



ALEXANDRINE PRESS

---

Experiences of Rural and Urban Communities in Tamil Nadu in the Aftermath of the 2004 Tsunami

Author(s): T. VASANTHA KUMARAN and ELIZABETH NEGI

Source: *Built Environment (1978-)*, Vol. 32, No. 4, Learning from Urban Disasters: Planning for Resilient Cities (2006), pp. 375-386

Published by: Alexandrine Press

Stable URL: <http://www.jstor.org/stable/23289511>

Accessed: 25-04-2018 22:08 UTC

---

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://about.jstor.org/terms>



JSTOR

*Alexandrine Press* is collaborating with JSTOR to digitize, preserve and extend access to *Built Environment (1978-)*

# Experiences of Rural and Urban Communities in Tamil Nadu in the Aftermath of the 2004 Tsunami

T. VASANTHA KUMARAN and ELIZABETH NEGI

*This paper relates the experiences of some rural and urban areas of Tamil Nadu in the aftermath of the tsunami, focusing on issues in their rebuilding and rehabilitation. It draws upon research which the authors are undertaking in the rural districts of Nagapattinam and Cuddalore and also in the settlement of Tsunami Nagar, where some 2000 urban households from five slums have found shelter for more than a year now. The research draws on interviews conducted with inhabitants of both rural and urban settlements where rehabilitation is under way, focusing on housing, livelihoods and infrastructure, in particular. It explores the self-help rebuilding experiences of these communities and also the work of local NGOs, international agency partners and local and regional governments. Only a preliminary summary of the results of the study is reported here.*

## Scene One

Pallavan Nagar, a seashore slum of Chennai, on a January morning in 2005. Not many people about. A man was repairing fishing nets near the former temple and, behind the temple, a woman was living with her seven year old son in a house built before the tsunami and still standing. The first wave had been seen initially only by the boy. No one else in the settlement saw it coming, including ten men who were working on their nets by the sea on that morning of 26 December. Living close to the sea, the boy was used to seeing waves coming and judging their size. This wave looked huge. He started shouting warnings to the men tending the fishing nets.

All the people ran to the coastal road, some metres above the settlement. With the exception of two children, who were playing at the temple and who were forgotten in the rush, everyone made it to safety. According

to the little boy's account, the two children playing at the temple and an old man who could not run because of a handicap were washed away. But the records of the non-government organizations engaged in relief and rehabilitation of the settlement later showed that twelve people had died and the slum was almost entirely destroyed. Every fisherman had lost his boat and nets. Every household had lost its means of livelihood. There hadn't been much infrastructure, except for a few dilapidated, dirty lavatories which the women and children had used. The temple where people used to gather, sit and chat for hours in the evenings was also gone.

Now the Public Works Department has fenced the slum area, evicting all the people who sought to return and claim rights to it in the days after the tsunami. The only place the people of the slum now have is Tsunami Nagar, a low-lying, flood-prone area of temporary shelters, 3 kilometres away from

the original slum and with little access to the sea on which the livelihoods of the fishing families depend.

### Scene Two

Joseph, a doctoral student at the Census of India in Chennai, had a miraculous escape from death in the religious town of Velankanni in Nagapattinam district. His family and relatives – about 25 people in all – escaped, too. On 26 December 2004 he was on his way to buy fish for a lunch which he regularly offered to the poor at the shrine of the Virgin Mary. He was in a cab travelling to the beach at Nagore, where fish was always cheap. Along the way, the driver of the cab saw the waters of a small pond along the road bubbling and he shouted out to draw this to the attention of the passengers. He stopped the vehicle and everyone went with him to see the water disappearing from the pond.

They returned to the cab and went on their way to Nagore, wondering aloud what could be happening. Joseph went to the beach, bought fish and returned to Velankanni. About 15 minutes later, the giant waves hit the town. When the wave hit him on the street, Joseph was half way up the stairs to his hotel. People on the beach were washed away in hundreds. Children and women were killed instantly, although some men ran and escaped death by climbing trees.

