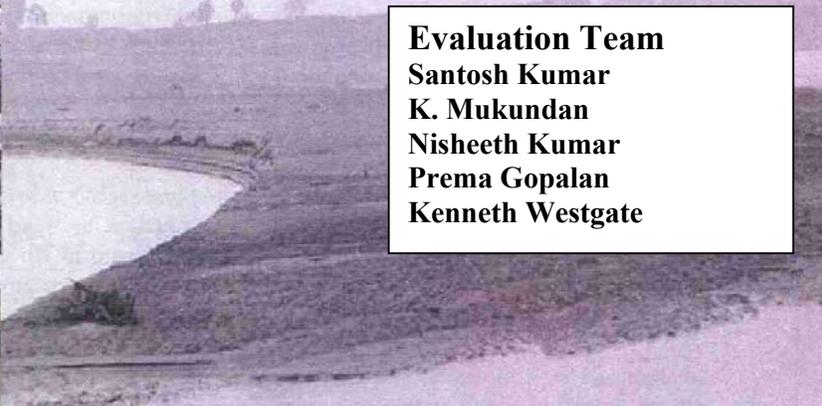
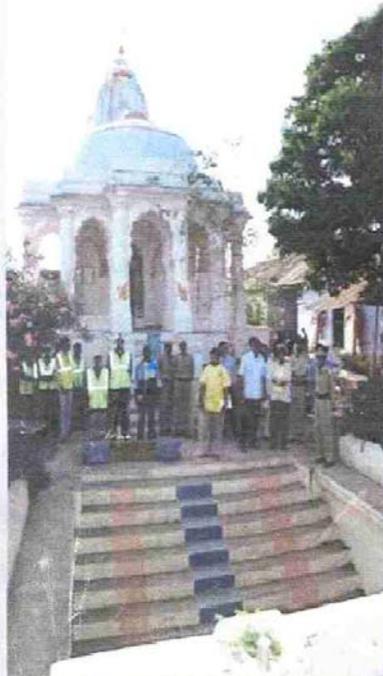


Ministry of Home Affairs -
United Nations Development Program

Disaster Risk Management Program

Assessment Report



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EXECUTIVE SUMMARY

Overall Assessment

1. Ministry of Home Affairs, Government of India had launched first of its kind a disaster risk management Programme at the community level. The Programme was supported by UNDP. The main objective of the programme was to reduce vulnerability of the community by building local capacity. The purpose of this evaluation exercise is to carry out a rapid qualitative assessment of the Phase 1 of Government of India-UNPD Disaster Risk Management (DRM) Program implemented across Bihar, Orissa and Gujarat. The evaluation has twin objectives of learning and application of learning to improve the program performance.

2. Overall the program has been in a position to advance the disaster mitigation agenda and most actions in this regard are focused on preparedness for better response. There is a shift in understanding that natural disasters are not the wrath of God and that this can be fought with pre planning initiatives. The strength of the program design is the ability of partners to innovate as part of implementation for this happen. There is a need for stronger strategic management of the program. So as to integrate it with state governments efforts for disaster risk management at community level.

3. The stated design of the project has been ambitious in view of the available resources and time available for its implementation. Given the resources (US\$ 34 million), the question that is constantly raised is as to whether the program is spread too thinly over larger number of districts with too many components. Strategically it appears to be a right move to sensitize as many States and affected areas on the basic issues and concepts in disaster risk mitigation (DRM).

4. The ongoing initiatives in Orissa and Gujarat, after the Super Cyclone and Earthquake respectively, provided the basis of understanding the importance of risk reduction, which helped the project in taking off in these two states. Bihar's progress especially at the lower level has been slow in terms of participation but presents an equal level of awareness on DRM issues.

5. *Mainstreaming and Ownership:* The governments are keen and committed to implement community based risk management program. The ownership is indicated by the government interests in the scaled up version of the DRM program phase and the specific shift in approach of States from relief to preparedness. The program has also helped initiate the process of formulating state policies on disaster management

6. The overall rating of the project in relation to the design is satisfactory. Though, the design, while is ambitious, at the operational level, the focus has been at strengthening participation at the local and upwards to the State levels. At the national level, in terms of program operationalization, the role of UNDP is quite prominent and this partnership is of importance to the programs progress. However, both at the State Level and National Level there is a need to reduce dependence on UNDP on the day to operational front.

The Cross Cutting Themes

7. The project has been developed within the contours of the *decentralization agenda* of Government of India and the States. The committees function broadly within the panchayati raj set up. The program perspective of building thematic linkages across decentralization, development, gender equity, and disaster risk reduction has added value to program performance at the village, block, district, and state levels. The self-help groups, community based organizations and especially women need to be mobilized as vehicles to advance participation for the program to be effective.

8. *Strategy and contribution to gender mainstreaming:* Community capacity building constitutes the core programme strategy. Women, as community members, are envisaged to be actively involved in planning processes. Gender concerns are addressed through mandatory representation of women in Disaster Management Committees (DMCs) and Disaster Management Teams (DMTs), but their number is much less as against the envisaged representation. Gender mainstreaming efforts and outcomes are uneven across States and Districts. While it is high in Gujarat and medium in Orissa it is low in Bihar in terms of participation at the management level.

9. *Partnerships:* Effective partnerships have been built for skill based training such as for first aid (Red Cross, CARE), safety and rescue (Fire Services department) and flood rescue training in Gujarat (Nauka Talim Kendra in Sinor Block of Vadodara District in Gujarat).

Capacity Building

10. The scale of capacity building activities has been impressive. The focus is largely on preparedness for response, as reflected in good quality search and rescue and first aid training. Capacities for participatory risk analysis need to be further built at the community level as a primary precondition to plan preparation at the village level. In terms of the sustenance of capacity building activities, the State have managed to mainstream disaster management as part of school curriculum and to the extent possible add on sessions to existing training programs at the State Administrative Training Institutions.

Sustainability:

11. Sustainability is intimately linked to the issue of ownership. While there is a visible ownership of the program at the national and state levels, it is being generally perceived as an UNDP program at the district level. However, there are variations in the nature and degree of ownership across states and districts. While the project design is broad-based on the mitigation front, given the program resources and ability to drive the concept of mitigation by the public agencies (Departments) is limited as the departments are expected to implement mitigation plans as outlined by hierarchy of Disaster Management Plans (Village/Gram Panchayat, Block and District).

Monitoring and Evaluation

12. The web-based monitoring system currently in place and use is mainly output driven. The information being collected under the project is more in terms of outputs such as plans prepared and people/ staff trained. Revisions are also being made to the

basic document but outcomes do not get reported¹. The system needs to be reworked to build in outcome monitoring and impact evaluation features and indicators into the existing system. This could include field based qualitative periodic reviews and community monitoring systems.

Recommendations

13. *Sustainability and scaling up*: In order to ensure the long term sustainability of project benefits, integration of disaster management concerns including risk reduction and mitigation into mainstream development activities have to be adopted as the key project strategy. In order to mobilize and sustain community interest (which is identified by implementers as a challenge, particularly in those areas where there has not been any recent disaster) there is a need to identify and link development programs and resources which communities can access to address vulnerabilities.

14. Local priorities and needs in terms of restoration of livelihoods, markets, basic services and infrastructure that connect people to markets and services are critical in the context of disaster. Similarly roles, capacity building, skills, information and human resources need to be built in a manner that enables communities to continually upgrade and refine their skills in a development context so that they can be drawn upon in the context of disaster.

