



Towards a Disaster Free India

National Institute of Disaster Management

**NEWSLETTER**

(For restricted circulation only)

### Editorial Board

**S. P. Gaur**, Executive Director, Editor

**Santosh Kumar**, Professor (Policy & Planning), Convenor

**Chandrani Bandyopadhyay**, Senior Research Officer, Member

**Sujata Satapathy**, Senior Research Officer, Member

## Contents...

### FROM THE EDITOR'S DESK **1**

*S. P. Gaur*

### Recent Activities **2**

### LESSONS FROM RECENT DISASTERS

#### Bihar Flood — 2004 **4**

*Amit Verma & Shekher Chaturvedi*

#### Kumbakonam Burns: 93 children consumed in flames **5**

*Sujata Satapathy & Ajinder Walia*

### UPCOMING EVENTS **8**

## National Institute of Disaster Management

IIPA Campus, I.P. Estate, Ring Road

New Delhi – 110002

Tel +91(0)11-23702445

Telefax +91(0)11-23702442

E-mail: [contact@nidm.net](mailto:contact@nidm.net)

Website: [www.nidm.net](http://www.nidm.net)

NIDM Newsletter Vol. I, No. 2, November 2004



Quarterly Newsletter of National Institute of Disaster Management

## From the Editor's Desk ...

Heartiest greetings to our readers of the second issue of quarterly newsletter. It is a matter of pleasure for me to address you as the new Executive Director, NIDM and Editor of this Newsletter.

As we move from the inaugural to the second issue of Tidings, impact of evolution is being felt. We have received many encouraging responses from our readers, which has strengthened our belief that regular interaction and exchange of ideas among all the stakeholders will be a mutually beneficial process. We believe that vibrant dialogue and discussion is enriching and provides solutions to many problems that seem difficult at individual levels.

Since its inauguration by the Hon'ble Home Minister on 11 August 2004, we at NIDM have tried to assimilate the poignant but significant lessons learnt from recent disasters like the Kumbakonam School Fire and the Bihar flood. Documentation of the lessons learnt is under way and we hope that we learn the lessons well enough to not repeat the follies, leading to more disasters and loss of generations.

We at NIDM believe that networking is the key to solutions in disaster management. This newsletter will create an atmosphere of mutual learning to help us on our way to fulfill our mandate and achieve our goal of building an India that is prepared to face disasters.

**S. P. Gaur**

Executive Director, NIDM

Editor

*The Earth has enough for man's need, but not enough for man's greed*

— Mahatma Gandhi

## Changes ...

**Shri S. P. Gaur**, IAS has taken charge as the Executive Director of NIDM from 4 November 2004

**Shri M. Madhavan Nambiar**, IAS, former Executive Director, NIDM has been appointed as Joint-Secretary in the Ministry of Information Technology, Government of India

**Shri S. Sudershan**, P.S. to ED has been repatriated to Ministry of Rural Development, Government of India

# National Institute of Disaster Management Ministry of Home Affairs (MHA)

*Activities undertaken from 1 August 2004 to 31 October 2004*

The erstwhile National Centre for Disaster Management was redesignated as the National Institute of Disaster Management (NIDM) vide MHA order dated 16.10.2003. The NIDM began to function as a separate organization from 16 October 2003.



## 1. Inauguration

The NIDM was inaugurated by Shri Shivraj Patil, Union Home Minister, on 11 August 2004. The inaugural function was attended by senior government officials and various dignitaries from United Nations (UN) agencies, and Non-government Organizations (NGOs). During the inaugural function, Shri Patil also released the NIDM newsletter and launched the website. He was then apprised of the various activities undertaken by NIDM and the status of the proposed campus. He saw the model of the new NIDM campus and was taken around various facilities of the institute, like the library, computer centre and training halls. The visitors were shown a short film on NIDM.



## Visit of Minister of State (Home)

On 5 October 2004, Shri S. Reghupathy, Minister of State (Home), Government of India, visited the NIDM and was apprised of its various activities. He also showed great interest in the model of the new campus.