Mobile phones allowed Joseph's family and relatives, separated in the confusion, to keep in touch with each other until the phones went dead. The family was able to get together again at Tiruvarur, a town some 50 kilometres away. But many people were less fortunate. There were bodies everywhere. Parents were looking for their children. Some, finding them dead or missing, were crying bitterly. Some 1500 people – Christmas visitors to the shrine and local residents – died at Velankanni.

\* \* \*

The two episodes above describe vividly some of the harrowing experiences of the December 2004 tsunami in the southern Indian state of Tamil Nadu. These events formed part, of course, of a larger tragedy which, in its geographical spread and magnitude, was exceptional among major disasters in recent human history, with 230,000 dead and missing and over 1.2 million displaced across 13 countries and small island states. The global response to the tsunami was also unprecedented, both in its speed and generosity. Global aid contributions totalled US\$21 billion from governments, multilateral agencies, non-government organizations (NGOs) and individuals.

This paper relates the experiences of some rural and urban areas of Tamil Nadu in the aftermath of the tsunami, focusing on issues in their rebuilding and rehabilitation. It draws upon research which the authors are undertaking in the rural districts of Nagapattinam and Cuddalore and also in the settlement of Tsunami Nagar, where some 2000 urban households from five slums have found shelter for more than a year now. The authors have been involved in a study of post-tsunami rebuilding and recovery as part of a larger collaborative research programme, covering the entire state of Tamil Nadu. The research draws on interviews conducted with inhabitants of both rural and urban settlements where rehabilitation is under way, focusing on housing, livelihoods and infrastructure, in particular. It explores the self-help rebuilding experiences of these communities and also the work of local NGOs, international agency partners and local and regional governments. Only a preliminary summary of the results of the study is reported here.

### Tamil Nadu and the 2004 Tsunami

The state of Tamil Nadu was the area worst affected on the Indian mainland by the 2004 tsunami. The reported height of the waves was between 7 and 10 metres. Nearly 2.5

million people along 1000 kilometres of coast were affected.

The tsunami hit thirteen districts along the coast, but impacted most severely on the districts of Cuddalore and Nagapattinam. Three hundred and sixty-two villages were hit by the tsunami in these two districts – about 42 per cent of the total number of villages affected in India.

The waves ran up the shore for 1 to 1.5 kilometres, although in some places they travelled inland for more than 3 kilometres and as much as 20–30 kilometres along the coastal inlets. Those who lived closest to the sea typically dwelt in thatched huts that were easily washed away by the tsunami. Most residents of these villages, including those who lived in Pallavan Nagar, did not own the land on which they lived.

While population density per square kilometre averages 478 along the Tamil Nadu coast, density in most fishing villages is almost three times as high. This explains why there was such heavy loss of life along the coast. The tsunami death toll for the State was estimated at 7,793. The State capital of Chennai (formerly Madras) had 206 deaths and Nagapattinam, the worst hit district,

experienced 5,525 casualties, with entire villages destroyed. There was major damage to, or destruction of, 17,652 houses and nearly 50,000 people lost their livelihoods. Economic loss suffered by the district was estimated at US\$356 million. Damage and loss of fishery and other infrastructure alone amounted to US\$272 million. The nuclear power station at Kalpakkam was shut down after sea water rushed into a pump station. No radiation leak or damage to the reactor was experienced, but about 100 casualties were reported amongst power plant personnel and their families.

Nagapattinam district is a multi-hazard prone district, with heavy winds, cyclones and floods being regular occurrences (table 1). Deaths, damage to property and crops, ports and communication systems are quite common, but not on a scale comparable to the losses due to the tsunami.

The bulk of the damage occurred within half a kilometre of the high-water mark. Chennai's fisherfolk were traumatized by the tsunami and some are still reluctant to return to the sea. Many also think that the Tamil Nadu government, in an attempt to take over the State's long coastline for tourism and industrial development, will use their

