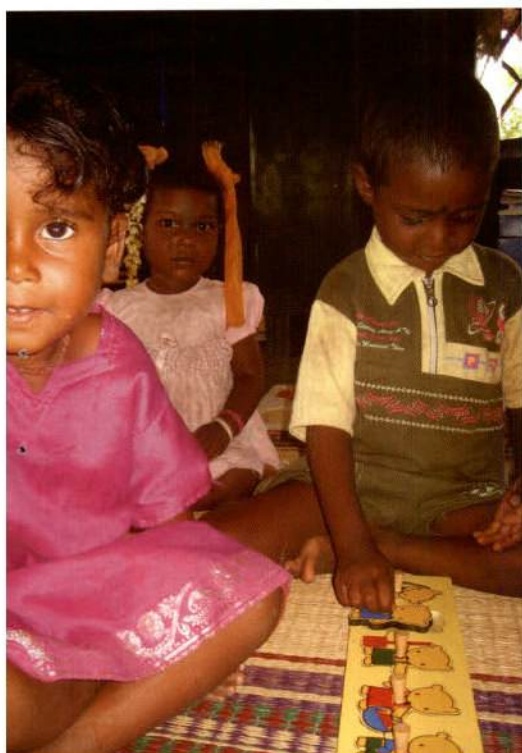
A project to sensitise NGOs and Government officers at the district level on child sexual abuse is in progress. In Kerala, a Government Poverty Eradication Programme, (Kudumbashree), has initiated the formation of a Children's Panchayat (children participate in making decisions at village level) in 15 percent of all panchayats (communities). In Andaman and Nicobar Islands, UNICEF helped establish Child Welfare

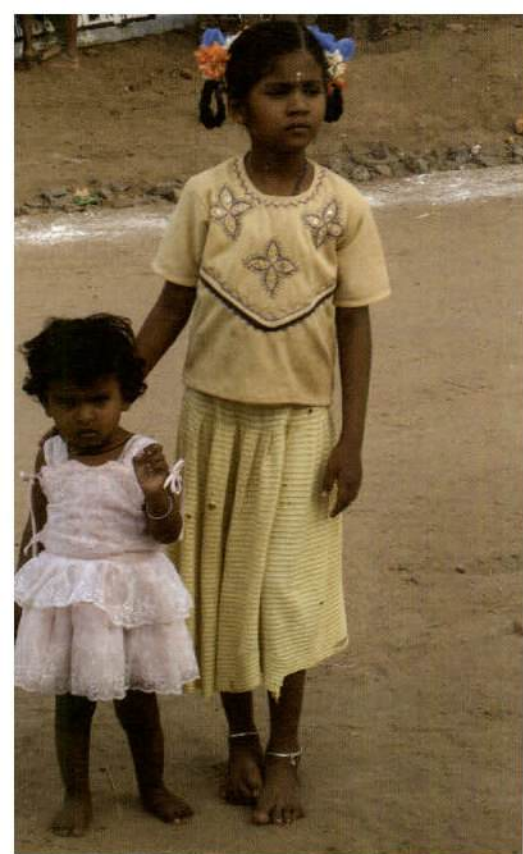
Committees for the first time. These bodies are sanctioned by the government and are legally mandated to ensure that provisions of the Juvenile Justice Act are upheld.

Protection of orphans

NGOs and the Government of Tamil Nadu are working on a database of Tsunami orphans. This should help so that the benefits and compensation provided to orphans are not subject to exploitation from outside. In the Andaman Islands, orphaned children from tribal communities were naturally absorbed into extended family structures whereas non-tribal children were more likely to become institutionalised. In such scenarios, the UN is collaborating with the government to find longer-term community based solutions for these children. To improve living conditions in orphanages, basic furniture like beds, was provided. The UN

Children need to know what their rights are





At village level stronger child protection has been implemented

is also engaged in capacity building of caretakers to ensure better standards of care for children in these institutions.

Birth registration

The UN is supporting the government to enable children and families to replace lost birth registration documents. A birth registration drive is helping ensure that everyone, even those who had not formalized their initial birth registration, are included. Parents of newborn babies receive a welcome kit, which includes important information on health and care of a newborn. These kits have been well received by the administration of the Andaman and Nicobar Islands and the procedure of handing them out to all parents of newborns is now standardized. Through the Directorate of Health awareness is generated on a

large scale. This happens through street plays, distribution of posters, and billboards on birth registration.

Stronger child protection mechanisms on village level

In the three districts of Tamil Nadu most affected by the Tsunami, existing mechanisms of child protection at community level (Juvenile Justice System, Village Level Watch Dog Committees or VLWDC) were strengthened. New mechanisms such as Child Protection Committees at village level were encouraged. This was achieved through orientation and training on child rights and child protection issues as well as trafficking. Approximately 2,000 VLWDC members were trained as part of capacity building programme on child protection. As a result, awareness on child protection issues and sensibility of the stakeholders to identify and respond has increased significantly. 1500 youth associated with Nehru Yuvak Kendra Sansthan (NYKS - Organisation under the Department of Youth Affairs and Sports) and 1100 women Self Help Group members associated with Kudumbashree in Kerala were oriented on Child Protection issues.

Help for adolescents

In the Andaman and Nicobar Islands, programmes to provide adolescents with a protective environment through youth friendly services were initiated. There are also programmes for awareness generation on child rights for adolescents.

Psychosocial care

Timely intervention contributed to reduction in trauma amongst children affected by the Tsunami. In Tamil Nadu, the UN supported the training, on psychosocial care, of 1,300 teachers and 1,300 youth volunteers associated with NYKS. Child friendly techniques such as puppetry, play therapy, children's theatre, clay modelling, painting workshops, cultural programmes and one-on-one counselling, were used to draw out the children from their trauma. Over the last two years, through its partner organisation, the UN supplied 3,659 play kits to youth clubs. Approximately 80,000 children have benefited from this. In Kerala, an estimated 30,000 children have benefited from individual counselling and group counselling. 356 play kits have been utilised as part of those programmes. In the Andaman and Nicobar Islands, 30 doctors and 100 paramedical staff from primary and community health centres were trained in identifying trauma-induced illnesses.

Building children's capacity

Life skills training in areas such as communication, interpersonal skills, negotiation, and personal safety were provided to the children, in order to build their knowledge and capacity on child-rights and child-protection. After-school clubs in Tamil Nadu and Andaman and Nicobar Islands provide a space for creative and recreational activities. In Tamil Nadu, youth volunteers, trained on

issues of psychosocial care and support, are facilitating programmes on life-skills for approximately 10,000 children. In a significant initiative, children from Tsunami-affected villages in Tamil Nadu are currently involved in producing documentaries on social issues. In Kerala, various life skills programmes reached about 5,000 children.

Constraints

Lack of common understanding

Child Protection seems to signify different things to different advocacy and rights groups that came forward to provide assistance and support for the Tsunami-affected children. At times, the absence of a common understanding of the meaning of child protection resulted in mixed responses from stakeholders. It proved difficult to consolidate or coordinate planning and action, particularly during the emergency phase of Tsunami relief. Arguably, these differences have impacted on the ability of stakeholders to advocate and lobby effectively for policy change.

Invisibility of child protection issues

Many child protection issues are sensitive and embedded in a culture of silence. Families and communities prefer to hide or condone them for a number of reasons, even at the cost of contravening the law. Non-cooperation or denial of child abuse or exploitation of children made it difficult for government and

NGO bodies to follow up on reported or suspected cases of child marriage, child trafficking, child labour, child sexual abuse and violence against children.

Absence of child centred health facilities in the Tsunami affected areas

In many of the Tsunami affected areas and temporary shelters, there was no provision of paediatricians or child psychologists to address healthcare issues - both physical and mental - specific to children. The situation was further aggravated by the absence of a special children's ward in primary health centres and many local hospitals in disaster affected areas.

Lessons learnt

Child protection is very effective when there is networking among children

Platforms exclusively for children, such as children's clubs or children's parliaments, allow children to engage with and reflect on issues confronting them and their communities, including child protection. If children's participation is to be made more meaningful, the best way is to help empower them to protect themselves.

