

# Government of India - UNDP Disaster Risk Management Programme 2002 – 2009

Evaluation and Review of Lessons Learnt







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**Evaluation and Review of Lessons Learnt**

Prepared by the Asian Disaster Preparedness Centre





## Foreword

In 2002, the GOI-UNDP Disaster Risk Management Programme started with a modest target of disaster preparedness and vulnerability reduction in 28 districts in the Indian states of Bihar, Orissa and Gujarat. The geographic coverage and outreach expanded progressively to cover almost one third of the country -176 districts spread over 17 states. The Programme outlay grew from US\$ 2 million in 2002 to US\$ 41 million during the seven year programme duration.

The Ministry of Home Affairs, Government of India, led the programme, presenting the initial National Framework to all development partners including donors, actively encouraging each agency to support elements of this framework. Donor partners such as AusAID (Australian Governments Overseas Aid Program), EC (European Commission), DFID (UK Department for International Development), DIPECHO (Disaster Preparedness Program of European Commission's Humanitarian Aid Department), Government of Japan, USAID (United States Agency for International Development), UNISDR (United Nations International Strategy for Disaster Reduction) and UNTF (United Nations Trust Fund) committed their support to this programme jointly managed by UNDP and the Government. As a direct result of this process of galvanizing resources within a strategic multi-donor framework, 300 million people living in high-risk areas were empowered to deal with risk management. The Programme also helped national and state governments to implement the paradigm shift in disaster management, from just providing relief to a holistic approach encompassing all phases of Disaster Management.

In order to sustain the increased stakeholder capacities, further work is required. The Government has indicated the need to upscale the community based capacity building processes to those districts not yet covered by the programme. These initiatives through the newly created institutional structures at various levels such as the state and district disaster management authorities and several new risk mitigation Programmes that are being finalized, will help India reduce the losses and damages due to natural and human induced disasters.

In 2009, an evaluation of the multi-donor supported programme was undertaken by the Asian Disaster Preparedness Center (ADPC), Thailand. This publication is the final report of the ADPC that presents an analysis of the outputs, outcomes and the overall impact of the programme in relation to the National Disaster Management Framework as well as insights on the way forward.

The support and commitment of all partners is greatly appreciated and we hope that there will be more occasions to enhance our cooperation and efforts towards making disaster risk reduction an integral part of development programmes.

Thank you all for the excellent partnership!



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# Acronyms

ASHA	Accredited Social Health Activist
ADPC	Asian Disaster Preparedness Centre
ATI	Administrative Training Institute
BCPR	Bureau of Crisis Prevention and Recovery
BDO	Block Development Officer
BM	Border Management
CSF	Calamity Relief Fund
CSO	Civil Society Organisation
CBO	Community Based Organisation
CBDRM	Capacity Building for Disaster Relief Management
CEO	Chief Executive Officer
CII	Confederation of Indian Industry
CPAP	Country Programme Action Plan
DDMA	District Disaster Management Authority
DM	Disaster Management
DMC	Disaster Management Committee
DMP	Disaster Management Plan
DMT	Disaster Management Team
DPO	District Project Officer
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
DRRO	Disaster Relief and Rehabilitation Officer
EOC	Emergency Operations Centre
Gol	Government of India
GP	Gram Panchayat
HPC	High Power Committee
HR	Human Resource
IAYS	Indira Awaas Yojana Scheme
ICT	Information and Communication Technology
IEC	Information, Education and Communication
INGO	International Non-Governmental Organisation
MRA	Main Result Area
MHA	Ministry of Home Affairs

NCCF	National Calamity Contingency Fund
NDMA	National Disaster Management Authority
NDMF	National Disaster Management Framework
NGO	Non-Governmental Organisation
NIDM	National Institute of Disaster Management
NSC	National Steering Committee
NYKS	Nehru Yuva Kendra Sangathan
PA	Programme Associate
PMB	Project Management Board
PRI	Panchayati Raj Institution
PSC	Project Steering Committee
PSO	Programme Support Objective
RC	Relief Commissioner
SIDM	State Institute for Disaster Management
SDMA	State Disaster Management Authority
SEC	State Executive Committee
SEEDS	Sustainable Environment and Ecological Development Society
SHG	Self-Help Group
SPO	State Project Officer
SSC	State Steering Committee
ULB	Urban Local Body
UEVRP	Urban Earthquake Vulnerability Reduction Project
UN	United Nations
UNCT	United Nations Country Team
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UNTF	United Nations Trust Fund
UNV	United Nations Volunteers
USAID	United States Agency for International Development
VDMP	Village Disaster Management Plan
YASHADA	Yashwantrao Chavan Academy of Development Administration



# Executive Summary

## Introduction

The Government of India (GoI)-United Nations Development Programme (UNDP) Disaster Risk Management Programme has been implemented in 176 districts in 17 states since August, 2002. The programme aims to reduce people's vulnerability to natural and man-made disasters through building community preparedness. The Asia Disaster Preparedness Centre (ADPC) was entrusted with an evaluation of the programme that aimed to cull out the lessons learnt and recommend a way forward. The evaluation was carried out with the national partner, the Sustainable Environment & Ecological Development Society (SEEDS), India in 14 states. This involved extensive field visits to programme districts and national consultations.

The evaluation exercise focused on an outcome and output analysis, reviewed a broad gamut of strategies, appraised the key priority areas of Disaster Risk Management (DRM) in India, reviewed progress made so far and identified a realistic timeframe to complete the remaining activities.

The evaluation was carried out through extensive visits to 14 states which included meetings with key officials at the state and district levels and visits to the programme areas. Information was collated and an analysis of outputs and outcomes was undertaken. Further, the overall impact of the programme as it relates to the National Disaster Management Framework (NDMF) and DRM Programme goals, objectives and Main Result Areas (MRAs) were also analysed. A framework of action for sustainability was developed keeping in mind the overall environment in the country and the progress made since the enactment of the Disaster Management Act in 2005. The evaluation also assessed the partnership strategy of UNDP and the GoI through an analysis of current and future initiatives.

Finally, inputs from the National Disaster Management Authority (NDMA), the Ministry of Home Affairs (MHA), UNDP, relief commissioners, other state government officers, State Project Officers (SPOs) and donors have been taken into account in the preparation of this report.

## Outcome analysis

Comparisons with similar DRM programmes in Asia and the Pacific reveal that the GoI-UNDP DRM Programme is the largest of its kind implemented by any country in Asia and has set a benchmark for community-based Disaster Risk Reduction (DRR). However, we can also learn useful lessons from the multi-level preparedness programmes implemented in Bangladesh and Vietnam over several decades. A dynamic and continuing partnership between the GoI, state governments and UNDP ensured strong leadership for the programme. Training and capacity-building at all levels including recruitment and placement of trained professionals at district levels made a qualitative difference to the programme activities. Despite numerous implementation dilemmas, typical of any large-scale unprecedented initiative, the programme has clearly demonstrated that loss of lives and vulnerabilities can be significantly reduced through appropriate community-based preparedness measures.



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## **Achieving stated outcomes**

The current evaluation reveals that the DRM Programme interventions have contributed significantly in achieving the stated outcome. Based on aggregation of indicator results, it is evident that the achievement of outcome indicators is highest at state and district levels. At levels lower than district, the achievement has been less than 60 percent. The programme was successful in its horizontal outreach but vertical penetration has been partial.

The DRM Programme fulfilled the priorities set out by the GoI, as reflected in the relevant recommendations of the High-Powered Committee (HPC) but it did not transform sufficiently into a new institutional arrangement. This was clearly a lost opportunity, most sorely felt, particularly by the states, when ensuring the graduation phase of the programme.

The Programme was relevant to the needs of the most vulnerable regions of the country. However, the identification process excluded some high-risk regions. The programme design was not sensitive to the geo-climatic conditions, remoteness of project districts and poor infrastructure. This has resulted in an additional strain on resources and delays in implementation. Problems of law and order became a barrier to a smooth and efficient engagement with communities in several states.

## **Leadership and integration**

Strong leadership at all levels catalysed programme performance. Nationally, the leadership provided by the MHA in driving the programme and its engagement with the states has ensured fairly widespread coverage. Likewise, a strong and continuous leadership and ownership of the programme in the selected states together with the involvement of the local community leaders has yielded qualitatively better results.

Results improved significantly, in qualitative terms, in states where programme activities were integrated with existing government development programmes carried out by various line departments. In most states, mainstreaming of the programme was visible in the education departments where Disaster Management (DM) curricula have been introduced in schools. However, the programme is still by and large perceived as a stand-alone programme in almost all states, building the capacity only of the revenue departments. By and large it has not been linked to development plans.

The DRM Programme was successfully able to reduce losses to life and property in several natural disasters. This was evident in some areas of Assam in 2007 and villages in Tamil Nadu in 2004, where disasters tested the level of preparedness of the local communities.

### Technical resources and training investments

Judicious use of technical resources and investments in training could have significantly improved the performance of the programme. The opportunity to use the DRM Programme to provide a fresh infusion of resources in order to develop their capacity as providers of training and technical support services to the state governments was not sufficiently utilised.

National UNV volunteers appointed to facilitate programme implementation ensured a fast start-up and its continued implementation. District Project Officers (DPOs) played an important role in the accomplishment of the programme objectives by assisting the district administration in executing the programme activities.



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## Output analysis

Programme outputs relating to preparedness have fared well, whereas achievements pertaining to long-term vulnerability reduction are partial. Two MRAs – promotion of disaster resistant and cost-effective housing technologies through training of professionals and construction workers has recorded low level of achievement<sup>1</sup>. Likewise, the establishment of techno-legal frameworks to create an enabling environment for disaster reduction has not achieved the desired results.

An output analysis reveals that Assam and Sikkim have reported high levels of achievement in nearly all MRAs. Uttar Pradesh, Uttarakhand, West Bengal, Tamil Nadu and Maharashtra have reported achievements in at least four of the six MRAs while Delhi, Mizoram and Tripura have reported achievements in three of the six MRAs. These MRAs strongly correlate to the intended outcome of the Programme – reduced vulnerability to natural and human-induced disasters through community preparedness. The achievements therefore vary from state to state, particularly with regard to long-term measures taken to reduce vulnerability.

Across states, there are wide variations in output performance. An important factor contributing to this variation is the lack of location-specific strategies. Too many activities, a vast coverage and lack of prioritisation of activities together resulted in an inescapable cookie-cutter approach which adversely affected the quality of the programme activities.

Mock-drills at the community level were an innovative approach undertaken to enhance preparedness. The drills helped in raising the community's awareness and their sensitivity to the likely impact of disasters, and steps that need to be taken for a community to be prepared. There have been several situations where the exposure to mock-drills helped people in saving lives. Qualitatively, the community mock-drills also highlighted many important areas for improvement.

### **DM plans – at the state, district and village level**

Seven of the 14 participating states reviewed reported of having DM plans. In some states, where a plan document of sufficient quality does not exist, a drafting process is underway. On the whole, state plans need to be revised extensively to conform to the provisions of the DM Act. While there has been good progress on the process and content of the district-level DM plans, limited attention has been paid to mitigation and prevention aspects. These plans also need to be revised in accordance with the provisions of the DM Act.

Village level plans in several areas were completed without the adequate orientation and training of local communities. The paucity of time and ambitious quantitative targets forced the programme to adopt a template-based approach. There were very few instances of plans being revised or reviewed. In addition, horizontal and vertical linkages between the various levels of planning were missing.

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<sup>1</sup>As per the evaluation methodology MRAs are graded as “low”, “medium” and “high” levels of achievement.



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## Awareness generation and social inclusion

Awareness has been generated through a variety of innovative and locally appropriate media, thereby ensuring extensive outreach. However, the element of social inclusion was missing from the Programme. Women have gradually become active partners in the local DRM process and their involvement is improving, while not to the desired scale. Women have been trained in first aid and search-and-rescue operations. The programme design itself, however, provided little room for women-led and women-specific strategies.

The programme outreach did not effectively translate into local-level empowerment. There were constraints in the programme approach, as well as external factors over which there was no control. Factors that helped achieve local empowerment included small-scale recurrent disasters, local social structures, the community's own coping systems and local-level engagement with other stakeholders. On the other hand constraints included law and order, local vested interest groups, inadequate accessibility and communities with no experience of facing disasters.

## Partnership strategy

A strong partnership between UNDP and MHA ensured that the programme was efficiently introduced in the selected states and monitored regularly. The strength and nature of the partnership at the state level has also strongly affected the impact of the programme. However, there was inadequate integration with other national ministries and departments.

Formal mechanisms to involve civil society organisations and the corporate sector were not part of the initial programme design. These, however, evolved during the programme implementation; particularly the involvement of the corporate sector such as the Confederation of Indian Industry (CII) nationally, at its state-level chapters. Hotel associations in some states were also involved. The programme was perceived as government-led. Civil Society Organisations (CSOs) were involved as implementing partners in several states particularly in the development of community-level plans. However, the potential of an effective partnership with CSOs through suitable mechanisms was not fully recognised.

## Key conclusions and recommendations to ensure programme sustainability

States that have already made arrangements to ensure sustainability are Delhi, Maharashtra, Sikkim and Uttarakhand. States that have taken significant action for alternate arrangements are Assam, Meghalaya, Mizoram, Nagaland, Tripura and West Bengal. States where action is now being initiated are Arunachal Pradesh, Manipur, Tamil Nadu, and Uttar Pradesh.

The DM Act 2005 had an important catalytic effect in ensuring programme sustainability. However, sustainability has been constrained by the availability of adequate funds and technical expertise. Progress in achieving sustainability was measured against the following parameters - institutionalised mechanisms, including DM training capacity, and legal frameworks; decisions on Human Resource (HR) support beyond the programme period; budgetary support for the continuity of programme activities; and extension of the Programme to other vulnerable areas not covered under the DRM Programme. Based on this analysis, a framework of action for immediate and medium-term measures has been proposed.

## Immediate and medium term measures to ensure sustainability

There is an immediate need for additional human and financial resources to support the smooth transition from UNDP to state government officers exclusively designated to take over the programme implementation at state and district levels.

In addition to meeting immediate needs, a range of medium-term measures towards sustainability include ensuring all states have constituted State Disaster Management Authorities (SDMAs) and District Disaster Management Authorities (DDMAs) which are effectively functional with horizontal and vertical linkages at district and sub-district level; formulation of state and district disaster management plans incorporating comprehensive local-risk analysis; regular mock drills to ensure adequate level of preparedness; capacity development of a new institutional mechanism; establishing detailed training and re-training systems; increasing the scope and number of institutions imparting training in DM; creating a funding mechanism for mitigation, training and preparedness activities; and enabling a coordination mechanism through defined partnerships across all stakeholders, which would ensure DM activities are effective and response is prompt.

Each state would need to develop its own DRM roadmap incorporating the measures outlined above to ensure sustainability.



## Good practices and lessons learnt

Based on the review of cases from the given pool of pre-identified cases and those cited during the evaluation field visits, a thematic approach has been adopted to identify 47 good practices under 13 themes. The 'Good Practices and Lessons Learnt' document prepared focuses on how effective the activities of the DRM Programme were in achieving positive change to reduce vulnerabilities and risks. The main areas that stand out were mapping out communities' vulnerabilities and risks, preparing plans, incorporating preparedness activities through drills, linking mitigation measures with local area development priorities, and adapting model-training approaches to enable communities to actively participate in DM initiatives.

## Other key recommendations

Almost unanimously, state governments suggested that the Programme be carried forward in the existing DRM districts as well as extended to non-DRM districts. Consolidation of the programme in the existing 176 districts and gradually extending it to all the districts of the country is recommended.

Institutionalising the techno-legal regime in all districts accompanied by the required training of professionals need to be carried out.

UNDP may leverage funding available in the Country Programme Action Plan (CPAP), 2008-12 to seek the support of other international agencies. Critical support will be needed to ensure the effectiveness of SDMAs and DDMAs; provide support to National Institute for Disaster Management (NIDM) and state-level training institutes; ensure technical and logistic support for development of training modules for specific targeted groups, training of trainers, documentation, monitoring and evaluation as well as planning at block and village levels so that intervention programmes can be taken up by the state governments.

A need has also been felt to look ahead and establish at least one full-fledged state level institution in the larger disaster-prone states to take on the role of a State Institute of Disaster Management (SIDM), similar to the role of the NIDM at the national level.

At the national level, funds may be provided by the central government to strengthen the NIDM, undertake the Programme in all vulnerable districts of non-DRM states, consolidate and continue the Programme in DRM districts till the state plans are finalised and the DRM Programme included therein, monitor as well as carry out a qualitative and quantitative concurrent evaluation of the programme and generate awareness at national level through mass media.

At the state level, funds may be provided by the state governments to continue the Programme in the existing DRM districts as well as extend the Programme to non-DRM districts, strengthen the existing training institutes and identify additional training institutes at the state and district levels, and establish and/or strengthen the SIDMs.

## Looking ahead

Looking ahead, as a part of system building, it has to be recognised that having taken important baby steps, we are at the threshold of not only unfinished agendas, but in many cases, just at the start of the agenda. The action ahead lies in sustained system building to ensure routinised and sustainable DRM systems and programmes at all levels. The DRM Programme is and needs to be perceived as a GoI programme to mainstream DRR in the day-to-day activities and agendas of all development ministries, to be implemented as a national mission with multi-ministerial engagement through a multi-stakeholder approach. This principle should govern the future strategy for programme implementation across the board at all levels to make the programme inclusive as well as sustainable.

A ten-year action plan needs to be taken up by the governments, NDMA, MHA and other concerned ministries in the national arena. SDMAs and relevant state departments and concerned departments for vulnerable districts need to mainstream DRR in the development activities in close conjunction with local governments, authorities and stakeholders with the active participation of the community. A new personnel structure also needs to be put in place, building on the success of the National UNV volunteer programme. Based on this modality, the development of a national corps of young DRR professionals could be considered to support the national DRR mission.





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# 1

## INTRODUCTION

### 1.1 DRM Programme, India

In partnership with the MHA, Gol, the DRM Programme was initiated in August 2002. The Programme is within the United Nations Development Assistance Framework (UNDAF) 2002-2007, India and the UNDP Country Programme (2002-2007). The Programme was initially extended up to December 2008 and then till June 2009, with the approval of the Project Management Board (PMB) in its meeting held on 11 December 2008. The Programme initially targeted 28 districts in three states i.e., Bihar, Gujarat and Orissa. This was extended to 125 districts in 12 states in April 2003. By late 2004 and early 2005, the programme was spread over 169 (presently 176) of the most hazard-prone districts in 17 selected states. These states/union territories are Arunachal Pradesh, Assam, Bihar, Delhi, Gujarat, Maharashtra, Meghalaya, Manipur, Mizoram, Nagaland, Orissa, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh, Uttarakhand and West Bengal.

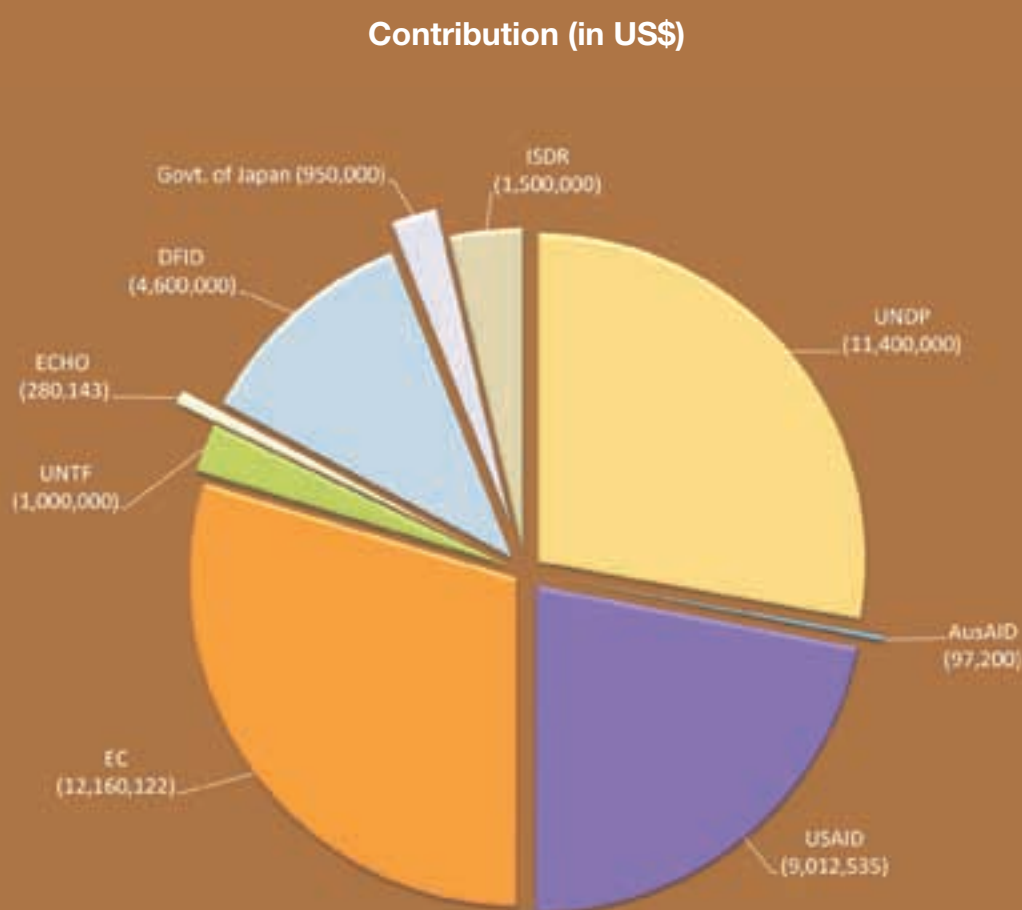


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## 1.2 Programme resource mobilisation – Multi-donor framework

The initial outlay of the programme for 28 districts in the three states was US\$ 2 million, which was increased to US\$ 27 million when the programme was extended to 125 districts in 12 states. Thereafter the outlay was increased to US\$ 34 million and finally to US\$ 41 million under a multi-donor framework when the programme coverage was further enhanced to 176 districts in 17 states<sup>2</sup>. The financial outlay of the Programme and contribution of each donor is presented in Figure 1.1 below :

**Figure 1.1: Financial Resource Mobilisation**



**Total 41 million\***

*\*Rounded off*

<sup>2</sup>Agenda notes from the meeting of the Programme Steering Committee , 26 September 2008

## 1.3 The largest programme in Asia: A number of firsts

Following the first UN Disaster Management Training Programme (UNDMTP) implemented in 14 Asian countries from 1990-1994, a number of UN Country Offices initiated small to medium-sized (US\$ 200,000-US\$ 700,000) programmes on capacity building for DM. Implemented between 1996 and 2000 these programmes used a small grant from UNDMTP coupled with funding from UNDP Country Offices. In India, a similar project on strengthening disaster input capacities initiated by the UNDP India Country Office was implemented by the Ministry of Agriculture and Cooperation, Gol from 1997 to 2000, with a total outlay of about US\$ 600,000.