15. For long term sustainability and achieving the development objective it is important to make a shift from a project to a program mode. This would basically mean enlarging the scope of program activities, expanding the time horizon, and making long term resource commitments for achieving the goal of sustainable risk reduction for communities at risk. A programmatic approach would need to work towards enabling community to accept disaster risk mitigation as part of life.

16. The project needs to be scaled up to all the states in the country following an in-depth study of what has worked and what has not worked and the reasons thereof in the Phase II of the DRM Program. The present evaluation study is confined to the phase I of the project which is being implemented only in three states whereas phase II has already completed its third year of the project.

17. *Design and strategy*: The project design should be modified to include community capacity development as its main focus and the objectives and components of the project need to be rationalized and sharpened accordingly. The components of the project have to be revisited and designed to focus on capacities to be developed which would include capacities related to participatory hazard, risk, vulnerability and capacity assessment, plan preparation, preparedness, training and for strengthening of community level institutions. The DRM program could be positioned as quality intervention, i.e, demand driven. The Center/ State/ Districts can set criteria for village selection based on Gram Panchayat's capability to demonstrate need and vulnerability, responsiveness and inclusion of women and civil society groups.

¹ A few outcomes observed during the field visits include an outline disaster management plan by the agriculture department in Orissa, documentation on effectiveness of plans and preparedness during the floods of 2001 in Orissa, or an opportunity of disaster proofing as part of Indira Awas Program in Bihar.

18. Soft resources could be segregated into two parts basic training and IEC related actions, and need-based studies of technical importance to each district/region. It would be necessary for the state governments to include mandatory allocation of resources in the State budget and project budget for capacity building [at least 1%] of government budgetary support.

Capacity Building

19. *Role of Volunteers:* The pre requisites for the partnership between GoI and UNDP will be that the UN Volunteers should be working at the state level providing support on analytical work, documentation and dissemination, provide demand based strategic support in specific areas such as flood control, earthquake engineering, curriculum design. This would mean enhanced resource allocation as part of the UN system to build capacities and at project level allocation of resources for Demand based technical assistance and MHA/States will also need to support specialization irrespective of location of the Staff. DPO equivalent should be provided on need based basis, as an additional support at the district level. This would also mean the need to incentivize (monetary) the position. Similarly the project should provide for a graduated capacity building program -move from basic to intermediate to advance level training than general training programs available as of now.

20. In case of a project approach, project cycle at community level must be benchmarked or sequenced.

Knowledge Management

21. A system of knowledge management aimed at articulating and sharing learning with all the stakeholders on a continuous basis needs to be worked out and put in place. This must include a mechanism to identify, document and share good practices. There is a need to develop state and national level platforms where the best practices of the districts and states can be shared once in a year which may be attended by all the stakeholders involved in the project implementation.

22. Training and capacity development: There needs to be a clearly worked out training and capacity development strategy. This should be based on an assessment of existing capacity gaps and resultant learning, training and technical assistance needs at various levels.

23. While the focus of the program should be on capacity building and IEC, there is also a need to allocate resources for analytical work for documentation, specialized functions/ departments on infrastructure maintenance issues, automating basic documentation function similar to those carried out under IDRN (at least 3 % of Value of the program).

Monitoring and Evaluation

24. The present arrangements of monitoring and evaluation system/instruments may be revised to get more field level inputs. There is a need to constitute a team of multi-disciplinary experts (comprising social scientist, economist, public health and structural engineer, gender and livelihood specialist etc. as per project requirement)

who can visit the field at least twice in a year to monitor the implementation of the project. If necessary, the feedback will be brought to the PMB and subsequently the directions may be issued to the states for corrections. The similar arrangement may also be done at the state level to monitor the district and community levels implementation.

25. The existing web-based monitoring system needs to be reworked to include outcome monitoring and impact evaluation features and indicators.

Resource Mobilization and Utilization

26. The Program may like to use the resources more strategically by intensifying capacity building efforts on the basis of clearly identified capacity gaps and needs as per the objectives of the program; a fresh capacity needs assessment exercise could be undertaken.

27. Since the focus of the project is mainly on community capacity development, there is a need to integrate local resources (human, institutional, financial) with the project components. Some new strategies may also have to be worked out such as creation of community risk mitigation fund, self help groups, micro credit institutions, Panchayat etc. as more active stakeholders.

The Process

28. Consultation at village level has to be more frequent. Local level institutions need to facilitate the process of consultation for which especially Panchayat/Gram sabha need to be empowered and be given more / main responsibility. One of the possible options could be to make Panchayat nodal agency for the implementation of the project which would also be in line with the macro policy direction of decentralized governance

Gender Mainstreaming

29. Given the social barriers to women's participation and the need to mobilize women's collectives and articulation of risk reduction, a women's DRM Sub-Committee should be formed at the village level. The members of risk sub-committee should also be members of DRM Committee at village level.

30. As in the case of community participation, the gender component of the DRM program requires a pool of gender sensitive – both professionals and para professionals within districts who can be drawn upon to orient, guide and facilitate women's participation in this program. Concretely, at a cluster level, women facilitators preferably Anganwadi workers could be utilized from among extension workers or govt. functionaries and their skills in facilitation enhanced. Their roles would include mobilization of women, forming women committees and ensuring women's gender priorities are surfaced and included in DRM plans.

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TABLE OF CONTENTS

1.	Introduction.....	1
1.2	Evaluation Parameters/Methodology.....	2
1.3	Analytical Frame.....	3
2.	Program design	4
2.1	Background	4
2.2.	Program design	5
2.3	Program Strategy	6
3.	Program Strategic Objectives	8
3.1	Program Strategic Objectives	8
3.4	Ownership and Sustainability	19
4.0	Enabling Community Participation In DRM	22
4.1	Creating an enabling environment.....	22
4.2	Public awareness of DRM at community level.....	22
4.3	Village Disaster Management Committees and Task Forces	22
4.4	Risk Assessment and Planning Process	23
4.5	Plan Format for Village Disaster Risk Management	23
4.9	Monitoring and Evaluation	25
4.10	Weaknesses.....	25
4.10	Recommendations.....	27
5.0	Gender Equity in DRM.....	32
5.2	Recommendations.....	37
6.0	Findings and Recommendations	41
6.1	Findings.....	41
6.3	Recommendations.....	43
	Annex 1 Goals, Objectives and Broad Areas of enquiry	3
	Annex 2 Goals, Objectives and Broad Areas of enquiry	6
	Annex 3 Districts Covered under Phase I States	8
	Annex 4 Assessing Gender Equity In The DRM Program.....	9
	Annex 5 targets and Performance	14
	Annex 6 Post Mission: State specific Observations	18

Chapter 1: Introduction

1. INTRODUCTION

1.1 Context and purpose:

1. The purpose of this evaluation exercise is to carry out a rapid qualitative assessment of the Phase I of Government of India-UNDP Disaster Risk Management (DRM) Program implemented across Bihar, Orissa and Gujarat. The evaluation has twin objectives of learning and application of learning to improve the program performance. At one level, this is an attempt to assess the relevance and appropriateness of the program design, and its implementation in the context of the disaster management policy perspective. At the other level this exercise seeks to assess the efficacy of the program approach and strategy in mainstreaming disaster risk reduction as part of development initiatives.

2. It is envisaged that the evaluation findings would yield valuable insights into the nature and quality of program design and implementation, particularly in terms of the outcomes achieved and impact made on both these counts. The evaluation findings in turn could be used to make necessary modifications in the on-going DRM program (Phase I and II) design and implementation strategy.