The most vulnerable ones need the most protection





New furniture and new teaching methods make learning more child friendly



Agencies involved: UNICEF

Education

“ The focus of the support was to assist the government and the communities to strengthen systems and service delivery for children”

Introduction

The Tsunami destroyed and damaged 360 Primary and Secondary schools in all the affected states. Based on the assessment of damages caused to the educational infrastructure, UN agencies supported the Government in restoring normalcy in children's lives through timely reopening and furnishing of schools. UN-led support in the education sector concentrated on Tamil Nadu and Andaman & Nicobar, which were the parts of India worst affected by the Tsunami. The focus of the support was to assist the government and the communities to strengthen systems and service delivery for children. It was also important to influence policy decisions with a view to transform government commitments into action. UN-supported education supplies and teacher training has reached 453, 749 children in Tsunami-affected districts of Andhra Pradesh, Tamil Nadu, Kerala and across the Andaman & Nicobar Islands.

Key Achievements

Introducing Quality Education Packages

The UN has been a major player in introducing the Quality Education Package (see box pg 49), changing the face of traditional rural schooling by implementing improved learning environment, teacher training and support, teaching-learning materials, and community involvement.

Support for out-of-school children

In Tamil Nadu, 31 bridge course centres (schools for school drop-outs) with well-equipped classrooms and learning materials were provided. This helps 620 out-of-school children to get back into the school system. So far, 40 boys and girls have been sent to regular schools from these. These efforts have, according to government sources, resulted in 90% of out-of-school children in the affected districts of Cuddalore and Nagapattinam attending their bridge courses and of

which about 60% were sent back to regular schools.

Girl power

One of the most successful programmes to empower children as agents of change in Tamil Nadu has been a campaign targeting girls between 6 and 14 years old. The campaign uses a popular cartoon character, called Meena, to inspire girls. Meena teaches them to believe that they can make a difference and take action to improve their communities and their own lives. 150 girls participated in Meena Clubs across Tsunami-affected Tamil Nadu.

Quality Education in the Andaman and Nicobar Islands

Shortly after the Tsunami, UNICEF introduced the Quality Education initiative to the Andaman and Nicobar Islands. The government has decided to expand the initiative from 15 model schools to all 310 schools across the islands so

New furniture in schools to enhance learning





With the move from temporary shelters to new homes access to education is improved

that all children can benefit from inclusive, participatory and child-centred learning. With technical support, including teacher training in mainland India, the Education Department revamped the curriculum of classes 1 and 2. Support in development and supply of appropriate teaching material as well as the translation of the material into five languages was provided. Although enrolment rates are high in the Islands, ensuring retention is crucial. Quality education provides academic support for teachers to deal effectively with activity-based learning.

The initiative tries to involve communities and parents in children's education. Local school committees have been created. They were trained on how to manage schools and on how to access government funds for the benefit of their schools. These funds are available through the national "Education for All"-programme. Island data has been included for the first time into the nation-wide District Information System on Education (DISE). This is vital in providing a true picture of the education system in India and in making planning and funding decisions.

Quality Education: Getting more children in school and improving learning outcomes

The Quality Education Package (QP) provides inputs to formal schools so that they may meet the specifications of quality schools:

- » schools are managed by the community
- » schools have good physical and academic environments
- » schools have trained teachers who demonstrate good teaching learning practices
- » teachers receive on-site support from resource persons

QP schools recognise the need for students' to actively participate in their learning (as opposed to learning by rote) and for teachers to use innovative teaching-learning materials (TLMs) that encourage independent and group learning, which is essential in addressing the reality of multi-grade classrooms and high student-teacher ratios. The QP also improves children's learning environment by providing essential furniture, and supplies.

The Quality Education Package has a special focus on girls, and takes into account factors that keep girls from going to school. Interventions such as ensuring separate toilets for girls, implemented through the Water and Environmental Sanitation programme, are encouraging more girls to go to school.

Quality Education is also about encouraging communities to become involved in the education of children, taking part in the management and running of the schools and encouraging all children, especially girls, to complete their primary school years.



Education provides access to new worlds

Constraints

Lack of clear communication

In Tamil Nadu in particular, laudable government initiatives such as tuition exemptions and exemptions from other admission and uniform fees as well as fee reimbursement, did not reach all districts evenly.

Vagueness in identification of the right targets

Lack of existing data on child population at the district level resulted in a lack of appropriate means for the government to identify affected children. As a result, the process of relief and rehabilitation for some of those in need were delayed. There was also considerable disparity between numbers affected and numbers of those who applied for various benefits and scholarships.

Imbalance in delivery of benefits

Inadequate coordination between the government and various NGOs resulted in, at times, excessive supply in some areas and considerable shortfall in others.

Increase in non-enrolment and dropouts

Enrolment drives in the five worst affected districts revealed that almost one third of children from Dalit (lowest caste) families were not enrolled in schools. Furthermore, a number of young boys in fisher communities had dropped out, partly due to an increased number of motorised boats that were replacing traditional catamarans. Hence, more help was needed in handling them.

Girls have been in greater demand for selling fish and caring for younger siblings and the elderly at home, more so in families which have lost an adult female. Despite the increased number of bridge schools targeting such children, lack of vocational education is a constraint in addressing these adolescent boys and girls.

Non-functioning schools in temporary shelters and long distances between shelters and original schools

For children who are yet to be relocated in their permanent homes with suitable schools, it is often a long way to attend regular schools. Some NGOs have been running transportation services, but beginning to question how long they can continue. Despite the bridge schools near shelters, children who have been used to regular schools prefer to attend them. Further, planned permanent shelters do not have a provision for schools.

Lessons Learnt

Coordinated services by stakeholders

Uncoordinated relief and rehabilitation is a disaster in itself. Relief work must be needs-based and not supply-driven. Information sharing of needs and benefits in a transparent manner helps to avoid duplication of services that lead to excessive benefits to some, while others suffer.

Participatory monitoring

Frequent and regular participatory monitoring ensures the best results. Maintaining an assets audit for furniture received, for example, and conduct of social audits involving women and children by certain NGOs are positive developments in some schools and communities. The conduct of child parliaments and similar activities has provided platforms for the children, at whose well-being, the relief measures are aimed at. Such participatory monitoring of communities is a step towards strengthening their capacities and enabling them to become self-sufficient in a sustainable manner.



Agencies involved: ADB, WB, FAO, ILO, UNDP

Livelihood

“ The swiftness of assistance brought survivors back on the road of economic recovery fast”

Introduction

The fisheries sector has by and large been the highest beneficiary of livelihood assistance in the post-Tsunami scenario due to the expanse of the disaster's impact in the coastal regions. The swiftness of the assistance brought survivors back on the road towards economic recovery much faster in comparison to many of their counterparts in other Tsunami affected countries. However, the lack of discriminative distribution, as well as uncoordinated reach of assistance and multiplication effect of these resources, has left many concerns to be addressed immediately. The initial thrust of assistance in the fisheries sector was by and large done by various NGOs, INGOs, civil society organisations as well as bilateral donors through their local partners and the state government. However, for long term sustainability of the all the affected populace, more concrete interventions were required, which demanded proper planning and consultation with the affected communities and the state administration.

The main objective of the livelihood programme is to support the efforts of the governments of Tamil Nadu and Kerala, the NGOs, the civil society organisations, the private sector, SHGs, individuals, as well as workers organisations. Hence economic growth, poverty alleviation, rehabilitation and reconstruction of damaged livelihood support infrastructure can be accelerated.

The ADB assistance is directed towards the restoration of livelihoods of the poor and low-income households, recognised by Tamil Nadu and Kerala as directly or indirectly affected. This happens through capacity building, micro-enterprise training and reconstruction of Tsunami-affected community-based infrastructure. Commitments for US\$ 46.3 million to Tamil Nadu and US\$ 4.63 million to Kerala have been planned and cleared by ADB and implementation of these projects have commenced.