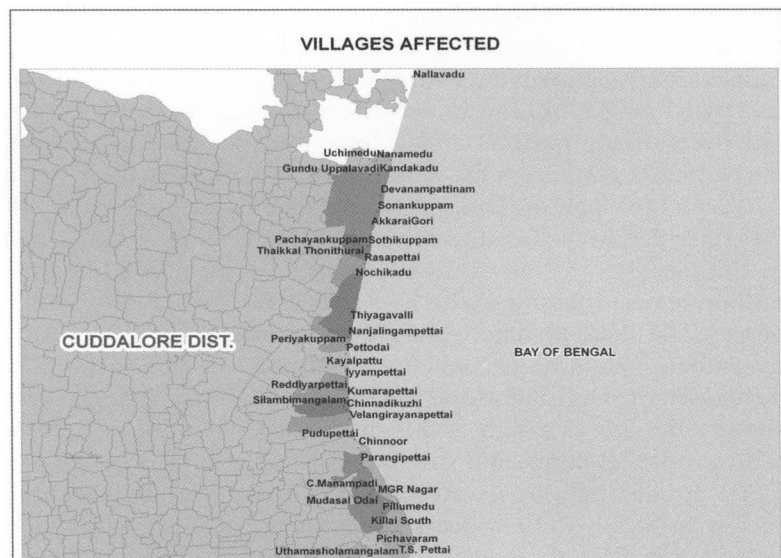


Figure 1. Cuddalore District: villages affected by the Tsunami of 26 December 2004.

Table 1. History of natural disasters in Nagapattinam District.

<i>Date of Occurrence</i>	<i>Calamity</i>	<i>Damage Caused</i>
30 Nov 1952	Storm surge up to 5 miles inland	400 lives lost
8 Dec 1967	Cyclone	7 lives lost and 15,000 made homeless
12 Nov 1977	Cyclone	560 lives lost and 196 missing. Damage to port, irrigation systems, roads, power supply and a large number of houses
1 Dec 1984	Floods due to heavy rain	Large-scale crop damage
15 Nov 1991	Heavy rainfall	Crops damaged
4 Dec 1993	Cyclone	1,100 people lost their lives, severe damage to crops
Oct-Nov 2004	Floods due to heavy rain	Crops and around 12,000 houses damaged

*Source:* The Collectorate of the Nagapattinam district, 2006.

fear as a pretext to resettle them permanently away from Chennai's seafront, in places like Tsunami Nagar, where infrastructure is poor and employment almost non-existent. Elsewhere, however, there is also some concern that people may be obliged to return to vulnerable locations.

### Relief and Rehabilitation

Immediately after the tsunami the Indian government refused to accept any foreign relief aid and some foreign emergency aid workers were redirected by the government to worse-hit areas of Indonesia and Sri Lanka. Subsequently, however, the government accepted US\$7.2 million in reconstruction aid from donor nations and a long-term development grant from the World Bank and the Asian Development Bank. US\$11.3 million was provided to the families of people killed in the disaster and an additional US\$12.5 million reached families who had lost their homes. The ability to handle the aftermath of the tsunami while, at the same time, helping Indonesia, Sri Lanka, and the Maldives was seen by Indians as a sign of self-sufficiency, self-confidence, status, and strength.

All levels of government and civil society in Tamil Nadu appeared to perform extremely well in the earliest days after the

disaster. Roads were reopened and temporary bridges were built in record time; bodies were collected quickly; and victims were provided with shelter, fresh water, food and medicine. After the most immediate needs were met, attention turned to co-ordinating the efforts of hundreds of local and international organizations involved in recovery work and the shift was made from building temporary houses to the much more complex task of completing permanent new settlements. Government agencies and NGOs concentrated on strategies for re-establishing livelihoods for the low-income families worst hit by the disaster. In the rural areas, rice paddies had to be drained of seawater and the soil desalinated. Freshwater lagoons had to be flushed and new pools of stagnant seawater drained. The owners of small to medium-sized businesses could not afford new loans to restart their businesses and needed financial assistance.

Fisheries and agriculture were the sectors most seriously hit by the disaster. In southern India, the focus has been on working with affected fishing communities and farmers, both in reconstruction and to promote employment and income generation options for affected communities through the reconstruction process. In India today, many agencies continue to assist in reconstruction,

yet a major part of rebuilding of homes and livelihoods after the disaster is also being done by the communities themselves. Aid programme staff and reconstruction specialists rarely have the time and expertise to document properly what they have done or to evaluate the extent to which their community rebuilding strategies have worked or not, particularly in relocated communities. As the sustainability of resettlement projects depends heavily on access to employment and the building of stable and inclusive social institutions, the cross-sectoral integration of housing with livelihood and community development planning will be a key focus of the rebuilding process. The links between these sectors are explored further below.