Compared to the initiatives outlined above in India, and its generation of smaller DM capacity building programmes in Asia, the Gol-UNDP DRM programme (2002-2009) marked a qualitative shift in size, scale, and budget. Also, with the exception of projects in Bangladesh, China and Vietnam, it was the first of the large programmes implemented by any UNDP Country Office or UN Country Team (UNCT) in Asia. Apart from size and volume of funds, similar to a programme in Bangladesh, it successfully adopted a multi-donor funding approach. In the case of India, the report of an HPC had just been released, and the government was in the process of drafting the NDMF based on its needs assessment; primarily using national expertise. Donors were encouraged to contribute resources to a programme to be jointly managed by the Gol and UNDP. This represented an approach of donor harmonisation that was consistent with the principles of the Paris Declaration on Aid Effectiveness, which was issued in March 2005. This is a key strength of the programme.

The Gol-UNDP DRM Programme evolved and expanded over six years primarily due to the mobilisation of additional resources and extension of the Programme to other districts. In addition, the Urban Earthquake Vulnerability Reduction Project (UEVRP) implemented in 38 cities with a population of over half a million in seismic zones III, IV and V<sup>3</sup> helped the Programme expand. By 2008, the Programme had expanded to 176 districts with UNDP Country Office support. The Programme was extended to June 2009 with limited support to the states.

Table 1.1 presents the overall programme goals, objectives, strategies and intended outcomes based on the latest available programme document.

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<sup>3</sup>Seismic zones III, IV and V have medium to high vulnerability to earthquakes as per the Vulnerability Atlas prepared by the Building Materials and Technology Promotion Centre (BMTPC), Ministry of Urban Development and Poverty Alleviation, Government of India (1997)

**Table 1.1<sup>4</sup>: GoI-UNDP DRM Programme: Key Strategies, Objectives, Result-Areas and Outcomes**

<p><b>Goal: Sustainable reduction in disaster risk in some of the most hazard-prone districts in select states in India</b></p>	<p><b>Indicators of achievement are:</b></p> <ul style="list-style-type: none"> <li>• Risk reduction factored in rapid disaster recovery</li> <li>• Disaster mitigated and development gains protected</li> <li>• Disaster risk considerations mainstreamed into development</li> <li>• Gender equity in disaster preparedness</li> </ul>
<p><b>Relevance to UNDAF Outcome(s):</b> Institutional mechanism strengthened for capacity building of local governance institutions and empowerment of community members (particularly the marginalised including women)</p>	
<p><b>Expected Outcome (s):</b> Reduce vulnerability to natural and man-made disasters through community preparedness</p>	
<p><b>Expected Output(s):</b> DM institutionalised and capacities developed at all levels with specific emphasis on women and other marginalised groups; increased community preparedness to manage disasters and mitigate vulnerabilities through risk reduction approaches and technologies</p>	
<p><b>Programme Support Objectives (PSO)</b></p> <ol style="list-style-type: none"> <li>I. Capacity building to institutionalise the system for DRM</li> <li>II. Environment building and education programmes in disaster reduction and recovery in the most hazard-prone states</li> <li>III. Multi-hazard preparedness and mitigation plans for DRM</li> <li>IV. Networking knowledge on effective approaches, methods, and tools for DRM ; developing and promoting policy frameworks at state and national levels</li> </ol>	

<sup>4</sup>GoI-UNDP Disaster Management Programme Document ( 2002-2009)

Programme Strategy	Programme Support Objectives ( PSO)	Programme MRAs
<p>Support to MHA to ensure administrative, institutional, legal, techno-legal, communication, and policy mechanisms are developed for DRM</p> <p>Support national government [MHA] efforts to strength its role in community and local self-governments' preparedness and response</p> <p>Support to National Institute of Disaster Management [NIDM]</p>	<p><b>PSO I:</b> National capacity enhancement to institutionalise the system for natural DRM in the MHA</p> <p><b>PSO IV:</b> Promote a policy framework at state and national levels</p> <p><b>PSO II:</b> Environment building, education, awareness programmes and strengthening capacities at all levels in natural DRM and sustainable recovery</p> <p><b>PSO III:</b> Multi-hazard preparedness, response and mitigation plans for DRM at state, district, block, village and ward level</p> <p><b>PSO IV:</b> Networking knowledge on effective approaches, methods and tools for DRM</p> <p><b>PSO 4:</b> Developing and promoting a policy framework at state and national levels</p> <p><b>PSO 2:</b> Strengthening capacities at all levels in natural DRM and sustainable recovery</p>	<p><b>MRA V:</b> Revised legal and techno-legal framework, promoted policy framework and created systems to ensure their compliance</p> <p><b>MRA IV:</b> Promoted disaster-resistant and cost-effective housing technologies</p> <p><b>MRA I:</b> DM institutionalised and capacities developed at all levels with specific emphasis on women</p> <p><b>MRA II:</b> Multi-hazard preparedness planning with linkages to a strengthened network of disaster management information centres and early warning mechanisms</p> <p><b>MRA III:</b> Awareness generated on DM and mitigation at all levels</p> <p><b>MRA I:</b> DM institutionalised and capacities developed at all levels with specific emphasis on women</p> <p><b>MRA VI:</b> Networking and knowledge sharing between the government, NGOs/Community Based Organisation (CBOs), institutions and stakeholders involved in DM</p>

<p style="text-align: center;"><b>Direct Outcome</b></p>	<p style="text-align: center;"><b>Indirect Outcome</b></p>
<ul style="list-style-type: none"> <li>• Enhanced capacity in the MHA for natural DRM</li> <li>• Administrative and institutional frameworks for administrative, institutional, legal, techno-legal, communication and policy mechanism for DRM developed for a (National) Disaster Management Cell in the MHA Integrated Operation Centre with a scientific warning dissemination system setup at MHA able to provide adequate and timely support to the implementing agencies</li> <li>• Comprehensive DRM framework and recovery strategies developed in 176 districts of the 17 programme states</li> <li>• Enhanced capacity of government functionaries of the nodal agency at the state level and in all selected districts in developing and updating the risk management and response plans for different hazards from time to time</li> <li>• National and state databases on natural DRM developed</li> <li>• Knowledge network for better involvement of stakeholders initiated</li> </ul>	<ul style="list-style-type: none"> <li>• Reduction of expenditure on disaster relief and increased investment in preparedness measures</li> <li>• Costs of disaster relief shared by the community</li> <li>• Enable self-reliance of villages, gram panchayats, blocks and districts in disaster preparedness</li> <li>• Ensure convergence of services and links to area development plans</li> <li>• Increased people's awareness and participation</li> <li>• Greater access to information for the people</li> </ul>

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### 1.3. A Comparisons with similar DRM Programmes in Asia and the Pacific

The GoI-UNDP programme bears comparison in terms of its size, budget, objectives, results, modalities, and programme management approaches with the following larger UNDP DRM programmes or UNDP-assisted programmes in other countries, as presented in Box 1 below:

#### Box 1: Similar UNDP Programmes in other countries of Asia and the Pacific

- **Government of Bangladesh** – *Comprehensive Disaster Management Programme (CDMP)*, 2003-2009
- **Government of Indonesia with UNDP/DFID** – *Safer Communities through DRR in Development*, 2007-2011
- **Government of Pakistan/UNDP/UNISDR/Donors** – *National Capacity Building for Disaster Risk Management (NCBDRM)*, 2007-2011
- **Government of Bhutan and UNDP** – *National Disaster Risk Management Framework* (2005-2006)
- **Government of Maldives/UNDP** – *Disaster Risk Management* (2008-2010)
- **Government of Sri Lanka with support from UNDP** – *Road Map for Safer Sri Lanka*, 2005-2015
- **Government of Nepal/UNDP/ECHO** – *National Strategy for Disaster Risk Management in Nepal*, 2006-2007

Table 1.3 summarises the status of the DRM programmes in Bangladesh, India, Indonesia and Pakistan. It illustrates that, in terms of programme spread and coverage, the DRM Programme in India is comparatively very ambitious; more so in terms of the number of states, districts and villages covered. In terms of population covered, the DRM Programme in India, with the outreach to about 300 million people, may probably exceed the cumulative coverage of similar programmes undertaken in Bangladesh, Indonesia and Pakistan. In terms of number of activities taken up, the programme in India is also comparatively more extensive. Against the backdrop of religious, social, linguistic, ethnic and cultural diversity, this community-based programme in India probably faced the most difficult challenges compared to other countries in the region, from the point of view of bringing about convergence among diverse communities towards the common objective of DRR and preparedness, with due emphasis on traditional coping mechanisms, which have been integrated into the programme.

However, while the programme certainly meets the standards to scale implementation in terms of geography and scope, it has yet to stand the test of time i.e., sustained implementation over several decades using regular government budgets and structures. Examples of such programmes in the Asian region are:

- a) Bangladesh's Cyclone Preparedness Programme (CPP): Underway since 1973 the programme is a partnership between the Ministry of Food and Disaster Management and the Bangladesh Red Crescent Society covering 47,000 volunteers in 4700 villages in 13 districts in a cyclone-prone region of the country.
- b) Vietnam's Flood and Storm Control Plans: This is a multi-level system of Annual Flood and Storm Control Plans prepared by the Flood and Storm Committee at the national, provincial, district and commune levels for the last 35 years.

Some of the success factors of these programmes can be a source of learning.



**Table 1.3: Select Disaster Risk Management Programmes in Asia and the Pacific**

<b>Country</b>	<b>Bangladesh</b>	<b>Indonesia</b>
<b>Period</b>	2003-2009	2007-2011
<b>Title</b>	Comprehensive Disaster Management Programme (CDMP)	Safer Communities through Disaster Risk Reduction in Development (SC-DRR)
<b>Budget</b>	US\$ 26.6 million	US\$ 18 million
<b>Principal Objective</b>	To strengthen the capacity of the Bangladesh disaster management system to reduce unacceptable risks and improve response and recovery activities.	Disaster Risk Reduction is integrated into the decentralised development process.
<b>Geographical Coverage</b>	National, districts, upazila (sub-district), unions, wards, and communities	National, as well as 6 out of 33 provinces targeted in 2008
<b>Donor(s)</b>	UNDP, DFID, EC	DFID
<b>Leading Government Agency</b>	Ministry of Food and Disaster Management (MoFDM)	the National Development Planning Agency (BAPPENAS) and National Coordination Agency for Disaster Management (BAKORNAS PB)

Pakistan	India
2007-2011	2002-2009
<p>National Capacity Building for Disaster Risk Management (NCBDRM)</p> <p>US\$ 46.5 million</p> <p>To enhance capability of the government of Pakistan at the federal, provincial, and local levels in dealing with disaster risks/ vulnerabilities in a systematic manner</p> <p>National, as well as 50 districts, major urban centres, etc</p> <p>UNDP, AusAID, Canadian International Development Agency (CIDA), DFID, World Bank (WB)</p> <p>National Disaster Management Authority (NDMA)</p>	<p>Disaster Risk Management Programme (DRM)</p> <p>US\$ 41 million</p> <p>Sustainable reduction in disaster risk in some of the most hazard-prone districts in select states of India.</p> <p>National, as well as 17 out of 35 states; 176 of 593 districts; 149,897 of 593,731 villages, 38 cities with over half million population each in seismic zones III, IV and V</p> <p>UNDP, EC, USAID, Government of Japan, AusAID, DFID, ECHO</p> <p>MHA</p>

**Table 1.3: Select Disaster Risk Management Programmes in Asia and the Pacific**

Country	Bangladesh	Indonesia
Period	2003-2009	2007-2011
<p><b>Other Government Departments and UN Agencies involved as partners</b></p> <p><b>(Intended) Results</b></p>	<p><b>MoFDM</b>, Disaster Management Bureau (DMB), Directorate of Relief and Rehabilitation (DRR), Department of Environment, UNDP, UNOPS, FAO.</p> <ol style="list-style-type: none"> <li>1. Professionalisation of the DM system – through a capacity building sub-programme</li> <li>2. Mainstreaming of DRM Programming – through a development partnership sub-programme.</li> <li>3. Strengthening of community institutional mechanisms – through a community empowerment sub-programme</li> <li>4. Expanding preparedness programmes across a broader range of hazards – through a research and information management sub-programme</li> <li>5. Operationalising Response Systems – through a response management sub-programme</li> </ol>	<p><b>BAPPENAS</b> and <b>BAKORNAS PB</b>, MHA, Local authorities, Decentralization Support Facility (DSF), UNDP</p> <ol style="list-style-type: none"> <li>1. Establishing a DRR policy, legal and regulatory framework</li> <li>2. Strengthening institutional systems that support decentralised DRR integrated with local-level development.</li> <li>3. Promoting education and awareness programmes to bolster understanding of the development and disaster linkages.</li> <li>4. Implementing DRR initiatives that make communities safer.</li> </ol>

Pakistan	India
2007-2011	2002-2009
<p><b>NDMA</b>, Provincial/Regional Disaster Management Authorities, Federal Line Ministries, government departments, training and education institutions, UNDP, other UN agencies, and NGOs.</p> <ol style="list-style-type: none"> <li>1. Establishment of institutional arrangements.</li> <li>2. Strategies for building codes, land use and disaster insurance</li> <li>3. National risk assessment</li> <li>4. Analysis of climate change related risks</li> <li>5. Disaster risk education, training, awareness</li> <li>6. DRM planning</li> <li>7. Local and community level programme implementation</li> <li>8. Strengthening of early warning systems</li> <li>9. Developing early warning systems for epidemics</li> <li>10. Mainstreaming disaster reduction into development.</li> <li>11. Improving effectiveness of emergency response system</li> <li>12. Capacity development for post-disaster recovery</li> </ol>	<p><b>MHA</b>, UNDP India Office, state governments.</p> <ol style="list-style-type: none"> <li>1. National capacity enhancement to institutionalise the system for natural DRM in the MHA</li> <li>2. Environment building, education, awareness programmes and strengthening capacities at all levels in natural DRM and sustainable recovery</li> <li>3. Multi-hazard preparedness, response, and mitigation plans for DRM at state, district, block, village and ward levels in 176 most multi-hazard prone districts of the 17 selected states</li> <li>4. Networking knowledge on effective approaches, methods and tools for DRM, developing and promoting policy frameworks at state and national levels</li> </ol>



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# 2

## EVALUATION METHODOLOGY

The methodology for undertaking the evaluation of the Gol-UNDP DRM Programme was determined after perusal of the “Mandatory Guidelines for Evaluators of UNDP Programmes”. The exercise was carried out by an evaluation team from the ADPC, Thailand and its national partner SEEDS, India as per the agreed Terms of Reference (ToR).

This evaluation study is meant to provide an outcome analysis of the programme activities carried out in the selected 14 out of the 17 programme states as well as forward looking recommendations on future strategy for the consideration of the Gol, state governments, UNDP and other stakeholders in India.

### 2.1 Objectives of the evaluation exercise

The objectives of this evaluation of the Gol-UNDP Programme as stated in Section 3 of the Terms of Reference (Annexure- I) are:

- Conduct holistic **outcome and output analysis**.
- **Review a broad gamut of strategies** like contribution to policy formulation, institutional strengthening, capacity building, awareness generation, community-based disaster preparedness approach, partnership building, knowledge networking, management effectiveness, etc.
- Appraise the key priority areas of the DRM in India with specific focus on community-based disaster preparedness, including provisions under the DM Acts (national and state) and ascertain how **DRM activities could be mainstreamed in the development plans to ensure sustainability**.
- Review progress made so far and **identify realistic timeframe to complete the remaining activities**, as well as make an assessment of measures required to gradually institutionalise the measures into the government system.

The evaluation team has approached this exercise as a forward-looking evaluation and lessons learnt review underlying the need to meet the expectations of MHA, UNDP, and other stakeholders to contribute to the processes of institutionalising DRM in the programme states. This will help in identifying actions and opportunities to extend the DRM activities to other states, districts, and communities at risk by UNDP as well as the GoI and state governments.

## 2.2 Key audiences of the report

The key audience for the evaluation include:

- MHA as the executing, as well as the implementing agency.
- NDMA.
- UNDP India as the agency that provided country office support.
- State governments, SDMAs and DDMAAs as they develop the roadmaps and undertake the implementation of programmes to institutionalise DM systems in their states and mainstream DRR into development.
- Various national agencies and other national stakeholders when they formulate and implement various DRR interventions with internal or external resources
- Donors who are interested in understanding the impact of their contributions and an appraisal of the approach to inform future investments of development resources.
- National and international NGOs and CBOs for their future local, district and state level interventions in the multi-disaster prone states in India.

The other key audiences of the evaluation, outside of India are the governments of Asian countries, UNDP Offices in Asian countries and at the regional level, UN agencies, donors and all development partners.

## 2.3 Previous evaluations of the GoI-UNDP DRM Programme

This report builds on previous evaluations of the Programme. In 2006, UNDP had entrusted an evaluation to the NIDM. The purpose of the evaluation exercise was a rapid qualitative assessment of Phase I of the DRM Programme implemented in 28 districts in Bihar, Gujarat and Orissa. The evaluation assessed the programme performance, the relevance and appropriateness of the programme design and its implementation in the context of the DM policy. The exercise was tasked to assess the efficacy of the programme approach and strategy in mainstreaming DRR as part of development initiatives.

In addition, an outcome evaluation was conducted by UNDP for its internal use in May-June 2007. This was an overall evaluation of its country programme (2003-2007) and the specific outcomes at the country level for the entire UNDP country programme. This included an analysis of the contributions of the DRM Programme to the sub-outcome of “Reduce vulnerability to natural and human-induced disasters through community preparedness”.

Furthermore, the EC conducted a specific donor evaluation through a team of independent consultants in January-February 2008 in the DRM target states of Assam, Sikkim and West Bengal as well as in some of the cities under the UEVRP component – Thiruvananthapuram and Kochi in Kerala, Mumbai and Pune in Maharashtra and Guwahati in Assam. The purpose of the EC evaluation was to assess the extent to which the Programme supported by EC had achieved its objectives against the standard criteria set out for the EC funding support to the DRM Programme. While undertaking this evaluation, the team took note of the conclusions of the earlier evaluations and comments/observations of the key stakeholders, and built upon them.

## 2.4 Overall approach to this evaluation study

The approach adopted for this study included the following:

- An assessment of the measures required to institutionalise DRM.
  - Analysis of how DRM activities could be further mainstreamed to ensure sustainability.
  - Analysis of the outputs, outcomes and overall impact of the Programme in relation to the NDMF and DRM Programme goals and objectives, and MRAs.
- Identification of the strengths of the strategies pursued under the Programme:
- A review of strategies and activities in which the Programme fared very well. These could be further highlighted in the form of case studies.
  - A review of strategies and activities in which the Programme took unprecedented initiatives and their net impact.
  - Review of lessons learnt on activities that did not yield desired results.
- Appraisal of the key priority areas of the Programme such as community-based disaster preparedness in the context of the provisions of the DM Act.
  - An assessment of inclusion of cross-cutting issues in the implementation of the programme including mainstreaming within the government programmes.
  - An assessment of the partnership strategy including integration of the Programme with stakeholders such as academic and training institutes.

The inputs received from the NDMA, MHA, UNDP, relief commissioners, other state government officers, SPOs and donors have been taken into account in preparing this report.



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# 3

## ANALYSIS, FINDINGS AND CONCLUSIONS

This chapter follows the structure of the UNDP guidelines<sup>5</sup> on outcome evaluation. Accordingly, this chapter is divided into four principal sections – an outcome analysis, examination of driving forces/factors that affected programme performance, an output analysis and assessment of partnership strategy. In each section, a national assessment as well as a state-wise disaggregated analysis has been carried out.

The findings reflect the observations made by the evaluation team during visits to the field, meetings with key officials and study of available statistical information as well as documentation carried out as part of the project.