## 2. Activities

### Development of Training Modules

The NIDM's core professional team prepares training modules of various line departments, keeping in view their job responsibilities. The design brief of the following sectors have been prepared by the NIDM staff, in collaboration with the sector experts:

- Education
- Forest
- Women and Child Development
- Postal Service
- Public Health and Engineering

Modules of these departments have been developed, involving sector training experts, NIDM staff and module writing experts.

Module on the **District Disaster Management Plan** was prepared by the NIDM and run during the training workshop organized between 6 – 8 October 2004.

### Publications

Manuals on various disasters are being prepared in-house. NIDM has recently published a Directory of Training Institutions and is preparing to bring out a directory of resource persons and NGOs working in the area of disaster management. It has also reprinted the status report made by the MHA. A trainer's manual, is also currently under compilation which will be crucial to trainers.

### Training & Workshops

A training and workshop calendar for the year 2004-05 has been finalized. It would mainly address senior and middle-level officers from various state governments. The programmes undertaken by the NIDM since 1 August 2004 are as follows:

SI	Programme/Activity
1.	Writer's Workshop for Module Development
2.	Brainstorming on NGOs' Participation in Disaster Mitigation
3.	Programme on Disaster Management for Corporates in Collaboration with FICCI
4.	Training workshop on Formulation of District Disaster Management Plan
5.	Programme on Disaster Preparedness in Collaboration with Union Bank of India (UBI)
6.	Programme on Disaster Management for SI (DE)

### Brainstorming on NGOs' Participation in Disaster Mitigation

This programme was organized by the NIDM on 24 September 2004 and discussed an action plan for co-ordination of voluntary organizations in disaster mitigation activities. Representatives of various voluntary organizations attended the programme.

### Programme for Corporate Sector

A two-day programme on disaster management was organized in collaboration with FICCI between 30 September – 1 October 2004. Around 300 participants from various corporate houses, government agencies and other sectors of society attended the programme. It was inaugurated by Shri S. Regunathan, Chief Secretary Delhi.

### Formulation of District Disaster Management Plan

- This programme, organized by the NIDM during 6 - 8 October 2004, was aimed to develop skills in district-level officers for managing the process of preparing district disaster management plans with a specific focus on disaster mitigation and preparedness.

### Programme on Disaster Preparedness for Bank Officers

- A three-day programme on disaster preparedness was organized in collaboration with Union Bank of India, between 13 - 15 October 2004. About 30 managers and security personnel, heading various regional offices attended.

### Programme on Disaster Management for Sub-Inspectors (SI), Border Security Force (BSF)

Between 18 - 19 October 2004, a two-day programme on disaster management for SIs, BSF was organized at their Training Centre and School at Hazaribagh. There were 141 participants who attended the programme.

### Foreign Delegations

- Dr Ian Davis from Cranfield University, United Kingdom and Ms Zenaida Dellica, former faculty Asian Disaster Preparedness Centre, Bangkok, Thailand, visited NIDM on 26 August 2004. They shared their experiences in the field of community-based disaster risk reduction with the faculty of NIDM.

- Officials from the United Nations Development Program (UNDP) visited NIDM on 31 August 2004 to discuss modalities for drought mitigation studies.

### Website and Newsletter

- The NIDM website was launched on 11 August 2004. This site contains comprehensive information about NIDM, future training programmes planned, in addition to being a completely informative site on disaster management.



- A quarterly newsletter, *Tidings*, was also released by the NIDM on 11 August 2004. This newsletter comprises information related to the institute and other developments in the field of disaster management.