### Rebuilding Housing

Issues in the rebuilding of housing after the tsunami can be illustrated with a case study from the work of the Karunalaya Social Service Society, an NGO involved in rebuilding housing in Tsunami Nagar. Karunalaya has been working with the people of North Chennai for several years

on projects including child labour eradication and poverty reduction through mechanisms such as micro-credit, income generation programmes and access to credit services through local banks. Karunalaya responded immediately after the disaster struck the coast. 2,196 families from eight fishing communities were relocated and resettled in one single rehabilitation area called Kargil Vetri Nagar, 9 kilometres away from their fishing harbour. Families used tents provided by Karunalaya for a limited time and later they were assigned temporary shelters by the government. They then moved to another resettlement location called 'Tsunami Nagar'. This move was linked with provision of ration cards and coupons for on-going relief measures from the government. However, a large number of the relocated families moved to rented houses in nearby areas since the temporary houses were not habitable. The shelters had walls and roofs made with thin gauge bitumen sheets. The floors were hastily made for occupation and were cemented crudely and semi-finished. Basic services such as electricity and water supply were provided but were inadequate. The houses were poorly



Figure 2. Temporary post-tsunami housing at Kargil Vetri Nagar in Chennai.

ventilated and it was stifling in the hot humid climate. The area had minimal provision of toilets and water, including potable water. The makeshift housing was used during the day time by families to ensure that they received relief measures periodically supplied to them by various government agencies and NGOs.

People who had lived originally in slum or squatter settlements like Pallavan Nagar were prevented from returning to these settlements. Forced eviction and displacement was a part of the government's strategy to remove communities from their traditional locales. In an interview which we conducted in late April 2006, a woman from Pallavan Nagar recounted what happened to her community as follows:

Initially we all decided that we would remain in Pallavan Nagar because we would not be happy anywhere else. Besides, it would be easier to carry on with our livelihoods from Pallavan Nagar because it was close to the sea. But the government people would not let us live there and forced us to move out of the place. As we moved out, the Public Works Department moved in, for the land we were living on was theirs, bulldozed the place and fenced the area. There was no other choice for us but to go to Kargil Vetri Nagar and into the temporary shelters.

Then came the rains and Tsunami Nagar was flooded because it was low-lying and the temporary shelters proved inadequate.

There was widespread suffering and displeasure among the people. But their protests and requests yielded some results and the temporary shelters were given



Figure 3. Flooding at Tsunami Nagar.

new roofs. The temporary shelters have now become shelters which provide some security and safety from inclement climatic elements. This is the reaction of a Tsunami Nagar resident to our enquiries about the new roofs:

The new roofs are better than the earlier ones. We do hope they will protect us from rains. But it is not the roofs that would save us from the rains, if they ever came like they did last time, in 2005. For the land is low-lying and there is no way we could avoid floods if there were heavy rains. We are afraid that, as long as we are here in Tsunami Nagar, we will have to face floods, new roofs or no roofs. The earlier we move into permanent shelters, the better our lives will be. We would like to leave now, if we could. We must in the not too distant future. We are awaiting the day.

While the people of rural coastal areas are permitted to rebuild their homes where their houses once stood, the slum people of Chennai are not allowed to do so. They are told that the housing provided now in Tsunami Nagar is temporary and that they will be moved to permanent housing once the houses are built, but they do not know where their new housing will be.

The creation of permanent housing must be one of the highest priorities in post-tsunami rebuilding. Secure and decent housing plays a key role in restoring morale and living standards and in enabling the normalization of family life for the tsunami-hit. Such housing also provides households with a threshold of security to support the resumption of economic activity and communities with a platform for the rebuilding of markets, social networks and social and economic infrastructure.

But the *location* of decent housing is also critical. Tsunami Nagar is not close to the coast or the fishing areas. The people of Pallavan Nagar housed here complain about the considerable amount of money they spend everyday to get to the sea and then back home.