While output analysis is based on quantitative achievements vis-à-vis targets set by the respective state governments, the outcome analysis shows the overall impact of the programme and the results achieved vis-à-vis expected UNDAF outcome(s), PSOs and MRAs and are not necessarily linked to quantitative achievements reflected through the output analysis.

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<sup>5</sup>Guidelines for Outcome Evaluation: Monitoring and Evaluation Companion Series #1. Evaluation Office, UNDP : [www.undp.org/eo](http://www.undp.org/eo)

## 3.1 Outcome analysis

Findings in this section of the report are based primarily on analysis of secondary information and other documentation available for the programme.

**A. The GoI-UNDP DRM Programme has been a path-breaking initiative in the country both in terms of scale as well as the breadth of its intervention.**

The GoI-UNDP DRM Programme was initiated at a time, when there was little appreciation and understanding of DRR issues. In 2002, the country was recovering from a string of catastrophic disasters. The HPC report too had pointed out that a comprehensive approach to DM was required. It was evident that every subsequent disaster was adversely affecting lives and property and that a paradigm shift was now necessary both in terms of spirit and action.

Even while it has been pointed out earlier, that the Programme was highly ambitious covering a large number of activities and a large geographical spread, it was clear that overall, the community's perception and response to DRM issues has shown marked improvement.

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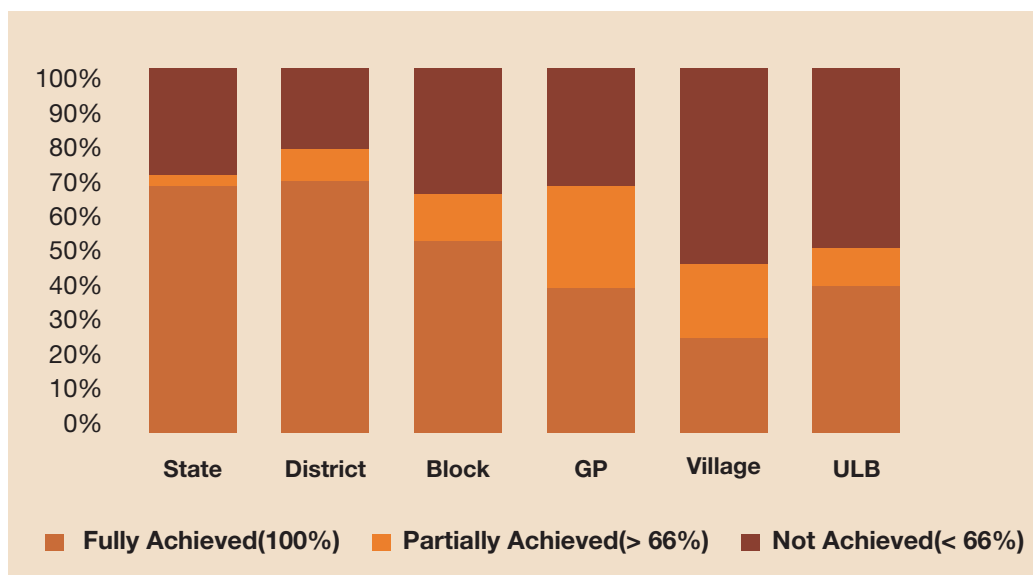
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**B. The current evaluation, carried out in 14 out of the total 17 programme states, reveals that the DRM Programme intervention has contributed significantly towards achieving programme objectives.**

Based on aggregation of indicator results<sup>6</sup> under different outcome categories, it is evident that achievement is highest at the state and district levels. At levels lower than the district, achievement has been less than 60 percent (Figure 3.1). As for local-level mechanisms such as development of plans, resources and trained personnel for enhancing disaster preparedness, the programme was fairly successful in lateral outreach. However, the vertical penetration has been somewhat partial.

<sup>6</sup>Physical Progress Report, 12 November 2008, UNDP

**Figure 3.1: Overall achievement of outcome indicators aggregate level-wise**



Based on the physical progress reported by states in 2008, a state-wise analysis was carried out of the outcome indicators under the categories – institutionalisation, mainstreaming, and local-level preparedness mechanisms. These categories broadly reflect the intended programme outcomes. In order to report progress against each category, the available output indicators (28 of the 79 available indicators of the UNDP's Physical Progress Report, November 2008) that best reflect the intended outcome have been bundled together under the following categories:

- I. Institutionalisation
- II. Mainstreaming
- III. Local-level preparedness
- IV. Inventorisation

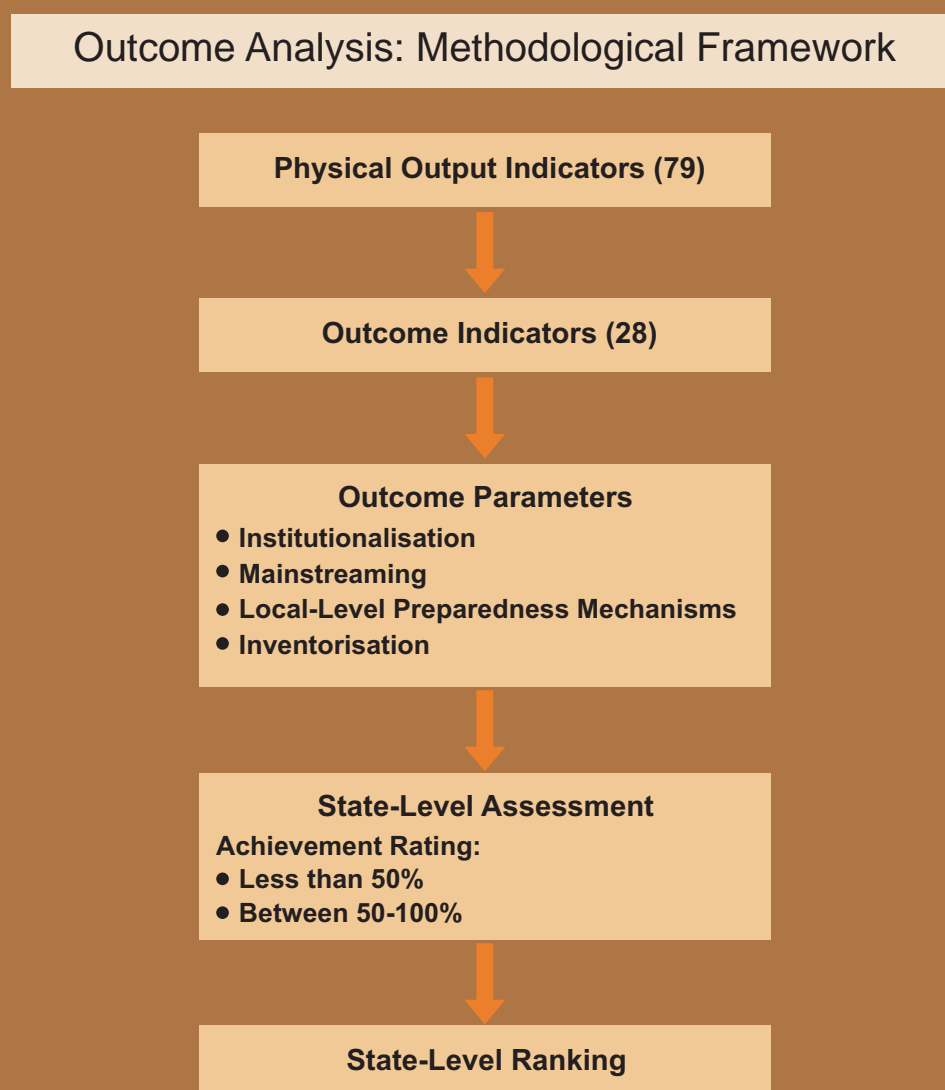
Figure 3.2 presents the process and methodology used for the outcome analysis.

The block circle indicates an achievement rate from 50 percent to 100 percent, which is the clear indication of positive change and the empty circle indicates an achievement rate less than 50 percent, as these parameters need more focus under respective segments (Monitoring and Evaluation Framework Handbook Rating System where the baseline is taken as 50 percent and above 50 percent achievement rate is considered as positive change).

The results in table 3.1 are indicated state-wise with states listed from left to right according to performance. The analysis reveals that Uttarakhand, Uttar Pradesh, Assam, Sikkim, Tripura, Tamil Nadu and West Bengal have scored high on their contribution to outcomes. When compared across 14 states, their efforts have been remarkable at the local level, reflecting an all-round progress at all levels.

It is, however, noted that achievements under few non-DRM key indicators such as formation of an authority at the state and district levels; state DM policy enactment; revision of relief codes; renaming/re-designation of the nodal department; integration with government development initiatives; engagement with other government departments and functioning of Emergency Operations Centres (EOCs) both at state and district levels, were largely government-driven as national initiatives influenced by factors not related to the DRM Programme. While these were not components of the DRM Programme, it was instrumental in the catalytic impact it has had in taking forward these components also in conjunction with government initiatives. In other words, these are the indirect benefits flowing from the Programme, which, in a very modest way, supplemented the government's aggressive efforts.

**Figure 3.2: Outcome analysis methodology based on outcome indicators and parameters**



**Table 3.1 State-wise analysis of outcome parameters**

<b>Outcome Parameters</b>	<b>Key Indicators</b>
<b>Institutionalisation</b>	Formation of an authority at state, district levels*
	Formation of DMCs at all levels
	Formation of Disaster Management Teams (DMTs) at all levels
	State DM policy enactment*
	Amendment of building codes/bye-laws*
	Revision of relief codes*
	Renaming/re-designation of the nodal department*
<b>Mainstreaming</b>	Sensitisation of professional bodies, corporate
	Integration with government development initiatives*
	Engagement with other government departments*
	Inclusion of DM in civil training – Administrative Training Institutes, police*
	Partnership with the corporate sector
	Inclusion of DM in school curriculum
	Inclusion of DM in engineers curriculum*
	Inclusion of DM in architects curriculum*
<b>Local-level preparedness mechanisms Inventorisation</b>	DMC, DMT members trained at all levels
	School sensitisation programme, key teachers trained
	Architects trained
	Engineers trained
	Masons trained
	Volunteers trained (CSOs, NYKS etc.)
	Panchayati Raj Institution (PRIs) members, Resident Welfare Associations (RWAs) trained
	Women's participation at all levels
	Formulation of DM plans at all levels
	DM plan review and update at all levels
	Functioning of EOCs (state, district)
	Conducted mock drills at all levels
	Inventory review and update - India Disaster Resource Network (IDRN)

Uttarakhand	Uttar Pradesh	Assam	Sikkim	Tripura	West Bengal	Tamil Nadu	Nagaland	Maharashtra	Mizoram	Delhi	Arunachal Pradesh	Meghalaya	Manipur	Overall Achievements
●	●	●	●	●	●	●	●	●	●	●	●	●	●	14/14
●	●	●	●	●	●	●	●	●	●	●	●	●	●	14/14
●	●	●	●	●	●	●	●	●	●	●	●	●	●	14/14
●	●	●	●	●	●	●	●	○	○	○	○	○	○	8/14
●	●	●	●	●	●	○	○	●	●	○	●	○	○	9/14
●	●	●	●	○	○	○	○	●	○	○	○	○	○	4/14
●	●	●	●	●	●	●	●	○	●	○	●	●	●	12/14
●	●	●	○	●	●	○	●	●	●	●	●	○	○	10/14
●	●	●	○	●	○	●	○	●	●	●	●	○	○	9/14
●	●	●	●	●	○	○	○	●	●	●	●	○	○	9/14
●	●	●	●	○	●	●	●	●	●	●	●	○	○	11/14
●	○	○	○	●	○	○	○	●	○	●	○	○	○	4/14
●	●	●	●	●	●	●	●	●	●	●	●	●	●	14/14
●	○	○	●	●	○	●	○	●	○	○	●	○	○	6/14
○	○	○	●	○	○	●	○	○	○	○	○	○	○	3/14
●	●	●	●	○	●	●	●	●	●	●	○	●	●	12/14
●	●	●	●	●	●	●	●	●	●	●	●	●	●	14/14
○	○	○	●	○	●	○	○	●	○	○	○	○	○	4/14
●	●	●	●	●	●	●	○	●	●	○	○	○	○	4/14
●	●	●	●	●	●	○	○	○	●	●	○	○	○	8/14
●	●	●	●	●	●	●	○	●	○	●	●	●	●	12/14
●	●	●	●	●	●	●	○	●	○	○	●	○	○	9/14
○	○	●	○	●	●	●	○	●	○	○	●	●	○	8/14
●	●	●	●	●	●	●	●	●	●	●	●	●	○	13/14
●	○	○	○	○	○	○	○	○	○	○	○	○	○	1/14
●	●	●	●	●	●	●	○	●	●	●	●	○	○	11/14
●	●	●	●	○	●	●	●	●	●	●	●	●	○	12/14
●	●	●	●	●	●	●	○	●	●	●	●	●	○	12/14

Note: ● indicates 50 to 100 percent achievement rate, and ○ indicates less than 50 percent achievement  
 \* Denotes the indicators that are not necessarily the key indicators under the Gol-UNDP DRM project but part of the overall 52 point “check list” prescribed by MHA to monitor the overall disaster management status in the states.

**C. DRM Programming did not transform sufficiently following new institutional arrangements.**

During the programme period, a transformative disaster in the form of the Indian Ocean tsunami of December 2004 occurred. It affected one of the DRM states Tamil Nadu, and led to the DM Act in December 2005, establishment of the NDMA headed by the prime Minister in September 2005, and the creation of new institutions i.e., Disaster Management Authorities at the state and district levels. Such fundamental transformations accelerated change that the NDMF contemplated and the DRM Programme advanced. However, appropriate linkages were not adequately established with the unfolding of the new institutional landscape. As a result, the new programmes and initiatives of the NDMA (and the SDMA in some states) tended to proceed in parallel and were not fully synergised. This could have been harmonised, and was felt particularly by the states, when undertaking the graduation phase of the Programme.

**D. The DRM Programme was relevant to the needs of the most vulnerable regions of the country. However, more high-risk regions could have been included, based on risk assessment rather than vulnerability assessment.**

The GoI-UNDP DRM Programme had considered vulnerability to multiple hazards as the basis for identifying areas for intervention. This was a good first step towards prioritisation. However, there were some problems with this approach.

There are more districts in the country that met the criteria of selection, but these were not included. Similarly, the district is a large administrative unit and geographical area, and not all areas within it are equally affected by the same hazards and risks. Therefore, by treating the district as a unit, and aiming to address all blocks and villages therein with similar activities using a fairly common-template approach, the possibility of concentrating on the most vulnerable blocks or villages within the district was not possible.

It is true that for administrative purposes, the district had to be taken as a unit since the overall responsibility of the district rests with the district magistrate or the deputy commissioner. However, within this limitation, the strategies adopted could have been disaggregated with micro-level focus at the block, village and ULB levels to address their specific vulnerabilities and promote a participatory community-based approach more vigorously.

Similarly, across the states, there are variations in vulnerability, affected by predominance of a particular type of hazard. Variations in the population distribution, settlement type and terrain also exist. Several states experience frequent low-intensity disasters, which, in cumulative terms, have a strong impact on local communities. As such, a risk assessment, rather than a vulnerability assessment, would have helped adapting programme activities to specific needs of the states.

Many local hazards such as drought, landslides, extreme heat, extreme cold, lightning strikes, and bamboo famine have been ignored. Criteria of potential number of lives that may be lost or affected would have helped to include some of the most vulnerable areas that have been ignored in the present programme.

**E. The DRM Programme addressed some of the priorities set out by the Gol, as reflected in the recommendations of the HPC.**

The DRM Programme was started at a time, when the country had suffered a series of catastrophic disasters (1999 Orissa cyclone; 2001 Gujarat earthquake) and there was a general sense of urgency to take pre-emptive action against disasters to minimise loss of life and property.

In August 1999, the HPC on DM constituted to look into the entire gamut of DM in India inter alia made the following recommendations in October 2001, which are directly relevant to the DRM Programme:

- Creation of state of the art EOCs at the state and district levels.
- Development of district DMPs and their integration into the state plans.
- Preparation of panchayat, local body and community-level DMPs.

The Programme met the needs of the government to approaching DM in a holistic manner through the coverage of the vulnerable areas of the country and by ensuring relevance to national and state priorities. While referring to this programme, the Planning Commission, in the 11th Five-Year Plan, has stated that “under this programme, disaster management plans are being prepared from village to district; village volunteers are being trained in first-aid, search and rescue, evacuation and relief and shelter management; disaster management teams are being constituted at the district and sub-district levels and mock drills are being conducted at all levels. It is the largest community-based DRM programme in the world. There is a definite need to increase the scope to cover other deficient areas too, in order to draw the full benefit from this”.

## **3.2 Factors influencing programme performance**

Findings in this section are based on field visits by the evaluation team, discussions with project beneficiaries and subsequent meetings with key stakeholders at the national, state and district levels.

A variety of factors have influenced programme performance. The evaluation team has identified five primary factors that have strongly influenced the performance of the Programme: leadership, state-level ownership, experience of past disasters, training infrastructure and programme management (Table 3.2).

**Table 3.2: Factors influencing programme performance**

	<b>Factor</b>	<b>Contribution</b>
<b>A</b>	<b>Leadership</b>	Local leadership at district and sub-districts; engagement with communities and other institutions; bringing about multi-stakeholder participation in events and activities.
<b>B</b>	<b>State level ownership</b>	Contribution from the state budget; mainstreaming of programme activities and placement of capable leadership.
<b>C</b>	<b>Experience of past disasters</b>	Heightened sensitivity has contributed to better reception and acceptance to programme activities.
<b>D</b>	<b>Training infrastructure</b>	Development of resource material; mobilisation of local institutions; tapping external resources to strengthen ongoing efforts.
<b>E</b>	<b>Programme management</b>	Deployment of National UNV volunteers, state and DPOs; creation and integration of programme management structures at the state level.

**A. Strong leadership at all levels catalysed programme performance.**

Strong leadership is of critical importance in disaster preparedness and response situations. At the national level, the strong leadership provided by the MHA in driving the Programme and their engagement with the states has ensured fairly good coverage.

During the visits undertaken by the evaluation team, it was found that in states like Assam, Maharashtra, Mizoram, Sikkim, Tamil Nadu, Uttar Pradesh, Uttarakhand and West Bengal, strong and continuous leadership at the state level and taking the local community leaders into confidence has yielded qualitatively better results.

**B. Strong ownership by state governments and district authorities: A lasting legacy of the DRM Programme.**

The Programme consolidated earlier smaller scale programmes in several states, and indelibly created enormous momentum in most of the participating states and districts. The feeling that this is a state and district level programme, owned and implemented by the state and district authorities is visible. While there is appreciation and gratitude to both Gol and UNDP for the enabling framework, technical and HR, and financial support provided by the Programme, there is an equally welcome sense of the need to carry on regardless of continuing resources. Such sentiment is no doubt fostered by responsibilities under the DM Act, the establishment of SDMAs and DDMA with legislative back-up, and the process of exit and graduation. The evaluation team observed such sentiments being echoed in almost all the states which noted that there is a need to continue programme activities with the confidence of state government resources and support from other sources even when support from the Programme ends.

**C. Multi-level action ensured top-down and bottom-up accountability.**

A key strength of the Programme was the number of levels at which implementation action was taken up. This was not a national programme working with the National Disaster Management Office (NDMO), complemented by a set of pilots in districts or communities. Rather, it was a serious effort at simultaneously working in a large number of communities, and all the way up to the national level, through panchayats and PRIs; blocks, districts, states, and various concerned ministries. Working through the national and state governments, on self-set priorities, this was, as one donor aptly characterised as simultaneously a top-down and bottom-up programme.

**D. Recognition of the community's own strengths and practices has led to strong ownership by community institutions.**

In cases where the programme has consciously recognised and integrated community's own practices, the ownership has been developed in a natural manner. Two major causes may be identified leading to this influence – the community's experience with natural disasters, and the community's own capacity in terms of awareness, ability to cope (including traditional knowledge) and social bonding.

During the visit by the evaluation team, it was also revealed that strong coping mechanisms have traditionally existed within the communities. In Arunachal Pradesh, villagers have their own systems of early warning, construction practices and local emergency response methods. The DRM Programme activities have further strengthened local capacities.

In Mizoram, a largely literate population, strong institutional support and rich involvement of NGOs strengthened participation as well as impact.

This momentum, confidence, and ownership is welcome, but it must be recognised that continued technical support, networking among communities across states and districts, and some financial support from the national level will still be needed. Or else, the momentum and promise of taking forward this programme will be lost.

**E. Integration with existing government programmes carried out by various line departments has significantly improved the quality of results.**

The programme states that have 'smartly' integrated or 'piggybacked' on existing programmes and programme structures have had a head start in reporting achievements. Considering that DRM is a multi-disciplinary exercise, a proactive approach to integrate with the other disciplines has helped.

The evaluation team noted that states like Delhi, Maharashtra and West Bengal have taken concrete steps in ensuring the DRM Programme is well integrated with government programmes. The Planning Department of Nagaland issued instructions to all departments, during the visit of the evaluation team, to ensure that disaster mitigation is integrated with all new development schemes, before sending it for approval. Mainstreaming of the Programme in education departments by including DM curricula in school education was visible in most states. It has been mainstreamed in health and home departments in the north eastern states where training in first aid is provided down to the village level through the primary health centres, which are under the health departments, and in search and rescue by civil defence and home guards, which are under the home departments.