# Flood Devastation

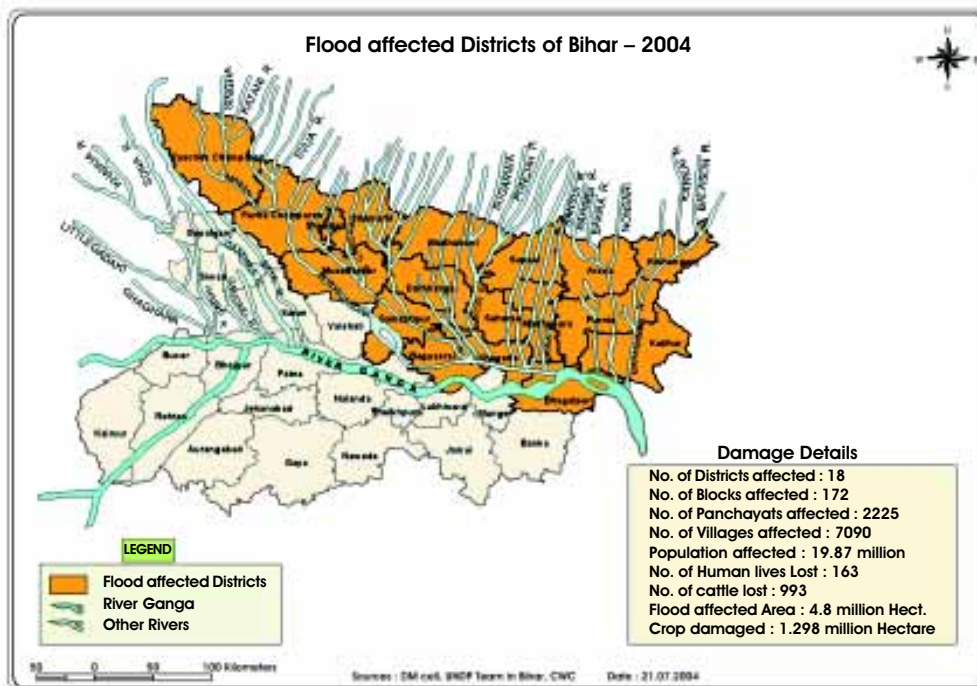
## *Bihar flood-2004* Amit Verma & Shekher Chaturvedi

**B**ihar is situated in the eastern part of India. The state is endowed with enviable resource base. The area of the state is 94,163.00 Sq. Km. and the population according to 2001 provisional census is 82.87 million. Bihar has always been affected by flood due to its unique geography and topography. There is a network of rivers in Bihar and most of the rivers are snow-fed and are therefore a perennial source of water. During monsoon, between July and September, most of the rivers are in spate and the situation worsens, when there is a heavy rainfall in the catchment areas, predominantly

Corps) were also involved per day in the packaging of relief material.

Though the government machinery had swung into action, still the relief took time to reach the affected families. However, the coping capacity of the local communities was found effective in handling evacuation and rescue. Their major grievance though was the disparity and delay in the distribution of flood relief.

During relief operations, need was felt for better preparedness levels in order to handle the situations efficiently. The experienced and trained personnel would be effective in carrying out various activities related with relief operations. Also, there is urgent need to develop a cadre of trained people for a better-organized response in future.



### Flood 2004

- Flood began in the latter half of June
- Initially flood occurred in the bordering northern districts and spread further into low-lying districts of north Bihar
- Out of 38 districts, 20 were affected
- Major Damage in Sitamarhi, Dharbhanga, Madhubani, Khagaria and Samastipur districts
- Population affected – 19.87 million
- Human lives lost – 163
- Livestock lost – 993

located in the Indo-Nepal border region. Northern region of Bihar State was under severe floods in July, 2004. Out of 37 districts in Bihar, 19 districts are flood affected. According to the official estimates of the government of Bihar, nearly 172 blocks, 2,325 panchayats and 7,090 villages were inundated. During many aerial surveys, most of the areas inundated had become completely detached from the capital, with roads, railway lines, electricity, telephone lines etc all cut off.