Under the Emergency Tsunami Reconstruction Project (ETRP), financed by the WB, US\$ 48.5 million have been allocated towards the restoration of livelihoods in the Tsunami affected areas of Tamil Nadu as well as the Union Territory of Pondicherry. Assistance is being provided to fisheries in the form of infrastructure-related work, to agriculture, horticulture, and animal husbandry. Assistance in fisheries and agriculture sector is provided in both Tamil Nadu and Pondicherry, while assistance in horticulture and animal husbandry is provided in Tamil Nadu only. The UN-programme on fisheries-livelihoods focuses on developing pilot projects, conducting relevant studies, workshops and on support of sustainable livelihoods. As part of the post-Tsunami livelihood initiatives, the UN has been implementing training and skills development programmes. These programmes aim at increasing the employability of the affected people and at the expansion of alternative employment opportunities. There is a quick impact approach, which is carried out in partnership with trade unions and employers' organisations. In parallel, the long-term approach enables the stakeholders to understand the needs of the affected people.

The main focus of livelihood programmes is support for economic growth





Sewing bags as an alternative income for fisherwomen

The UN has also finalised a “Community-based support rehabilitation of livelihoods of Tsunami survivors to enhance capacities and safety of fisher communities” Project, funded by European Commission for Humanitarian Aid (ECHO). This project has been implemented in association with South Indian Federation of Fishermen Societies (SIFFS).

Key Achievements

Non-fisheries livelihood

With the participation of all stakeholders an action plan was developed. As part of this, institutional structures, such as a Project Advisory Committee consisting of district stakeholders for non-fisheries livelihoods interventions, were established. The major components of livelihood restoration such as alternative livelihood, community development, micro finance, women’s empowerment, health, nutrition, education, health and insurance, have been addressed in a holistic manner. Self Help Groups with the support of NGOs and the panchayats (communities) were used to facilitate interventions.

Financial assistance

Funds from the ADB are used to facilitate access to subsidies and financial assistance for economic activities. This includes special assistance for the disabled, families headed by women, the deserted and widows. The decision to allow access to these funds has opened up many avenues piloting new interventions. The government’s decision to give additional subsidy to the groups’ revolving fund, which is used for internal lending activities within the members of the group, has

facilitated increase in thrift lending activities within the SHG members. Out of Tsunami Emergency Assistance Project (TEAP), a total of about \$15 million have already been disbursed to about 26,000 SHGs, covering about 390,000 families. This has helped the families in meeting their immediate need and reducing the high interest borrowings from the local money lenders. Similarly, the UN has also helped identifying marginalised social groups and individuals and has provided appropriate assistance.

Safety for fishermen

In the two worst affected districts of TN, five workshops, where boat engines can be repaired, were established by the UN and its partner SIFFS. Fishermen and youth from the community were taught to repair boat engines and received training in sea safety. Through this, fishermen achieve greater reliability and more safety. Repair and maintenance of engines also leads to lower fuel and hence lower operational costs. The programme on sea safety included sea safety workshops and street plays on village level. At the state level, a workshop generated widespread awareness in a field long overlooked or disregarded. The programme reached 13,500 persons. The government has

now decided to adopt a policy to regulate safety aspects of the fisheries sector.

Gender equity

In the development and implementation of various interventions, gender equality and women’s empowerment was a priority. Many of the activities have a women specific focus. They include efforts to increase access to credit and economic activities.

Towards sustainable fisheries livelihoods

To organise and establish an appropriate Marine Fisheries management system, the multilateral organisations carried out a study, “Tsunami Rehabilitation: Assessment of Policy support for sustainable pro-poor fisheries in Tamil Nadu, India”. It provides an overview of the Marine Fisheries sector in Tamil Nadu, with respect to the current and future ‘post-Tsunami’ interventions. The recommendations are formulated into a proposal, “Fisheries management for sustainable livelihoods”, proposed to be implemented by the Department of Fisheries in Tamil Nadu and Pondicherry.

The suggested policy framework and a plan of action, call for all stakeholders to participate and share responsibilities



Destroyed and damaged boats were replaced very fast

in formulating a viable policy and sustainably managing the fisheries and related livelihoods. It includes a capacity building programme for the Department of Fisheries.

The UN, in collaboration with the South Indian Federation of Fishermen Societies (SIFFS) is supporting a pilot project on development of fisheries co-management in selected areas in Tamil Nadu and Kerala. More programmes and studies on enhancing existing fishery livelihoods and diversifying livelihoods are in the pipeline.

Networking

To supplement and compliment interventions and achieve the objectives set, a network with the Government, NGOs, INGOs, Research Institutions, Fisheries College, and Confederation of Indian Industries was established.

Desalination of land

After the Tsunami, vast stretches of land were ruined by seawater and not suitable for agriculture anymore. However, the government, NGOs, civil society organisations, SHGs and farmers initiated various desalination processes and removal of sand silt. This helped in restoration of most of the cultivatable lands. For this purpose extensive funds came from the WB.

Constraints

Oversupply of boats

Oversupply of FRP (Fibre Reinforced Plastics) boats by different agencies is a cause of concern. Not only has it an

effect on the already reduced fisheries resource but it could also lead to a lack of sufficient workforce. Recycling or sale of boats to other states is not an exception. Further, the expediency for supply of assets has had its adverse impact on the quality and appropriateness of the boats and all products related to the fisheries sector like nets, vessels, or engines, which were distributed.

Duplication of assistance

Poor coordination between the government, donors, INGOs, NGOs and civil society organisations led to dilution of assistance. There were cases where beneficiaries obtained the same assistance from more than one source. Similarly, excess formation of SHGs also led to duplication of beneficiaries in many cases.

Slow project delivery

Difficulty and delay in the identification of local partners with sufficient capacity to plan and implement livelihoods rehabilitation and development projects, particularly among marginalised communities, has led to slow project delivery.

Lack of support

Some Self Help Groups promoted and formed by workers organisations and supported by the UN, and others, are neither duly recognised nor entertained by the banking community. Hence, they have been denied access to credit.

Lessons learnt

Knowledge of the local system

Lack of coordination and exchange of information and competitive distribution of assistance to the affected will always lead to duplication of activities. This makes the affected people dependent on aid instead of reviving life through economic activity. Development of sustainable livelihood interventions in post disaster scenario requires a good understanding of pre-disaster livelihoods systems and should use local knowledge. Interventions on livelihood diversification need to be socioeconomically and ecologically viable and should involve the community in decision-making.

Holistic approach

Stand-alone livelihood interventions without any linkages are not sustainable. Many agencies and organisations are still not open to a holistic approach. Quality assurance and market linkages are constraints associated with value addition to products produced by these vulnerable communities and are some of the shortfalls in the sustainability of interventions in organising this sector.

Sea Safety as a long term project

The sea safety project is a project made for replication. Not only as part of disaster preparedness but also to enhance income and to advance the cause of the underprivileged people of the community. However, the sustainability and scaling up of such a project is dependent on the interest and capacity of the local players and state government.



Agencies involved: UNDP, WB

Environment

“ Initially very little was done to understand the impact of the Tsunami on the environment”

Introduction



The December 2004 earthquake and Tsunami that swept across the Indian Ocean region had unprecedented consequences for fragile natural ecosystems along the coasts and islands of the region. While state governments, along with national and international agencies, focused their initial response on rebuilding shelters for communities living along the coast and restoring their livelihoods, very little was done to understand the impact of this event on natural marine and near shore ecosystems and their services.

The environmental impacts of this tragedy are now being addressed. It is becoming increasingly clear that plans to address the long term interests of coastal communities and coastal environments (Integrated Coastal Zone Management Plans) should be based on a participatory approach with strong research and scientific components. There is also a greater realisation that baseline data on ecological and socioeconomic status of the coastline and special datasets on resources, hazards, and infrastructure are needed for a good coastal management plan as well as a comprehensive disaster management plan.

The World Bank has been supporting the Governments of Tamil Nadu and Pondicherry, while the UN has been working with local CBOs and the government departments (Tamil Nadu, Andhra Pradesh, Kerala and the Union Territory of Pondicherry), on a number of initiatives that are directed to the long-term sustainability of the coastal environment.

The emphasis of the programme undertaken by UN 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 was 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 Coastal Regulation Zone (CRZ) notification (1991), as housing interventions were immediately needed after the Tsunami. Therefore, the programme aims to understand coastal vulnerability and resilience in the face of extreme natural events within the Indian context, establish participatory ecological and community monitoring systems, critically analyse developmental policy with respect to the coast and develop management models for key sites along the coast.