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However, the Programme is still perceived mostly as a one-off initiative, building the capacity only of the revenue departments. It has not been linked to development plans. There are no intervention programmes to reduce micro-level vulnerability, based on the village-level risk profile. Linkages of the Programme with different departments at state and district levels were not visible. At the state and district levels, involvement of other line departments needs to be improved. Awareness and capacity building for all line departments is needed. This will help all concerned departments to consider DM while planning their development activities.

**F. The implementation of the Programme was adversely affected because the programme design did not incorporate challenges of accessibility and state of infrastructure.**

Certain high-risk districts in remote locations particularly in the North East, and carrying out activities in such areas required extra efforts. The programme design for planning as well as monitoring required such challenges to be recognised.

The Programme should address recurring local hazards and the immediate needs of the communities. The programme design was not sensitive to the geo-climatic conditions, remoteness of project districts and poor infrastructure. This has resulted in additional strain on resources and delays in implementation.

The programme design and strategy was over-ambitious keeping in mind the constraint of time and resources and a large number of activities. However, it cannot be ignored that, it was the first programme of its kind taken up by the government in conjunction with UNDP for DRR from the national to the village-level and the programme design articulated the concerns of the main stakeholders and gave expression to the vision of the national and state governments for an inclusive agenda for DRR at all levels.

**G. While the programme has been largely unaffected by the changing political climate, certain states experiencing problems of insurgency have reported constraints in implementation.**

In Manipur and Nagaland, controlling law and order is the priority of the state, making DM of secondary importance. The problem of law and order became a barrier to smooth and efficient engagement with communities. Also, multi-stakeholder participation was very limited as there were very few opportunities to build mutual trust and a common agenda for action. This was evident in the particular disengagement found among the people met during the evaluation visits.

**H. Impact of disasters: The DRM Programme was successfully able to reduce loss of life and property in certain cases of natural disasters.**

Comprehensive documentary evidence on the influence of natural disasters on the performance of the Programme was not available. However, the evaluation team found good examples of the benefits acquired as a result of the DRM Programme activities. The capacity building of communities has been tested in several states during recent disasters and the communities have been able to act in a pro-active manner on their own without outside support. There is need to document such examples and share it with communities with similar vulnerabilities.

In the district of Dhemaji in Assam, during the flash floods of 2007, the capacity built by the DRM Programme was put to use effectively. In West Bengal, during the floods of 2006 and 2007, the people of Burdwan district effectively responded to the situation through using their rescue training and provision of temporary shelter materials. Similarly, in 2008, the Irrigation Department of West Bengal, with the support of the DRM task forces, could repair breaches along the embankments to protect the area from floods.

Samiyarpetti village in Cuddalore district of Tamil Nadu provides the best example of the positive impact of the DRM Programme. The village was affected by the Indian Ocean tsunami on 26 December 2004. Training to villagers was provided just a month before the tsunami. As a result, during the tsunami, lives lost were significantly low, while in a village just 2 kilometres away, the death toll was three times higher.

**I. There is also evidence that the programme activities have limited impact when the effect of disasters is widespread.**

Especially in cases where widespread natural disasters have occurred, the output of the Programme has had limited impact on managing response and recovery. In the 2005 floods in Maharashtra, the capacity built under the DRM Programme was largely inadequate in meeting the challenges. It is, however, true that the momentum in Maharashtra under the programme developed in 2006, after the 2005 floods.

In the latter part of the Programme, however, a thrust on establishment of the EOCs, investments on vital equipment and infrastructure have considerably improved capabilities of states and districts in tackling large-scale disasters.

**J. Judicious use of technical resources and investments on training would have significantly affected the programme performance.**

Use of existing state-level training institutions was limited, with few exceptions. The opportunity to use the DRM Programme to provide a fresh infusion of resources in order to develop their capacity was not sufficiently utilised.

By and large the DM Cells/Centres were sought to be utilised as providers of training courses for state government officials. In some cases, in the first two years of the programme, training courses on “Development of Disaster Management Plans in Districts” and “Community-Based Disaster Risk Management” were organised. But these were not tailor-made to the needs of the Programme. The state ATI DM cells were generally involved in fairly peripheral levels of the Programme implementation, rarely beyond the role of the training service providers.

Wherever states have well developed curriculum, manuals and training courses available to develop the capacity of implementing officials at the state and district levels, there is marked positive impact on the quality of the programme outputs. Assam, Maharashtra, Mizoram, Uttar Pradesh and Uttarakhand have carried out extensive training programmes using the DM cell of ATIs. Availability of high calibre technical institutions and other resource organisations have improved the confidence and sustainability of programme results.

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**K. Quality of training programmes at State Training Institutes (STIs) needs to be improved; training modules updated; refresher training mechanism put in place.**

The quality of the training programmes varies not only from state to state, but also from district to district in the same state. Where the training has been integrated into the different government departments, the quality was observed to be good. In other cases, it varied from fair to poor. Further, training has to be imparted in different modules to specific groups assigned with different responsibilities. These areas would be wide-ranging such as formulation and update of DMPs, micro-level planning, mock drills, first aid, search and rescue, shelter management, relief distribution, sanitation, media management, documentation, management of relief camps, communication links at the grassroots, dissemination of early warnings and awareness generation. The training modules developed for this purpose would need to be updated based on their qualitative assessment and evaluation. It is also necessary to put in place a mechanism for refresher training for different stakeholders.

Likewise, a one-time training only generates awareness or sensitises the participants. In order to gain real expertise, one needs to have refresher trainings and repeated practice. This was not found to be a widespread practice.

**L. Programme Management: Role of National UNV volunteers.**

The strategy to provide human resource (HR) support for programme implementation through National UNV volunteers was a deliberate and innovative choice. It was a vastly different approach from using a few internationally recruited technical advisors complemented by national Technical Officers. Using the volunteers on this scale enabled the recruitment and deployment of young professionals as key support to the senior officials in states and districts to single-mindedly focus on the implementation of the Programme.

They were competent, enthusiastic, and often having personally experienced the havoc wrought by major disasters in their home states; e.g. the Orissa super cyclone and Gujarat earthquake. Therefore, the National UNV volunteers were highly motivated to make a difference and professionally contribute to a 'social good'. There is no doubt that they were the key to the fast start-up of the Programme and continued implementation of the programme on a fast track. Their work has drawn praise from their demanding supervisors: the RCs, SPOs, and DMs, and from partner organisations and beneficiary communities.

The pace of programme implementation provided a great learning environment for these professionals, an exposure to the government from within, and an opportunity to cut their teeth on difficult, practical problems. When disasters struck other countries; for example, the floods in Sri Lanka in 2003, and later the Indian Ocean tsunami in December 2004, it was the best and brightest of these volunteers who were deployed and served with distinction. Thus, the Programme has contributed an influx of between 200 to 400 new professionals into the sector over the last eight years. Several of these DRR professionals are now working outside the country, in international non-government organisations (INGOs), regional organisations, and UN agencies, and are appreciated for their competence, insight, practical wisdom, and dedication.

**M. DPOs appointed by UNDP have played an important role in the accomplishment of programme objectives by assisting the district administration in executing the programme activities.**

Through their services, the DPOs have made themselves indispensable to the district administration. Over the years, they have managed to carve a niche for themselves and have established themselves as focal points for DM activities. They have been assisting with plan preparation, updating and training activities in the district. Importance of the inputs from DPOs is distinctly visible in the status of DRM activities in the states where the support of DPOs has not been provided. DRM activities in these states have been affected quantitatively and qualitatively.

A distinct difference in the level of achievement is seen in the states of Manipur, where the programme activities at district and lower levels have been adversely affected due to the absence of DPOs. More recently, the provision for hiring field officers was planned but not implemented due to administrative reasons. As a result, these plans have not been prepared. The activities of the block and villages have also been negatively affected, which is evident from the lack of visible progress in programme activities at the block level and the low level of detailing in the village DMPs. These shortcomings could have been overcome in the programme period by appointing officials at the district levels. Similarly, in Mizoram, field officers were hired by the state nodal agency but each of the officers had two districts to look after against the normal practice of one DPO in each district. This has also affected activities in the state of Mizoram. However, the state has tried to overcome this deficiency under the guidance of a dedicated retired officer of the state. On the other hand, in Assam, the DPOs have contributed significantly in facilitating the preparation of fairly good quality DMPs; e.g. in the district of Naugaon.

Arunachal Pradesh was perhaps the only state that performed well even in the absence of DPOs. The good performance of the districts in this state can be attributed to the creation of positions of District Relief and Rehabilitation Officer (DRROs), who have been discharging the functions of DPOs. However, this process has delayed the activities in the state since the posts were created only two years ago. The creation of these posts also put a burden on the financial resources of the state, which could have otherwise been used for DRM activities. Uttarakhand, on the other hand, has enjoyed the support of DPOs who have helped the districts in achieving remarkable progress in programme activities and have assisted in the initiation of admirable activities such as setting up of well-equipped EOCs and technology demonstration units. The DPOs have also introduced a number of innovative practices such as setting up of a community-funded disaster mitigation fund in Uttarkashi and bamboo plantations in Bageshwar district.

In most of the states, UNDP-appointed DPOs have played a direct implementing role, making the present progress possible, whereas they should have played a facilitating role, building the capacity of local government officials. However, for this to be effective, the government needed to appoint a district-level full time official.

**N. Institutionalisation of state and district-level DRM positions.**

The HR support provided by the Programme through the programme associates, project officers, state project officers, and DPOs is today recognised as indispensable to the continued implementation of the programme. They, thus, filled a pre-existing void, and their effective delivery of services pointed to a need, which is now being institutionalised. The creation of technical secretariats in some states for the SDMAs and the new regular positions of District Disaster Preparedness Officers is a sure sign that a new system is required.

**O. Project management structures were insufficiently integrated into the state and district structures.**

This aspect has been to some extent already discussed earlier, which points out the role of the National UNV volunteers as external support. It is no doubt true that the continued reliance on the volunteers did not adequately activate the functionaries in the system in a phased manner that would have ensured sustainability. It is hoped that, with the creation of regular positions to man the new structures and their secretariats created under the DM Act, namely the state and district DM authorities, the situation will change.

Some states did not introduce the volunteer approach, but consciously appointed DPOs and SPOs from among the existing officials of the state government. This is seen most clearly in West Bengal and Tamil Nadu. West Bengal, almost uniquely in the country, has a District and Block Relief Officer (DRO and BRO). This existing human infrastructure was utilised as a base for programme implementation and appointment of DPOs. The states did not have or require the same level of HR support. In the same way, Tamil Nadu used the existing infrastructure of District and Block Rural Development Officers to serve as DPOs.

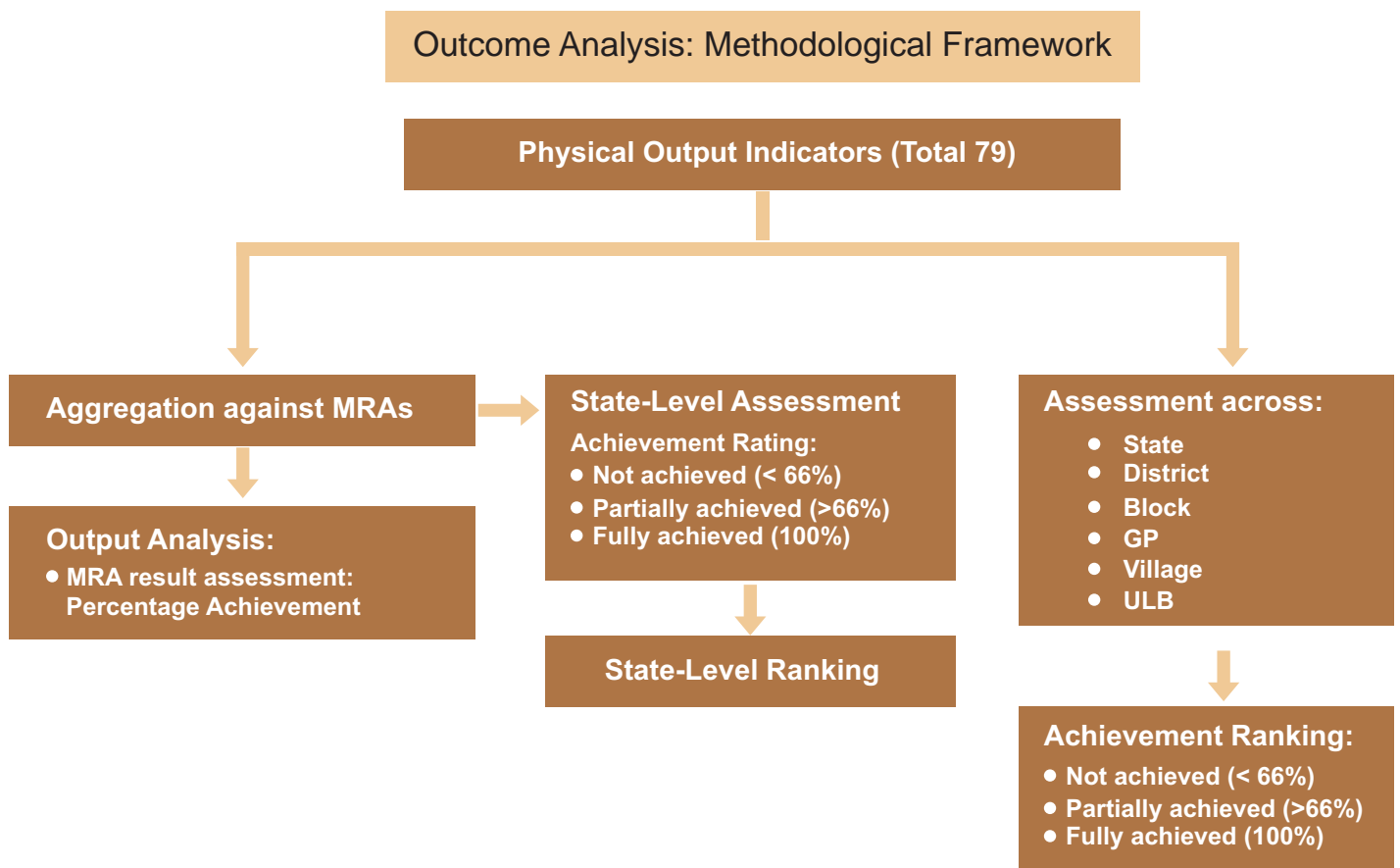
While the use of existing functionaries within the system made for greater integration, there was a relatively slow start-up in the absence of “fresh blood” with many existing functionaries seeing the additional burden of increased responsibilities, without any incentive or reward, as unreasonable and unwarranted, and therefore did not extend their full cooperation. Thus it can be said, that while the use of state HR led to a slower start-up, this was a more sustained programme, even if at a lower level of performance. Future programmes should make greater use of existing state and district-level officials.



### 3.3 Output analysis

Findings in this section are based on correlation between quantitative results and field observations. The output analysis was carried out by examining achievements under the six MRAs which are the aggregation of 79 physical output indicators. MRAs were analysed according to overall achievements. Figure 3.3 below presents the methodology for the Output Analysis Framework:

**Figure 3.3: Output Analysis Framework based on output indicators**



**A. Programme outputs relating to preparedness have done well, whereas achievement pertaining to long-term vulnerability reduction is partial.**

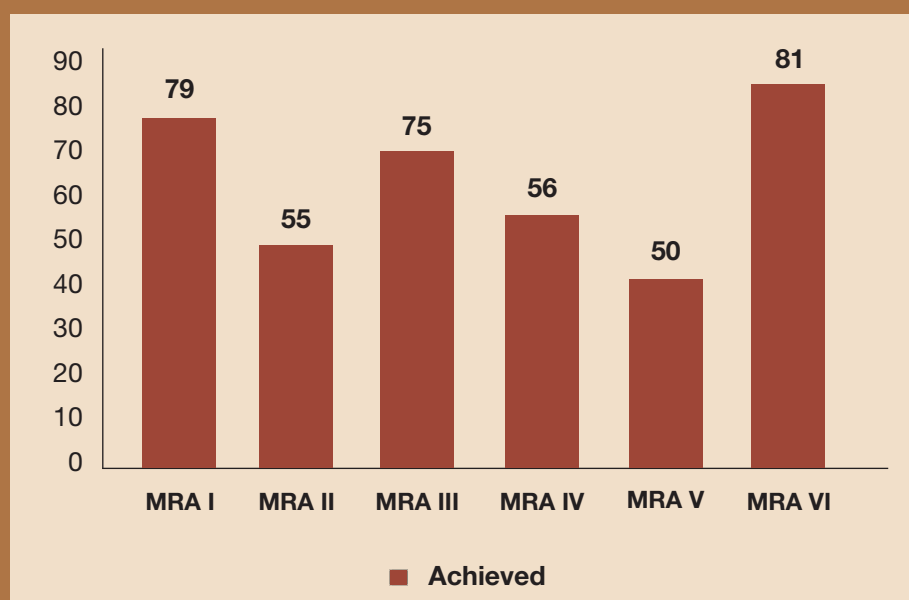
The key outputs by the DRM Programme have been categorised under six MRAs as below:

- **MRA I:** DRM institutionalised and capacities developed at all levels with specific emphasis on women.
- **MRA II:** Multi-hazard preparedness planning initiated with linkages to a strengthened network of DM information centres and early warning mechanisms.
- **MRA III:** DM and mitigation awareness generated at all levels.
- **MRA IV:** Disaster-resistant and cost-effective housing technologies promoted.
- **MRA V:** Legal and techno-legal framework revised, policy framework promoted and systems created to ensure compliance.
- **MRA VI:** Networking and knowledge-sharing between governments, NGOs/CBOs, institutions and stakeholders involved in DM initiated.

The MRAs stated above strongly relate to the intended outcome of the Programme – reduced vulnerability to natural and human-induced disasters through community preparedness.

As noted in previous evaluations, and reconfirmed by the current round, the Programme has created an environment that enabled a paradigm shift in attitude from relief to preparedness. However, the long term vulnerability reduction cannot be achieved solely by preparedness measures. Sustained steps aimed at mitigation as well as at integration into development programming are essential. Out of the total 79 activities categorised within six MRAs, only a few activities may be categorised as 'long-term measures towards vulnerability reduction'.

**Figure 3.4: MRA-wise achievements aggregated for 14 states**





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Two MRAs – promotion of disaster-resistant and cost-effective housing technologies through training of professionals and construction workers has recorded low levels of achievement. Likewise, establishment of techno-legal frameworks to create an enabling environment for DRR has not achieved desired results. It is acknowledged that both these result areas require substantial investments in time and effort. However, state-wise analysis reveals that only four states with respect to MRA IV and six states with respect to MRA V have made any progress at all (Table 3.3). The achievement of various states against given MRAs is based on rating stipulated by UNDP<sup>7</sup> wherein, if the result indicates less than 66 percent achievement, it is considered as “Not achieved”. (The evaluation team is of the view that this categorisation is somewhat harsh and unrealistic and it could appropriately have been – fully achieved, substantially achieved, partially achieved and not achieved) The table below indicates coloured boxes where achievement is equal to or more than 66 percent. Based on the analysis – Assam has the highest level of achievement with respect to programme outputs across all MRAs.

**Table 3.3: State-wise achievement of MRAs**

Summary Achievement of MRAs	Assam	Sikkim	Uttar Pradesh	Uttarakhand	West Bengal	Tamil Nadu	Maharashtra	Mizoram	Delhi	Tripura	Nagaland	Manipur	Arunachal Pradesh	Meghalaya	Overall
MRA I															76
MRA II															55
MRA III															75
MRA IV															56
MRA V															50
MRA VI															81

**B. Quantitative output analysis, aggregated for all states, is impressive for several parameters.**

The quantitative output analysis of the Programme, based on figures compiled as of August 2008, shows that the performance has been quite impressive in respect of several parameters compared to the pre-determined targets laid down. These include:

- At state level, 5880 master trainers were trained as against the target of 5294 (111 percent)
- 6852 senior officers and policy makers including legislators have been sensitised against the target of 4791 (143 percent) and 16 out of the 17 state EOCs strengthened and equipped (94 percent)
- Including DM in school curricula has recorded impressive results at 100 percent
- Training of members of professional bodies and corporate sector (111 percent) outdid the target set
- A massive awareness campaign also far exceeded target expectations (225 percent).

However, progress with regards to some other areas was below expectations. These included:

- Progress is not as good with regards to constitution and training of state search and rescue teams (76 percent)
- Progress is somewhat poor in finalising state disaster management plans (41 percent), amendment of state building bye-laws (59 percent) and relief codes (24 percent)

At the district level, the achievements have been extremely good in respect of DMC members trained (12757-219 percent), teachers trained (90533 – 724 percent), DMT members trained in first aid (14158 - 338 percent) and search and rescue (12682 - 309 percent), total PRI members trained (15078 - 380 percent), women PRI members trained (4729 - 363 percent) and fairly good progress in the preparation of DMPs (96 percent), conduct of mock drills (86 percent) and equipping EOCs (93 percent).

At the block level, the progress is again quite impressive in respect of DMC members trained (50171 - 208 percent), PRI members trained (87366 - 243 percent), women Panchayati Raj Institution (PRI) members trained (16848 - 155 percent), total volunteers trained (117125 - 129 percent), women volunteers trained (27596 - 102 percent) and masons trained (36730 - 148 percent) The progress was fairly good in respect of DMPs prepared (1273 - 80 percent) but was poor in respect of mock drills conducted (1551 - 35 percent).