The State relief distribution by air started on 10th July, 2004 and it continued for nearly a month ending on 8th August, 2004. The main goal of the operation was to provide immediate relief to those seriously affected by the calamity. During the flood relief operation, the packet contained popular food items like gram flour/ chaffed rice (having good shelf life), supplemented with salt/sugar, apart from candles, matchboxes etc. During the operations, 10 helicopters were pressed into action. 100 cadets from NCC (National Cadet



# Kumbakonam Burns:

## *93 children consumed in flames* Sujata Satapathy & Ajinder Walia

On 16th July 2004, a devastating fire broke out in a private school in Kumbakonam, Tamil Nadu. The tragedy killed 93 children, shocking the entire nation. This appalling incident spurred the media and the authorities to examine the quality of schools and the educational system followed in India. The school in Kumbakonam was located in a three storeyed building in a congested street, a sure recipe for disaster. Safety norms were flouted, resulting in the lives of innocent children being compromised. The tragedy was undoubtedly the consequence of sheer negligence. This attitude has led to the steady deterioration of an already inadequate education system, and the proliferation of private schools that are usually overcrowded, in unsafe buildings, and largely unregulated. In such cases, business interests far outweigh basic safety in schools.



*Kumbakonam – scene of the tragedy*

### Vulnerability Profile

The poorly-constructed building housed three schools: Sri Krishna Girls High School (a government-aided Tamil-medium school); Sri Krishna Middle School (with a government-aided Tamil section and an unaided English-medium section); and Saraswathy Primary and Nursery school (unrecognised). A total strength of 750 students were taught in an area that was just 40 feet wide and 120 feet long. The only exit to the building was also its entrance – a narrow door which was generally kept shut – so that the children would not run out onto the road. An ill-planned safety measure that eventually

turned into a death trap. There was a narrow stairway, poorly illuminated and with little or no ventilation, that connected the two floors. The first floor comprised two areas, one with a concrete roof and the other with a thatched roof and collapsible door. The kitchen, which was located on the west of the ground floor, also had a thatched roof and one entrance/exit.

On the day of this devastating incident, the additional education officer was inspecting the Tamil section of the school. It was discovered that to augment the number of students in the Tamil section to secure a higher grant from the government for the midday-meal scheme, students from the English-medium section on the ground floor were sent upstairs to the Tamil medium section. It was also found that out of the 24 schoolteachers, only 11 were present, as the rest had taken leave to visit the temple to celebrate the auspicious festival day of *Aadi Velli*. Even out of the 11 teachers who reported to school for duty, many had gone to visit the temple during the school hours.

There had previously been two minor incidents of fire in the school building. The third spelled tragedy for its students.

### Incident Profile

On 16 July 2004, at around 10 a.m., the midday meal was being prepared for the students. The fire broke out due to the negligence of the cook, and it spread rapidly to the kitchen's thatched roof, which burst into flame like a tinderbox, fanned further by a strong breeze. When

the fire was noticed, the teachers pushed all the children into a classroom, locked the collapsible door and went to try and put out the fire.

About half an hour later, it was clear that the situation was out of control and that the blaze was spreading dangerously. Children on the ground and first floor were told to escape through the narrow entrance. But due to the panic and chaos, the 125 primary-school children who were locked inside a long room on the first floor, were forgotten.

When these children saw the thick, black smoke filling the room, they rushed to the door to try and escape. It was locked and their cries for help went unheeded in the panic generated. The fire soon spread to the dry, thatched roof, which gave way

and collapsed on the souls inside. Sixty-seven children died instantly; 16 children died in hospital, and another 21 children sustained grave injuries. Some of these survivors are still in hospital. Some parents lost two children in the school; some



*The collapsible door that sealed the fate of 93 children*

lost their only child; and others lost one of the two children. Many parents had undergone family-planning operations, making the tragedy even more heartbreaking.

## Response and Relief

The response to the Kumbakonam fire and the relief efforts by the local community and the government, were well-organized and effective. The district collector of Thanjavur, Dr Radhakrishnan, reached the site of the tragedy in around 40 minutes. The following measures were taken to manage the disaster:



*This is all that remained...*

- White cloth was procured immediately to cover the bodies.
- A large hall built in the Kumbakonam Government Hospital for epidemic patients of Mahamagam festival (held annually in Kumbakonam) was now used to keep the bodies of the fire

victims. The parents were asked to identify the bodies of their children here.