Mangroves are a natural protection against certain hazards

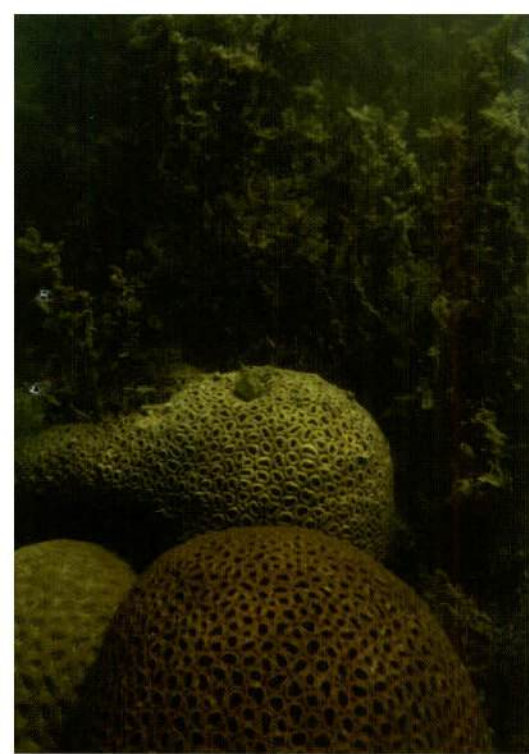


Key Achievements

Establishing legal framework

UN has been assisting the Government of India's Ministry of Environment and Forests and the Government of Tamil Nadu in establishing a strong legal framework

for coastal policies and integrated coastal zone management by fostering greater participation of civil societies and local communities.



Impact on different ecosystems such as coral reefs are studied now

Study

A detailed study, commissioned by the UN in collaboration with Ashoka Trust for Research in Ecology and the Environment (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. The Government of Tamil Nadu has accepted this study and the housing interventions initiated by the government and civil society organisations are drawing heavily from it. Over 500 copies of this study have been circulated enabling the civil society organisations to understand the position of law on housing and other infra structural developments along the coast.

GIS-based maps

Preparation of broad-scale GIS (Geographic Information System; a collection of computer hard- and software as well as geographic data which enables creation of explicit maps to understand how the different areas have been impacted by the Tsunami) based maps of critical coastal ecosystems and land use, are nearing completion. Presently, six terrestrial ecosystems (such as mangroves,

forests along rivers, coastal dunes and mixed scrub), four categories of human land-use (salt pans and aquaculture farms, open agriculture, orchards, groves and casuarina plantations -casuarina is a genus of shrubs and trees) and two categories of near shore ecosystems (sea grass and coral reef) have been identified.

Web portal

In order to facilitate access and sharing of information on the scientific and socioeconomic databases that have been collated by the UN-partners on all aspects of coastal environmental issues and impacts of Tsunami, the programme has also rolled out a web portal (<http://www.ptei-india.org>).

Awareness programmes

To create awareness among panchayat (community) leaders, officials of Government department and local bodies about various issues relating to CRZ, 13 workshops in 13 districts were conducted by DoE to sensitise all stakeholders. As part of these workshops, a stakeholder survey on coastal environmental issues along the Tamil Nadu coastal districts was initiated by DoE and UN in collaboration with TNTRC. This survey has been helpful in identifying the key coastal environmental issues as perceived by the civil society and

identified those organisations that could play an active role in the development of integrated CZMPs (Costal Zone Management Plans).

Constraints

Lack of basic data

Studies to address the various coastal environmental issues have been severely constrained, as there is very limited baseline information on the status of ecosystems and their pre-Tsunami services. The same goes for the status of human communities that are dependent on these ecosystems for their livelihoods.

Limited capacity

There is also a limited awareness and capacity among the stakeholders to understand various coastal environments and to undertake environmental initiatives for a more holistic and integrated coastal area planning as well as to incorporate environmental sustainability concerns in various livelihoods activities.

Lessons learnt

Further studies on the impact on ecosystems needed

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 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. However, as baseline information on these critical ecosystems are not available, there is an urgent need to address this before one attempts to address the impacts of the Tsunami on these systems. These studies will help the government agencies to undertake recovery measures within an agreed framework (standards and guidelines) rather than undertake restoration interventions on an ad hoc basis.

Participatory handling of CRZ

The Tsunami and the resulting devastation have placed coastal laws and their implementation under very close scrutiny. The CRZ Notification is getting increased attention and coastal communities and others are attempting to understand it better. In spite of some

efforts on increasing awareness of CRZ issues, there continues to be limited awareness of the CRZ and its implications among all stakeholders: including the general public, the private sector and in many cases, even the government departments. There is a clear need to closely involve the coastal communities and other stakeholders in evaluating and revising coastal policies and also laws to ensure their relevance and effective implementation.

Therefore, partnerships will have to be established between professionals, international and national organisations, governmental agencies and community groups for natural resource monitoring, learning and information sharing to enable capacity development of all major stakeholders.

Sanitation facilities need to be improved

The sanitation facilities that were provided in the initial set of shelters now seem inadequate and inappropriate, as

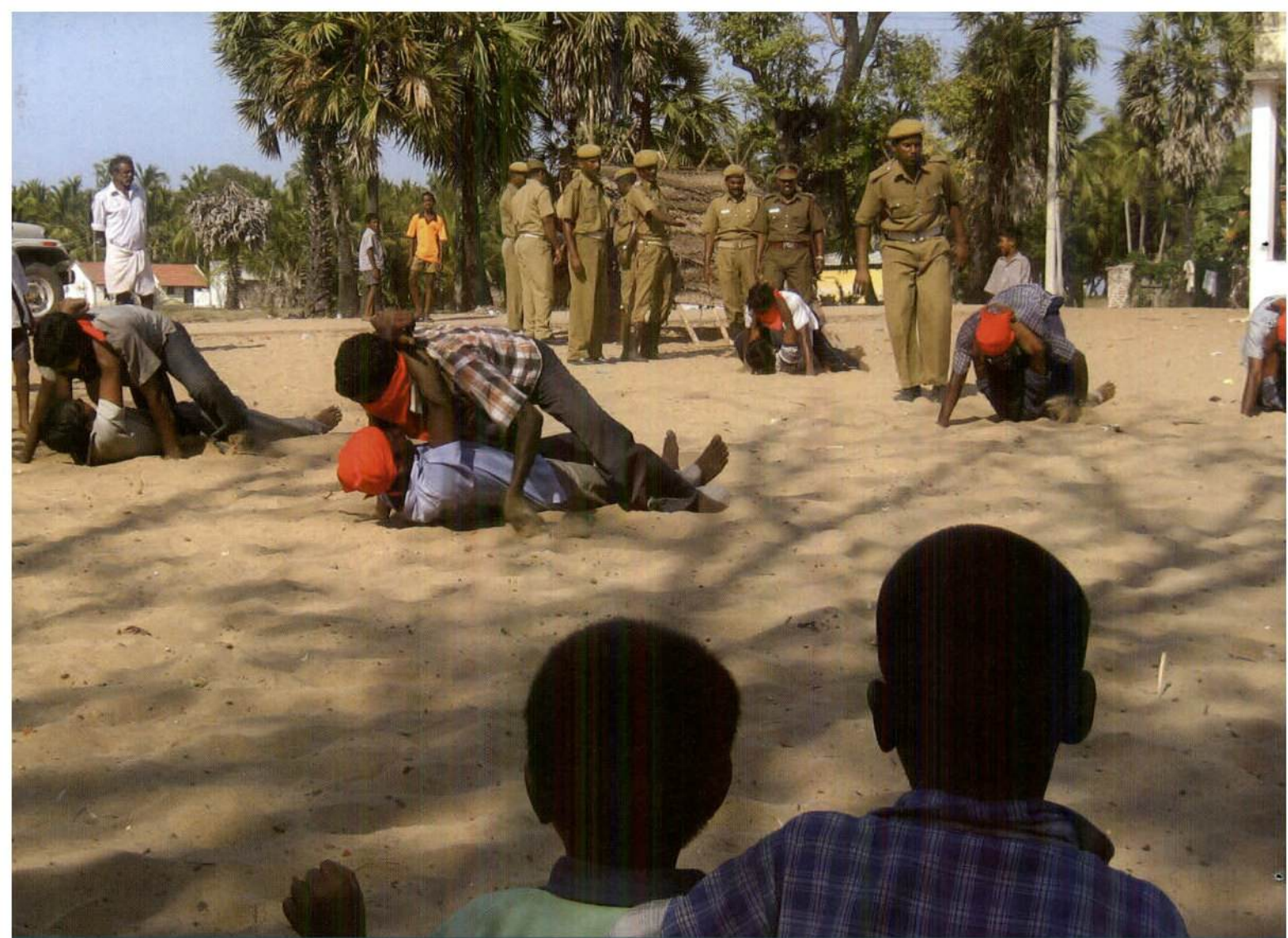
they have polluted the coastal areas and fresh water resources along the coast. Soak pits in coastal habitations (both temporary and permanent habitations) are causing pollution of ground water sources. Therefore, alternative technological solutions need to be identified. Local communities have to be made aware of sanitation issues and have to be taught to use the facilities provided. Sanitation should be located away from the sand dunes. Awareness on water quality and environmental health, including secondary contamination is required, as several unhygienic practices exist.