3. The DRM program is first of its kind both in terms of its intent and scale. Though the stated aim and objectives of the program are very ambitious, the actual approach to implementation is modest and focused. The focus has been in terms of capacity building of key stakeholders, particularly communities and Panchayati Raj Institutions (PRIs), and support in preparation of DRM plans at various (village, GP, taluka, district and state).

4. The program (Phase I) initially covered 28 districts in the States of Orissa, Bihar and Gujarat with a resource base of US \$ 2 million. Based on the initial successes, this program (Phase II) was scaled up to cover 125 districts in 12 States. The resources allocated were US\$ 27 million. With the addition of the earthquake risk reduction component the coverage was extended to 169 districts in 17 States with an additional resource allocation of US\$ 7 million. The overall outlay of the program is US\$ 34 million.

5. The vital output of the program is multi-hazard risk management and sustainable recovery plans at community, panchayat and other administrative levels (block/taluka, district and state) in some of the most multi-hazard prone states and districts, and strengthening institutions responsible for sustainability and replication of these efforts. Hence, there is an added emphasis on strengthening the capacities of communities, local self-governments and state and district administrations to deal with disasters.

6. It is important to look at the DRM program intervention in the overall context of the macro policy initiatives that were already underway at the Government of India level when the program was conceived and launched in 2002. This included the preparation of a National Disaster Management Framework following the recommendations of the High Powered Committee on Disaster Management in 2001.

7. The mandate of this committee was basically to prepare disaster management plans at the national and state levels in India. But the committee concentrated only on the national plan and suggested that the state plans be prepared by respective states at the local level. In view of this, having a program across some of the most multi-hazard prone states and districts of India was certainly of considerable significance. It was against this backdrop that the GoI-UNDP initiative to have the DRM Program was conceived, designed and launched in 2002.

1.2 Evaluation Parameters/Methodology

8. The review is focused on Phase I states only and is intended to be an exercise in strategic learning that helps find out the outcomes of the program and its impact over a range of issues. The parameters of evaluation include the following:

- Effectiveness in terms of realization of the stated program objectives
- Institutionalization of the program within mainstream government functioning
- Integration of disaster risk reduction concerns into mainstream development initiatives
- Capacities developed at various levels for improved hazard/vulnerability/capacity/risk/ assessment and planning

9. All these parameters are basically outcome indicators of the soundness of the program design and implementation. These are examined in the following broad categories in the following sections of the same title:

- a. Program design
- b. Program strategy
- c. Program performance

10. The findings, issues and challenges and recommendations are shared separately in three different sections. The methodology adopted for carrying out the evaluation included the following:

- In-depth discussion with the Secretary, to the respective State Governments (Orissa, Bihar, and Gujarat) and other senior government representatives at the state level.
- Meetings and interviews with senior and middle level managers at Orissa State Disaster Management Authority (OSDMA) and Gujarat State Disaster Management Authority (GSDMA).
- Visit to identified sample DRM and non-DRM districts and a Block, interaction with district teams including UN Volunteers functioning as District Project Officers in these districts.
- Visit to sample villages one each from DRM and Non-DRM village and focus group discussion with communities and groups of women including transect walk
- Semi-structured interviews with NGOs functioning as support organizations in the DRM program districts and villages
- Observation of mock-drills and participation in training programs in first aid, and search and rescue

- De-briefing with the DPOs/ NUNVs in the presence of the Secretary and/or Disaster Management Authority representatives at the end of the state visit.

1.3 Analytical Frame

11. An Analytical Frame was designed (Annex 1) based on the project document, as signed between the Government of India and UNDP. During the course of initial discussions, the emphasis was on the need to focus on review around the core theme of “strengthening community based disaster reduction and recovery”. However, as the review progressed, it was observed that the focus has been more on community preparedness and broader review will need to be carried out in relation to the stated aims of the project. In fact the broader review is the basis of our recommendations on “*what the project could have done better*”.

12. The project has two cross cutting themes of gender and decentralization. While, the outlook of this review has been reoriented from this perspective, it needs mention that DRM is also a cross cutting theme and is not vertical.

13. This review focused on Phase I States of Bihar, Orissa and Gujarat. In each of the Phase I States, the site visits included two DRM districts and a Non DRM district, and associated taluk, gram panchayats and villages². The review has been predominantly qualitative, based on in-depth interviews with officials, NGO’s, communities and community based organizations, as mentioned earlier.

14. Some of the key questions regarding this program are:

- Is the input/output better than those as mandated by routine requirements as part of disaster preparedness?
- Is the focus multi hazard?
- Has the project helped communities and officials in making informed choice-information beyond local knowledge and awareness?

²

State	District	Block/ Taluk	Gram Panchayat	Village Panchayat
Bihar	Khagaria	Khagadia Alauli	Alauli	Amausi Madhura Musahari
	Muzzafarpur	Raghai	Raghai	Minapur
		Motipur		
Orissa	Kendrapada	Aul		Batipatra
	Khurda		Batipara	Dadhapatna
	Dhenkanel			
Gujarat	Vadodara	Padra		Pipaliya, Kaya Varuhan
		Sinor		Boriad

Chapter 2: Program Design and Strategy

2. PROGRAM DESIGN

2.1 Background

15. This section provides an overall review of the program design as per the document and only relevant actions agreed to as part of phase I is the basis for the current assessment.

16. **Program Aim:** The overall program aims to “contribute towards social and economic development goals of the National Governments and State Governments in two sub national networking hubs to minimize loss of development from Natural Disasters and reduce vulnerability”. As per the design, the expected output of the program is to demonstrate a “*sustainable model*” for mainstreaming disaster risk management (DRM) at different levels with special focus at District and Community Level. The core theme however, is to strengthen capacities of communities, local self-governments and districts to deal with future disasters. The projects indicators of achieving the objectives are:

- a) Risk reduction factored in rapid disaster recovery
- b) disaster mitigated and development gains protected
- c) disaster risk considerations mainstreamed into development
- d) gender equity in preparedness

17. **Program Strategic Objectives:** The aims of the projects are being achieved through the Program Strategic Objectives, categorized into 4 thematic areas (see Annex 2) as given below:

- (i) National Capacity Building to Institutionalize system of natural disaster risk management at MHA
- (ii) Environment building, education, awareness and strengthening capacities at all levels in DRM and sustainable recovery
- (iii) Multi Hazard preparedness, response and mitigation plans for DRM at State, District Block, Village Ward Level; and
- (iv) Networking knowledge on effective approaches, methods and tools for DRM and promoting policy frameworks at State and National Levels

18. **Program Outcomes:** Further the design has identified the following outcomes of the program³:

- Administrative and institutional framework developed for Natural Disaster Risk Management Cell in Ministry of Home Affairs.
- Enhanced capacity in Ministry of Home Affairs for natural disaster risk management
- Disaster risk management cell with scientific warning dissemination system at MHA able to provide adequate and timely support to the implementing agencies.
- Comprehensive disaster risk management framework and recovery strategies in 125 districts of 12 program states within proposed 6 years.

³ Though the design focuses on 125 districts, the coverage of the current assessment is restricted to Phase I states only.