- Injured children were placed on banana leaves. Air-conditioners were also used to cool their burns.
- The district collector, with the consent of his senior colleagues, waived the requirement of post-mortem of the bodies, saving parents from greater trauma.
- The agency that maintained the cremation grounds arranged to transport the bodies in their own vehicles, as well as those of the Red Cross, free of cost. The bodies of the deceased children were sent to their respective villages. Staff at the cremation ground as well as the burial ground ensured that arrangements went off smoothly. Authorities took care of all the expenditure.
- Special medical teams from JIPMER (medical institute from Pondicherry) and Christian Medical College, Vellore rushed to Kumbakonam, with large quantities of collage membrane and other materials to treat the burnt patients.
- Natham village near Kumbakonam lost 13 children. A *pucca* road was immediately built to facilitate the cremation of the bodies from the village.
- Identifying the bodies of the children was a traumatic experience for the parents. Crowd management was handled in a compassionate manner, keeping in view the emotions of the hundreds of people who had either lost children, or gathered to support those who had.
- The media was allowed complete access to information, to ensure greater transparency.
- Seventeen people were arrested. Among them were school correspondent, the staff of the midday-meal scheme, the chief educational officer, the district educational officer, the district elementary education officer, the former additional educational officer, the assistant education officer and the former *tahsildar* (an engineer).
- The school was closed down and government recognition was withdrawn with immediate effect.
- The state government ordered an ex-gratia amount of Rs 1 lakh to the parents of the deceased, Rs 25,000 to those who were seriously injured and Rs 10,000 to those who had sustained minor injuries. The central government also ordered a compensation of Rs 50,000 to the parents of the deceased and Rs 25,000 to the injured. The distribution of the money was done the very same day, through demand drafts to ensure transparency. These were mostly deposited in banks in the form of fixed deposits to avoid misuse of the money by the parents.
- Bharat Sanchar Nigam Limited (BSNL) opened free help lines at the hospital. Aircell also provided free cellular phones to facilitate the response and relief efforts.

## Reconstruction and Rehabilitation Measures

A number of rehabilitative measures were taken by the administration to ensure the speedy recuperation of the community from this tragedy. Some of the measures, both short and long-term, that were undertaken in this regard are as follows:



*Government-built concrete house*

- Within seven days of the incident, the authorities removed thatched roofs from all schools in the area. The schools that had a kitchen in close proximity to the classrooms were told to shift their kitchen immediately – away from the classrooms and under a concrete roof. In the second phase, all schools in Tamil Nadu, were asked to remove thatched roofs and replace them with non-inflammable and concrete material.
- Concrete houses are being built for the families of the deceased children who did not previously have one.
- A six-member inquiry commission was set up, headed by K. Sampath, a retired judge of the Madras High Court, to investigate the causes and circumstances that led to the fire, as well as to suggest reform measures to ensure the prevention of such disasters in the future.
- Arrangements were made to admit the children who had survived into various other schools (free of cost for the current year) according to the preference of the parents. All of them were provided with free uniforms, textbooks and notebooks.
- The administration decided to perform recanalization surgery after counselling, for those parents who had lost their children in the fire tragedy and were unable to conceive again, having undergone family planning operations.
- The government, along with the support of the corporate sector, facilitated the treatment of the injured children in various hospitals.
- Administrators, educationists, professionals and medical counsellors, also organized daily counselling sessions for the injured and surviving students.
- Counselling and psychiatric help was also given to the parents of the deceased, especially to siblings and mothers, along with those children who had suffered injuries. This

continues even today.

- The School Education Department was asked to undertake an intensive inspection of all the schools throughout the state and ascertain if safety standards were being followed and ensure their compliance in the future.

