

## Overview

An earthquake of a magnitude of 8.60 on the Richter scale occurred with its epicentre off the west coast of Northern Sumatra on 26 December 2004 at 06.29 A.M. (IST). This earthquake generated tsunami<sup>1</sup> waves that were up to 10 metres high and travelled at 700-800 Kmph. The waves hit the coastal states of Andhra Pradesh, Kerala and Tamil Nadu and the Union Territories (UTs) of Pondicherry and Andaman and Nicobar Islands (ANI). The damage caused by the tsunami which affected 27.92 lakh people in 1089 villages included loss of lives, damages to dwelling units and boats, loss of livestock, damage to cropped area, destruction of physical and social infrastructure and ecologically sensitive resources such as coral reefs, mangroves, beaches, forest cover etc. While the affected States/UTs had projected a requirement of financial assistance of Rs. 11796.40 crore, the Ministry of Home Affairs (MHA) sanctioned Rs. 3644.05 crore based on the recommendation of the central team for an amount of Rs. 5690.81 crore. As an amount of Rs. 1607.01 crore was transferred to the long term reconstruction programme, the affected State/UTs were left with only Rs. 1759.05 crore for immediate relief and rehabilitation. The system of assessment of the damage needs to be made more transparent so that the States do not overpitch their requirement. The States also need to be realistic in projecting their requirement for immediate relief assistance as large amounts of released assistance remained unutilised as of March 2006.

Audit examination of the measures taken for tsunami relief and rehabilitation revealed that the Ministry of Environment and Forests had not enforced environmental laws effectively which resulted in extensive destruction in the coastal areas. None of the State/UT authorities prepared the Coastal Zone Management Plan. Disaster Management Authorities were constituted in the States of Andhra Pradesh, Kerala, Tamil Nadu and Union Territories of ANI and Pondicherry. However, Disaster Management Acts had not been enacted. Kerala and Pondicherry did not have a declared disaster management policy.

An amount of Rs. 44.88 crore meant for tsunami relief was diverted to committed liabilities and administrative expenditure. Expenditure of Rs. 4.95 crore was incurred in excess of norms due to wrong application of rates and non-adherence of codal provisions. Beneficiaries were adversely affected due to non-utilisation of Rs. 17.31 crore. Poor utilisation led to surrender of funds. Advances drawn were lying unadjusted for long periods in contravention of rules. In Tamil Nadu, relief amount of Rs. 6.38 crore was irregularly disbursed for 3330 unregistered catamarans in four districts.

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<sup>1</sup>A wave produced by any brief, large-scale disturbance of the ocean floor, principally by a shallow earthquake or earth movement, subsidence, or volcanic eruption; characterised by great speeds ( up to 950 kilometers/hour), long wavelengths ( up to 200 kilometers), long periods ( generally 10-60 minutes); and low observable amplitude on the open sea, although it may rise to heights of 30 meters or more and cause much damage on an exposed coast.

Deficiencies in identification of beneficiaries led to inadmissible payments and shortfall in coverage of relief measures. In Tamil Nadu, relief packages were provided to 88011 families against 63032 families sanctioned resulting in excess expenditure of Rs. 6.33 crore. Sustenance allowance was not distributed to 77322 families. About 2742 temporary shelters constructed in Tamil Nadu at a cost of Rs. 2.58 crore could not be put to use as these were constructed in low lying areas which were waterlogged due to rain. Out of 4721 shelters, 3026 temporary shelters constructed at a cost of Rs. 1.76 crore were not occupied by the victims. In Andhra Pradesh, delay in acquisition of land and resistance on the part of beneficiaries to move out of Coastal Regulation Zone caused delay in completion of permanent houses. In Kerala, out of 4053 permanent houses in respect of which construction was entrusted to NGOs, only 2431 houses had been completed.

Repairs to basic infrastructure such as roads, bridges, office buildings and schools were delayed. In providing assistance to the fishing sector, the assessment of damages was inadequate and the claims were not verified properly. Nominees of deceased fishermen did not receive the benefit of insurance in Pondicherry. In ANI, there was a failure to restore infrastructure despite the funds being available, which remained unspent. The monitoring of actual relief measures by the States/UTs was inadequate. The MHA did not monitor implementation of its instructions effectively. A significant initiative of September 2003 seeking the introduction of a pre-contract system for emergency procurement did not take off in the affected States/UTs.