At the GP level, the progress is good in respect of DMC members trained (297717 - 134 percent) and women DMC members trained (80065 - 127 percent). The progress is fairly good with regard to preparation of disaster management plans (25522 - 86 percent). However, the progress is not good in respect of DMT members trained in first aid (108824 - 46 percent) and search and rescue training (108531 - 46 percent). The percentage of women DMT members trained in first aid and search and rescue is however fairly good at 90 percent and 93 percent respectively compared to targets set. The progress is particularly poor in respect of mock drills conducted (10053 - 17 percent).

At the village level, the progress is quite good, as against the targets set, in respect of DMC members trained (1209280 - 96 percent), fairly good for DMT members trained in first aid (508324 - 75 percent) and search and rescue training (485344 - 72 percent), DMPs prepared (132065 - 88 percent). The progress in respect of women DMT members trained in first aid and search and rescue is somewhat less than satisfactory at 80 percent and 61 percent respectively of the targets set. It is quite poor for mock drills conducted (10053 - 17 percent)

At the ULB level, the achievement is very good in terms of DMC members trained (15706 - 202 percent) but not as good for preparation of DMPs (506 - 84 percent) and conduct of mock drills (668 - 66 percent).

The quantitative output achievements are not considered to be appropriate yardsticks for an outcome analysis. This can be attributed to the following:

- As will be seen from above, the targets set, particularly at the block, GP and village levels are over-ambitious.
- The Programme has only been taken up at these levels over the last two years, since considerable time was taken for advocacy at the state and district levels, before the programme could make a head-start at these levels.
- The targets for mock drills were determined on the assumption that these could commence from the second year onwards, which in itself was not a very realistic assumption, particularly at the block, GP and village levels. The mock drills could be organised only after the members of DMCs, DMTs and PRIs were trained and DMPs were put in place. Therefore, the mock drills could be initiated in the last one and half years. With this in mind, the progress on the mock drills cannot be considered really bad, although it could have been accelerated to some extent but not in terms of the pre-determined targets.

The overall outcome of the programme has been much better compared to the trends indicated by the quantitative outputs. The programme has been very successful in creating awareness at the community level, which was quite visible in almost all the states. It has also brought about a change in the mindset of officers at the states and districts, particularly in those states that had not suffered a major disaster in the recent past.

The Programme has also succeeded in significantly raising the level of preparedness of the community as well as other stakeholders including state governments and district administrations. The training imparted to over three million personnel is indeed a remarkable feat. The first evaluation conducted in mid-2006 noted that training had been imparted to almost half a million personnel. The pace of implementation has quickened in the last two years with the spread of the programme to the GP and village levels with more than a million people being trained every year.

Seen in the context that this programme has no visible physical deliverables for the community either in cash or kind but only attempts to educate and train the community to help themselves in the event of a disaster, it is indeed a remarkable achievement without any parallel in any country in the world in the field of DRR.

**C. Too many activities, too little, too thin.**

A big criticism of the widespread geographical coverage at multiple levels was articulated, both by implementing partners, other stakeholders, and even beneficiary communities. Some key phrases came up repeatedly:

“Too many activities, lower resource allocation for each activity, no prioritisation between activities.”

“A 'Common Template' approach; diversity not sufficiently recognised.”

“Quality of each output and quality of control/assurance could have been better.”

These comments have been examined in the subsequent sections:



**“Too many activities; lower resource allocation per unit, no prioritisation between activities.”**

As already mentioned, each state was given a set of targets to achieve, based on the original programme document. Later, when the quantitative monitoring system was set up, some desirable outputs were added to be monitored by MHA, even though these were not programme targets. This heavy load of “targets” did not lend itself to good planning, as it did not easily clarify to the implementing states the relative hierarchy of outputs, or the relative time to be spent on each output. So too, in the case of certain mass outputs for example, the preparation of village DMPs and later, mock drills, the available budget was so small compared to targets that it often translated into potentially low levels of resource availability, such as Rs 150 per village DM plan and Rs 100 for a village-level mock drill. Such amounts were lower than the expenditure needed, and did not compare favourably with resource inflows from normal national budgetary allocations for similar development programmes in other sectors, or to externally-funded programmes through NGOs, the government, or other UN agencies aiming at similar DM/DRM activities. Thus the frequency, depth, and consequent establishment of a long-term working system on these activities of contingency planning and rehearsals suffered.

On the other hand, it has to be noted that the states and districts have largely not been able to utilise even the “lower resource allocation” which is obvious from the fact that the cumulative unspent balance by end-September 2008 was over US\$ 9 million, which is over 20 percent of the total programme outlay of US\$ 41 million. Further, the preparation of DMPs as well as mock drills at the GP and village levels was required to be undertaken by the community and not by outside agencies at nominal or no cost. In several cases, these functions were entrusted to NGOs or other stakeholders that have resulted in the template approach, which is considered a negative for the programme. This is a major reason for the lack of ownership of these tasks by the community at grassroots, at least in some of the states and districts.

It is to the credit of the several state and district governments and the innovation and imaginative approach of Relief Commissioners (RCs), SPOs, DMs, and DPOs in these states, that the necessary supplementary funding through state government budgets and programmes was brought to bear and made available for these activities, while imaginative partnerships were struck to share resources and build synergies with other ongoing government and NGO programmes. In moving ahead to expand the programme, or in supporting long-term institutionalisation of these activities for example, planning, conduct of drills, refresher training, and workshops for community based DRM groups and activities, it must be recognised that resources for activities are needed and must be mobilised from government budgetary resources and local contributors.

The inability of local implementing partners to discern, and the lack of specific and visible guidance from national authorities on programme management and prioritisation, meant that in the list of 18 direct targets/outputs, the importance of some activities was not understood, and therefore neglected. One glaring example would be the preparation, vetting, and circulation of state DMPs, which were neglected in several states.

**“A common template approach – diversity not sufficiently recognised.”**

As is inevitable in a programme of this size and with its planned timeframe, it is necessary to have indicative activities that could be taken up, complemented by a shortlist of essentials that must be accomplished. Both of these will require nationally-applicable common guidelines. In our view, such an approach was necessary to kick-start the Programme. While apparently a 'common template' approach was used, in actual discussions with states, and subsequently in rolling out implementation, there was sufficient lee-way given so that these targets could be informally reviewed and modified.

Clearly this was done, especially as several states were keen to engage, and some insisted on some components to be included, which were different from those planned. This was particularly so in Maharashtra, Tamil Nadu and West Bengal, where there are long traditions of work in this area and new reasonably well-funded projects through NDMA.

**“Quality control and assurance could have been better.”**

With so many activities, monitoring was primarily carried out through monthly self-reporting, and lack of sufficient periodic substantive field monitoring from the MHA/UNDP Programme Unit in Delhi – consequently, quality suffered. This could have been strengthened by regular meetings with the states and a similar mechanism in each state. This could also have been addressed by clearer guidelines for each activity, supporting a process for state-level review and refinement, and the availability of a help-desk or source of technical support above the SPOs and DPOs. Thus, this observation can be considered fair.

**D. Mock-drills at the community level were an innovative approach undertaken to enhance preparedness. Qualitatively the drills provided many important lessons for improvement.**

Unlike mock drills that are conducted in controlled conditions, the community drills conducted as part of the programme were a bold and innovative initiative. In many places, the benefits of such exposure resulted in saving lives such as in Assam and Tamil Nadu. Key to the successful community-based disaster reduction lies in the community's ability to overcome the challenges of frequent small-scale risks. Over a period of time, counter-measures practiced helped to build local-level resilience. Overall, the drills helped in raising awareness and sensitivity on the likely impact of disasters and steps that are needed for preparedness. Drills also brought communities and local governments closer. However, qualitatively there were many areas that required improvement.

- Distinction between instructions was not clear: Differences between duck-cover-hold for earthquakes, and drop-cover-roll in the event of a fire were not clear. Likewise, each type of disaster requires a distinct set of actions. As observed by the evaluation team, these distinctions were not clearly understood by the local implementers.
- Cooperation of multiple agencies at the community level was not forthcoming. Drills were considered an activity 'owned' by the department of revenue. Other departments did not always actively cooperate in providing necessary inputs.
- Mock drills were a one-off activity: Except in Uttarakhand, the regularity of mock drills have not been reported from other states. As a result of these infrequent drills, skills acquired during training sessions are forgotten. Nevertheless there are several good examples – in the district of Rhoi in Meghalaya, where mock drills have been organised. Further, in Arunachal Pradesh, the evaluation team observed that communities had well-developed local techniques of administering first aid using readily available bamboo. This material is also used by communities in Nagaland, to temporarily store water and extinguish fires.

- Over-reaction and poor planning: An email-based discussion on UNDP's Solution Exchange<sup>8</sup>, highlighted that sometimes, mock drill participants skip the steps originally planned. Some actors overreact as a result encroaching on the role of others. This was largely a result of inadequate planning before the drills. This was also observed by the evaluation team in the mock drills organised in Assam, Meghalaya and Nagaland.
- Lack of seriousness: Respondents to the email discussion<sup>9</sup> pointed out that the quality of drills and the seriousness attached to the exercise is largely affected by the degree of involvement of the community. Taking community leaders into confidence, especially as key role players in the drills, has a strong influence on the quality.

#### **E. State Disaster Management Plans – much needs to be done.**

A state-level plan is one cornerstone framework document for DM in the state. At the minimum, it is an effective contingency plan for preparedness for disaster response, with a clear articulation of roles and responsibilities of each department of the government, and a description of vertical linkages – upwards to the centre and downwards to the district emergency response arrangements. If implemented imaginatively, it can be more; it can articulate a programme for an emergency response system, upgrading and maintenance of preparedness, as well as a programme for mainstreaming DRR into development. Even against the above mentioned lower benchmark, the performance is less than desired.

There is no easily accessible central inventory of these plans, either at MHA or in the DRM programme office in UNDP. There is also no evidence of a review process involving a national agency or technical specialist in the DRM team. Seven of the participating 14 states being reviewed reported having plans. This record of performance belies the quality and utility of the plans.

While visiting the states, the field team discussed it with the state governments and, on request, was provided with copies of the state DMPs for three of the 14 states. A quick review of these plans reveals the following:

- (i) Very few plans are actually approved by the State Disaster Management Committee or any other approving authority in the state.
- (ii) Some states have not revised the state plans since 2004.
- (iii) There is no specific process for reviewing these plans, once prepared.
- (iv) State-level mock drills have not been carried out.
- (v) In some states, where a plan document of sufficient quality does not exist, a process is underway to prepare it. Assam has constituted an inter-departmental committee to prepare the state plan.

During the HPC process between 1999 and 2002, several states were asked to initiate preparation of plans, and state committees were constituted which undertook activities in this regard. There was no evidence that an intensive effort was made to establish links with these past processes during the implementation of the DRM Programme.

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<sup>8</sup>Solution Exchange Query on Mock Drills. <http://www.solutionexchange-un.net.in/drm/cr/cr-se-drm11030801.pdf>

<sup>9</sup>ibid

Part of the challenge in preparing and finalising plans is the absence of clear guidance; and subsequent review under the DRM Programme. However, the NDMA has now issued guidelines for the preparation of the state level DMPs. Hopefully, in the future, the state DMPs would conform to these guidelines as well as relevant provisions in the DM Act and plans will be up-dated annually.

In the PSC meeting on 26 September 2008, the team recommended that focused action, including technical support, be provided to all participating States, which should be encouraged to review and finalise their state-level plans as a key output of the DRM Programme. This is an important part of the graduation strategy. Continued support for state DM plan development, review, testing, and updation is an important component of support to SDMAs. A brief commentary on the status of the state DM plans is given in the state-wise field visit reports.

**F. District Disaster Management Plans: good progress on process and content; consolidation needed.**

The district DM plans are a key instrument for a structured response to natural disasters. Today, with constitution of DDMA and their responsibilities under the DM Act, this assumes even greater importance.

District contingency planning is not a new phenomenon. Several states, particularly those affected by recurrent floods, have a long-standing practice of producing annual flood plans, which are revisited every year in the pre-flood season and revised. Uttar Pradesh, for instance, has a state-level Act – the Uttar Pradesh Flood Control Act, 1954 – which specifically mandates such planning. In 1995, under the Maharashtra Emergency Earthquake Rehabilitation Programme (MEERP), six districts in Maharashtra became the focus of an intensive exercise to prepare and update district plans. This was later extended to cover 25 more districts with support from the Yashwantrao Chavan Academy of Development Administration (YASHADA) based in Pune, Maharashtra. The Uttar Pradesh ATI and a proactive State Relief Commissioner's Office promoted district-level planning workshops in at least 20 different districts in Uttar Pradesh. Under the 2000-2002 ADB -Technical Assistance Programme eight districts - six in Uttarakhand and two in Uttar Pradesh, in Maharajganj and Kanpur - received technical support to prepare and revise their DM Plans. From 2001-2003, the Lal Bahadur Shastri Academy and the National Centre for Disaster Management prepared the Red Book and issued guidelines for district DM planning. All these processes contributed to building a momentum for DM planning.

There is no doubt that the DRM Programme maintained the momentum, provided new inputs, and enhanced the quality of the regular DM planning process where it existed. In some cases, however, the guidelines produced, or the initiatives taken, did not adequately refer to or build upon past processes followed in the state.

DMPs have been developed at various levels. Since it has been the practice to develop annual contingency plans for response at state and district levels, it was, therefore, easy to prepare these plans. However, there is limited, if any, attention paid to mitigation and prevention aspects in these plans.



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The district and sub-district DMPs presently put in place are qualitatively below average, except in a few cases. Further, they do not have either horizontal or vertical linkages. Most of the district plans do not include risk assessment, training and capacity building, identification of prevention and mitigation measures, updated resource inventories and roles and responsibilities outlined for different stakeholders. It does not cover the strategy for a multi-stakeholder approach or address the requirements of socially disadvantaged women and children as well as gender empowerment issues. These plans are required to be updated annually. However, with the preparation of district plans in accordance with the provisions of the DM Act, these issues are expected to be addressed. It is necessary that the guidelines issued by the state authorities adequately cover all these aspects for inclusion in the district and lower level plans with provision for periodic review and updating.

As per reports from the state governments to UNDP, 169 of the 176 districts have prepared and revised district plans. The team, during its visits to the districts, made efforts to collect these documents and examined their content and formulation process. The team collected 36 district plans from the 14 states visited. This included 34 DMPs from DRM districts and 2 DMPs from non-DRM districts – Akola in Maharashtra and Hoogly in West Bengal.

The DRM Programme has certainly helped in improving the quality and usefulness of the plans. A major shift has been in promoting a multi-hazard approach. This is reflected in good information on hazard profiles, vulnerability, and capacities; in many cases geo-referenced. In some states, the state-level disaster inventory has also been utilised. Some plans have benefited from the involvement of local-level technical/specialist inputs; namely from state universities and local NGOs. In a few cases, the training workshops on district DM planning have been a contributing factor. The plans have greatly benefited from significant inputs from the district magistrate and the DPO. Further, in some plans, the involvement of a range of agencies that are assigned roles under the plan is visible.

In a few states, the team was informed that the process of finalisation of plans included its submission to the RC/Secretary of DM; and in some cases even a presentation of highlights was made before the State Steering Committee. In both types of cases; the verbal and written feedback received was a supplementary source of technical guidance to the District Administration, District DM Committee and DPO. Documentation of this feedback and technical review was often undertaken by the state planning SPO and PA; once again indicating the useful and critical role they played in the process of development of district plans.

The fact that a few non-DRM districts also had plans of acceptable quality points to several conclusions. Traditionally, district DM planning is a continuing activity within the state administration, particularly in those districts that are often affected by recurrent floods. It also points to the fact that when instructions were issued by the state governments to DRM districts, in many states these were also issued to non-DRM districts and duly followed. There is also the “transfer” factor. A district collector either a district magistrate or assistant district magistrate who successfully pioneered a new approach in a DRM district would promote the same approach if he or she moved to a non-DRM district. The team appreciated the plans of the district of Haldia in West Bengal - a non-DRM district. This was an instance where the plan was developed because the Block Relief Officers (BROs) were being transferred within the state. For instance, a champion of the Haldia plan had earlier served in the North 24 Parganas which is a DRM district.

Not much horizontal interaction was visible in the DRM Programme implementation. There were limited structured opportunities for district-level officials to meet and share lessons and experiences or for interaction opportunities. On sharing this observation during a debrief session after the field visit to Maharashtra, the state government agreed to take this up. As a result, three divisional-level workshops were held in November 2008 bringing district magistrates and key officials from 4-5 districts to the divisional headquarters for an interaction on these issues.

With the establishment of the SDMAs and DDMA, this exercise of annual DM planning at district level is expected to assume greater importance, and a structured process to provide regular technical input; benchmarking; sharing of good practices; et al. will be needed. This should be made a key component of future DM planning.

**G. Plans at the village level were completed without adequate orientation and training of local communities. The paucity of time and ambitious quantitative targets forced the programme to adopt a 'cookie-cutter' approach. There were few instances, if at all, of revision or review of plans.**

A large number of DMPs at the panchayat and village levels have been prepared. In the absence of proper orientation preceding the planning process, the process of developing the plans with community involvement was forced to follow a template approach. Moreover, weak local ownership increased the pressure on the facilitators to develop a large number of plans within limited timeframes. Where a few hamlets make one village panchayat, the DM plan shows only the map and details of the main village, overlooking the training and mobilisation carried out in the hamlets, due to a template-based approach.

Ideally, DM plans at a village level should be regularly reviewed and approved by the district, and likewise the district-level plans should be approved by the state. This will ensure that the plans cover all aspects of DM and at the same time linkages can be provided from village to district to the state plans. This review process should be carried out annually supported by appropriate refresher training. The DM Act seeks to establish such linkages, which need to be scrupulously followed.

**H. Awareness generation has been carried out through a variety of innovative and locally appropriate media, thus ensuring large outreach.**

A diverse range of media such as posters, wall paintings, films, puppet shows, street plays, magic shows, audio cassettes, children's books, have been used to communicate the risks of disaster to local communities. "How to" guides have helped local intermediaries in organising information required to develop strategies to reduce risk.

This is an important positive output of the Programme. However, a true indicator of the success of any such public awareness strategy is the degree to which there is evidence of self-initiated action (Knowledge - Realisation - Decision - Action). There is limited evidence relating only to select sectors of self-initiated action based purely on receipt of IEC material. Moreover, the indicators selected for measuring outputs do not sufficiently capture this correlation. These have also been listed in the good practice document by the evaluation team<sup>10</sup>.

**I. Including women as active partners in the local DRM process is gradually improving, though not to the desired level.**

Women's participation was found to be good where the DRM Programme could ride on existing opportunities such as active SHG, anganwadi workers, Accredited Social Health Activists (ASHA), or where traditionally women have active roles in the community. In a few states - Arunachal Pradesh, Manipur and Tamil Nadu - the participation of women was found to be high. In many communities in the north east, existing social structures place fewer barriers for women's participation. This has allowed greater roles for women. Likewise, in urban areas, young female volunteers were mobilised to play an important role in creating awareness within the local community.

The involvement of women at the grassroots in the programme implementation, though less than the desired level, is gradually improving. There are positive trends to show that women's participation is gradually changing from passive to, at least, semi-active. A visible impact of the Programme is that all women, as a group, are now not seen by the communities as vulnerable. This could be due to gradual change in the social environment and particularly due to a larger number of women represented in PRIs. However, this programme, in a modest way, has contributed to the greater involvement of women in DRR. With increasing involvement of PRIs, anganwadi workers, SHGs and NGOs in the implementation of the Programme, women's participation in the programme would improve further significantly. For example involving a woman BDO in disaster preparedness activities helped encourage greater involvement by women. The stress should be more on quality participation of women, a trend which is now gradually emerging, rather than greater participation in terms of only numbers.

Women have been trained in first aid and search and rescue. However, it is also noted that in general, women have not been trained in flood rescue techniques. It may be recalled that during the tsunami in 2004, many women died since they were not willing to be rescued from water by men. There is a need to develop women master trainers for flood rescue.

The programme design itself provided little room for women-led and women-specific strategies. Ensuring the participation of women in the community meetings was not enough as it failed to break down prevailing social barriers. Separate strategies were needed.

**J. Extent of community empowerment has been limited, even while outreach has been widespread.**

Communities have been directly included in the preparedness training, conduct of mock drills and other related programme activities. While involvement has led to change in attitudes, there is an inadequate level of empowerment. This can be attributed to several factors outlined below:

- In several regions, the recurrent nature of disasters calls for high levels of preparedness. Infusion of special skills in first aid, evacuation, and rescue directly into the community has helped overcome the challenges posed by small-scale disasters. At the same time, most of the areas have no experienced major disasters for a long time. Communities in such areas were complacent towards programme activities. The programme activities have not factored in specific strategies needed to address high-intensity but low-frequency disasters.