Not all village people are against relocation. There are factions and one faction does not want to be rehoused in its original

village while another does and resists any relocation. In the latter case this is because, for some, relocation means giving away the right to the land they have been living on for several decades. It may be their place of birth and they would like to live and die there.

A Pallavan Nagar fisherman living in Tsunami Nagar had this to say:

The house has to please everyone living in it. The house has to provide comfort. In the slum where we were before, we had houses of real comfort, even if those houses were not anything big, not anything as comfortable as the houses you people live in. They were comfortable in their own ways. After all, it is we who could make the place we live in comfortable. They were pleasing to all of us, our families and our women and children.

By comparison, the houses given to the people of Tsunami Nagar as temporary shelters are neither pleasing nor comfortable in any sense. These shelters have no character:

They are at best temporary and we doubt they would ever stay in our memory once we leave here for some place else and some other houses.

There is a risk that temporary housing can undermine permanent housing solutions (Gilbert, 2001). There are concerns regarding the design quality of post-tsunami housing projects, with warnings that they may become a legitimization for sub-standard, low-cost housing (Philips, 2005). There is also a risk that *ad hoc* exceptions to planning and design principles may undermine longer-term policy goals. The specifications for minimum floor area for dwellings in the housing projects represent a substantial reduction in size for many relocated households. No allowance is made for variations in household size (ADB, 2005). Elsewhere, there are claims that the new housing programme design has not taken into account the needs of the most vulnerable groups including women, children and the disabled (Asia Foundation, 2005). Another respondent had this to say:

The government people came and gave housing tokens to about 900 families, but these were only the families who had owned their houses in Pallavan Nagar. There were 52 families who had



lived in rented houses and were not given tokens. Of these, 17 families lived under shelter sheets. We spoke to Pakirisami, who has three daughters. He lost his boat at sea, and so can't go fishing now. He's just waiting for the government to do something. One time, government people came, and took photos of people from each household, but then they ran out of film. They said they'd come back, but they never did.

Resettlement programmes, which do not take sufficient account of people's needs and preferences with respect to location, housing type and neighbourhood design, run a high risk of generating on-going poverty and social conflict. They have damaging effects on physical, psychological and social well-being. In the longer term, they impede progress in human development and sharply reduce employment and output, increasing poverty and limiting the prospects for economic growth, improvement of state capacity and consolidation of social stability.

### Rebuilding Livelihoods

The tsunami has had a profound impact on coastal livelihoods. These livelihoods typically include fishing, tourism, roadside and petty trading and cottage industry. With human casualties, the loss of economic assets and the collapse of infrastructure and traditional markets, and without ready access to alternative occupations, coastal households face severe and extended economic stress. There are difficulties in promoting alternative livelihoods for the tsunami-traumatized and asset-depleted communities. It is therefore not surprising that many rehabilitation efforts have focused on restoring pre-tsunami livelihood activities through such interventions as, for example, replacing fishing boats and gear and funding petty and family trade and industry.

The post-tsunami environment provides a rare conjunction of incentive and opportunity to encourage movement into more sustainable, higher-income livelihoods, and the substantial donor funds which have flowed into tsunami-affected regions pro-

vide a potential resource for programme development.

Previous experiences indicate that, as far as possible, communities should be relocated as close as possible to where they lived before the disaster and that communities should be relocated in their entirety rather than being fragmented (Philips, 2005; World Bank, 2005). One of the participants from Nagapattinam district said that:

I would like to go back to the place where I lived before the disaster for that is where I would find my peace, support and succour. I am not sure whether I would ever get the peace of mind and succour anywhere else and in places other than the one I lived in and cherished long. But when I go, I want to go with all my people here, not let anyone to be taken away to any other place. My life, in fact my family's, cannot be complete without any of them.

