Chapter – IV:
National Disaster Management Authority

The National Disaster Management Authority (NDMA) was constituted in May 2005 as an apex body for laying down policies and guidelines on disaster management. Following the enactment of the DM Act, NDMA was formally constituted in accordance with Section 3 (1) of the Act on 27th September 2006. NDMA was mandated to deal with all types of disasters, natural or man-made.

Major functions and responsibilities of NDMA

- lay down policy on disaster management;
- approve the National Plan;
- approve Disaster Management Plans prepared by the Central Ministries or Departments;
- lay down guidelines to be followed by the Central Ministries and State Authorities;
- coordinate the enforcement and implementation of the policy and plan for disaster management;
- recommend provision of funds for the purpose of mitigation;
- provide such support to other countries affected by major disasters;
- take other measures for the prevention of disaster, or the mitigation, or preparedness and capacity building for dealing with the threatening disaster situation or disaster; and
- lay down broad policies and guidelines for the functioning of the National Institute of Disaster Management.

4.1 Organisational structure

NDMA was constituted with the Prime Minister as its Chairperson and nine other members. Each member headed disaster-specific divisions and one member was to be designated as Vice-Chairperson. Each member had also been given the responsibility of specified states and UTs for close interaction and coordination. NDMA Secretariat, headed by a Secretary provided secretarial support and continuity.

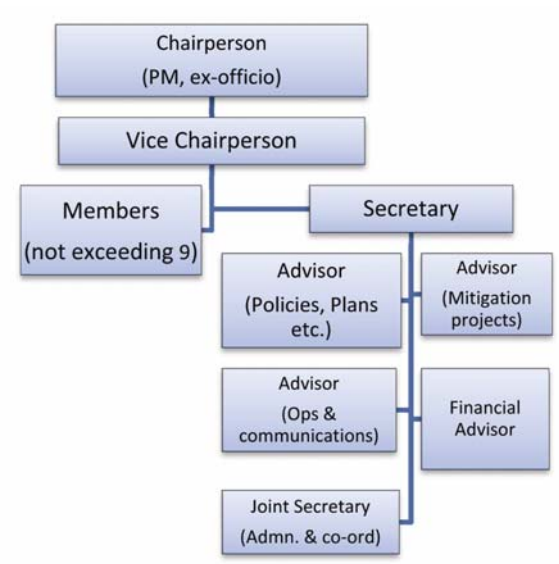


Chart No. 4.1: Organogram of NDMA

4.2 Delay in constitution of Advisory Committee of NDMA

DM Act provided for the NDMA constituting an Advisory Committee consisting of experts in the field of disaster management and having practical experience of disaster management at the national, state or district level to make recommendations on different aspects of disaster management.

The Advisory Committee was constituted in June 2007. The term of Advisory Committee was initially fixed for a period of two years followed by an extension of the term of the Committee for one year. Thus, the extended term of the Committee expired on 14th June 2010.

In June 2010, NDMA initiated the proposal for constitution of the 2nd Advisory Committee. Following the suggestions of the Prime Minister Office (PMO) given during the constitution of the first Advisory Committee, NDMA had approached various Ministries for nomination of experts of different fields.

We noted that NDMA had received names of three experts from Ministry of Earth Sciences and no response from other Ministries and Departments (May 2012). Thus, NDMA functioned without the services of the Advisory Committee since June 2010.

MHA stated (December 2012) that names of experts from several institutions had been received and the same were being processed for approval of PMO.