A healthy environment can provide healthy livelihood





Training at community level: A plan of the months where there is a greater danger of hazards is drawn in the sand



Agencies involved: UNDP UNICEF, UNESCO

Disaster Risk Management

“ Disaster risk management is an integral part of any reconstruction process”

Introduction

W

With an overall goal to ensure sustainable disaster risk reduction in some of the most vulnerable regions, the disaster risk management programme of the UNTRS is being implemented in the four coastal states of Tamil Nadu, Pondicherry, Kerala and Andhra Pradesh. This programme stresses the need for a paradigm shift in addressing disaster management where disaster management and response is not a one-time activity, but an integral part of any reconstruction process. To address this shift, the programme adopts the following strategies:

- » Integrating risk management into rehabilitation and reconstruction efforts
- » Where possible, build on ongoing state level initiatives and link up with national and regional efforts
- » Aim towards mainstreaming disaster risk management in recovery efforts through appropriate institutional, legal, and financial mechanisms in each state

The Ministry of Home Affairs (MHA), the nodal agency in the Government of India for coordinating disaster management activities, prepared the 'National Disaster Management Framework', outlining the priority geographical areas for disaster risk management interventions. This framework reflects a distinct change in focus from relief-oriented approach to a balanced preventative approach incorporating prevention, preparedness and mitigation.

The UN system has been supporting the Government of India and the State Governments in developing capacities for various aspects of disaster risk management. In 2002, the Government of India - UNDP Disaster Risk Management (DRM) programme was formulated and is currently being implemented in 169 multi-hazard prone districts of the country. Since 2003, as a part of this programme, the Government of Tamil Nadu with assistance from the UN has been implementing the programme in six multi-hazard prone districts of Tamil Nadu.

The need for disaster risk reduction and disaster management received an added impetus after the Tsunami. In order to strengthen the community capacities in disaster risk reduction, the disaster management programme will be extended to cover all the coastal districts of Tamil Nadu. In the states of Andhra Pradesh, Pondicherry and Kerala, the UN will work with the state governments to strengthen capacities for undertaking risk reduction activities.

As a guiding principle for early and long-term recovery, the UN incorporated "Reducing Disaster Risk" as a core crosscutting approach to the UN Recovery Framework. At present, the UNDP is working actively with the Government of Tamil Nadu. It is expected that from 2007 onwards, UN will engage and assist the government of the other three states to take up similar risk reduction activities.

Street plays create awareness on disaster risk management



Knowing how to save people can reduce the number of casualties in a disaster



Key Achievements

Initiation of a systematic and sustainable DRM programme

In Tamil Nadu, the disaster management programme that has been implemented since 2003, is aimed at community level disaster preparedness and management and is implemented with strong government participation and in a systematic manner through the GOI-UNDP DRM programme. It is a useful system to take forward the disaster preparedness and risk management paradigm in a sustainable manner. The systematic approach of this programme addresses disaster management initiatives first at the village level and gradually builds up to the disaster preparedness for the district and ultimately for the entire state.

Vulnerability Mapping and Coastal Management Planning

The World Bank team has worked with the Government on a variety of disaster risk reduction initiatives such as the development of integrated coastal management plans and coastal vulnerability maps. The team has also supported awareness campaigns on coastal regulatory zone issues

and provided significant input in the formulation of the demarcation of the high-tide line.

NGO participation

After the Tsunami, there has been substantial and positive NGO participation in disaster management programmes. There are several examples of successful attempts to integrate localised and scattered NGO preparedness efforts with the government programme. Various NGOs are incorporating risk reduction components into their programme activities. There is considerable commitment at the highest levels in the State Administration to implement disaster preparedness and management programmes, in both government and civil society organisations. Initiatives have been taken to integrate preparedness and risk reduction across different sectors such as livelihood, shelter, and environment.

Risk reduction efforts

The need to integrate risk reduction as a component of the reconstruction process was addressed by the government and the NGOs in the course of the rehabilitation activities. These have been

in the form of construction or repair of cyclone shelters, sea bunds, cyclone, and flood-proof housing construction.

Early Warning systems strengthened

The Government of Tamil Nadu, with assistance from the UN, is implementing a pilot project on strengthening early warning system capacities of the government and the communities. The project is being pilot tested in Cuddalore district with strengthening of communication systems in 55 most vulnerable villages. Along with this, about 1500 people are being trained in these villages in appropriate responses to early warning messages. An early warning training manual has been developed in English and in Tamil and is being used in community training programmes to create awareness on early warning systems. After drawing on the lessons of this initiative, the project will be scaled up to cover select coastal areas of the four Tsunami affected states. A study on "Mapping of Early warning systems in Tamil Nadu" has been undertaken and documented. The document intends to help the Government, technical institutes

and NGOs in designing need based disaster management programmes in Tamil Nadu.

Disaster database creation

The UN is working with the Government of Tamil Nadu to develop a disaster database for the state. Information on historical disasters and the damages caused, are being collated and analysed for informed decision-making. Information on resources available are also collated in each district and updated regularly to come as a ready reference in the event of a disaster.

Community awareness

Extensive awareness about the need for preparedness programmes was put into effect by various institutions, especially in Tsunami affected areas where there has been good response from the communities at large, towards disaster preparedness initiatives. This awareness is due to the disaster management programmes of several organisations, their constant interaction with local communities and the role of the media in spreading awareness and highlighting the need for preparedness.

Framing of guidelines

Guidelines for mitigation and preparedness were drafted and finalised based on discussions with various stakeholders. Guidelines on

disaster specific dos and don'ts and safe construction practices have been developed and widely disseminated.

Constraints

Lack of intra and inter institutional convergence and coordination

At the implementation levels, especially in the blocks and the villages, there is a lack of coordination and convergence. One reason was the shortage of quality information about resource bases. There was no systematic attempt to tap into existing social resources like priests, SHGs, CBOs, business and trader associations. At the village and block levels there is a lack of convergence between government organisations, between NGOs and between the government and NGOs.

Programmes not entirely demand and community driven

There was mismatch between expectations of the community, levels of awareness and programme delivery strategies. This was evident in the form of context driven dependency and an inadequate participation of all available institutions. With the need for relief and rehabilitation being paramount, there is a visible mismatch between the adopted strategies of programmes and community needs, especially in the DRM project.

Lessons learnt

Need for a flexible, coordinated system

Since the state government is the main player who is currently addressing the needs of disaster preparedness and management, there is a need to build in flexibility that encourages participation of various actors who add value to the programme. This flexibility should attempt to tap the strengths and interest areas of the different players in disaster management. In areas, especially at the village and the block levels, where the inter agency coordination has been effective, a greater participation of the communities has taken place. This led to more efficient implementation of the programme.

Quality and availability of human resources

Ensuring availability of trained and qualified human resources and maintaining a database of such resources is critical to the success of the preparedness and risk management efforts.