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- Engagement with local leaders has yielded mixed results. While their influence over the communities has helped create inroads for the community-level activities, there is evidence that leaders were not proactive in ensuring inclusion of the most vulnerable groups within the communities. Marginalised communities do not seem to have been specifically identified or targeted at the local level. This is an area of concern, as both traditional community-based approaches and top-down approaches can isolate marginalised groups in the community and compound social problems. Further, marginalised communities have problems accessing community resources and this was also not factored into programme activities.
- Engagement with strong local institutions was helpful. However, local NGOs often lacked capacity, and the existing lack of trust between local governments and NGOs became a barrier to their involvement. Specific strategies were required to identify and train NGOs from the very beginning.
- At the local level, there are good examples of improving effectiveness of ongoing programmes – National Rural Health Mission and Sarva Shiksha Abhiyan, by including DRM Programme components. In Sikkim, ASHA workers have been trained in first aid. This enhanced their own efficiency and engagement with the communities. In Uttar Pradesh, masons and contractors engaged in construction of new school rooms have been trained in earthquake-resistant techniques. Most of these initiatives were at the behest of the respective state governments in central government-sponsored schemes. More efforts at the central government level were needed to make such initiatives widespread.
- In urban areas, the community's participation was limited, except in Delhi where the opportunity was provided by the ongoing 'Bhagidari'<sup>11</sup> programme of the Government of Delhi that allowed direct interaction with RWAs. However, the same set of strategies applied to rural areas was not successful in urban areas.

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<sup>11</sup>Bhagidari is a Government of Delhi initiative to promote citizen participation in governance through multi stakeholder processes and principles: <http://delhigovt.nic.in/bhagi.asp>

**Table 3.4: Factors influencing community participation as observed by the evaluation team (state visited mentioned in parentheses)**

What helped	What were the constraints
<ul style="list-style-type: none"> <li>• Small scale recurrent disasters created strong understanding. (Assam)</li> </ul>	<ul style="list-style-type: none"> <li>• Non-occurrence of major disasters has led to a complacent attitude towards programme activities.</li> <li>• Competing needs/problems of livelihood, law and order problems hindered interest and involvement in the programme.</li> </ul>
<ul style="list-style-type: none"> <li>• Consultation for the community plan preparation (Assam, Arunachal Pradesh, Meghalaya and Nagaland).</li> <li>• Mock drills were successful in raising awareness and sensitivity to potential disaster impacts (Assam and Meghalaya).</li> <li>• School-based interventions were very successful in training children (Assam).</li> </ul>	<ul style="list-style-type: none"> <li>• Having to travel through difficult terrain to attend the training workshops/ meetings resulted in the community having to incur costs and time.</li> <li>• Training has been provided but community task forces do not have necessary equipment to support their activities.</li> </ul>
<ul style="list-style-type: none"> <li>• Strong leadership at the state level</li> </ul>	<ul style="list-style-type: none"> <li>• In some cases, it was found to be individual-driven and hence not sustainable in the long term.</li> </ul>
<ul style="list-style-type: none"> <li>• Involvement of PRI members ensured the participation of officials at higher tiers – districts, blocks and GP (Assam).</li> </ul>	<ul style="list-style-type: none"> <li>• Pro-active involvement of PRI members was uneven in different states.</li> </ul>
<ul style="list-style-type: none"> <li>• Community's own coping practices incorporated in programme activities (Arunachal Pradesh).</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of adequate documentation of traditional coping mechanisms constrained widespread dissemination.</li> </ul>
<ul style="list-style-type: none"> <li>• IEC materials and awareness programmes during major festivals (Sikkim).</li> </ul>	
<ul style="list-style-type: none"> <li>• Existing community structures with strong bonding (Sikkim).</li> </ul>	<ul style="list-style-type: none"> <li>• Existing social structures became barriers to programme outreach by excluding the most vulnerable groups within the local communities.</li> </ul>
<ul style="list-style-type: none"> <li>• Engagement with local service providers such as the fire services, and primary health centres (Assam and Tamil Nadu).</li> </ul>	<ul style="list-style-type: none"> <li>• People were shy to adapt a participatory approach, which resulted in at least partial exclusion of NGOs, SHGs, etc.</li> </ul>
<ul style="list-style-type: none"> <li>• Involvement of local NGOs, especially youth groups helped in larger community outreach.</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of trust between the district authorities and local NGOs had a significant effect on participation.</li> <li>• Inadequate capacities of NGOs hindered their involvement.</li> </ul>

**K. Progress of putting in place the techno-legal framework has been very slow.**

The techno-legal regime has not received the attention it deserves in almost all states. Although model building bye-laws, amendments to be made in Town and Country Planning Acts and Development Control Regulations have been shared with all states, very little, if any, effort has been made by the state governments to reduce urban vulnerability. Hazard Safety Cells, though constituted, are not really functional. Similarly, while Rapid Visual Screening (RVS) of a few lifeline buildings has been undertaken by some states, the detailed evaluation for retrofitting has not been carried out. The respective state urban development departments need to develop and implement a time-bound roadmap for this purpose. The Ministry of Urban Development needs to take the lead to achieve this objective, with the NDMA and MHA as facilitators.

**L. Overall utilisation of funds as against budgeted costs is low.**

The overall percentage of expenditure against the resources released to the states without funds for HR is about 49 percent for the quarter ended 30 June 2008<sup>12</sup>. In contrast, the level of achievement of programme activities is relatively high. This reflects, in part, unrealistic costing of activities across states. As such, no correlation exists between fund utilisation and programme performance across states. The unspent balances with the state governments are, however, expected to be fully utilised by June 2009.

**Table 3.5: Expenditure across states as of August 2008**

Percentage Expenditure	States
Above 80%	Sikkim and Tamil Nadu
60-80%	Gujarat, West Bengal and Maharashtra
50-60%	Uttarakhand
35-50%	Arunachal Pradesh, Assam, Bihar, Delhi, Mizoram, Orissa and Tripura
Less than 35%	Manipur, Meghalaya, Nagaland and Uttar Pradesh

### 3.4: Assessment of the partnership strategy

**A. A strong partnership between UNDP and the MHA ensured that the programme is efficiently introduced in the selected states and monitored regularly.**

A strong partnership between UNDP and the MHA provided good leadership to the Programme nationally. However, as noted earlier, there was inadequate integration with other national ministries, departments, civil society and other resource institutions. This had a corresponding similar effect on the states also.

For example, engagement with the Central Board of Secondary Education led to the inclusion of DM in the school syllabus. This was a significant development and became a model for state governments to follow. As a result, inclusion of DM syllabus in the state curriculum has been achieved by almost all states.

All programme activities were initiated simultaneously without correctly assessing local-level capacities and needs. The results therefore varied across states.

**B. The strength and nature of the partnership at the state level has strongly affected the impact of the programme.**

The partnership strategy with organisations outside the government is limited largely to those at the local level. This widened the base for volunteerism. However, limited involvement of organisations at the national and state levels is a missed opportunity in building sustainability and for mid-course learning.

In many states, the DRM Programme has utilised existing local community based institutions as well as NGOs in serving as resource agencies mobilising local volunteers, training and awareness-generation activities. This has yielded good results in Assam, Delhi, Maharashtra, Mizoram, Sikkim, Tamil Nadu, Uttarakhand and West Bengal.

In West Bengal, the Programme is part of the deliberations and activities of the Inter-Agency Group at the state level; this provides a wider platform for learning and ownership.

A large number of NGOs are working on community-based DRR activities. Many such agencies bring with them useful experiences and innovations. The DRM Programme could have taken useful inputs from such ongoing activities in the region.

The involvement of the corporate sector evolved during the programme implementation such as a joint meeting with the CII at the national level and its state-level chapters. Barring a few local trade and business associations in select programme areas, there is inadequate participation of such institutions. There is a need for aggressive advocacy so as to transfer the efforts put in at the national level to state and district levels. Likewise, the involvement of the scientific and technical community is limited. There are some good examples of bringing in expertise in good construction practices. Many other sectors, where scientific and technical inputs may have helped, were found to be missing.

## **In conclusion**

The findings from the evaluation have been summarised below to provide the salient inputs for future programming. In this section, three questions are posed – What worked well? What could have been done better? What was missed out? Against each question, only one conclusion that was felt most important has been drawn:

### **What worked well**

The DRM Programme was implemented at a scale unprecedented in the world and the sheer breadth of its activities has set a benchmark for community-based DRR. To carry out the programme, an intricate management structure was put in place. A dynamic and continuing partnership between the GoI, state governments and UNDP ensured strong leadership. Training and capacity building at all levels including recruitment and placement of trained professionals at the district level made a qualitative difference to the programme activities. The involvement of PRIs and anganwadi workers has helped in institutionalising DRM into local self-government bodies and in improving women's participation. The scope of the Programme allowed it to absorb and redefine its targets, brought about by the Disaster Management Act in 2005.

In spite of numerous implementation dilemmas that are typical of any large-scale first-of-its kind initiative, the Programme has clearly demonstrated that loss of life and vulnerabilities can be significantly reduced through appropriate community-based preparedness measures.

### **What could have been done better**

Disaggregated strategies were required to address the varying nature of vulnerabilities and capacities of communities and other key stakeholders across the country. Making multi-hazard vulnerability as the basis of identifying programme target areas provided an incorrect baseline especially in the north east, which has high seismic vulnerability along with challenges of accessibility, and law and order. At the community level too, local needs and risks were not fully assessed leading to skewed presumptions. This had a bearing on the programme output as it appeared too ambitious for certain areas with respect to availability of time and spread of activities. Similarly, urban communities by their nature are heterogeneous and therefore, conventional means of eliciting community participation were not relevant to the context. National institutions, and NGOs engaged in similar field-based activities could have been closely involved in providing customised inputs for specific regional needs.

There is wide variation in output performance across states. An important factor contributing to this variation is the lack of disaggregated strategies. Therefore, the gains from the Programme may not sustain for long unless targeted activities are taken up in the next phase in near future.

### Missed opportunities

The Programme missed out on the opportunity to achieve community empowerment and inclusion. In the country's context, the progress towards the Millennium Development Goals (MDGs) is critically linked to the well-being and safety of those belonging to the most vulnerable groups within communities. These include women and children, disabled, minority groups, scheduled castes and tribal groups. In any disaster situation, these groups suffer the most. Except for school-going children, the special needs and capacities of such groups were largely overlooked in the programme design. Women's representation in numbers as well as active participation, while initiated, needs to be further strengthened. Empowerment as a whole, desired through the role of the local people in decision-making was also missing. The programme activities at the local level aimed to implement, but not develop partnerships to facilitate informed local decision-making.

Future programming needs to be sensitive to such requirements and develop targeted strategies that ensure inclusion and equity in all activities. Likewise, empowerment has to be achieved based on strong community-based mobilisation, education and awareness creating a ground for self-motivated community-led risk reduction legacy.





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# 4

## SUMMARY OF GOOD PRACTICES AND LESSONS LEARNT

A separate case-study document “Good Practices and Lessons Learnt” has been produced as part of the “Lessons Learning Review and Evaluation exercise. This brief chapter provides an overview and summarises the salient points highlighted from the case studies.

A thematic approach has been adopted to identify 47 good practices, across 13 themes outlined below:

1. Training Facilitates Preparedness
2. Mock Drills for Better Preparedness
3. Promoting Traditional Coping Mechanisms
4. Preparedness Facilitates Better Response
5. People Volunteer in Community-Based Activities
6. Social Campaign Channels for DRR
7. Alternative Communication Channels for Quick Response
8. Demonstration of Safe Construction Practices
9. Safer Schools – Effective Institution for Disaster Awareness and Preparedness
10. Gender Sensitive Approach in DM Practices
11. Integration of DM Plans in the Local Planning Process
12. Integration of DRM in Development Schemes
13. Sustaining Community-Based Initiatives

Each of the themes summarised in the separate document covers (i) observations (ii) explanation and remarks on the experiences of the practices' impact and (iii) lessons learnt through illustrations of cases cited through reviews.

## 4.1 Observations on good practices

The 'Good Practices and Lessons Learnt' document is best used as a learning input, inspirational trigger, and a tool for replication. The approach adopted captured from the pool of pre-identified cases and from the visits to the selected 14 states, evidence of the narratives at locations. This evidence was gathered through interaction with the community, officials and DRM Programme staff as the “doers” among practitioners.

Guidelines were developed to document examples of best practices and to publish them as examples for use during awareness generation campaigns and training activities. It was observed during the field visits that although many of the cases are being introduced or adopted in other programme states, there is a need for the states to capture the impact of the programme interventions at the community level and involvement of different agencies and NGOs; share the common approaches used for implementing the programme activities. While developing the document, it was observed that state governments such as Maharashtra have actually brought out documentation on the Good Practices of DRM in their state, while few others such as Uttar Pradesh have initiated the process. However, not every state has been able to document the best practices and innovative initiatives.



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## 4.2 Lessons learnt from the documented examples of good practices

The 'Good Practices and Lessons Learnt' document focuses on how effective the activities of the DRM Programme were in achieving positive change to reduce vulnerabilities and risks faced by people. The main areas that stand out were mapping out communities' vulnerabilities and risks, preparing plans, incorporating preparedness activities through drills, linking mitigation measures with local area development priorities, and adapting model training approaches to enable communities to actively participate in DM initiatives. Some of the more prominent lessons learnt under each theme, as illustrated in the Good Practices document, are given below.

### Theme 1.

DRM training programmes should be conducted in the local language, to the extent, possible, and the training of female master trainers should be promoted. Existing institutions and systems should be utilised to deliver training programmes (especially at the lower administrative levels), and the involvement of more stakeholders should be encouraged.

### Theme 2.

Mock drills have facilitated the DMPs updates. The drills should be institutionalised as a regular activity at the sub-district levels, within the ambit of the DM institutional mechanisms, and increased community participation in drills should be encouraged. Coordinating with stakeholders locally would provide greater expert inputs and possibilities of volunteer mobilisation.

### Theme 3.

The role of traditional coping techniques should be recognised in village DMPs and also within capacity-building training programmes, which should then be shared with other district-level stakeholders through an appropriate medium. There is lack of documentation of traditional coping capacities at present.

### Theme 4.

Village DMPs, including the associated information maps, should be accessible to all within the village, and the DMPs' effectiveness should be tested through mock drills. DRM priorities should form an integral part of village-level development activities, and should also be linked to livelihood strategies in order to promote an 'awareness to action' approach.

### Theme 5.

Although volunteerism promoted the engagement of communities, long-term sustainability of the approach requires permanent organisational support, clear-cut roles and responsibilities, and due recognition of the volunteers' important contributions.

### Theme 6.

Imaginative and diverse media channels may be utilised to communicate DRM messages to target groups – including initiatives to reach those with physical disabilities. Feedback routes should be present during awareness-raising activities in order to assess the quality and effectiveness of messages.

#### **Theme 7.**

EOCs can serve as information hubs and helplines. However, most district EOCs are not yet operational. Efficient EOC functioning requires complementary community and response team training, and linkage with Early Warning Systems to community-level disaster preparedness (last mile connectivity is essential).

#### **Theme 8.**

Training programmes for masons and other construction workers on hazard-resistant building techniques form key inputs to improve the safety of buildings. A pool of master trainers should be identified for training programmes, which should also provide certification and refresher training to construction workers.

#### **Theme 9.**

School DMPs, once prepared, should be readily accessible for use during emergency responses, and should include key contact details. School managers should be encouraged to improve hazard-resistance of existing structures, and to construct more resilient new school buildings.

#### **Theme 10.**

Active participation of women in village disaster management taskforce teams has been an encouraging sign of increased female involvement in DRM activities. Women master trainers and the involvement of women SHGs should be promoted to encourage greater female participation and integration of gender sensitivity into activities.

#### **Theme 11.**

Community participatory approaches for DMP preparation are weak at local levels, and DMPs are mostly limited to the template circulated under the DRM Programme. Furthermore, there is lack of sharing of DMPs with line departments and community members. Greater NGO involvement during DMP development should be promoted and formalised through a Memorandum of Understanding.

#### **Theme 12.**

More proactive involvement and commitment from the central and state governments, through the departments of panchayat and rural development, would ensure greater streamlining of DRM into planning processes.

#### **Theme 13.**

Panchayat meetings have provided a useful platform for sustaining active participation of communities. New development programmes should include DRM-related activities – particularly at the block and village levels.



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# 5

## PROPOSED FRAMEWORK OF ACTION FOR PROGRAMME SUSTAINABILITY

This section of the report outlines a proposed framework of action required to ensure sustainability of the Programme beyond June 2009. In doing so, it takes into consideration the healthy progress made by some states. The first part of this chapter is an assessment of graduation strategies prepared by the states; and the second section examines possible action points to ensure sustainability of the DRM Programme.

### 5.1 Assessment of state graduation strategies

Progress towards sustainability was measured against the following parameters:

- Institutional structure in place, including DM training capacity and legal frameworks.
- Decisions on HR support beyond programme period.
- Budgetary support for continuity of programme activities.  
Extension of the DRM Programme to other vulnerable areas, presently not covered.

Major challenges listed out by most states pertain to availability of funds, technical and HR support. Challenges related to external environmental factors such as law and order have also been highlighted at least by two north eastern states.

Based on the assessment of the graduation strategies put forth by the states and observations of the evaluation team during visits to the states, it is noted that four states have taken significant decisions that can potentially ensure sustainability (Table 5.1) – Delhi, Maharashtra, Sikkim and Uttarakhand.



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In Maharashtra, in addition to the SDMAs and DDMAAs, ten regional DM centres have been constituted. It has also been decided to conduct mock drills twice a year. Further, beyond December 2008, allocations have been made in the state budget to continue the system of DPOs. Moreover, a decision has been taken to include DM as one of the parameters in the performance appraisal of secretaries. The creation of State and District Disaster Response Funds has been approved. The activities of the DRM Programme would also be carried out in 21 non-DRM districts. DM training has been included in the departmental as well as school curricula.

In Delhi, the Delhi Disaster Management Authority was constituted in 2003 (now modified in terms of the DM Act) and DDMAAs have been constituted in all districts. The state has made budget provisions beyond the programme period to continue activities. A cadre of professionals armed with management training and new emergency services also commenced during the Programme period.

In Uttarakhand, in addition to the statutory bodies set up under the DM Act, a specialised institute – the Disaster Mitigation and Management Centre – is now functional as an autonomous body. Nodal officers are in place at the state, district and block levels. Also, BDOs have been assigned responsibility to prepare plans and update this at the block level. Funds from the Calamity Relief Fund (CRF) have been partly apportioned to conduct training in earthquake-resistant features. Also, arrangements are in place with numerous institutes of higher learning to conduct training. Committed resources beyond the programme period will potentially ensure sustainability of all activities.

In Sikkim, state nodal officers have been identified from the line departments. The existing four National UNV volunteers who were hired by the state nodal agency have been absorbed into regular posts of the Government of Sikkim since July 2008.

Based on close interaction with the concerned state governments and the inputs received from the states including the state graduation strategies, the 14 states may be broadly placed in the following three categories:

- A States which have already made alternate arrangements:  
Delhi, Maharashtra, Sikkim, and Uttarakhand
- B States which have taken significant action for alternate arrangements:  
Assam, Meghalaya, Mizoram, Nagaland, Tripura, and West Bengal
- C States where action has recently initiated:  
Arunachal Pradesh, Manipur, Tamil Nadu, and Uttar Pradesh



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**Table 5.1: Summary of progress towards sustainability**

State	Initial progress*	Elaborate plans**	Significant decisions taken for continuity***
Arunachal Pradesh	*		
Assam	*	*	
Delhi	*	*	*
Maharashtra	*	*	*
Manipur	*		
Meghalaya	*	*	
Mizoram	*	*	
Nagaland	*	*	
Sikkim	*	*	*
Tamil Nadu	*		
Tripura	*	*	
Uttarakhand	*	*	*
Uttar Pradesh	*		
West Bengal	*	*	

Source: State graduation strategies and interactions in each state

**\*Initial progress:** Some initial activities have been undertaken to continue the momentum created by DRM.

**\*\*Elaborate plans:** State and district-level plans are under finalisation and mainstreaming of activities has been initiated with other departments within the state.

**\*\*\*Significant decisions taken for continuity:** Budget allocations for activities beyond programme period; training calendars in place; posts created/and or specific role allocations made.

**Note:** Uttar Pradesh is in the process of creating posts for all districts and provision of funds is being made by SDMA. Once these actions are taken, expected by June, 2009, it would fall in category "A".

## 5.2 Looking ahead-system building

Over the last seven years, the DRM Programme has made an impressive beginning on an ambitious scale. It needs to be taken forward with an aggressive strategy, not only to ensure its sustainability in the existing DRM districts but also to extend it to all the vulnerable districts in the country. Looking ahead, it has to be realised that having taken important baby steps, we are at the threshold of not only unfinished agendas but at the start of agendas. The task ahead lies in adequate system building to ensure programme sustainability.

### **A. The Disaster Management Act, 2005 had an important catalytic effect in ensuring programme sustainability.**

The evaluation team observed that most states that have reported progress towards sustainability have been successfully able to integrate the programme management structure with the institutional mechanism stipulated in the DM Act. Delhi, Maharashtra, Meghalaya, Mizoram, Nagaland, Tripura, Uttarakhand, Uttar Pradesh and West Bengal have all reported the constitution of SDMAs. In Maharashtra, Uttarakhand and West Bengal, an existing system at the state and district levels has further helped in expediting the institutionalisation process.

The DM Act lays down the institutional, planning, training, funding and coordination mechanism, anchored by NDMA nationally, SDMAs at the state-level, DDMA at the district-level and local authorities at the sub-districts. The DM Act 2005, the NDMF put in place in 2002 and updated in 2004 and the state-level roadmaps prepared as a result of the national roadmap or the NDMF are the guiding instruments for action ahead towards system building.