4.3 Implementation of projects by NDMA

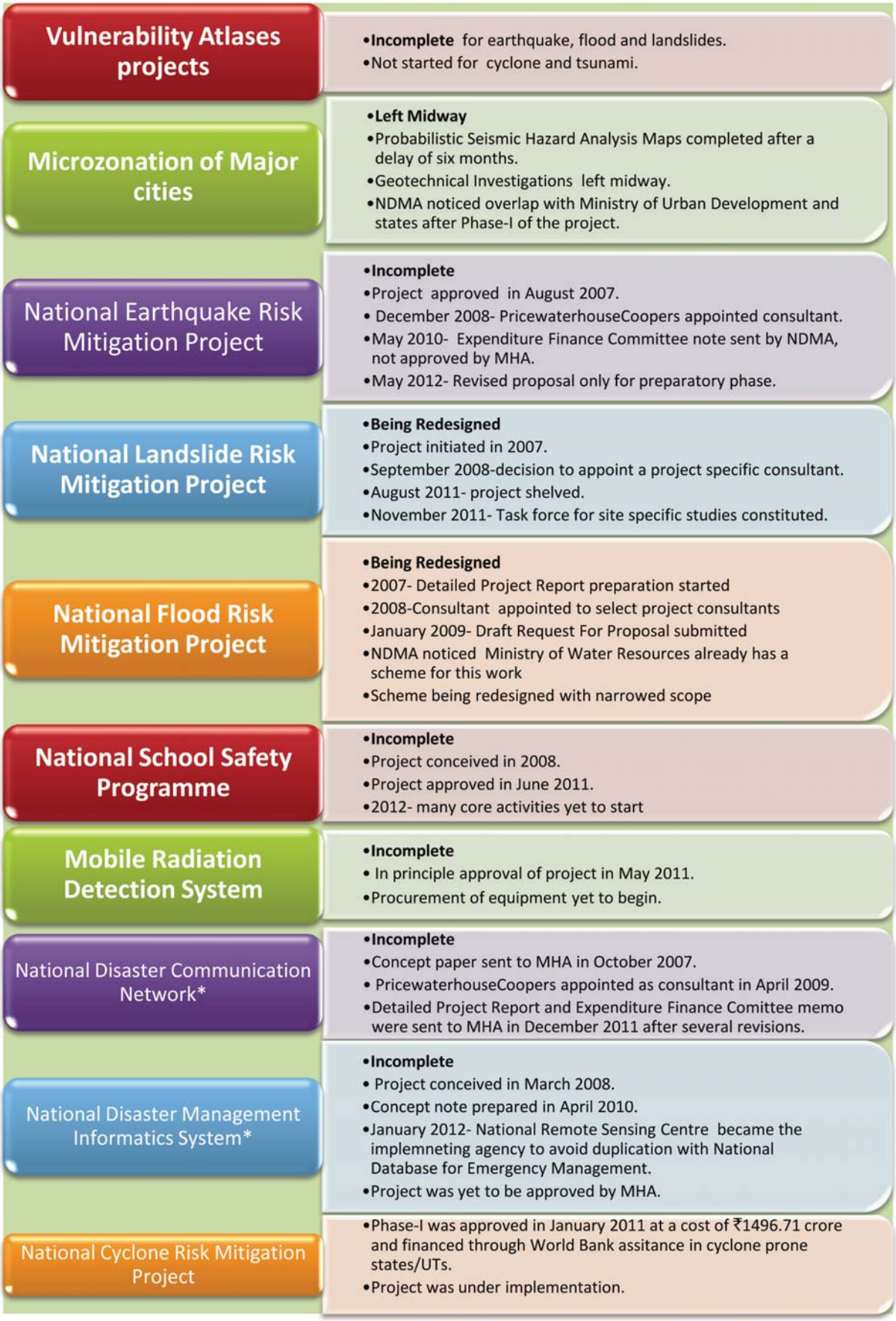
The Working Group of Planning Commission (December 2006) recommended various projects to be taken up by NDMA during the Eleventh Five Year Plan for disaster management. For the purpose of audit, the projects undertaken by NDMA were categorised as:

i. projects on vulnerability assessment and microzonation of major cities,
ii. mitigation projects,
iii. communication network projects ***(discussed in chapter-6)***, and
iv. other projects.

The performance of NDMA in terms of project implementation had been abysmal. So far, no major project taken up by NDMA had seen completion. It was noticed that NDMA selected projects without proper ground work and as a result either the projects were abandoned midway or were incomplete after a considerable period. In many cases, NDMA realised midway that some other agency was already executing project with similar objectives.

NDMA experimented with varying strategies to undertake projects. All agencies appointed to execute the work, were appointed on nomination basis. The project designs and scope were revised midway. Timelines were mostly absent and wherever timelines were given, they were not adhered to.