- Aware and informed community in 125 hazard-prone districts on disaster risk management and mitigation.
- 125 multi-hazard prone districts have multi-hazard disaster risk management, response and mitigation plans based on vulnerability and risk assessment of women and children towards natural disasters.
- Greater participation of elected women representatives of local self-governments in 125 districts in the process of disaster preparedness and risk management.
- Enhanced capacity of the 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.
- Enhanced capacity of women in First aid, Shelter management, Water and Sanitation and Rescue Evacuation.
- Well-equipped disaster risk management information centers at selected States and Districts.
- Emergency kit at all selected districts of 12 states.
- Manual, training module and awareness strategies are available for replication in other areas.
- Enhanced capacity of the training institutions for training in disaster risk management.
- Trained skilled masons and engineers for hazard-resistant housing.
- Models for dissemination of best practices in retrofitting in roof top rainwater harvesting.
- Knowledge network for better involvement of stakeholders
- National and State database on natural disaster risk management developed.
- Vulnerability and Risk Reduction Reports prepared for integration of vulnerable reduction into development programs to allocate resources more effectively to the needy states.

19. The following are indirect outcomes of the program:

- Reduction of expenditure on disaster relief & increased investment in preparedness measures.
- Sharing of disaster relief cost by the community.
- Self-reliant village, Gram Panchayat, Blocks and Districts for preparedness.
- Convergence of services & links to area development plans.
- People's awareness and participation increased.
- Access to information by the people.
- Safe housing construction.

2.2. Program design

20. The program is designed to address disaster management issues from a risk reduction perspective. It aims at demonstrating a sustainable model for mainstreaming of disaster risk management at all levels with focus on district and community level activities.

21. Sustainable multi-hazard risk management is the primary objective of the program and capacity building at various levels, particularly at the community and panchayati raj institutions (PRIs) levels, is the key strategy to achieve this objective.

The basic outputs of the program intervention are disaster management plans prepared at the community/village/GP, block, district and state levels.

22. The objectives, components, outcomes and strategies of the program are spelt out in the design document, as also the related activities. But they could be further sharpened to bring in greater alignment between these program features in the on-going program in Phase I and II.

23. Within the broader framework of the program design, the states and districts have been given considerable amount of flexibility in working out their respective program implementation strategies keep in view may the local vulnerabilities.

2.3 Program Strategy

24. The stated program strategy is 'to support national and state efforts in disaster management with emphasis on the most multi-hazard prone districts by strengthening the capacities of the communities, local self governments and districts to deal with future disasters'. The capacity building at each level-community and local self governments in both urban and rural areas, district and state administration and national institutions-is at the core of the program strategy.

25. It is stated that a multi-pronged strategy would be adopted, which would include:

- Support to Ministry of Home Affairs for ensuring administrative, institutional, financial and legal mechanisms for disaster risk management
- Support National Government (MHA) efforts in strengthening its role in community and local self-governments' preparedness and response, including support to National Civil Defense College (NCDC) and National Fire Service College (NFSC).
- Comprehensive disaster risk management program in the selected 169 most vulnerable districts falling in states including Gujarat, Orissa, Bihar, Tamil Nadu, West Bengal, Maharashtra, Delhi, Uttaranchal, Assam, Meghalaya and Sikkim in two phases.

26. The program components to be included were as follows:

- Development of state and district disaster management plans
- Development of disaster risk management and response plans at Village/Ward, Gram Panchayat, Block/Urban Local Body levels
- Constitution of Disaster Management Teams and Committees at all levels with adequate representation of women in all committees and teams (Village/Ward, Gram Panchayat, Block/Urban local body, District and State)
- Capacity building of Disaster Management Teams at all levels. Special training for women in first aid, shelter management, water and sanitation, rescue and evaluation, etc.

- Capacity building in cyclone and earthquake resistant features for houses in disaster-prone districts, training in retrofitting, and construction of technology demonstration units.
- Integration of disaster management plans with development plans of local self-governments.

27. The stated program strategy puts emphasis on capacity building and preparation of plans at various levels. Besides these two central concerns and components, the strategy section of the program document also mentions a large number of other related and/or complementary activities. These include promoting partnerships with academic institutions and private sector in development of disaster risk management plans, strengthening disaster management centers in program states, developing vulnerability and risk indices, annual vulnerability and risk reduction reports for creating benchmarks to measure disaster risk management etc.

**Chapter 3: An Assessment of the Program Strategic
Objectives**

3. PROGRAM STRATEGIC OBJECTIVES

28. The program performance can be looked at in two ways: one in terms of the outputs achieved as against the stated program strategic objectives; and second in terms of some of the issues critical to disaster risk management agenda at the national, state and local levels. This chapter deals with the program performance in relation to the stated objectives.

3.1 Program Strategic Objectives

PSO-I NATIONAL CAPACITY BUILDING TO INSTITUTIONALIZE SYSTEM OF NATURAL DISASTER RISK MANAGEMENT AT MHA

29. *Support MHA as National Nodal Agency and Institutionalization of DRM actions:* The program has been in a position to advance actions on the policy front by way of working with States on Disaster Management Policies, especially in Bihar and Orissa, wherein the Acts have been formulated. The actual passage and the operational policies in Bihar and Orissa are to be modeled on the National Policy. It needs mention that sufficient grounds have been created by the program in terms of sensitization of a wide spectrum of the population to advance action for the policies to be operational. Gujarat is high on the policy and implementation curve due to the head start post Earthquake and extensive technical assistance in various areas made available by multi laterals.

30. The *State Vulnerability Report*, an important element of the project, primarily aimed at strengthening the policy and operational effectiveness of the department is yet to happen in a large scale. Gujarat has formulated a Vulnerability Atlas and is it yet to be disseminated. Work has commenced in Orissa, but will need to focus on the most critical aspect of usefulness in resource allocation and mainstreaming DM concepts in departments based on the analysis than just thematic mapping.

31. *Capacity building:* Overall capacity building has been quite exhaustive in all three States, though Gujarat and Orissa have moved ahead due to support from other externally aided reconstruction programs. As on date capacities of about half a million of the population has been built through direct capacity building actions (See Annex 5). These programs have enabled the states to broad base and scale up capacity building programs initiated as part of DRM.

32. The progress on indicators relating to Trainers and officials trained, communities exposed, and extension of DM concepts as part of academic programs is quite impressive (See Annex 5). Training, especially of community members in search and rescue, and first aid has been carried out extensively and an important outcome of the project is the inclusion of DM related capacity building as part of other training programs at the State level. In Orissa, select training sessions have been extended by half a day to focus on DM related awareness. In Orissa, Aspects of disaster management is reviewed as part of all

district level and a Non DRM district has introduced fortnightly reporting of DM related activities at GP/ Block and District Levels⁴

33. A major achievement of the program has been the thrust to “*manage delivery of knowledge*” effectively through a variety of means, and the program has used every opportunity to mainstream DRM concepts. For example both in Gujarat and Orissa, the fire services also have been scaling up programs on search and rescue and Red Cross has been active on first aid related training.

34. While the role of the State Level Secretariat is more advisory, the role of the District and the designation of District Emergency Officer are encouraging and critical for the success of the program. The strength the UN and UNV’s are in the areas of advocacy and support in training related actions. While DEO’s are critical from the point of liaison, the UNV (DPO) still perform most of the operational functions of the project such as advocacy and administration. To the extent that monitoring reports are managed through the DPOs. This is an aspect that needs to be looked into as the UNVs are in not in a position to perform functions (as outlined in their scope of work) such as assessment of inputs and outputs in program design, analysis and documentation or for that matter specializing in certain core areas related to disaster management.