## Policy Interventions

Following the tragedy, a communication from the Union Minister of Human Resource Development was sent to State Governments, requesting them to take action to ensure health and safety of the school children with respect to safe school buildings, hygienic meals and sensitization of teachers.

## Observations of the NIDM Team

The NIDM had sent two senior research officers, *Dr Sujata Satapathy* and *Dr Ajinder Walia* to Kumbakonam. The team visited the school and interacted with the administration, as well as with the district collector, who were all actively involved in managing the disaster. They carried out activities to counsel the victims and encouraged them to talk about the tragedy. Detailed discussions with people from the education department, school staff, local community and families affected, brought forward numerous issues that required urgent attention. The team also tried to identify family members who were most affected by the tragedy and had developed various psychological problems subsequent to it.

During the course of their investigation, the NIDM team observed that:

- The distribution of relief in terms of cash was done effectively, immediately and with transparency.
- The psychosocial health of the victims was being looked after. The government, as well as volunteers from the American Red Cross Society, were actively engaged in providing mental health services to the families that were affected by the tragedy.



*Traumatized siblings expressing through drawings*

- The corporate sector also rose to the occasion and offered their services. Their sponsorship of the treatment of the injured children in various hospitals continues even today.
- The district collector with his team pays weekly visits to the affected families to discuss their problems and to monitor the progress of their recovery and rehabilitation.
- The inclusion of a clinical psychologist in the six-member commission is a major step towards managing disasters with greater sensitivity, keeping in view that the worst part of such incidents is the trauma suffered by the families affected; and
- Recreational facilities were needed to be developed in Natham village, in order to divert the attention of the victims from the tragedy that had taken place. The team recommended the installation of a television to the district collector for this purpose. The NIDM greatly appreciates the collector's immediate acceptance of this recommendation.

### Areas for Intervention

- It has now been over three months since the fire tragedy in Kumbakonam. The incident has seriously affected the mental health of adolescents and mothers. Most of the mothers who lost their children are still on medication. There is a need to follow up on their treatment.
- Counselling was mainly targeted towards mothers and children who had witnessed the tragedy. It was found that fathers, siblings and grandmothers were not being given adequate counselling, although the need to do so was felt acutely during the visit. There were certain cases in which fathers of the victims had increased their alcohol intake and had not resumed their routine occupation.
- The quality of interaction amongst family members in many families had also deteriorated. Family ties need to be normalized as soon as possible to help the community to fully recuperate.
- The surviving students are still suffering from fear and anxiety and these pressures need to be addressed.
- The NIDM team also visited some of the schools in Kumbakonam and found that old buildings, narrow staircases and entrances/exits still exist in most schools, inviting future disasters.

### The Road Ahead



*Awaiting an assurance for a disaster-free life*

The strict enforcement of building safety rules for educational institutions is recommended. In addition it is critical to review the policies that granted recognition to schools prior to 1950. Training teachers and other staff in the schools, raising awareness of the children through the curriculum, and developing a district disaster management plan with due emphasis on such disasters, will go a long way to help prevent the reoccurrence of such heartbreaking tragedies in the future. A detailed report about the tragedy is under preparation.

## Upcoming Events

- Train The Trainers Programme on Preparedness & Mitigation Measures on Earthquake & Landslides at ATI, Kohima from 29 November – 3 December 2004
- Train the Trainers Programme on Disaster Resistant Techniques for Houses at AASC, Guwahati, 6 – 9 December 2004
- Training Programme on Hazards, Risk & Vulnerability Assessment Tools & Techniques through Video-conferencing at ATI, Mysore, 17 - 18 December 2004
- Workshop on Risk Financing in Disaster Management at NIDM, 20 – 21 January 2005.
- United Nations World Conference on Disaster Reduction, Kobe, Hyogo 18 – 22 January 2005

**We welcome responses/comments/articles from readers of our newsletter.**

**NIDM extends warm greetings to all readers for Diwali and Eid.**