Chart 4.2: Project Implementation by NDMA (At a glance)



*- details in chapter 6

The details are as follows:

4.3.1 Vulnerability Analysis and Risk Assessment (VA&RA)

Vulnerability analysis and risk assessment were based on two parameters viz. the demand for survival of the buildings and infrastructure against the hazard profiles (the damaging forces) and their physical capacity to withstand the same.

In terms of the Yokohama strategy for a safer world in 1994, GoI had constituted an Expert Group to identify vulnerable areas with reference to natural hazards and prepare 'Vulnerability Atlas' showing areas vulnerable to natural disasters.

Building Materials & Technology Promotion Council (BMTPC) under Ministry of Urban Development prepared the vulnerability atlas of India in 1997. The atlas was revised by BMTPC in 2006 and was further proposed to be revised in 2011. In addition, NDMA was also engaged in preparing the upgraded hazard maps and atlases of the Indian land mass with respect to various natural hazards like earthquake, landslide, flood and cyclone.

We noted the following:

4.3.1.1 Earthquake hazard map & atlas

In January 2011, NDMA took estimates from BMTPC for the preparation of earthquake hazard maps as well as atlases of the country, states/UTs and districts. It took NDMA 10 months to sign an MoU with the nominated agency, BMTPC and award the work at a cost of ₹ 76.83 lakh. The project was to be completed in nine months. NDMA stated (July 2012) that BMTPC had prepared the upgraded hazard maps for the whole of India, two states (Andhra Pradesh and Bihar) and district level maps for Bihar. The earthquake hazard maps of the remaining states and districts in the country were under preparation.

4.3.1.2 Landslide hazard map

The existing vulnerability map for landslides in the country did not include the landslide inventory data already available with organisations like the Geological Survey of India, Central Road Research Institute, National Remote Sensing Centre, Defence Terrain Research Laboratory, etc. Further, information for landslide hazard was incomplete due to the non-availability of data from the North-Eastern States.

NDMA constituted (March 2011) working committee of experts for the task of up-gradation of landslide hazard map of the country. In July 2011, Working Committee of Experts on landslides decided that NDMA should obtain the landslide data from different national agencies for incorporation into the landslide hazard map. NDMA stated (July 2012) that data for preparing the map had been received from most of the agencies and working committee of experts would start working on the data to prepare basic input for preparation of upgraded landslide hazard maps/atlases.

4.3.1.3 Flood hazard map

NDMA constituted (January 2009) an Expert Committee for the identification of flood affected districts in India. The expert committee was to establish the parameters for proper categorisation of

the flood prone districts in India and to prepare the upgraded list of flood affected districts.

We noted that the flood hazard map was completed only for Assam and that for Bihar was nearing completion. However, for the states of Odisha and West Bengal, the work was not taken up (July 2012).

The atlas needed to be revised (i) by incorporating latest boundaries of states and districts (ii) latest data on various disasters and (iii) census data of 2011 and extending it up to district level and delineating Taluka boundaries.

However, the upgradation of various hazard atlases had not been completed. The hazard maps of other disasters like cyclone, tsunami etc. were yet to be taken up.

Absence of upgraded hazard maps was a risk associated with informed decision making of stakeholders in disaster mitigation and response.

MHA stated (December 2012) that:

- Data work for preparation of Cyclone Hazard Maps was nearing completion in SERC, Chennai. The work for preparation of Cyclone Hazard Maps was envisaged to be taken up thereafter through BMTPC once the work relating to preparation of Upgraded Earthquake Hazard Maps was completed by them.
- As regards Tsunami, Indian National Centre for Ocean Information Services (INCOIS) established by the Government of India under MoES had already carried out advance work in this regard especially on Tsunami modeling and Early Warning System.
- For floods and landslides, hazard maps were being prepared along with NRSC, GSI, etc. in consultation with the concerned State Authorities.

It further added that upgradation work was to be carried out in a systematic way and in a phased manner with the involvement of various relevant stakeholders and following a scientific approach.