RECOVERY- THE VADODARA EXPERIENCE

The DRM program has contributed to the efforts in mitigating the impact of 2004 floods in a significant manner through a better facilitation of the process of emergency response. As shared by the District Magistrate, Vadodara, the administration made effective use of SDRN facility available in Gujarat to plan and execute disaster management activities during the floods; moreover, the services of UN volunteers available were also used very effectively to filter information and pass only required information to the District Collector for press briefing and several other decision making purposes during these floods. This reportedly saved a lot of very precious management time for the district magistrate, working as the key disaster manager at the district level, by helping him avoid unnecessary information overload and chaos and take informed decisions in time in a systematic manner.

35. *Equipment Support*: The emergency operations centers (EOC’s)⁵ are at different levels of establishment/ operation in the States. These centers have been built as per the safety measures required for such structures; such as earthquake and flood proofing. In addition the program has provided support in terms of providing basic search and rescue kits to the participating districts.

36. *India Disaster Resources Network (IDRN)* has enabled building up an inventory of equipments and resources at the national level. The access right to the database is with the officials and the data set is updated on an annual basis (*Expected*). While IDRN does provide details of ownership and location, given the mobility of people and equipments, a web based movement control system with the equipment (owner/ manufacturer indicating a transaction) having a right to modify the information would have been a simpler solution than an annual exercise of updataion which does not appear to be regular. A few sample checks based on the recent visits indicate that the information needs updation.

⁴ Dhenkanel

⁵ Typical equipments in an EOC include: Hotline Mobile, Satellite Phone, VHF and HF Sets, Ham radio, computer and related communication and a generator set.

One of the list is expected to present, the life savers- the site has provides details of fire service personnel but not those trained under the project. As regard to resource persons, as mentioned above, a similar mandatory updation should be possible once they complete a training course or with a limited access, the training institute could handle it.

37. *Policy initiatives defined, extent of implementation:* The role of project on influencing policy has been concurrent with national level decisions on Disaster Management arrangements i.e, passage of the NDM Act, Policy and establishment of NDM Authority. Therefore it becomes difficult to draw a line in terms of projects' influence on the decisions. However, the partnership with MHA and States has led to formulation of State level polices and Acts⁶. Beyond this activity, the outcome is limited, as observed both in Orissa and Bihar, beyond the policy, there has been no major initiative to allocate resources and in case of Orissa, except for the agriculture department, other departments have not attempted a sectoral DM plan.

38. *Relevance of decentralization in this context:* The DRM planning process has been within the contours of the decentralization agenda of governments⁷. The PRI's are active in the process (see PSO II on quality of participation) and wherever possible the existing structures created as part of other programs have been used to advance the agenda (SJRY). In select villages, the role of self-help groups created under development programs have been involved as part of the process, but within the PRI framework. At the grass root level support to the committees is through teams⁸ that focus on preparedness and action during events. The Sarpanch / Block / DPC chairpersons are actively involved in the process. However, the focus as part of phase I have largely been rural than urban.

PSO II ENVIRONMENT BUILDING, EDUCATION, AWARENESS AND STRENGTHENING CAPACITIES AT ALL LEVELS IN DRM AND SUSTAINABLE RECOVERY

39. *How relevant were the Knowledge Management/ capacity building programs in relation to this objective:*

40. *Awareness:* Different forums are being used to generate awareness. In Gujarat, cluster forums bringing together *community* leaders from multiple villages are being used to raise awareness and orient communities to the DRM program. Disaster issues have been introduced in school curriculum, a media campaign on do's and don'ts, advertisements on national network/ prime time, through information fairs (Bihar-Chetna 2006), as part of other training programs (Orissa and Gujarat) and department specific

⁶ For example, post Super Cyclone 99, GoO had created the following agencies

- OSDMA
- Orissa State Rapid Action Force and
- Storage facilities for grains, multi-purpose cyclone shelters

⁷ At the operational level the committees at various levels are responsible for preparation of the plans:

- *District Disaster Management Committee*
- *Block Disaster Management Committee*
- *GP Disaster Management Committee*
- *Village Disaster Management Committee*

⁸ Search and Rescue; First Aid; Counseling; Warning Communication; Shelter Management; Coordination; Relief Distribution; Carcass Disposal; Sanitation

events are major modes of awareness generation. In all three states, though to a greater degree in Orissa and Gujarat, impressive training and IEC material has been developed. These include guidelines for preparation of plans at various levels, training modules and manuals, school handbooks and standard operating procedure toolkits etc.

41. This has apparently resulted in a visible sense of awareness among the communities of the sample villages visited about *issues* related to search and rescue, and first aid in the time of emergencies. However, the issues related to hazard, vulnerability and risk have yet to be fully appreciated at the community level resulting in a disaster risk management approach to planning and preparedness at that level.

42. Discussions with master trainers indicate that despite transfer from the prime district posting, they continue to be called upon for various capacity building programs in the districts. This is an indication of the training institutions ability to utilize services of master trainers as well as trainees in advancing the agenda.

43. Capacity building: is the core of the program implementation strategy and has been given a lot of attention, which also shows through in the capacities built. The capacities built are mainly for improved response by way of better search and rescue and first aid, for which the Disaster Management Team (DMTS) members in all the program states and districts have been trained during skill upgradation programs organized for the purpose by specialized agencies.

- The capacities for better participatory planning and community facilitation and communication need to be further built to make sure that people from communities at risk are actually involved in plan preparation, which is not the case at the moment in most of the places.
- The evaluation team did not come across any substantial efforts in promotion of women led initiatives (For an assessment on Gender issues see Chapter 4) and other actions that guarantee gender equity in disaster preparedness and mitigation. Though there are women members in Disaster Management Committees (DMCs) and Disaster Management Teams (DMTs), their presence in most of the cases is more notional than actual, as they are largely not involved in the decision making role related to plan preparation including the allocation of roles and responsibilities. More women are in first aid and shelter management DMTs, rather than in damage assessment and relief related activities, despite their informal contributions in relief, restoration of housing, livelihoods, crisis credit etc.

44. As mentioned earlier, clusters are being used in some cases to orient villages to the DRM program. However, this forum is not used subsequently. The cluster can be a useful learning forum and to disseminate good practices, and strengthen inter village coordination. The programs has covered a range of participants⁹

⁹ Broadly includes, Teachers, NSS and NCC volunteers, district officials, community volunteers

45. **Community empowerment and gender mainstreaming:** As community is invariably the first responder in the event of a hazard, minimizing the intensity and impact of disaster can be taken care of best through community empowerment. Community is not a monolithic category, as there are great internal differentials in terms of availability of and access to and control over resources across groups of men, women, children, old, sick and challenged on the one hand and distribution of roles and responsibilities on the other. Differential access to resources is most prominent in the case of men and women; hence, gender mainstreaming has to be an integral part of a community empowerment exercise

46. Ensuring participation of men, women and children of the communities in various activities related to plan preparation such as data generation, hazard/vulnerability/capacity assessment, risk analysis etc. is an exercise in community empowerment. Upgradation of knowledge and skills through training is another method of empowering community members by building their capacities.

47. Creating institutional mechanisms such as committees and task forces and training and orienting them to undertake their respective roles and responsibilities under the program has also led to considerable amount of community empowerment across all the three states (Bihar, Orissa and Gujarat). As the DRM program focuses on community based disaster risk management, the project cycle at the community level needs to be clearly sequenced or benchmarked.

48. Community participation and gender equity issues being central to the program have been dealt with at greater length separately in the chapters 4 and 5.