Commitment at the top level

Interest of high level officials - both in government and among NGOs - and their understanding of and conviction about the relevance of preparedness is the key to the success of the programme. Equally critical is the involvement and participation of local bodies.



Agencies involved: UNDP, WB

Information, Communication Technology, Coordination

“ Coordination meetings, conducted regularly at resource centres help to identify gaps”

Introduction

Policy-support and coordination is a focus area in the UN recovery framework. It is a building mechanism for improved coordination and information-sharing among stakeholders at various levels in Tamil Nadu state in all processes of Tsunami relief, rehabilitation and recovery.

The creation of a state-level coordination and resource centre, along with a network of district level centres, was key in enhancing partnerships between government and civil society organisations in aid coordination. This network of resource centres is complemented by a web-based Information and Communication Technology (ICT) solution that captures damages, needs and resources available at all levels in recovery efforts. Another objective is to set up village ICT kiosks and Village Information Centres (VICs) and upgrade existing VICs, by generating suitable content that can respond to the recovery needs of the communities. These ICT kiosks would be linked to the district recovery resource centres to effect exchange of information. A community radio project has been initiated. The radio will be integrated with the ICT kiosks in the form of an internet radio station.

Key Achievements

State and district resource centres

The coordination and resource centres, established at state and district levels provide a neutral platform for discussions, debates, learning and capacity building and also create a network of government, NGOs, communities, donors and research institutions. At the State level, the Tamil Nadu Tsunami Resource Centre (www.tntrc.org) is a joint initiative of the UN, INGOs (Oxfam, Save the Children, Caritas, Christian Aid, Catholic Relief Services, World Vision, Plan International) and the Government. Of the district level resource centres, the NGO Coordination and Resource Centre (NCRC) Nagapattinam (www.ncrc.in) was the first to evolve; followed by Kanyakumari and Villupuram. Other district resource centres have now been established in Cuddalore, Kanchipuram, Tirunelveli and Tuticorin.

TNTRC has been instrumental in networking with organisations on the local, state and national level. This allows a two-way flow of information, knowledge networking and coordination. Throughout the district resource centres network, grassroots issues are recognised and addressed through different strategies based on need. Local best practices are shared across the different districts and states to make a difference to the lives of the people affected by the Tsunami. The newsletters as well as the websites of the resource centres (www.tntrc.org, www.ncrc.in, www.krrc.in) are important means to disseminate information.

The coordination meetings, conducted regularly at the resource centres, helps to identify the gaps, reallocate resources and formulate need based strategies in support of Government efforts. Core

Resource centre in Nagapattinam: Essential to coordination





Community radio gives a voice to the people

groups have been formed to strengthen and consolidate strategies among all partners. The resource centres, in addition, conduct independent studies to gather information on the ground situation of the recovery process. They have also brought to the spotlight, issues of vulnerable and socially marginalised groups.

Web-based tracking system

With the overall aim of enhancing the coordination at local level and strengthening local governance, the Tamil Nadu Disaster Management System (TNDMS), a web-based beneficiary tracking system, has been developed by the UN in partnership with Price Waterhouse Coopers and for the government of Tamil Nadu. The features of the online system are:

- » A Comprehensive database of damages, losses, persons, disaster resources, NGOs, CSOs, government policies, and relief and recovery projects
- » Ability to track holistically, the benefits & damages suffered by individuals in the Tsunami affected area
- » Ability to monitor progress of relief & recovery projects both at aggregate and individual levels

- » Grievance facility for beneficiaries and public access to reports

The TNDMS helps in recovery efforts by different stakeholders by avoiding duplication in beneficiary identification and these results in effective allocation of resources. Moreover, it offers various services to enhance the accountability and transparency of the recovery process. For example, an online grievance-petition facility allows beneficiaries to submit petitions online. The website (www.tndms.gov.in) has been designed both in English and Tamil and has been deployed in all 13 Tsunami affected districts in Tamil Nadu. It is linked with all the coordination centres and the VICs to ensure effective coordination and information flow amongst different stakeholders

Community Radio

In partnership with DHAN Foundation and the NGO VOICES a community radio has been established in the district of Nagapattinam. A separate studio has been set up and audio programming is currently carried out. A few slots in the All India Radio programmes will be taken and the programmes are to be broadcast live before the end of the year. The radio will be effectively integrated with the ICT component mentioned below, thereby increasing its reach to the entire coast.

Information and Communication Technology (ICT)

ICT has become an important component of the recovery process to effectively network communities and develop capacities of the most

isolated or excluded people. In order to complement the ongoing efforts of various organisations in this field, the UN has initiated the development of a web site in Tamil that can act as a centralised portal accessible at community level. The content will focus on livelihoods, HIV/AIDS, disaster preparedness, housing construction technology, environmental sustainability. VIC operators will be trained in audio, video and text-based content development, thus ensuring the local relevance of the content and sustainability of the initiative.

Constraints

Acceptance of Information Technology

Although more than 250 VICs have been established along the coast, their usage is relatively low; many of them are located in low-income and low-literacy areas. Therefore, the acceptance of web-based learning mechanisms will take time. Another major difficulty is the absence of suitable content available in local languages.

Lack of willingness to adapt to new systems

The TNDMS has been built as an improvement on an existing platform that was created to cater to immediate aid information and coordination needs. Since a bulk of the data remains in the old system and the concerned operators have become well entrenched in the system, their willingness to adapt to the new system is a challenge. This also involves a significant shift of data from the old system to the new, which is a challenging task.

Lessons learnt

Community involvement crucial

Decentralised and autonomous processes of multi stakeholder consultation and dissemination of information constitute the core of coordination tasks. The most important stakeholder in information and coordination should be the community. The inherent social support and coping mechanisms of the community should

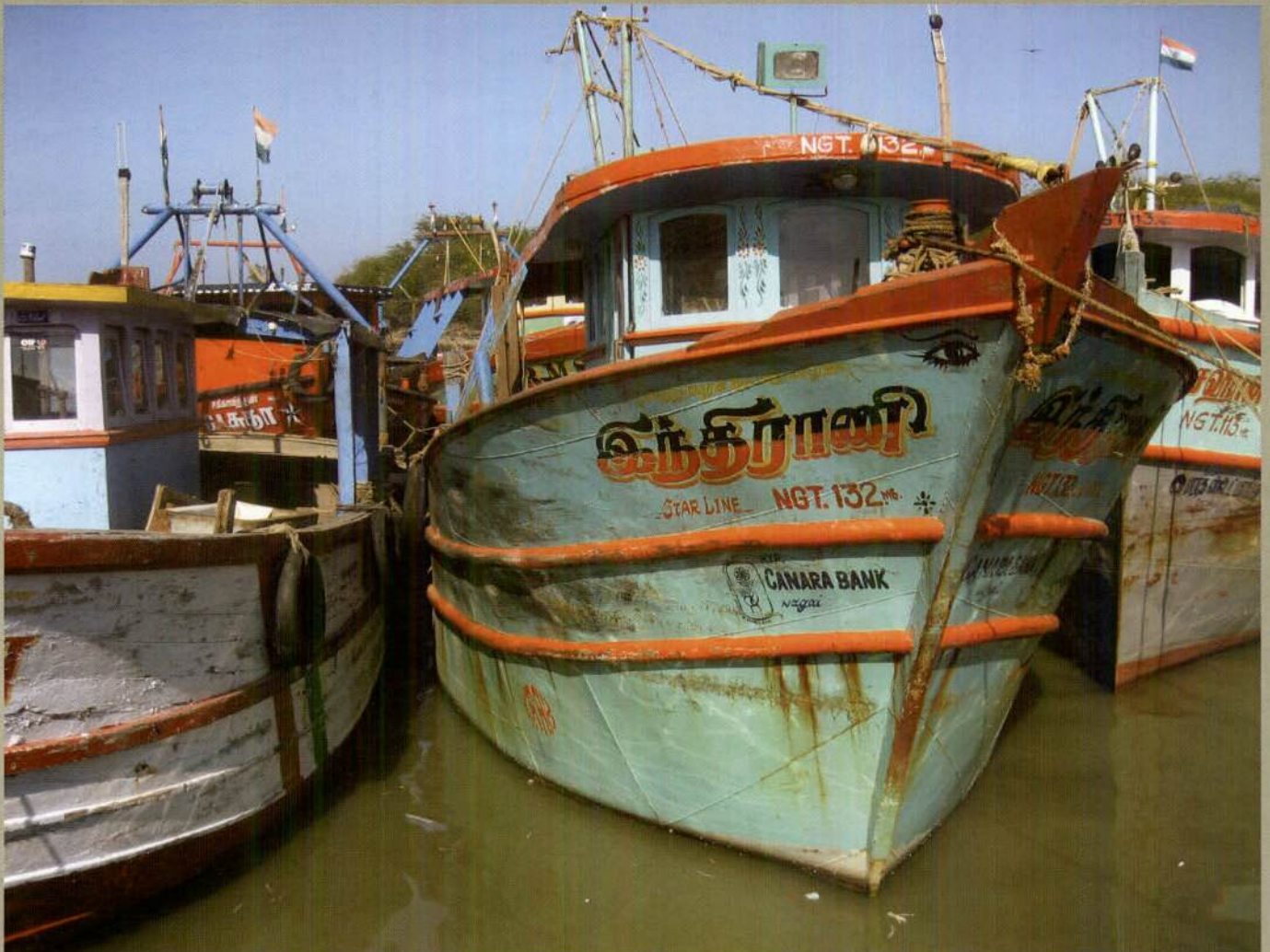
be tapped. Programmes, which did not factor the community in could not be sustained. For successful coordination at the village level, it is imperative to promote village human resources and community-based organisations to build village level databases and capacities. These decentralised as well as multi stakeholder (including government, civil society organisations and community) systems will ensure transparency and accountability in reconstruction efforts.