4.3.2 Microzonation of major cities

Microzonation of cities enables the characterization of potential seismic vulnerability/risk that needs to be taken into account when designing new structure or retrofitting existing ones. The Planning Commission recommended a project for the "Microzonation of Major Cities" to be taken up by NDMA/MHA during Eleventh Five Year Plan. The objective of the project was to carry out microzonation of High Risk Cities in Seismic Zones-IV and V to prepare strategies to reduce earthquake risk and vulnerability in the high risk districts.

The Working Committee of Experts at NDMA divided the task in two parts viz: Development of Probabilistic Seismic Hazard Analysis (PSHA)[1] Map of India and Probabilistic Seismic Hazard Analysis & Geotechnical Investigations of the soil mass above bedrock.

[1] PSHA map: quantifies the rate (or probability) of exceeding various ground motion levels at a site given all possible earthquakes.

We noted the following in respect of the two components:

4.3.2.1 Development of PSHA Map of India at the bedrock level

NDMA awarded the work for developing PSHA maps to Structural Engineering Research Centre (SERC), Chennai in August 2008 at a cost of ₹ 56.14 lakh. The entire amount was released in three instalments to SERC. The project was completed in March-April 2011, after a delay of more than six months. The PSHA reports were sent to NDMA (February 2012). These reports were, however, not printed and sent to stakeholders till completion of audit (June 2012).

MHA stated (December 2012) that initially it was envisaged to have the PSHA report in soft form only. Subsequently it was felt that the printed version might also be useful for academic purposes. The reports were then printed and sent to all concerned.

4.3.2.2 Geotechnical investigations of the soil mass above bedrock

The objective of geotechnical investigations was to assist design engineers and town planners to understand general site conditions on the basis of site classification leading to building of safe and economical habitats. This Project was divided in two phases:

Phase-I: Preparation of (i) TECH DOC[2], which was to provide geotechnical inputs needed by structural engineers for design, retrofitting and construction work at a given site and (ii) preparation of Detailed Project Report (DPR) showing the details of plan as well as resources required, the expected time line etc for successful completion of the task involved in Phase-II.

Phase-II: Pilot Scale Studies on Seismic Microzonation of two cities for validation of the recommended prescription of various tests spelt out in TECH DOC.

NDMA signed (July 2009) an MoU with the India Institute of Science (IISc), Bangalore to prepare the technical document on geotechnical/geophysical investigations for Seismic Microzonation of Indian landmass. It was also proposed to prepare Detailed Project Report for carrying out Seismic Microzonation of two identified urban centres in the country. The cost of the project was ₹ 59.63 lakh and NDMA released first instalment of ₹ 41.35 lakh in October 2009. The project was to be completed within 18 months from the release of first instalment i.e. April 2011. However, the final version of the TECH-DOC was submitted by IISc in November 2011 after a delay of seven months.

As per Phase-I, IISc was to prepare DPR for carrying out seismic microzonation of two identified urban centres in the country under Phase-II of the project. IISc submitted (November 2011) a proposal involving an amount of ₹ 19.78 crore to carry out seismic Microzonation of the cities of Noida and Thane area. However, this was not approved by NDMA.

MHA stated (December 2012) that Phase-I of the project had successfully established the procedures for carrying out microzonation of urban centres in the entire country. Phase-II of the project

[2] Technical Document

proposal envisaged carrying out of seismic microzonation of Noida and Thane cities for demonstrative purposes, if felt necessary. As some of the states had already taken up microzonation of certain cities on their own, it was therefore, not considered necessary to undertake phase-II of the proposal.

Thus, there was poor conceptualization of the project as Phase-II was not pursued and NDMA left it to states.

We noted that all agencies to execute these works relating to hazard atlases and microzonation were nominated by NDMA. We were, therefore, unable to derive assurance on whether NDMA received the most competitive offer both in terms of cost and efficiency.

MHA stated (December 2012) that the agencies identified to undertake the works related to Hazard Atlases and Geotechnical Investigations were the apex Government institutions of the country with the requisite capability and expertise and were governed by financial regulations of Government of India.

The reply did not explain that in the absence of bidding process, how were the cost and quality ensured.