49. Training has been one of the most successful activities in terms of sheer coverage involving around half a million people across Gujarat, Orissa and Bihar. The program content and methodology of the training programs on search and rescue and first aid have been appreciated in all the three states, as evident from the available end-of-the program feedback of the participants. The capacities built in terms of enhanced awareness and skills were visible during the mock drills/demonstration exercises conducted in the villages by trained DMC/DMT members.

50. The quality of training manuals and other background material such as booklets and guidelines prepared in Orissa was good. Largely the same material with some minor modifications was used in Bihar. For technical training such as flood and fire rescue, partnering with specialized agencies such as Red Cross (Orissa and Gujarat) and Nauka Talim Kendra (in Gujarat for flood rescue) has been very effective.

51. The capacities related to hazard/vulnerability/risk/capacity assessment at the community level leading to participatory plan preparation by community members need to be built among both government and NGO functionaries involved in the program at various levels. The lessons learnt from the training and capacity building activities undertaken as a part of the Program are as follows:

- Training programs should be designed on the basis of clearly identified training needs of an identified group of functionaries; training needs should be assessed periodically at the beginning of each project cycle in a district and the training content and methodology should be revised accordingly.
- The focus of the training programs should be on effective transfer of skills; this could be tracked during the program with the help of pre-program and post-program evaluation by the participants. Moreover, appropriate quantitative and qualitative indicators should be developed and used for tracking the transfer of skills.
- Sound preparation is the key to the effectiveness of a program, which must be undertaken well in advance to enhance the efficacy of training inputs imparted to the participants.
- Involving the members of Gram Panchayat and government functionaries working at the village level, along with SHG members is critical to ensure long-term sustainability of the program benefits.

Capacity Building

	Orissa		Gujarat		Bihar		Total		
	Target	Actuals	Target	Actuals	Target	Actuals	Target	Actuals	
State	Officials	200	110	1300	552	350	120	1850	782
	Master Trainers	90	317	900	1989	200	142	1190	2448
	Sub Total	290	427	2200	2541	550	262	3040	3230
	%		147.2		115.5		47.6		106.3
District	Officials	1040	796	2310	4523	1243	964	4593	6283
	DMC/DMT Members	1879	2157	490	1073	560	124	2929	3354
	PRI Members	320	207	450	1127	700	5	1470	1339
	Teachers	1610	707	1500	14772	1200	1	4310	15480
	NSS/NCC Volunteers	320	4297	1500	3590	1400	863	3220	8750
	Architects and Engineers	804	967	380	355	660	1308	1844	2630
	Volunteers	5973	9131	6630	25440	5763	3265	18366	37836
	%		152.9		383.7		56.7		206.0
Block	Officials	1450	1581	1860	6144	2000	1	5310	7726
	DMC/DMT Members	4350	3838	2130	5134	4000	14	10480	8986
	DMT S&R and First Aid	18030	2315	0	0	17190	220	35220	2535
	PRI Members	22178	6156	5000	4143	5380	1403	32558	11702
	Masons	2900	1561	1000	269	10500	17	14400	1847
	Village Volunteers	12020	6062	1800	5429	20000	711	33820	12202
	Sub Total	60928	21513	11790	21119	59070	2366	131788	44998
	%		35.3		179.1		4.0		34.1
Gram Panchayat	DMC/DMT Members	54090	45949	0	0	68100	754	122190	46703
	DMT S&R and First Aid	30050	393	0	0	27504	2058	57554	2451
	Sub Total	84140	46342	0	0	95604	2812	179744	49154
	%		55.1				2.9		27.3
Village	DMC Members trained	325276	206490	113420	49448	128560	463	567256	256401
	Village DMT trained in First Aid & Search and Rescue	232280	35067	42000	24529	51424	3394	325704	62990
	Sub Total	557556	241557	155420	73977	179984	3857	892960	319391
	%		43.3		47.6		2.1		35.8
	Total	708887	318970	176040	123077	340971	12562	1225898	454609
%		45.0		69.9		3.7		37.1	

**PSO III MULTI HAZARD PREPAREDNESS, RESPONSE AND MITIGATION PLANS FOR
DRM AT DIFFERENT LEVELS**

52. *The Outputs-Plans:* All the identified districts and the various tiers of government have prepared plans. The *process* has been to a large extent as per the toolkit developed for the project and actions are broadly expected to be as per the standard Operating Procedure toolkits. As part of the plan, the base of information presented includes the census, information gathered at the village level on population and vulnerable groups, teams and members, list of contacts and inputs from department on critical infrastructure / public health issues.

53. The plans are useful in terms of understanding the basic of being prepared and limited on mitigation. In fact the information and the teams have been of immense help to the district administration in terms of management of relief measures and rescue efforts (floods in Orissa especially or the flooding events in Baroda in 2005). The district administration based on the data could assess demand and handle relief supply efficiently based on the data generated and support from the disaster management teams.

54. *Action Points as per the Plans:* The recommendations in terms of mitigation/preparedness are more in terms of “*things to do*”¹⁰ and the second round of plans at various levels outline select actions carried out. The observation is that, the plans are standard and have limited analysis of information gathered. On the whole, discussions point out that the action points (*Things to do*) are not backed by resource commitments from the State. While this is not an expectation of the program, this will need to be seen as a long term requirement.

55. *The Outputs*¹¹: provide greater value in decision-making than the systems as prevalent based on the current systems. Though public departments carry out most of the post disaster work, it was observed that the data and support from various teams at the grass root level helped the officials in managing relief well. However, it would have been better if most of the routine functions of extracting information from the census, contact lists etc, could have been automated. Gujarat through SRDN has a system to update information. However, the initial data will have to be fed in. The tasks of the line departments who are part of the plan (preparedness/ mitigation) are not fully reflected in the DMPs, especially of those departments responsible for managing infrastructure. In fact the departments have better drawings and plans but the maps in the “Plans” are very sketchy. Even in Orissa wherein OSDMA has better district level plans, the sharing of outputs between agencies and districts as part of DMP is limited.

56. *How inclusive are the plans?* : The discourse on community based disaster preparedness (CBDP) approach to disaster management has been significant. The preparation of village and GP Disaster Management (DM) Plans though community-

¹⁰ For example as per the toolkit for say a Taluk level officers, the normal time activities (assuming mitigation) has a list of preventive maintenance (through checks) but a corresponding repairs or replacement of assets was not observed during discussions. Actions are more tuned to preparation than management/ mitigation.

¹¹ *Contents:* Situation analysis; inventory of key assets, contact information, vulnerable groups, disaster related weak spots, task allocation and to do lists for disaster management teams/ officials / departments before and after events.

based in the sense that people know that such a plan is prepared and communities do participate, it is not a active participation, as most of the people in the villages were not really aware of the contents of the plan. This issue is more limited to facilitation of community process. The focus has largely been on achieving the output of a plan prepared, rather than on completing a plan document with active involvement of the community.

57. There are very few clearly identifiable local level risk management initiatives, besides the routine DM Plans from among the sample villages visited. The methodology adopted largely involves cluster meetings to begin with culminating in a Gram Sabha. Meeting where the need to prepare a disaster management plan is discussed and the decision to have one is usually taken. But the process does not seem to be very effective, particularly in the way it is probably handled, as in most of the villages visited, people found it difficult to recall as to what actually happened and in what sequence, despite their general awareness that something did happen. This does underline the need to strengthen the facilitation of the community processes on the ground, which is very well spelt out in the guidelines prepared (by UNDP/GOI) for the preparation of the disaster plans.