### **B. Mainstreaming of DRR through a national mission.**

The DRM Programme is and needs to be taken forward as a GoI Programme for mainstreaming DRR in the day-to-day activities and agendas of all development ministries. It should be implemented as a national mission with multi-ministerial engagement through a multi-stakeholder approach. This principle should govern future programme implementation across the board at all levels to make the Programme inclusive as well as sustainable.

### **C. Long-term action plan needed for system building.**

A ten-year action plan needs to be formulated by the government, NDMA, MHA and other concerned ministries nationally, SDMAs and relevant state departments at the state level and all concerned departments at the districts for vulnerable districts to mainstream DRR in the development activities and put in place sustainable preparedness and response mechanism and preparedness plans. This needs to be done in close conjunction with local governments and authorities and all stakeholders with active community participation. The experiences of the Gujarat SDMA, Orissa SDMA and Delhi DMA set up earlier can be a good basis of learning, and therefore need to be documented and shared with all SDMAs. SMDA secretariats may develop their own plans, based on their respective risk assessment and vulnerability analysis.

Similarly, the lessons learned by existing composite state technical institutes such as YASHADA, Pune; Disaster Management Institute (DMI), Bhopal; DMMC, Dehradun and Gujarat Institute of Disaster Management (GIDM), Ahmedabad need to be shared with all other existing as well as proposed state-level institutes (ATIs, SIRDs, Remote Sensing Agencies, universities etc.) to optimise their output, both qualitative and quantitative. The system of District and Block Relief Officers presently in place in West Bengal could be a viable option. Necessary linkages with civil-defence, fire services, primary and community health centres, the Red Cross, NGOs, CBOs and SHGs should be established, if necessary, by strengthening the relevant government organisations and extending support to these organisations. These initiatives could be implemented through the modality of national, state and district plans which are mandatory under the DM Act 2005.

#### **D. New personnel structure needed.**

A new personnel structure needs to be put in place, building on the success of the National UNV volunteers system. Based on this modality, development of a national corps of young DRR professionals could be considered to support the National DRR Mission. Similar schemes exist in other institutions like the Council for Scientific and Industrial Research and the Council for Advancement of People's Action and Rural Technology.

#### **E. Availability of adequate funds and technical expertise is a major constraint for sustainability.**

A major constraint noted by states is the availability of adequate funds for the continuation of programme activities. As the Programme was implemented using GoI-UNDP funds with little or no visible support from the state governments, many states are now struggling to find suitable replacement resources through appropriate budgetary provisions.

The second important barrier noted by states is the limited access to, and availability of technical expertise. This would be a major challenge for future programming for the states, as the need for trained manpower far exceeds the current availability. Moreover, considering the scale of challenges at hand, there is an urgent need to identify and empower a greater number of specialised institutions and trained professionals.



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## 5.3 Proposed framework of action for programme sustainability

The Programme has now been extended by UNDP under the existing modalities up to June 2009. Each programme state and union territory has to take pro-active measures to ensure the continuation of the programme beyond this date. The strategy to be adopted by each state can be broadly categorised in two stages:

- Immediate measures to be taken by June 2009 to ensure continuation of the programme without any break.
- Medium-term measures for programme sustainability over the next 12 months by December 2009.

The state graduation strategy may be reviewed and revised to include immediate as well as medium-term measures discussed in this chapter and implemented in a time-bound manner. The graduation strategy already undertaken by the state governments may feed into the revised graduation strategy to facilitate its implementation.

### A. Immediate measures for additional HR and financial support.

The immediate concern for each state government is to put in place necessary manpower so that the transition from the HR support presently provided by UNDP to state government officers exclusively designated to take over the Programme at state and district-level is smooth. Further, funds have to be earmarked for the continuation of the programme activities from the financial year 2009-2010.

### B. Medium-term measures.

The immediate measures proposed to be taken primarily by the MHA and NDMA from 2009 to 2010 are an interim arrangement only to ensure the uninterrupted continuation of the Programme till regular arrangements are put in place. This will not ensure long-term sustainability and institutionalisation of the programme unless institutional, planning, training, funding and coordination mechanisms are put in place in accordance with the DM Act, 2005. The Programme also has to be integrated with development plans of all the ministries and departments at national, state, district and local-levels. The following medium-term measures may, therefore, be taken to ensure its institutionalisation by the state governments:

- **Project Management Unit in MHA**

The MHA as per the programme execution agreement of August 2002, was designated as the executing as well as implementing agency with Country Office support from UNDP. Despite the fact that the project cost was over INR 1,500 million, no project management unit was created in the Ministry, which proved to be a major handicap in undertaking regular monitoring and concurrent evaluation of the Programme. This drawback needs to be addressed by the Implementing agencies at the national, state and district-levels during the next phase of the Programme.

- **Constitution of functional SDMAs and DDMAAs**

The state governments of Arunachal Pradesh, Assam, Delhi, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, Uttar Pradesh, Uttarakhand and West Bengal have constituted their SDMAs. Tamil Nadu has yet to constitute the SDMA. Manipur had constituted the State Authority in 2005 and it is yet to be re-constituted in terms of the DM Act. In most of the states, the DDMAAs are still underway. Even in a few states where DDMAAs have been constituted, they are yet to be functional. It is, however, obvious, keeping in view the functions assigned to it, that the DDMAAs would be the key implementing and monitoring agency for the DRM Programme at district and local-levels. The state governments have a legal obligation under the DM Act to ensure that these authorities are in place and fully functional as early as possible. Although this task is not directly related to the DRM Programme, the Programme can be meaningfully taken forward by states in future through these authorities as a key agency at the state and district-levels.

- **Ensuring horizontal and vertical linkages at the district and sub-district levels**

The vertical institutional linkages are provided through the NDMA, SDMA and DDMA as per the DM Act. At the district and lower levels, the three-tier Panchayati Raj System can support the institutional mechanism. Likewise, the horizontal linkage has been provided with the inclusion of the Chairperson of the Zila Parishad that is the district council as co-Chairperson of the District Authority. The horizontal linkages should appropriately include NGOs, youth organisations, anganwadi workers, teachers, ex-servicemen and other stakeholders who will function in conjunction with the PRIs and government functionaries at the grassroots. The state and district governments may consider associating these stakeholders through an advisory committee constituted by the DDMAAs.

- **Formulation of state and district disaster management plans**

The National Authority has already issued guidelines for the preparation of state plans. However, the state and district DMPs are yet to be functionally put in place. Once this exercise is completed, the state and district plans would be able to cover micro-level risk analysis, integration of measures with development plans and projects, capacity building, linkages with the DMPs and roles and responsibilities of each department, funding mechanism for implementing state plans and other related measures. It will also have necessary vertical linkages with the national plan as well as the district plans.

- **Regular mock drills to ensure a level of preparedness**

The evaluation team noted during the field visits that mock drills were largely conducted as a one-off activity. However mock drills not only generate awareness and prepare the community, they also afford an opportunity to ascertain the strengths and weaknesses of the plans, which can then be modified and updated accordingly. Indirectly, mock drills therefore support the sustainability of DM initiatives.



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Over the last two years, the NDMA has organised a large number of table-top exercises and mock drills. These mock drills are very elaborate and are organised for specific disasters at different locations in conjunction with the state governments and other stakeholders. The NDMA has organised between 60 to 80 table-top and mock exercises every year. The feedback received from the state governments such as Assam and Uttarakhand revealed that these mock drills have contributed significantly to capacity development as well as awareness generation. In order to ensure capacity development at sub-district levels, the state and district authorities may conduct similar mock drills and table-top exercises at the block, GP and village levels. Besides, such exercises need to be adequately documented and video-graphed and shared with other states and districts with similar vulnerabilities.

- **Training/Re-training systems**

The integration of the Programme from national to the local-level will be successful only if training and re-training of all stakeholders is built into the system at all levels, particularly at the district and local-levels. The training/re-training mechanism has to include sensitisation of the members of SDMAs and DDMA's; training of officers and employees of SDMAs and DDMA's; government functionaries at district and sub-district level; government officials of ULBs; over three million elected representatives of PRIs; members of NGOs active at the district and sub-district levels; representatives of voluntary organisations like SHGs , anganwadi workers, youth organisations, ex-servicemen, school teachers etc.; members of Disaster Management Committees (DMC) and Teams at village, block, GP, ULBs and wards; members of the corporate sector; and officials of other ministries/departments, agencies and programmes, where mainstreaming of DRR is to be achieved.



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- **Role of the NIDM**

The responsibility of training and capacity building has been entrusted to the NIDM at the apex level. With the transfer of the scheme relating to support to the State ATIs/SIRDs from the MHA to the NIDM, the ATIs/SIRDs and their DM Cells are in the process of being strengthened and revitalised. NIDM is extending technical support by way of development of training modules and organisation of training of trainers, besides providing additional financial support. Faculty members of NIDM are assigned to play the role of mentors to particular ATIs. The NIDM may develop model training modules for different target groups and organise the training of state-level trainers. The Institute may also devise certification schemes and undertake macro-level evaluation of training programmes, based on feedback received as well as field visits to state-level training institutes. Further, NIDM may also develop training modules for NGOs and other stakeholders and impart training to trainers drawn from national-level NGOs, which in turn may impart training to trainers drawn from state and district-level voluntary organisations with the objective that the trained should have developed the requisite competence to train NGOs and other stakeholders at the grassroots. The community-based DRM training components may be integrated with the proposed National Human Resource Development (HRD) Plan, to be developed by NIDM.

- **State-level training and technical support organisations**

Almost all states have DMCs in the ATIs and SIRDs. However, considering the sheer volume of the personnel to be trained in different training modules, it is necessary to identify additional training institutes at state level. These Centres and Institutes need to be upgraded with experienced faculty members, facilities and infrastructure. They may be made responsible for the development of specific training modules for different areas of the state, based on their respective vulnerability profile and taking the modules developed by NIDM as a broad guideline. The Centres may impart training to PRI members, state and district-level functionaries and voluntary organisations including NGOs and also assess and evaluate the quality of training programmes being organised by training centres and

NGOs at district and sub-district levels. This aspect may be addressed by the SDMAs in consultation with NDMA for financial and logistical support and NIDM for technical including professional support. Such a role is already being effectively played by a few established institutions in some states like the DMMC in Uttarakhand, the GIDM from an earlier period, soon after the Bhuj earthquake, the DMC in YASHADA, Pune in Maharashtra, and also the DMI, Bhopal in Madhya Pradesh. These institutes may provide the composite services of training and technical support in the field of disaster prevention, mitigation and preparedness.

There is also a need to look ahead and establish at least one full-fledged state-level institution in each of the larger disaster-prone states to take on the role of a SIDM such as GIDM, similar to the role of NIDM at the national level.

It will be necessary to involve CSOs, to impart training to the community at the grassroots, with an adequate supervision and evaluation system in place. These organisations will need to be provided with necessary technical, logistical and financial support. Such arrangements can be on a “fee for services” modality.

Technical support institutes also need to be identified in each state to impart training to engineers, architects, masons, doctors and paramedics as well as corporate sector and voluntary organisations. Each state also needs to evolve a State HRD Plan with the support of NIDM. The state HR plans so developed may feed into the national HR plan to be developed by NIDM. If necessary, the development of national as well as state HR plans may be outsourced to well established institutes or civil society organisations with the requisite expertise in the field.

A well-developed training/re-training cum technical support mechanism fully embedded in the existing systems with adequate coordination with the other stakeholders entrusted with the responsibility of training personnel at grassroots level and providing technical support to SDMAs and other government entities is an essential pre-requisite for the institutionalisation of the DRM Programme.

- **Funding mechanism**

In the recent graduation-cum-exit strategy prepared by 13 of the 17 participating programme states, it has been recognised that funds have to be provided in the respective state budgets to be able to take the Programme forward. The possible sources of funds identified are state budget, CRF (10 percent of annual allocation), mitigation funds and centrally-assisted programmes. However, of the 14 states covered under the evaluation, budgetary provisions have only been made by Delhi (INR 70 million), Maharashtra (INR 10 million), Mizoram (2 percent of the State Plan) and Sikkim. It is necessary that the remaining states provide adequate funds in their respective budgets from the next financial year.

At the national-level, funds may be provided by the central government to strengthen the NIDM to enable the Institute to fulfil its obligations; undertake the Programme in all vulnerable districts in the non-DRM states; consolidate and continue the Programme in DRM districts till the state plans are finalised and the DRM Programme included therein; monitor and undertake a qualitative and quantitative evaluation of the Programme through outsourcing to professional agencies, preferably to government institutes/agencies; and generate awareness at the national level through the mass media.

At the state-level, funds may be provided for the continuation of the Programme in the existing DRM districts as well as its extension to non-DRM districts in DRM states; strengthening of the existing training institutes and identification of additional training institutes at the state and district-levels; establishment and/or strengthening of SIDMs; extension of the Programme to non-DRM states; development and updating resource inventory; provision of basic inexpensive equipment such as first aid kits, search and rescue equipment for community use during disasters as well as during the mock drills; documentation of lessons learned and dissemination of the information to stakeholders and the community; awareness generation within the state in local languages; micro-level monitoring and concurrent evaluation of the Programme in order to take mid-term corrective measures.

A committee may be constituted by MHA in close coordination with NDMA to assess the quantum of funds required to fulfil their obligations of the DRM Programme over the next five years. Similarly, the states may develop their own mechanisms to assess funds required annually for the next five years.

- **Coordination mechanism for the DRM Programme**

The need for an effective and vibrant coordination mechanism, both vertical and horizontal, for DRR initiatives in general and the DRM Programme in particular, cannot be over-emphasised. The modalities of coordination may be as proposed below:

- An apex-level steering mechanism under NDMA may be put in place for overall guidance to formulate and implement the next phase of the DRM Programme.
- A senior officers-level committee with officers from the MHA and other concerned ministries may be constituted for macro-level coordination.
- Similar arrangements may be put in place by the state governments/SDMAs.
- The DDMA may constitute an implementation committee under the Chief Executive Officer of the Authority with representatives of ULBs and the district-level training institute to interact with the local authorities including visits to block/village/ward level for grass-roots-level monitoring of the implementation of the Programme. This committee may closely interact with NGOs, CBOs, SHGs, youth organisations and other stakeholders actively associated with the implementation of the Programme at the community-level.
- The Chief Executive Officer of the District Authority may set apart some time once a month or at more frequent intervals as considered necessary to listen to the problems of the CSOs active at the district and sub- district levels with a view to facilitating their functions for the grassroots implementation of the DRM Programme.

- **State-wise DRM roadmap**

There is need to review the state roadmaps with special focus on community-based DRM and the graduation strategy for the DRM Programme as well as State Disaster Management Policy. The Policy may be laid down, or reviewed where already in place, after the National Policy on Disaster Management is finalised and released so that necessary linkages are maintained. The resolve of the state governments to adopt a multi-stakeholder approach with community participation for DRM should find expression in the policy as well as the state, district and local plans.

- **Partnership arrangements as a future programming approach**

Since DM has to be taken up with a multi-disciplinary and multi-stakeholder approach, there is need to develop an inclusive programme for implementation in partnership with CSOs, SHGs, NSS, NYKS, NCC, teachers, ex-servicemen as well as the corporate sector by pooling of resources including technical and financial resources. While a beginning has been made in a few states in this direction under the DRM Programme, the approach needs to be further consolidated and extended to all states. Such a partnership approach and distribution of geographical areas and responsibilities to different stakeholder organisations based on their competence and past performance is well established for response and recovery programmes. It now needs to be extended consciously to encompass the pre-disaster aspects of awareness generation, mitigation and preparedness included in the DRM Programme.



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# 6

## ANALYSIS OF SALIENT POINTS FOR FUTURE PROGRAMMING

### 6.1 Implementation strategy: The past perspective

The UNDP implementation modality of providing a large complement of HR support had distinct advantages and also related disadvantages. The main advantage, as highlighted in the first evaluation report as well as by several state governments during field visits was that the project implementation was placed on a fast track. On the other hand, the related disadvantage, which eventually surfaced, was that it was primarily perceived as a UNDP programme and the state governments did not fully identify themselves with the ownership of the project.

The fact that the Programme was externally funded contributed to an initial lack of full ownership by states. It is, however, a fact that state governments did incur considerable in-kind expenditure on several activities related to the DRM Programme from separate budgets at the state and district-levels. However, since there was no separate budget head exclusively for this programme where government funds were placed, this expenditure was invisible and was not perceived as state governments' contribution. Most of the state governments are now in the process of providing funds for taking forward the Programme after the exit of the international programme partners, although this process may be gradual. It has to be realised that a community-based initiative cannot be concluded in six years; it has to be embedded in the existing systems of the government at all levels with adequate financial and logistical support provided within the system to ensure that the project activities continue on a regular basis.

Another factor to be kept in view is that although the programme was initiated in September 2002 in 28 districts and extended to 125 districts in April 2003 with 44 districts added by the end of 2003, the settlement of the programme modalities with the state governments did take considerable time and it was effectively launched in most of the states by the end of 2003 or by mid-2004. The programme implementation travelled down to the blocks and particularly to the GPs and village and ward levels in the latter half of 2006. Several states highlighted this aspect of implementation. This is the reason that the visibility of the Programme before mid 2006 at the GP and village-levels was relatively poor as raised during the first evaluation. Therefore, the programme has been implemented at the grassroots for only about two years.

Further, the new institutional, planning, training, funding and coordination mechanism has emerged only after the enactment of the DM Act, 2005, which was notified for state-related provisions only in August 2007. The states are still in the process of putting in place these mechanisms including the modalities for financial support. The MHA and the state governments have to keep these limitations in view while deciding the future programme strategy.



## 6.2 Salient components of future programming

All the state governments were of the unanimous view that the Programme has to be carried forward in the existing DRM districts and also extended to non-DRM districts. Several non-DRM states are also keen to introduce the Programme in their states. The salient components for future programming have to be determined keeping in mind these requirements and to ensure that DRR in general and the DRM Programme with its community participatory approach in particular, are built into the system of governance. The salient components that emerged based on discussions with the state governments, as also the views of the evaluation team, are summarised in the following paragraphs.

## 6.3 Linkages to the 11th Five-Year Plan and national priorities

DRR in general and the DRM Programme in particular are important components of the national priorities articulated by the Planning Commission in the 11th Five-Year Plan (2007-2012). At the outset, it states that “With urbanisation and concentration of population in metropolitan cities, more and more people are becoming vulnerable to locational disasters. So, the development process needs to be sensitive towards disaster prevention, preparedness and mitigation. Disaster management has therefore emerged as a high priority for the country. Going beyond the historical focus on relief and rehabilitation after the event, there is a need to look ahead and plan for disaster preparedness and mitigation in order to ensure that periodic shocks to our development efforts are minimised.” As for the DRM Programme, the document inter alia mentions that “It is the largest community-based DRM programme in the world. There is a definite need to increase the scope to cover other deficient areas too, in order to draw the full benefit from this”.

## 6.4 Consolidation of the Programme in the existing 176 districts

There is a need to further consolidate the Programme in these districts, particularly with regard to the following components:

- Introduction of intensive awareness generation campaign at the grassroots, through the distribution of pamphlets, advertising on bus panels, wall hoardings, person-to-person contacts by involving NGOs, SHGs, anganwadi workers, teachers and students, in addition to government functionaries.
- Conduct of vulnerability analysis and risk assessment at the micro level.
- Development of master trainers at the district and block-levels and from among anganwadi workers, based on well-prepared training modules by DMCs at ATIs/SIRDs, in consultation with NIDM, if necessary.
- Training/re-training of elected representatives of PRIs/ULBs as well as DMCs and Task Forces of DMTs, based on well-developed training modules.
- Review and update of DMPs, based on guidelines issued by NDMA/SDMAs/DDMAs with upward and downward linkages.
- Regular conduct of mock drills at all levels.
- Introduction of DM curricula in schools and colleges.
- Introduction of techno-legal regime in cities and towns.
- Training of engineers, architects and masons in earthquake/cyclone/flood/landslide-resistant constructions.
- Intensive implementation of UEVRP component in all cities and towns falling in seismic zones III, IV and V.

- Activating Hazard Safety Cells in all earthquake-prone states for rapid visual screening, detailed evaluation and retrofitting of life-line buildings.
- Maintenance and regular update of resource inventory under IDRN.
- Documentation.
- Micro-level planning for intervention programmes at grassroots to reduce vulnerability.
- Integration of DRR and DRM particularly in development plans at the district-level.
- Develop effective coordination mechanisms with all stakeholders, both horizontal and vertical.

## 6.5 Extension of the Programme to 241 vulnerable districts in 22 states

According to the Vulnerability Atlas of India, prepared by the Building Materials and Technology Promotion Council, there are about 241 districts that are most vulnerable to different hazards, particularly earthquakes. All 176 districts where the programme is being implemented at present may not necessarily be included in these 241 districts. Therefore the additional districts to which the Programme is required to be extended may range between 110 to 120 districts. These districts need to be brought under the DRM Programme umbrella as early as possible.



## **6.6 Extension of programme to all 612 districts in the country**

In the next phase, after the Programme reaches the 241 districts, it may be extended to all remaining districts in the country. Preliminary action for preparation of detailed project reports for this purpose may be taken in advance and necessary administrative and financial approvals obtained so that the programme may be initiated in the first year of the next Five-Year Plan.