4.3.3 Mitigation Projects:

DM Act envisaged a shift from relief-centric response to a proactive prevention, mitigation and preparedness-driven approach for conserving developmental gains and also to minimise losses of life, livelihoods and property. Mitigation involved reduction of risk of any disaster or its severity or consequences. NDMA was carrying out several mitigation projects. We noted the following in respect of these projects:

4.3.3.1 National Earthquake Risk Mitigation Project (NERMP)

The Planning Commission had accorded in principle approval (October 2003) to the proposal of 'Earthquake Preparedness and Mitigation Project' to be implemented by MHA. After establishment of the NDMA, all the mitigation projects were transferred to it in August 2006. The draft proposal of the NERMP was approved in August 2007.

In December 2008, NDMA appointed a consultant[3] for preparation of the DPR for NERMP at a cost of ₹ 1.74 crore. The consultant submitted the draft Detailed Project Report (DPR) after a delay of eight months which was forwarded to MHA alongwith the draft Expenditure Finance Committee Memo in May 2010. The overall cost of the project was estimated at ₹ 1850.21 crore. MHA asked for a review of the project and suggested that it may be taken up in a phased manner.

A revised proposal only for the preparatory phase was circulated in December 2011 for comments and concurrence of stakeholders. There was no further progress since then.

Due to non-implementation of the project, NDMA could utilise only ₹ 0.18 crore till March 2012 against the projected plan outlay of ₹ 27 crore for the Eleventh Five Year Plan.

MHA stated (December 2012) that initially a detailed project report for ₹ 1850.21 crore was prepared by NDMA for the project. It further added that not much expertise was available in the country in

[3] M/s PricewaterhouseCoopers

many of the relevant domain areas, i.e. seismic retrofitting of infrastructure was almost a virgin and BIS codes for such subjects were still evolving. There was lack of consensus on many issues among the experts, academicians and practitioners. After due deliberations, a pilot project for ₹ 24.87 crore had been prepared which was under examination in the Ministry for its approval.

We noticed that since October 2003, the project did not make meaningful progress. Actual work on the earthquake risk mitigation was yet to start despite the DM Act laying emphasis on mitigation.

4.3.3.2 National Landslide Risk Mitigation Project (NLRMP)

NLRMP aimed at strengthening the structural and non structural landslide mitigation efforts. It also aimed to minimise the risks arising out of disasters caused by landslides.

We noted that a self contained note on NLRMP was sent by the NDMA to MHA in September 2007, which was not found very convincing and MHA asked (June 2008) for a revised note for preparation of the DPR.

NDMA decided (September 2008) to appoint project specific consultant for preparation of this DPR. The consultant was not appointed even after a lapse of more than two and half years (June 2011). In the meanwhile, NDMA had organised a National Seminar on Landslide Mitigation Management in June 2011, as a follow up of which, Member NDMA had approved (August 2011) the following:

- National landslide risk mitigation project may not be further pursued.
- Site specific studies of landslides should be initiated by reputed institutions to pave the way for site/region specific mitigation projects; and
- A Task Force would be formed chaired by Geological Survey of India, the nodal agency for landslides, for recommending further action to be taken on landslide management in the country.

The Task Force of experts was constituted in November 2011 for identifying a clear roadmap for landslide management in the country. So far, the Task Force had held only one meeting (January 2012).

MHA stated (December 2012) that drawing up a single project for various landslides at the national level would be a long drawn process involving huge funds and delay, and the project was being formulated for the first time in the country. The scheme for providing financial support to the State Governments for site specific mitigation was in final stages of preparation with NDMA.

Thus, NDMA despite handling the matter for four years could not ascertain the approach to be followed for this project. After a lapse of five years the project was still at the planning stage (December 2012). In the absence of a national project on landslide risk mitigation, various stakeholders were deprived of support and technical assistance from the National Authority.

4.3.3.3 National Flood Risk Mitigation Project (NFRMP)

NFRMP aimed at assisting the Central Ministries and Departments, and the State Governments to address the issues of preparedness and mitigation of floods with a view to minimise vulnerability to floods and consequent loss of lives, livelihood systems, property and damage to infrastructure and public utilities.