A decade or so ago, according to the General Secretary of the Tamil Nadu Fish Workers Federation, livelihoods were not an issue for Chennai's fisherfolk. The daily catch at the Kasimedu fishing harbour in North Chennai, home to 2,000 catamarans and small motorized trawlers, was 300 to 400 tonnes. Tamil Nadu's fishing industry earned US\$ 600 million in foreign exchange every year. The General Secretary of the Federation says that this prosperity has declined since then because of dwindling catches attributable to pollution; the increasing operation of giant trawlers; the lack of modern craft for small operators; rising costs of diesel fuel, nets and boats; falling prices for fish; and a lack of government policies tailored to the needs of the coastal communities. So the tsunami hit a region where fishing incomes were already becoming fragile. Incomes have fallen from 8,000–10,000 rupees a week (US\$160–200) 10 years ago to hardly more than 1,000 rupees a week (US\$20) in 2006. Increasing commercialization of the fishing industry has also forced fishermen to borrow heavily from middlemen and traders to upgrade their vessels, binding them to pay high interest rates and to sell their catch to lenders at

prices below market rates. Fluctuating fish harvests and unpredictable sale prices also mean uncertain daily incomes and living standards for the average fisherman, who is usually part of a crew of three or four on a catamaran or a small motorized trawler.

It is estimated that of all the families provided with temporary shelter in Tsunami Nagar, about half are directly linked to fishing and about a quarter are engaged in other fishing-related jobs. The low demand for fish for nearly three months after the tsunami, in addition to reduced supplies and market fluctuations, has led to loss of income and employment, especially for women. Most owners of boats were not insured.

The restoration of the livelihoods of fishing families required varied forms of assistance. Some needed help to repair damage, others required replacement boats. However, a narrow focus on restoring the pre-tsunami *status quo* may not be appropriate. As indicated earlier, traditional sectors such as fishing, and also agriculture, were already in long-term structural decline well before the tsunami. The modernization of traditional livelihood sectors and the promotion of higher-income, more sustainable livelihoods in growth sectors such as tourism and services are important considerations in longer-term livelihood planning.

### **Rebuilding Physical and Social Infrastructure**

Marine fishing communities in Chennai lag behind the general population of Tamil Nadu in literacy rates and educational levels. Close to 85 per cent of Chennai's coastal village population is illiterate. If they send their children to school at all, most families stop the education of their children early, as the fishing industry has traditionally absorbed young workers in large numbers. But with profits dwindling, the employment rates in fishing are dropping. While many coastal Chennai families want to move away from fishing in the wake of the tsunami, they

find themselves unable to do so because of their lack of education and alternative skills. Mortality rates and frequency of illness are high among Chennai's coastal communities, and particularly among women. Most of Chennai's coastal residents lived without basic amenities such as drinking water, toilets, drainage, or a health care system before the tsunami (see Bunch *et al.*, 2005).

Most families in Tsunami Nagar depend on government hospitals and municipal dispensaries for their health needs, as they have no means to pay and thus have no access to private care. Local health authorities initially provided healthcare to relief camps through mobile teams. At present there is a health post with basic medical care in Tsunami Nagar provided by Karunalaya, and other NGOs have also set up health stations for people under their care. Although the onus of providing emergency health services to the displaced population lay with the government, routine health services and emergency services still have to be re-established in the affected communities.

Karunalaya staff acted promptly to ensure that most children could return to school, and particularly those who needed to prepare for the school-leaving examinations. They have replaced books and uniforms, organized alternative sites for holding classes and provided transport for school children who are able to attend classes in the same schools as they were prior to the tsunami. Karunalaya field staff have also organized recreation and pre-school sessions with mid-day meals for younger children.

### **Social Issues**

The relocation of many fishing families to settlements away from the coast has meant that many of the men have been out of the fishing trade for several months. This has led to lethargy in the community and to a number of social issues. Gambling and drinking have increased substantially and relief money provided has been frittered

away. There is an increasing likelihood of women and young adolescent girls being forced into sex work.

In the village of Keezhaivanagiri in Nagapattinam district, caste-based discrimination has also surfaced in the post-tsunami period. Muthu, a farm labourer and a member of an untouchable caste, lost seven goats and a cow when massive waves lashed his coastal village. The water also swept away his thatched mud hut. But, as he explains, his real problems began after the tsunami waters receded. In the aftermath of the disaster, he and his people found themselves the targets of discrimination by the fishermen of his village:

Forty families from my community took shelter in a school building outside the village. But in two days, the fishermen's families at the shelter began troubling us. They did not allow us to sleep and eat with them. They did not want to be under the same roof with us. We were forced to leave. Our homes were destroyed and our children were hungry. Where could we go?