COMMITTEES AND TASK FORCE FORMATION

Committees and task forces are in place at the village level. The Committees and task forces are made up of volunteers and government functionaries. The evaluation team encountered villages in which Committees existed in name only. In some villages the Committees are made up primarily of government functionaries who appear to dominate the village processes.

Participants as part of mock drills demonstrated that the task forces, particularly the first aid and rescue teams are aware of their roles and responsibilities. Representation of women is limited in the Committees and task forces other than the first aid teams.

58. *Observations:* While *standardization* of outputs is critical, the plans look similar and could have been achieved well by extracting information from available modes such as census and other documents than the extra effort put in to collect, collate and present the data. Gujarat has done fairly well by using the State wide wireless area network (GSWAN) to update the information periodically. By doing so the focus could have been more on analysis than compilation and updation of data can be handled well by the local teachers. For example in the three states, the most common focus on the multi-hazard response has been on flood/ storm surge. A review of the documents reveals that there's hardly any what-if analysis on flood levels and impact on settlements, and the affected population. In Gujarat, the State prepares an annual flood memorandum and the DMP's reviewed have a line referring to the document

LESSONS: THE CLUSTER HOUSING

Promotion of cluster housing as a part of Indira Awas Yojana, such as in the Khagariya district of Bihar, is a very innovative practice aimed at building disaster risk management perspective into an on-going housing scheme for the people below the poverty line. Though this has originally been the initiative of the Block Development Office in district Khagaria, it has certainly furthered the agenda of the DRM program in the district, which could learn from this and similar other practices, and work towards their replication. This also proves the point that it is not only possible, but also desirable to view and address disaster risk management primarily as a development issue and do it with the active participation of people as per local needs and initiatives.

LESSONS: WOMEN IN SEARCH AND RESCUE

The practice of involving and training women as part of search and rescue teams for rescue during floods in Vadodara district of Gujarat is a very good practice and needs to be promoted. The successful partnership with Nauka Talim Kendra in Sinor block of Vadodara district for the purpose is a very good example of building local partnerships for sustainable capacity building of Disaster Management Team (DMT) members. More such partnerships need to be built in other areas such as participatory hazard/vulnerability/risk analysis, damage assessment and resource planning, for which local capacities are sought to be built.

while it would make sense to present the analysis related to the settlements and impact with rising levels of flood waters.

59. The Plan while has an outline of priority works, it is silent on costs of actions¹². While it was pointed out that the details are available in the Block plan, it was found inadequate and did not capture the complete costs of mitigation. Further there is no analysis of risks of no investment and or rising flood levels as \part of the DMP.

60. *The Shortcomings:* The progress of planned outputs in terms of the availability of prepared plans at the village, GP, block/taluka, district and state levels is generally good. Most of these plans are basically good data base documents, but the risk analysis is limited. As a result, the community members in general are not clearly aware of the nature and intensity of risks beyond their VDMP. The plans shortcomings are limited analytical and action components and focus is on description of assets, resources, vulnerable groups, government offices and official's village livelihoods, housing and assets, people to be contacted in case of emergencies. This is a useful starting point and analysis and planning -which includes linkages to various state sponsored development programs, which could reduce disaster risk, can be undertaken on the basis of this data

PSO IV NETWORKING KNOWLEDGE ON EFFECTIVE APPROACHES, METHODS AND TOOLS FOR DRM AND PROMOTING POLICY FRAMEWORKS AT STATE AND NATIONAL LEVELS

61. Enormous quantum of information is collected at the grass-root level and if structured well this can be useful for other decision support systems at the District / State level. With the updation of data at least every year, this can be a proxy for census updates and with the actual list of members in each village registered will be a good contribution of the project.

62. Information provided by SDRN in Gujarat is one of the most dynamic at this point of time and the others States should emulate this concept but the same time keep in mind the aspect mentioned in above on a single point data collection which could be of use for all departments. IDRN is quite useful in terms of resource details but updation is critical and more importantly of resources trained through the project both public, private and community. GIS based disaster vulnerability database for application in the states is very limited and most work is carried out in Gujarat and Orissa as part of donor funded project. Gujarat is far advanced and Orissa and Bihar is yet to start of work.

63. As mentioned earlier on in the discussions, the UNV's and State level team should focus on evolving tools to analyze and present the data (of the basic data) as part of the DMP's and let the DEO's (DPO's) spend time presenting the analysis and the impact. In this context one of the objectives of the project is to support R&D. Currently the focus is more earthquake related than flood or other disasters which have a significant impact on the population (See recommendation on bifurcation of

¹² Example: The District Status Report Khagaria reflects a damage of Rs 72 Crores due to floods in 2004. In such event the costs of development [preventive investments] could have been of help in reducing losses

fund into two parts) Scope exists for supporting agriculture and irrigation department on advanced flood modeling and impact analysis techniques and the project as part of mainstreaming DM in such departments should use the special windows to support such initiatives.

64. *Sharing best practices* within the project is limited and it is part related to limited time available with the project management (State and UNV) on routine administrative work than value additions through documentation and dissemination.

65. Currently BMPTC is undertaking risks and vulnerability assessment at Macro Level and the States are working on micro level issues with support from DRM program.

66. The financial progress is the highest in Bihar as against the allocation. While the utilization level in Gujarat and Orissa are compared with outcomes, the performance is much higher due to other sources of funds available for disaster mitigation related activities in these two states. This is an important lesson for future projects of the need to position funds strategically.

State	Allocation.		Transferred Amount				Status report	Cumulative Exp.	Closing Balance	Utilization
	Prov.	Actual	Obligated		Actual					
	<i>Units in Million</i>									
	US\$		US\$	INR	US\$	INR		INR	INR	%
Bihar	3.08	2.85	2.07	93.38	0.74	33.86	Yes	17.09	16.76	50.49
Gujarat	3.20	3.17	2.37	106.73	1.5	71.85	Yes	12.27	59.57	17.09
Orissa	3.09	2.84	2.17	97.7	1.63	75.31	Yes	22.30	53.00	29.62

Notes:

All figures above – as of Dec 05

Resource Framework Provisional Allocation is of US\$ 34 million and Actual is US\$ 33 million.

1 US\$= 45 INdian Rupees, Obligated Transfer excluding HR & equipment under 33+ framework

67. *Performance Review an Assessment*¹³: The project performance review is carried out by a variety of means form Steering committee review to web based review of progress. At all levels, the focus of review is in terms of outputs in relation to main result areas (MRA). The web based monitoring system in place and use for the DRM Program basically tracks milestones in terms of events and activities. Whereas the information collected by the system provide information on the nature and number of activities undertaken and the qualitative aspects reflects activities undertaken than any impact of the program on decisions at the field level. For example, gender equity in disaster risk management is a stated objective in the DRM program but it is not clear as to how or if at all the activities and progress in the context of gender equity are being monitored [See section 5]. Similarly while disaster mitigation is one of the objectives, progress at the community level is in the arena of emergency response. Impacts, documentation and lessons learnt are not presented.

68. UNDP and the UN volunteers who are supposed to review and provide feedback to the committees, prepare the results framework and review the same. For example even at the national level, the program manager reviews (UNDP)

¹³ The documents reviewed include:

- Annual review of DRM Program at the State Level
- QPR
- Field reports of Staff.

performance of the program he implements. While the issue is marginal, there is a need to segregate these functions.