In August 2007, NDMA started the preparation of DPR for NFRMP. Engagement of Consultancy Development Centre (CDC) to select the project management consultants was approved by Vice Chairman, NDMA in August 2008. The Centre submitted draft Request For Proposal (RFP) for the selection of lead consultant in January 2009. At this advanced stage, NDMA decided to ascertain from the Ministry of Water Resources (MoWR) as to whether there was any overlap of the proposed NFRMP with the Flood Management Programme of MoWR for which an outlay of ₹ 8000 crore was made in the Eleventh Five Year Plan. In its response, MoWR intimated (May 2009) NDMA that all major activities proposed under NFRMP were already being handled by the Ministry.

We noticed that NDMA's interaction with nodal Ministries needs to be improved as in two major projects, only after spending considerable time and effort did NDMA realised that these were already being taken up under some scheme/project by the line Ministries.

We noted that:

(i) In July 2011 the Government decided that it was not feasible to have one large National Flood Risk Mitigation Project. Therefore, in order to avoid duplication of work and to productively utilise the available resources, the National Flood Risk Mitigation Project was rechristened as Flood Risk Mitigation Project (FRMP).

(ii) National Landslide Risk Mitigation Project had also been changed to Landslide Risk Mitigation Project (LRMP).

The concept notes of the revised schemes were issued in November 2011. NDMA had not finalised the SFC/EFC note on these revised schemes (May 2012).

MHA stated (December 2012) that due to inadequate in-house expertise in flood management, the services of CDC were sought to identify suitable consultants for preparing the DPR. However, this could not materialise and NDMA with its own efforts drew a scheme by avoiding overlaps and proposing action in areas where not much work had been carried out to mitigate the risk of floods. MHA further added that since MoWR was already executing a Flood Management Programme, it was considered appropriate to revise the project to avoid duplication of efforts. The reply confirmed that planning was inadequate which resulted in inordinate delays in finalising the scope of the project and ensuring its completion.

Thus, all the major risk mitigation projects initiated by NDMA were at various stages of implementation. The time limits were either without any basis or absent altogether. NDMA was still re-

conceptualizing these projects with reduced scope which indicated significant gaps at the planning stage leading to delay in establishing vulnerability assessment and mitigation efforts.

MHA stated (December 2012) that because disaster risk mitigation schemes were being prepared for the first time in the country, the project formulation had taken some time. However, two of the risk mitigation projects i.e. National Cyclone Risk Mitigation and School Safety were already approved and being executed.

4.3.4 Other Projects:

4.3.4.1 Mobile Radiation Detection System (MRDS)

In May 2011, MHA conveyed 'in principle' approval for establishment of Mobile Radiation Detection System. MRDS was to have a mobile monitoring van equipped with radiation detection system and protective gear to carry out the assessment of the radiological impact. On detection of any enhanced level of radiation or presence of radioactive substance the police personnel of MRDS were to immediately report the matter to the nearest Emergency Response Centre (ERC) already set up by Bhabha Atomic Research Centre.

A network of 20 units of Emergency Response Centers (ERCs) had been established by Bhabha Atomic Research Centre (BARC), Department of Atomic Energy in the country. ERCs were equipped with radiation monitoring instruments, protective gear and other supporting infrastructure. The main function of ERCs was to detect any radiation related abnormal situation in a suspected area by detection and monitoring of radiation and to continuously assess the situation further.

The establishment of MRDS including procurement of necessary monitoring instruments and training of the first responders from the police force was to be completed by NDMA within a period of three years. The State Governments were responsible for setting up MRDS within the State police.

In November 2011, Secretary NDMA recommended the MRDS proposal at an estimated cost of ₹ 7.49 crore. The project envisaging setting up of 960 MRDS was sanctioned by VC, NDMA in January 2012.

We noted that the project was initially proposed to be implemented through BARC on turnkey basis. During SFC stage, BARC clarified that it would only provide technical support. Thereafter it was decided by MHA and NDMA that the procurement of equipment would be carried out by the 'Procurement Wing' of MHA. We noted that due to unwillingness expressed by the concerned wing of MHA, no procurement was made (May 2012).