The disaster has reopened centuries-old fault lines of caste in the rigid rural social hierarchy. In the district of Nagapattinam, untouchables from about 10 villages have openly protested at what they see as discrimination against them in the provision of relief supplies and access to shelters. The Indian constitution outlaws the 3,000-year-old caste system, in which society is organized into groups ranked in a strict hierarchy. But many Indians are still influenced by caste considerations. Untouchables are at the bottom of the rural social order; people of other castes often consider them to be unclean and refuse any contact with them. Of course, the fishermen deny that there is discrimination on the basis of caste. One of them, a woman who is the head of the fishing community, says:

We have lost everything, homes, boats and lives, because we were right by the high tide level. They have lost their thatch roofs, a few goats and maybe a sickle and a spade...

Inter-communal disputes have been common in Tsunami Nagar as well, and the efforts of the field staff of Karunalaya and other NGOs have been severely challenged by the lack of unity among the communities that came into Tsunami Nagar from different geographical locations.

The social impacts of the tsunami will not be short-lived. 'The government and aid organizations are powerless to address the legacy of deep grief that will linger long in these coastal communities' (Mulligan and Buddhadasa, 2006). The intricate social structures of the coastal dwellers have been ruptured. The spatial networks of different social groups relocated from different city slums do not overlap or intermingle in Tsunami Nagar. Because they see their present homes as simply temporary shelters, people have no interest in developing new social networks in Tsunami Nagar. An elderly woman who participated in our interviews had this to say:

This is no longer the community that existed in Pallavan Nagar. It is shattered, broken, torn asunder by the black waves. Everyone has his or her grief that cannot be wiped completely away. Individuals find it difficult to connect, even after all these months, to the other grieving people. Fear is omnipresent, in everyone's eyes and hearts.

### **Reflections on the Post-Tsunami Relief Efforts**

While people involved in tsunami rebuilding work are reluctant to criticize the government for its rebuilding efforts, many are deeply disappointed that the political leaders and the NGOs have wasted precious opportunities for rebuilding strong, well-looked after communities, even when sufficient funds were available from donors and elsewhere to achieve this. Issues which have arisen to date from the emergency relocation plans which were put into effect include:

- ♦ Overcrowding and associated health problems and security risks;

- ♦ Poor sanitation and hygiene facilities, especially for women – particularly inadequate toilets, water supply and drainage;
- ♦ Poor transportation facilities, resulting in exploitation by private carriers for commuting and bringing in commodities;
- ♦ A displaced population deprived of traditional livelihood opportunities, particularly for men, resulting in an increased burden on women who have to resort to taking up more casual employment to survive;
- ♦ Increased alcohol consumption by men deprived of employment;
- ♦ An increase in violence including domestic disputes, child abuse and intercommunal conflicts as a consequence of different communities occupying the same area;
- ♦ The presence of 'Mafia-like' gangs and unscrupulous groups including lower level functionaries of political parties who pose a threat to the relief work;
- ♦ A general feeling of insecurity and anxiety about how long people will need to stay in the 'temporary' shelters.

Chennai's fishing communities need to be rehabilitated in a holistic way. Such an effort would concentrate not just on rebuilding, but should also address the circumstances that have kept fisherfolk impoverished. There is a need, in particular, to articulate clearly the structure of rights over the coastal area ecosystems, the interface of land and water. There is a need for an integrated strategic study of the coastal areas, extending some 10 kilometres inland which looks at the needs of both farmers and fishermen. This needs also to recognize the complex and interdependent nature of different livelihoods – fishermen who own their boats, those who do not, women who help with processing the catch and others, such as 'salt panners' who also earn a living from the sea. And it needs to consider both the use and the conservation of resources in the long-term interests of the coastal communities.