Modern technologies should be integrated

New initiatives from central and state governments to establish warning systems and emergency communication networks should be integrated with the modern technologies and private sector investments such as cell phone networks and cable television should ensure warning and information dissemination mechanisms with multiple redundancies.

Inauguration of the latest addition: The Cuddalore Resource Centre





Life in most Tsunami-affected coastal villages has returned to normal. Much has been achieved in Tsunami recovery, but there is still a lot to do

The Way Forward

“ While the achievements have been significant, the work is far from completed”

Much has been achieved during the past two years of Tsunami Recovery, with important contributions made by the United Nations, the World Bank and the Asian Development Bank. The role of multilateral organisations was not limited to financing but also included building partnerships between the Government and civil society organisations, promoting aid coordination and transparency, advocating for equity issues and other core principles such as participation and sustainability. Last but not least, the multilateral organisations supported the development of policies that will guide the recovery efforts.

While the achievements have been significant, the work is far from completed. The stock taking exercise in September 2006 has identified a series of important recommendations in each of the twelve sectors, which have implications for policy development as well as for the programmes and work

plans of each organisation involved in Tsunami Recovery throughout India. The last chapter of this report - “Tsunami: India, Two Years After” highlights some of the keys recommendations taken from the stock taking exercise, as far as they are relevant for the next phase of Tsunami Recovery in India.

With almost a third of the housing reconstruction completed, it was recommended that, in the next phase of Tsunami Recovery, housing reconstruction and water and sanitation efforts should incorporate a more holistic approach that goes beyond mere construction. It should include an integrated approach to habitat development and living environments that is socially and culturally acceptable. There is also a need to strengthen district level quality audit systems of the construction programmes to ensure adherence to government construction guidelines and policies.

While the reconstruction process progresses, the majority of the affected people still live in temporary shelters. It is essential that we continue to support not only temporary housing but also the basic social services of education, environmental sanitation, maternal and child health. Psychosocial care will remain important until people have actually settled in their new homes; as issues of transition and relocation may bring back trauma and create new issues of community building.

Infrastructural work on public buildings, roads and bridges has not yet been completed. There is a need to streamline land acquisition and

procurement procedures. The enforcement of existing coastal regulations needs to be ensured, so that damages in future disasters will be minimised. Construction efforts need to take into account disaster safety features and the use of affordable, appropriate technology.

To build back better and increase access, as well as quality of care, health and nutrition services for mothers, children, and adolescents need to be strengthened. Conventional community based health care services and programmes, such as Integrated Child Development Services (ICDS) are required as much as mobile health units and telemedicine. This then ensures a wider outreach of basic health care services. At the same time, the capacity building of Community Level Psychosocial workers has to continue, to sustain efforts in providing comprehensive psychosocial care to those affected, involving professional groups such as teachers. This is especially important since there are issues related to mental health such as increased alcohol consumption since the Tsunami.

The expansion of the HIV/AIDS prevention programmes is essential, so that awareness of the disease, among community members and high risk groups, can be increased. High risk groups and networks of people living with HIV/Aids should be involved in the planning and implementation of such programmes. Correspondingly, awareness on sensitive issues like trafficking and child protection requires a heightened level of visibility. While Village Watchdog Committees

are at the front line, they still need to be better linked to district and other formal welfare and protection organisations.

Much has been done to support the reconstruction and the furnishing of schools and efforts in getting children who dropped out back to school were successful. Yet, in the future a lot remains to be done, so that no child is left out from the rehabilitation process and from education.

Coordination and knowledge sharing between the multiple actors, from the government and NGOs to the civil society, is crucial in a disaster. In Tsunami recovery in India, such coordination mechanisms, established at district and state levels, is a success story. The importance of this has been recognised in post-disaster and development contexts. But the challenge is to make such mechanisms sustainable and build linkages between state, district and village level information and communication centres.

Livelihood restoration is crucial for sustainable recovery and in building resilience for future disasters. Following the Tsunami, much was invested in the fisheries sector, but without the necessary vision of long term or sustainable fisheries management. Investment into the creation of alternative livelihoods is essential. Hence, scaling up viable and market-oriented alternative livelihood creation programmes is important to reduce poverty.

Disaster risk management is essential in preventing and mitigating the impact of future disasters. While a lot has been

achieved in this area, there is still a lot to be done. There is a need for better coordination between responsible institutions, based on a transparent set of accountabilities and for greater involvement from communities and NGOs.

Disaster risk management is not only a programme area within recovery. It is the underlying principle in all programmes. It should be included in the construction of new houses, public building and schools or in the formulation of policies. The same goes for plans for emergency response and management plans for communities, schools and health centres. Protocols need to be developed for provision of basic services in disasters and the capacity, of professional groups, has to be built appropriately and awareness among communities has to be raised.

The positive role management of the environment can play, is underestimated and should be researched. Coastal zone management plans, based on scientific evidence and developed in participation with the communities, should lead to better preservation and active eco-restoration, on the long run providing protection against disasters.

Given the incidence of natural disasters in South and South East Asia, there is a vital need for a comprehensive regional hazard risk management programme aimed at increasing resilience of nations to disasters while decreasing underlying risk factors. Both the WB and the UN are executing regional initiatives in South and South East Asia to reduce disaster risks. The WB is launching a south Asia region

Hazard risk management programme to provide a road map for the development of mitigation activities and the enhancement of national disaster response capacities. The Bureau for Crisis Prevention and Recovery of UN is implementing a regional programme on capacity building for sustainable recovery and risk reduction in Tsunami affected countries. This is complemented by national and local level capacity building efforts on all aspects of disaster risk reduction in these countries. The organisation is also developing regional initiatives to manage risks emanating from climate related hazard.

Last, but not least, even though social equity issues have been successfully addressed during the recovery period so far, the monitoring of social equity during the next phase of the recovery work has to continue. We need to use our efforts to institutionalise equity principles in all development efforts, whether it be of the multilateral agencies, the NGOs, or government.

Two years after the Indian Ocean Tsunami, Tsunami Recovery work has moved into a crucial phase. Results will have to be demonstrated also in terms of sustainability, equity, and building back better. The road ahead is still long, but is more clearly paved as a result of the successful completion of the relief phase, the establishment of a strong foundation of partnerships between all actors, an awareness of the importance of disaster risk management and a high level of commitment towards coordination and working together.