MHA stated (December 2012) that NDMA had now approached BARC, Mumbai for procurement of equipment.

4.3.4.2 National School Safety Programme (NSSP)

NDMA decided (July 2008) to take up a pilot project on school safety and formed a core group for the purpose. Accordingly, the National School Safety Programme (NSSP) was conceived with a total cost of ₹ 48.47 crore. The programme aimed at promoting a culture of disaster preparedness within the school environment and was taken up by NDMA

as a Centrally Sponsored Scheme in 22 states and Union Territories.

NSSP was approved in June 2011 and was to be completed by June 2013. We found that the implementation of NSSP was lagging behind as several important activities, which were to be conducted during 2011-12, were yet to be started. Those were:

- formulation of draft National School Safety Policy,
- non structural mitigation measures in 22 states,
- demonstrative retrofitting workshops to formulate guidelines on retrofitting, and
- circulation of information, education and communication material.

Three states were yet to finalise the list of schools to be covered under NSSP.

Total expenditure on NSSP during 2011-12 was ₹ 4.90 crore as against the target of ₹ 14.12 crore.

MHA stated (June 2012) that initiation for school safety was being implemented for the first time in the country and a lot of consultation was required with all the stakeholders. It took considerable time to finalise the financial guidelines.

4.4 Miscellaneous issues:

4.4.1 Efforts for disaster planning in urban areas

In January 2004, an Expert Committee of MHA suggested model amendments in town and country planning acts, land use zoning regulations and building regulations to include the elements of safe construction, retrofitting of lifeline and critical buildings and other key infrastructure. The model amendments were circulated to all states and UTs in September 2004 to review and adopt the recommendations as per the prevailing disaster vulnerabilities. Neither NDMA nor MHA had information on action taken by the states on these model amendments.

After the earthquake in Japan in April 2011, NDMA took up this matter again and requested states to furnish action taken report. NDMA had requested 16 states and UTs (particularly falling in Zone IV and V) to furnish the status reports on action taken especially in the areas of institutional strengthening for disaster management. Replies were received only from six states (June 2012).

MHA stated (December 2012) that primary responsibility of enforcing building bye-laws and building codes rested with respective State Governments/UTs with monitoring and co-ordination by the Ministry of Urban Development. NDMA had been pursuing with the State Governments/UTs with regard to enforcement of building bye laws and building codes as per the model amendments in building bylaws and town planning acts prepared by the Committee of Experts.

Thus, the model amendments in the existing regulations were yet to be carried out.

4.4.2 NDMA functions not being performed

As per the DM Act, NDMA was mandated to perform the following tasks:

- Section 6 (2) (g) of the Act provides for recommending provision of funds for the purpose of mitigation.
- Section 13 provides that in cases of disasters of severe magnitude, NDMA recommend relief in repayment of loans or for grant of fresh loans to the persons affected by disasters on such concessional terms as may be appropriate.

MHA stated (December 2012) that Reserve Bank of India had issued instructions in July 2009 to all Scheduled Commercial Banks to take necessary action in this regard. It included grant of fresh loans, consumption loans and restructuring of existing loans. The banks are guided by these guidelines; there is nothing more that NDMA can add at this stage.

Till 2012, NDMA had not initiated any action for recommending relief in repayment of loans or for grant of fresh loans to the persons affected by disaster. We also noticed that RBI guidelines existed on this subject since 1984 and were being updated regularly. The intention of the legislature as contained in the said provision of the DM Act was clearly for NDMA to play a pivotal rather than a peripheral role, being the nodal agency.

4.4.3 Review of major national projects

According to the Cabinet Note on "Organisational Structure of the NDMA", it was to review all major on-going national projects[4], to include structural requirements for disaster reduction. We, however, noted that NDMA had not been performing the task assigned to it by the Cabinet.

[4] In sectors of education, housing, rural development, urban development and other infrastructural projects of roads, bridges, etc.

4.5 Case study on NDMA's response to Leh Cloudburst:

In August 2010, a cloudburst in Leh resulted in large scale damage to houses rendering many families homeless. The Prime Minister visited Leh on 17th August 2010 and announced relief packages for the victims.