## **6.7 Institutionalisation of the techno-legal regime in all districts**

While model building bye-laws have been issued and circulated across all states, followed by ULB-wise recommendations of specific amendments required to be carried out and shared with concerned state governments by the National Seismic Advisor of the MHA, who along with his team has been engaged under the DRM Programme, hardly any action has been taken by the state governments to translate the recommendations into action. This matter needs to be followed up vigorously by the MHA in conjunction with the Ministry of Urban Development with the state governments. Simultaneously, training of engineers, architects and masons needs to be undertaken on a much larger scale. NDMA is already in the process of developing a project report for this purpose. However, the introduction of UEVRP component under the DRM Programme will assist in sensitising the stakeholders as well as the community to the techno-legal framework.

## **6.8 Possible interventions under CPAP 2008-2012**

The Programme is linked to the national priority of integrating development planning and environmental concerns to ensure containment of adverse effects, such as the threat of climate change, and the well-being of future generations as well as to the UNDAF outcome 4, which states that “the most vulnerable, including women and girls, and government at all levels have enhanced abilities to prepare, respond and recover from disasters and environmental changes”.

The UNDP Country Programme 2008-2012, signed with the Ministry of Finance in February 2008, inter alia states, in respect of DRM that “The programme will focus on integrating disaster risk reduction elements across all development sectors. Support to the newly established district and state level disaster management authorities will institutionalise community-level disaster preparedness. Appropriate policies and regulations and comprehensive multi-hazard risk assessments will help integrate disaster risk reduction concerns into development planning, including adaptation to climate change impacts. The next phase of the programme will be closely associated with the NDMA, established in 2005. Drawing upon recent experiences, such as the 2004 Indian Ocean tsunami, will help strengthen post-disaster recovery operations.”

Given that the UNDAF, signed by all UN agencies, promises DRR; consideration should be given to a joint country programming on DRR as in other “One UN” countries like Vietnam and Pakistan. At the very least when UN agencies in the country are implementing programmes on this theme, these programmes should be decided in a complementary fashion and progress periodically reviewed by the UNCT and its thematic working group on disasters.



## 6.9 Possible support by international agencies including UNDP from 2008 to 2012.

In view of the aforementioned goals and objectives, technical and logistical support may be provided by international agencies, including UNDP for the following activities during the period 2008-2012 which is in synergy with the 11th Five-Year Plan.

- **Support to SDMAs**

The state governments will require technical support for the preparation of state plans in accordance with the provisions of the DM Act, 2005. For this purpose, six states (three DRM and three non-DRM states) may be selected in consultation with MHA and NDMA to develop model state plans. The assistance may be in the form of outsourcing the assignment to different agencies or a team of consultants. The state plans so developed can then be replicated, mutatis mutandis, in the remaining states and union territories by the respective SDMAs and SECs.

Technical support may be provided to the selected six states for the preparation of guidelines for the development of district plans. The modalities of assistance to be provided may be the same as for preparation of state plans. The guidelines could be useful to the remaining states/union territories for developing their own guidelines.

- **Support to DDMAs**

In each of the 17 DRM states one district may be selected for the development of a model district plan in consultation with the concerned SDMAs. It would entail updating district plans keeping in mind legislative provisions and guidelines of the national and state authorities as also lessons learned during the intervening period, mock drills and consultations with the local authorities. This function can be outsourced to a team of consultants drawn from professional agencies including the NIDM. The respective DMCs centres functioning in the state ATIs may invariably be associated with the exercise. It may be appropriate to develop at least one local plan, to be implemented by the local authority. The modalities for the preparation of the local plan may be the same as proposed for the district plan.

- **Sub-district planning**

Micro-level planning at the sub-district level for taking up intervention programmes is necessary at the village/GP/block/ULB levels to bridge the gaps identified on the basis of the risk assessment. Assistance may be provided for risk assessment and capacity building in selected districts. Technical support from international and UN agencies may be for the purpose of risk assessment, identification of gaps and preparation of project reports for capacity building by outsourcing. The cost of implementation of the project may be borne by the state governments from the funds available with the district planning body or line departments, where feasible, or the District Disaster Mitigation Fund. The implementing agency of the project may be the local authority under the overall supervision of the district authority. The district development officer, who is normally also the Chief Executive Officer of the Zila Parishad or district council may be assigned the responsibility of monitoring and evaluating the progress of the project.



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- **Support to NIDM**

NIDM would be primarily concerned with the development of training modules for specific targeted groups, training of trainers, documentation, monitoring and evaluation. Upgrading the institute and the development of a faculty, particularly in the area of community based DRM is likely to take considerable time. In the interim, perhaps, the next three to four years, NIDM may require technical and logistical support, which may be provided by international or UN agencies. The modalities of providing assistance may be settled in consultation with NIDM and the approval of the NDMA and MHA.

One of the responsibilities entrusted to the NIDM under the DM Act, 2005 is to formulate and implement a comprehensive national HRD plan. NIDM has initiated the process but it is likely to take considerable time due to the inadequate facilities. The National HR Plan developed by NIDM would be the roadmap for states to develop their respective State HR Plans. Technical support to NIDM to formulate the National HR Plan will go a long way in integrating DRR initiatives including the DRM Programme with development plans to achieve the goal of inclusive development. The modalities for providing technical and professional support to NIDM and its partner state institutes may be worked out in consultation with them.

- **Support to the STIs**

The DMCs at the State ATIs and the SIRDs are at present functioning in almost all states. However, most of these centres are neither well-staffed nor well-equipped. This requirement is primarily to be addressed by the MHA and the state governments. The state plans may take care of this requirement. However, pending their up-gradation by the central and state governments, technical and logistical support may be provided to these institutes, in the area of community based DRM

- **Technical and financial cooperation with development partners**

It may not be possible for UNDP and other international agencies to provide technical assistance to SDMAs, DDMAAs, NIDM, state-level training institutes, CSOs as well as for sub-district level planning directly or through extension of HR support through engaging resource personnel. However, this task may be achieved through technical and financial cooperation with development partners by outsourcing specific activities to them. The selection of such partners may be made based on their technical and professional competence and proven track record.



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# SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

## 7.1 Conclusions

### 7.1.A Outcome

- The GoI-UNDP DRM Programme has been a path breaking initiative in the country both in terms of scale as well as the breadth of its intervention. It is the largest DRM programme implemented by any country in Asia.
- The current evaluation reveals that the DRM Programme intervention has contributed significantly in achieving the stated outcome.
- The DRM Programme fulfilled the priorities set out by the GoI as reflected in some of the recommendations of the HPC.
- Strong ownership by community institutions and structures has played an important role in facilitating implementation locally.
- Mock drills at the community level were an innovative approach undertaken to enhance preparedness. The drills helped in raising awareness and sensitivity on the likely impact of disasters and steps that are needed for preparedness. It brought communities and local governments closer. Qualitatively, the community drills provided many important lessons for improvement.
- The fact that few non-DRM districts also had plans of acceptable quality points to the indirect impact of the DRM Programme due to transfer of officers from DRM to non-DRM districts and blocks.
- In spite of numerous implementation dilemmas, that are typical to any large scale unprecedented initiative, the Programme has clearly demonstrated that losses to lives, property, and vulnerabilities can be significantly reduced through appropriate community-based preparedness measures.



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### 7.1.B Factors that influenced programme performance

- Factors influencing the programme performance were leadership, state-level ownership, experience of past disasters, training and project management. Ownership by state governments and district authorities, while gradual, is a lasting legacy of the DRM Programme.
- The strategy to provide HR support for programme implementation through National UNV volunteers was a deliberate and imaginative choice, which accelerated the programme implementation.
- DPOs appointed by UNDP have played an important role in the accomplishment of programme objectives by assisting the district administration in executing the programme activities. The HR support provided by the Programme is today recognised as indispensable to the continued implementation of the programme. Therefore DPOs filled a pre-existing void, and their effective delivery of services pointed to a need, which is now being institutionalised.

## 7.2 Recommendations

### 7.2.A Outcome analysis

- DRM programming did not transform sufficiently following the new institutional arrangements. As a result, the new programmes and initiatives of the NDMA and the SDMAs in some states, proceeded in parallel and were not fully synergised. The Programme, in its next phase, may be integrated with the institutional mechanism now put in place, by the national as well as state governments.
- The DRM Programme was relevant to the need, as it generally covered the most vulnerable regions of the country. However, the identification process excluded some high-risk regions. There are more districts that met the criteria of selection, but were not included. Similarly, not all areas within a district are equally affected by the same hazards and risks. Therefore, by using the district as a unit, and aiming to address all blocks and villages therein with similar activities, the opportunity of concentrating on the most vulnerable blocks or villages within the district was lost. It is true that for administrative purposes, district had to be taken as a unit since the overall responsibility of the district rests with the district magistrate or the deputy commissioner. However, within this limitation, the strategies adopted could have been disaggregated with micro-level focus at the block, village and ULB levels to address their specific vulnerabilities and promote a participatory community-based approach more vigorously. Similarly, across the states, there are variations in vulnerability, population distribution, settlement type and terrain. Several states in the country experience frequent low-intensity disasters, which, in cumulative terms, have a strong impact on local communities. As such, a risk assessment, rather than a vulnerability assessment would have helped to adapt programme activities to the micro-specific needs of these states. Criteria including the potential number of lives that may be lost or affected would have helped to include some of the most vulnerable areas that have been ignored in the present programme. This may be corrected in the programme design of the next phase.
- Integration with existing government programmes carried out by various line departments in some states has significantly improved the quality of the results. However, it is still perceived in almost all states as a stand-alone programme. It has not been linked to development plans. There are no intervention programmes to reduce the micro-level vulnerability, based on village-level risk profiles. Linkages of the Programme with different departments at the state and district-levels were not visible. At the state and district-level, involvement of other line departments needs to be improved. For this purpose, awareness and capacity building for all line departments at the state and district-levels is needed, which can be achieved when respective line departments at the national, state and district-levels put in place their DMPs in accordance with the DM Act, 2005. This exercise will not only facilitate integration of DRR components by each concerned department with their respective development plans but also provide necessary horizontal and vertical linkages with all stakeholders, which are by and large not currently in place.
- In the next phase, the quality of training programmes at state-level training institutes needs to be improved and training modules updated. Refresher training mechanisms have to be put in place.

- While the strategy to provide HR support for programme implementation through National UNV volunteers and DPOs was a deliberate and innovative choice, which accelerated the programme implementation, it is no doubt true that continued reliance on the volunteers did not adequately activate the functionaries in the system in a phased manner, to ensure a more sustainable approach. It is hoped that, with the creation of regular positions by the states, this situation will change.
- Too many activities; vast spread, lack of prioritisation between activities and a cookie-cutter approach adversely affected the quality of programme activities. With so many activities, monitoring was primarily carried out through monthly self-reporting, and there was a lack of sufficient periodic substantive field monitoring from the MHA/UNDP Programme Unit in Delhi. Consequently, quality suffered. Project Management Units, both at national and state-levels, are therefore essential pre-requisites for micro level monitoring of the Programme.

## 7.2.B Output analysis

- Programme outputs pertaining to preparedness have done well, whereas achievement pertaining to long-term vulnerability reduction is partial. Sustained action aimed at mitigation, as well as at integration with development programming is therefore essential, which needs to be built-in, in the next phase.
- Quantitative output analysis, aggregated for all states, is impressive for several parameters, compared to the pre-determined targets laid down. However, the progress is not as good in respect of constitution and training of state search and rescue teams and somewhat poor with regards to the finalisation of state DMPs, amendment of state building bye-laws and relief codes. The progress is somewhat less satisfactory in conducting mock drills at the block, GP and village-levels. More focused attention needs to be paid to these aspects in the future programme strategy.
- There is a wide variation in output performance across states. An important factor contributing to this variation is the lack of disaggregated strategies. Therefore, the gains from the Programme may not be sustained for long beyond the programme unless targeted activities are taken up and further consolidated in the next phase of the programme.

## 7.2.C Disaster Management Plans

- Much needs to be done to improve the quality of state DMPs. There is no easily accessible central inventory of these plans, either at MHA or in the DRM Programme office in UNDP. Also, there is no evidence of a review process by a national agency or technical specialist in the DRM team. The mechanism laid down in the DM Act for preparation, approval and review of the state plans need to be followed scrupulously.
- There is limited, if any, attention paid to mitigation and prevention aspects in the district DMPs. The district and sub-district DM plans currently in place are qualitatively below average, except in a few cases. In addition, these plans do not have either horizontal or vertical linkages. Most of the district plans do not include vulnerability analysis and risk assessment, training and capacity building, identification of prevention and mitigation measures, updated resource inventory and roles and responsibilities of different stakeholders. The plans do not adequately address the

strategy for multi-stakeholder engagement or the requirements of the socially disadvantaged and children, as well as gender empowerment concerns. Also, no system was found to be in place for periodic review and updating of the plans at all levels. These aspects need to be adequately addressed for which purpose guidelines may be laid down by the state authorities, based on the guidelines issued by the national authority for state plans.

## 7.2.D Community empowerment

- Awareness generation has been carried out through a variety of innovative and locally appropriate media, thereby ensuring large outreach. However, the extent of community empowerment has been limited. The public awareness strategy needs to be revised to promote self-initiated action by the community.
- Including women as active partners in the local DRM process is showing signs of gradual improvement, though not to the desired level. With increasing involvement of PRIs, anganwadi workers, SHGs and NGOs in the implementation of the Programme, women's participation in the programme is expected to improve significantly. The emphasis should be more on the quality participation of women, rather than greater participation in numeric terms alone.
- The Programme missed out on the opportunity to achieve community empowerment and inclusion. In the context of India, the progress towards MDGs is critically linked to the well-being and security of those belonging to the most vulnerable groups within communities. These include women and children, the disabled, minority groups, scheduled castes and tribal groups. The special needs and capacities of such groups were largely overlooked in the programme design. Empowerment as a whole, desired in through the role of local people in decision-making was also not achieved. Programme activities at the local level aimed to implement the Programme, but did not focus on partnerships for informed local decision-making. Future programming needs to be sensitive to such requirements and develop targeted strategies that ensure inclusion and equity in all activities. Likewise, empowerment has to be achieved through strong community-based mobilisation, education and awareness building thereby laying the ground for a self-motivated community-led risk reduction legacy.





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## 7.2.E Techno-legal framework

- Progress towards putting in place a techno-legal framework has been very slow. It has not received the attention it deserves, in almost all states. While model building bye-laws, amendments to the Town and Country Planning Acts and Development Control Regulations have been shared with all states, very little, if any, effort has been made by the state governments to reduce urban vulnerability. Hazard Safety Cells, though constituted, are not really functional. The respective State Urban Development Departments need to develop and implement a roadmap for this purpose in a time-bound manner. The Ministry of Urban Development needs to take the lead to achieve this objective, with the NDMA and the MHA as facilitators.

## 7.2.F Partnership Strategy

- A strong partnership between UNDP and the MHA provided a good leadership at the national-level. However, there was inadequate integration with other national ministries, departments, civil society and other resource institutions. This integration may be brought in through the national plan as envisaged in the DM Act.
- All programme activities were initiated simultaneously without a correct assessment of local capacity and needs. The results were therefore varied across states. The strength and nature of partnership with the states has strongly affected the impact of the Programme. Greater involvement of NGOs in serving as resource agencies mobilising local volunteers, training and awareness generation activities as well as involvement of the corporate sector and scientific and technical institutes in the next phase may significantly bridge this gap.

## 7.2.G Programme sustainability

- The sustainability of programme outputs remains a challenge as progress made by most state governments for supporting post-project activities is not currently adequate. The state governments have a legal obligation under the DM Act, 2005 to ensure that the State and District Disaster Management Authorities are fully functional as soon as possible. Accelerated action needs to be taken for this purpose. While this activity is not directly related to the DRM Programme, it is true that the Programme can be meaningfully taken forward by states in the future only through these authorities. The PRIs and the municipalities may be entrusted with the coordination, monitoring and implementation of the Programme by involving CSOs, youth organisations, teachers, government workers and other stakeholders including the community. At the sub-district level, the three tiered Panchayati Raj system may function as the institutional mechanism.
- The horizontal linkages should appropriately include NGOs, youth organisations, anganwadi workers, teachers, ex-servicemen and other stakeholders who will function in conjunction with the PRIs and government functionaries at the grassroots. The active involvement of PRI members will also ensure a gender-sensitive approach.
- Mock drills not only generate awareness and prepare the community, they also present an opportunity to ascertain the strengths and weaknesses of the plans, which can accordingly be modified and updated. This element of DRM in particular needs to be addressed. A mechanism to assess the quality of the mock drills conducted and ensure greater involvement of the community, NGOs, SHGs and other stakeholders should be developed. Further, such exercises need to be adequately documented and video-graphed and shared with other states and districts with similar vulnerabilities.
- The NIDM has not been strengthened adequately, despite additional responsibilities entrusted to it, which needs to be addressed. Similar bottlenecks would continue to arise at the state and district-levels. These issues need to be addressed and resolved in a time-bound manner so that the pace of programme implementation, monitoring and internal concurrent evaluation is accelerated. The new system of DRM has several new institutional mechanisms that require establishment, orientation, clarity on roles as well as peer learning, based on multi-stakeholder partnerships. A massive capacity development exercise has, therefore, to be put in place for these institutions alone to ensure optimum and sustainable results.
- The state-level training institutes need to be upgraded with experienced faculty members in CBDRM, facilities and infrastructure. These centres or institutes may be given responsibility for developing specific training modules for different areas of the state, based on their respective vulnerability profile based on the modules developed by NIDM as broad guidelines. The Centres may impart training to PRI members, state and district-level functionaries and voluntary organisations including NGOs and also assess and evaluate the quality of training programmes being organised by training centres and NGOs at the district and sub-district levels. This aspect may be addressed by the SDMAs in consultation with NDMA for financial and logistical support and NIDM for technical including professional support.
- There is also a need to look ahead and establish at least one full-fledged state-level institution in the larger disaster-prone states to take on the role of a SIDM, similar to the role of NIDM at the national-level.

## 7.2.H Financial support

- Nationally, funds may be provided by the central government for strengthening of NIDM; undertaking the Programme in all vulnerable districts of non-DRM states; consolidation and continuation of the Programme in DRM districts till the state plans are finalised and the DRM Programme included therein; monitoring as well as qualitative and quantitative evaluation of the Programme and awareness generation at the national level through mass media.
- At the state level, funds may be provided by states for continuing the Programme in the existing DRM districts as well as extending the Programme to non-DRM districts, strengthening of the existing training institutes and identifying additional training institutes at state and district-levels; establishment and/or strengthening of SIDMs; extension of the Programme to non-DRM states; development and update of the resource inventory; provision of basic inexpensive equipment such as first aid kits, search and rescue equipment for the community's use during disasters and mock drills; documentation of lessons learned, and dissemination of information to the stakeholders and the community; awareness generation in the state in local languages; and micro-level monitoring and evaluation of the Programme.

### 7.2.I Future programme strategy

- The state-level graduation strategy may be reviewed and revised to include the above measures and implemented in a time-bound manner. The graduation strategy already undertaken by the state governments may feed into the revised graduation strategy to facilitate its implementation.
- There is a need to review the state roadmaps with special focus on community-based DRM and the graduation strategy for the DRM Programme as well as state DMP. The resolve of the state governments to adopt a multi-stakeholder approach with community participation for DRM should find an expression in the state, district and local plans.
- Technical and logistical support may be provided by UNDP and other international agencies during the period 2008-2012 to State and District Disaster Management Authorities for the preparation of state and district plans, development of model local plans, micro-level planning at the sub-district level for taking up intervention programmes at the village/GP/block/ULB/ward-levels to bridge the gaps for DRR. Technical support from international and UN agencies may be provided for the purpose of identifying gaps through risk assessment and capacity building at the district and sub-district levels. Technical and logistic support to NIDM and state-level training institutes for the next three to four years could be towards training modules for different stakeholders for CBDRM and formulation of national and state HR plans. The modalities for providing technical and professional support to NIDM and its partner state institutes may be worked out in consultation with them.

- It may not be possible for UNDP and other international agencies to provide technical assistance to SDMAs, DDMA, NIDM, state-level training institutes, CSOs as well as for district and sub-district level risk assessment and capacity building directly or through extension of HR support by engagement of resource personnel. However, this task may be achieved through technical and financial cooperation with development partners by outsourcing specific activities to them. Selection of such partners may be made based on their technical and professional competence and proven track record.

## 7.2.J Looking ahead- system building

- The DRM Programme is, and needs to be, taken forward as a GoI programme to mainstream DRR in the day-to-day activities and agendas of all development ministries, to be implemented as a national mission with multi-ministerial engagement and multi-stakeholder approach. This principle should govern future programme implementation across the board to make the Programme inclusive as well as sustainable.
- A ten-year action plan needs to be taken up by the governments, NDMA, MHA and other concerned ministries at the national-level, SDMAs and relevant state departments at the state-level and all concerned departments at the district-level for vulnerable districts to mainstream DRR into the development activities in close conjunction with local governments and authorities and all stakeholders with active community participation.
- A new personnel structure needs to be put in place, building on the success of the National UNV volunteers arrangement. Based on this modality, development of a national corps of young DRR professionals could be considered to support the National DRR Mission.









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