Other aspects of this strategic policy framework should include:

- ♦ Developing multi-pronged and location-specific plans for the provision of clean water and adequate sanitation that include prevention measures for waterborne diseases.
- ♦ A master plan for livelihoods that provides affected communities with the basis for making informed choices and offers alternatives for both those who wish to remain in fishing and those who do not.
- ♦ A proper family census and the development of some baseline data on Tamil Nadu's coastal communities in order to gain a meaningful understanding of their socio-economic conditions. The poor quality of data and information available about coastal communities makes it difficult to target social security benefits or to plan for the rehabilitation of these communities.
- ♦ Planting mangroves and fostering coral reefs as natural barriers to resist the sea's fury (rather than building a proposed seawall along the Tamil Nadu coastline).
- ♦ Recasting India's Coastal Regulation Zone (CRZ) Act, which strictly regulates activities within 500 metres of the high tide level to protect the rights of fisherfolk, rather than those of industrial and hotel construction interests.

A strategic policy framework of this sort would improve the socio-economic condition of the coastal communities, as well as reducing their vulnerability to future disasters.

## Conclusions

The study reported here has provided some information about the experiences of post-tsunami recovery in Tamil Nadu. The study is by no means complete, as the recovery process is on-going and there are any number of programmes of rebuilding

on which little can be reported yet because no documentation of progress exists. Nevertheless, the paper does provide an indication of the scale and difficulty of the post-tsunami recovery process.

It is evident that the governments and people throughout the tsunami-affected region have much to be proud of. Many thousands of homes, together with schools and medical facilities, have already been rebuilt (Subramanian, 2006). Livelihood programmes have provided hope and economic opportunity to hundreds of thousands of people. And officials throughout the region have recognized that they are responsible not only for ensuring access to adequate shelter and housing, education, and medical services, but also for involving the affected populations in the critical decisions impacting on their future well-being. Governments, NGOs and international aid agencies have all played a role in this effort. Permanent housing for the tsunami-hit populations and sustainable livelihoods cannot be provided overnight. Our experience demonstrates, however, that when people are adequately consulted in recovery processes, policies are more likely to be broadly accepted and to endure. And to guarantee the broadest level of consultation, governments should accelerate efforts to engage women and traditionally marginalized communities.

Also, given the unprecedented scale of the tsunami disaster, it is imperative that agencies involved in disaster relief learn as much as possible from the recovery processes. Methods for responding quickly to natural disasters and getting immediate assistance to the affected communities are well known. However, there is a gap in understanding the longer-term impacts of such disaster relief. More research is needed on the effectiveness of longer-term development planning in

communities where international aid and expertise has been provided. Implementing agencies rarely have the time and expertise to document properly what they have done or to conduct comprehensive and nuanced research on the efficacy of their work, particularly in relocated communities. The research on which this paper draws is a small step in this direction.

## REFERENCES

- Asia Foundation (2005) *The Aceh Rehabilitation and Reconstruction Appraisal: Complete Findings Report*. Jakarta: Asia Foundation.
- Asian Development Bank (2005) *India: Post-Tsunami Recovery Program: Preliminary Damage and Needs Assessment*. Manila: Asian Development Bank
- Bunch, M.J., Franklin, B., Morley, D., Kumaran, T.V. and Madha Suresh, V. (2005) Research in turbulent environments: Slums in Chennai, India and the impact of the December 2004 tsunami on an Eco-Health project. *EcoHealth*, 2(2), pp. 150–154.
- Gilbert, Roy (2001) Doing More for Those Made Homeless by Natural Disasters. Disaster Management Facility Working Paper No. 1. Washington DC: World Bank.
- Mulligan, M. and Buddhadasa, N. (2006) *Great Achievements and Wasted Opportunities: Compiling a Balance Sheet on Sri Lanka's Post-tsunami Recovery*. Melbourne: The Globalism Institute, RMIT University.
- Philips, Rajan (2005) Post-tsunami reconstruction priorities and strategies. *Polity*, 2(4). Social Sciences Association of Sri Lanka, Colombo.
- Subramanian, A. (2006) *Tsunami and Vulnerable Populations: A case study of Nagapattinam District on the Coromandel Coast of India*. Field research report of an evaluation study. Chennai: Madras Christian College.
- World Bank (2005) *Lessons from Natural Disasters and Emergency Reconstruction*. Operations Evaluation Department (10 January). Washington DC: World Bank.