Contributors to this Report

United Nations

UNTRS

<i>Pieter Bult</i>	<i>UN-Coordinator</i>
<i>Rama Kashyap</i>	<i>Programme Advisor (Social Equity)</i>
<i>Editor : Eva van Beek</i>	<i>Communication Officer</i>
<i>Co-editor: Divya Jacob</i>	<i>Programme-Associate</i>

FAO

<i>C.M.Muralidharan</i>	<i>Fisheries Livelihoods Coordinator</i>
-------------------------	--

ILO

<i>Shyam Sunder</i>	<i>Livelihoods Coordinator</i>
<i>Karthikeyan V</i>	<i>Project Officer, ILO - ICFTU / APRO Project</i>

UNDP

<i>Didier Trebucq</i>	<i>Programme Specialist (Recovery)</i>
<i>Chandrima Biswas</i>	<i>Programme Associate (Disaster Management)</i>
<i>Sudha Gooty</i>	<i>Programme Associate (Trafficking – HIV/Aids)</i>
<i>Ishwar N M</i>	<i>Programme Associate (Environment)</i>
<i>Sridhar Lakshman</i>	<i>Programme Associate (ICT)</i>
<i>Alok Patnaik</i>	<i>Programme Associate (Shelter)</i>
<i>Mili Maria Thomas</i>	<i>Jr. Programme Associate (Recovery)</i>

UNFPA

<i>Shachi Grover</i>	<i>Programme Officer (Population and Development)</i>
----------------------	---

UNICEF

<i>Mikko Lainejoki</i>	<i>Tsunami Recovery Program Coordinator</i>
<i>Joan Howe</i>	<i>External Relations Officer</i>
<i>Barbara Atherly</i>	<i>Project Officer – Tsunami Recovery</i>
<i>Dr S Iyer</i>	<i>APO – Health and Nutrition</i>
<i>Latha Mani</i>	<i>APO – HIV/AIDS</i>
<i>Pramila Manoharan</i>	<i>APO – Education</i>
<i>Subhash Misra</i>	<i>Programme Coordinator – UNICEF Camp Officer, Port Blair</i>
<i>Saji Thomas</i>	<i>PO – Child Protection</i>
<i>K N Vijayanthi</i>	<i>APO – WES</i>

WHO

<i>Dr Cherian Varghese</i>	<i>Cluster Focal Point - Non Communicable Diseases and Mental Health</i>
<i>Dr Arvind Mathur</i>	<i>Cluster Focal Point – Family and Community Health (FCH)</i>
<i>Paramita Sudharto</i>	<i>Public Health Administrator</i>

World Bank

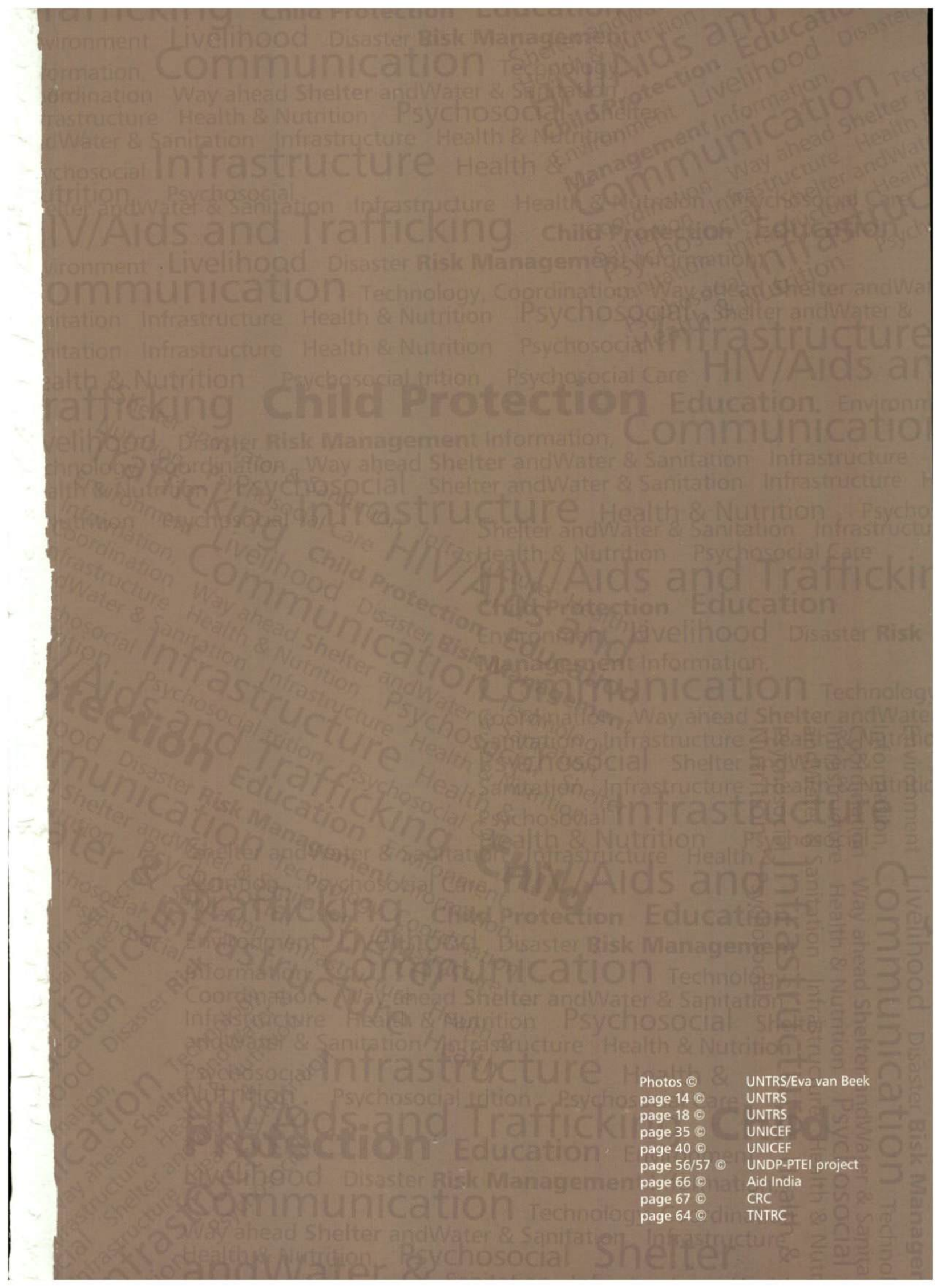
<i>Christoph Pusch</i>	<i>Team Leader</i>
<i>Rakhi Bhavnani</i>	<i>Hazard Risk Management Consultant</i>
<i>S Vaideeswaran</i>	<i>Sr. Environmental Consultant</i>
<i>I U B Reddy</i>	<i>Sr. Social Development Specialist</i>
<i>Shankar Narayanan</i>	<i>Sr. Social Development Specialist</i>

Asian Development Bank

<i>Alex Jorgensen</i>	<i>Principal Urban Specialist, INRM</i>
<i>Ashok Srivastava</i>	<i>Project Implementation Officer, INRM</i>
<i>S V Anil Das</i>	<i>Livelihood Specialist (Consultant), Extended Mission, Tamil Nadu,</i>
<i>Deepak Singh</i>	<i>Project Management and Engineering Specialist (Consultant), Extended Mission, Tamil Nadu</i>



©2006



Photos ©
 page 14 © UNTRS/Eva van Beek
 page 18 © UNTRS
 page 35 © UNTRS
 page 40 © UNICEF
 page 56/57 © UNDP-PTEI project
 page 66 © Aid India
 page 67 © CRC
 page 64 © TNTRC

**UNITED NATIONS TEAM
FOR TSUNAMI RECOVERY SUPPORT**
Apex Towers, 54, 2nd Main Road, R.A. Puram, Chennai 600 028, India
Tel: +91 44 4230 3551 Fax: +91 44 4230 3556
www.un.org.in/untrs

WORLD BANK
70 Lodi Estate, New Delhi 110 003, India
Tel: +91 11 2461 7241 Fax: +91 11 2461 9393
www.worldbank.org/India

ASIAN DEVELOPMENT BANK
India Resident Mission (INRM)
4 San Martin Marg, Chanakyapuri New Delhi, 110021 India
Tel: +91 11 2410 7200 Fax: +91 11 2687 0975