Prime Minister Office (PMO) chose NDMA to construct 20 community shelters at 10 different locations on sites identified by the State Government. As per the directions of the PMO, the prefab community shelters should withstand temperature as low as minus 30^0 Celsius and be set up before the onset of severe winter i.e. by October 2010.

NDMA received quotations from various Public Sector Undertakings with a validity period of 10 days in September 2010. The lowest rates were offered by NBCC[5]. After a gap of 20 days (i.e. after the expiry of the validity of the bids), NDMA on 29th September 2010 accepted NBCC's bid and asked for the final cost and completion date of the project.

NBCC replied (October 2010) that the total cost of the project had increased from ₹ 6.68 crore to ₹ 10.85 crore with the tentative date for completion of the project as 15th November 2010. NDMA approached PMO for approval which agreed and released an amount of ₹ 5 crore from Prime Minister's National Relief Fund (PMNRF) as 1st tranche of the costs involved.

NDMA requested NBCC to start the construction and to execute a MoU in this regard. NBCC stated (13.10.2010) that it would be difficult to adhere to the target dates since the suitable period[6] for construction had already lapsed. Finally, on 21st October 2010 NDMA cancelled the offer of NBCC.

After this, a team of NDMA visited Leh to explore the possibility of contacting some firms already working at Leh. Thereafter, it was decided to execute MoU with Hindustan Prefab Ltd. and setting up of all the shelters by 15 November 2010. The work was finally completed in December 2010. Thus, the facility of community shelters could only be extended to the victims of such calamity after the onset of extreme weather conditions.

[5] National Building Construction Corporation
[6] conducive period for construction work is very limited in Leh

Against the projected cost of ₹ 10.85 crore for setting up of 10 shelters, NDMA erected 16 community shelters by incurring a sum of only ₹ 2.92 crore. The balance amount of ₹ 2.08 crore was returned to PMNRF in September 2011. Evidently, the initial projection of funds was faulty and rates were adopted on ad-hoc basis. NDMA could not utilise even the 1st tranche of funds released and retained the funds for almost nine months outside PMNRF.

On this being pointed out MHA stated (December 2012) that since NDMA had no technical unit, it was decided to engage the PSUs specializing in construction. The project was executed in harsh weather conditions within a very short time period.

Lesson learnt: NDMA had no mandate to execute emergency response works, neither did it have any experience and expertise in this area. The role of NDMA was not envisaged as an executing agency for reconstruction projects.

4.6 Manpower management in NDMA

4.6.1 Vacancies in NDMA

As per the Cabinet Note on "Organizational Structure of NDMA" it was to have 124 posts. However, we noted 33 to 60 *per cent* vacancies at the end of each financial year covered by audit. The details are in **Annex - 4.1**.

Further, many 'critical posts' like Advisor (Operations & Communication), Assistant Advisor (IT), Duty Officer (Operations centre) etc. were not filled up since 2008.

MHA stated (December 2012) that out of 124 posts, 92 posts were filled and advertisement to fill the remaining posts had been published in local dailies.

4.6.2 Appointment of consultants

As per extant Government of India rules for appointing consultants, the terms of reference of consultants should be prepared including precise statement of objectives, tasks to be carried out; schedule for completion of tasks and final outputs required of the them.

The cabinet note provided that the services of specialists would be outsourced as and when the requirement arose. We noted that NDMA appointed 13 consultants in different area of specialization, who were attached with the concerned Members' Secretariat. We further noted that these consultants were engaged in day to day work of NDMA and no specific tasks were assigned to them. Their tenures were also renewed routinely.

MHA stated (December 2012) that consultants were being appointed as per the revised guidelines and detailed Terms of Reference with specific tasks to be assigned to them.

Recommendations:

- ***NDMA should ensure early constitution of its Advisory Committee of experts.***
- ***NDMA needs to review and strengthen its project execution approach. Better coordination is required with nodal Ministries to avoid duplication of efforts.***
- ***NDMA should start the work of assessment of major national projects with a view to include structural requirements for disaster reduction.***
- ***NDMA should make efforts for formulation of the retrofitting policy.***