69. UNVs /DPOs meet once a month at the state level to review progress and share lessons. Main indicators of progress at the village level are – committees formed, task teams appointed, mapping done, contingency plans completed and mock drills completed. However these indicators do not necessarily measure the effectiveness of village level actors in the event of a crisis. If women's participation is a key component then monitoring and assessing it regularly for ensuring women's participation in terms of membership of committees, participation in decision making, what roles and responsibilities are required to be carried out by them must form an integral part of the monitoring framework.

3.4 Ownership and Sustainability

70. Ownership of the program activities and plans prepared at state, district, village and GP levels is the key to the long term sustainability of their usage, updation etc. resulting in reduced risk for the communities involved. The exit strategy needs to focus on ownership and sustainability issues, along with capacity building issues to ensure long-term benefits of the program. Following points need to be considered:

71. Ownership and sustainability at village level requires communities to get mobilized around disaster risk reduction and in order to sustain the interest and capacities of the Committees and Task Forces they require regular learning and training, information and resources such as a community risk fund that enables them to implement disaster mitigation plans.

72. It is hard to assess the level of ownership of the program by national partners and mainstreaming of the initiative in the governmental systems and its impact on policy formulation, as several initiatives including the enactment of a central legislation and formulation of a national policy were already underway when the program was conceived and launched. However, what is indisputable is the pioneering contribution of the program in initiating and institutionalizing a system of disaster management plan preparation across several states and districts in the country on such a large scale.

73. The degree of ownership created at national, state, district, block and gram panchayat levels is of critical importance from the point of view of the long-term sustainability of program benefits. Though the program in its design is intended to be a government owned and run program at the state and district levels and a community driven program at the village level, in actual practice it is still largely seen as a UNDP driven program with UN volunteers playing the role of key facilitators of the program both at the state and district levels, though in varying degrees across states and districts.

74. In order to ensure the sustainability of the program results in light of the current policy and programmatic thrust of GoI, it is important that a fundamental shift in disaster management planning from the existing blue-print approach to a more inclusive community driven approach is made. This would practically mean that the process of plan preparation at the community level is facilitated in a manner that the

communities, particularly women, are actively involved in data generation, hazard mapping, vulnerability assessment, and risk analysis and the plan is prepared by them in a format or formats, which are easily understood and used by them.

75. There is a need to create an ownership of the data generated and used in the plan documents by those who are going to make use of those plans and the data therein. As per the existing practice of plan preparation at the village and GP level, the formats for data collection for the plan are already given. And as most of the data is being currently collected from secondary sources, there is practically no ownership of the data available in plan documents at the level of community, which people neither understand, nor can they use it in times of emergencies.

76. The on-going activities are not really enough to sustain the benefits of the program beyond the program period in most of the cases. They need to be strengthened by creating strong institutional linkages (across community based institutions such as self help groups, yuvak mandal dals, mahila mandal dals, GPs, DMCs and DMTs) at the local level and making the planning process more inclusive, participatory, and consultative in a substantive, and not only a notional, sense. In order to make this happen, the functionaries (whether UNVs, NGO staff or revenue and block staff) need to be thoroughly trained in community facilitation and communication skills, which is of paramount importance from the point of view of ensuring the long-term sustainability of program benefits.

3.5 Monitoring and Evaluation

77. Monitoring and evaluation, as an exercise in strategic learning and action, assumes critical importance. The following points need to be considered in this regard:

78. **Observations:** If one accepts the maxim that what gets monitored is what gets done, monitoring becomes an extremely important instrument not only to track, but also to influence program performance. The web based monitoring system in place and use for the DRM program basically tracks milestones in terms of events and activities. Whereas the information collected by the system does give one a sense of the nature and number of activities undertaken, it needs to be rearticulated to offer any information on the qualitative aspects of program performance in terms of outcomes achieved and impact made. For example, gender equity in disaster risk management is a stated objective in the DRM program but it is not clear as to how or if at all the activities and progress in the context of gender equity are being monitored. Similarly while disaster mitigation is one of the objectives, progress at the community level is in the arena of emergency response. .

79. The web-based monitoring system in place is basically designed to track events and outputs achieved in terms of activities undertaken; for example, the indicators include senior officers and policy makers oriented, State Disaster Management Policy approved, State Disaster Management Act enacted, Disaster Management Committees formed, DMC/DMT members trained, Disaster Management Plans finalized, lifeline buildings retrofitted, etc. While these quantitative indicators do underline some of the important activities undertaken and outputs achieved, they certainly are not very helpful in finding out the extent to which

disaster risk management concerns are addressed, and stated objectives realized in terms of the outcomes and impact achieved by way of eventual risk reduction.

80. **Options:** The arrangements for monitoring, evaluation and research need to be further strengthened to make it an exercise in strategic learning and action. It is proposed that a monitoring and evaluation system putting equal emphasis on quantitative and qualitative aspects of program performance is developed, which can generate strategic information for learning about the critical aspects of program functioning leading to mid-course corrections in program implementation strategy and its execution.

81. Main indicators of progress at the village level are – committees formed, task teams appointed, mapping done, contingency plans completed and mock drills completed. However these indicators do not necessarily measure the effectiveness of village level actors in the event of a crisis. If women’s participation is a key component then monitoring and assessing it regularly for ensuring women’s participation in terms of membership of committees, participation in decision making, what roles and responsibilities are required to be carried out by them must form an integral part of the monitoring framework.

82. The program needs to refocus on the review approach and a joint team from MHA and UNDP will need to visit the States every 6 months to assess progress and outcomes and redefine the contours with the states.

Chapter 4: Enabling Community Participation

4.0 ENABLING COMMUNITY PARTICIPATION IN DRM

83. The first of its kind in the country, this program, seeks to focus on the non-structural components of disaster management by building local capacities and creating village level DRM plans. The emphasis on *community based disaster risk management* is a distinct advantage as professional organizations and the government tend to enter and exit at various stages of disaster response with the assumption that specialists in the following stages will take care of social and economic dimensions of risk reduction. In contrast, communities themselves are not specialists but are concerned with all these development areas and are thus best suited to address risk in an integrated and sustainable manner.

84. The objectives and outcomes of the program clearly emphasize community participation and gender equity in developing risk mitigation strategies and districts for program implementation are selected on the basis of vulnerability to multiple hazards.

4.1 Creating an enabling environment

85. The program has certainly created an enhanced level of public awareness about preparedness and disaster risk management across levels.

86. In Bihar, disaster issues have been introduced in school curriculum and efforts are on to do the same in the other states. Each of the states visited by the Evaluation Team had developed educational materials such as posters, booklets and pamphlets. Recently the Government of Bihar organized information fair – called Chetna 2006, which brought together all stakeholders – including school children, teachers, technical specialists, fire department, railways, etc, and raised awareness on disaster. This has led to a demand for similar information fairs in other districts of Bihar.

4.2 Public awareness of DRM at community level

87. There is a visible sense of awareness in the sample villages visited about preparedness for better “emergency response” to disasters ie. issues related to search and rescue, and use of first aid.

4.3 Village Disaster Management Committees and Task Forces

88. Central to the sustainability of the DRM program are creation of :

- a) village level institutions or DRM Committees linked to Gram Panchayats
- b) DRM Task Forces envisaged as volunteer teams based on a broad based mobilization of all sections with capacities in dealing with disasters with a view to reducing risks.

89. Villages visited had Committees and Task Forces in place at the village level:

- *Activities:* Mock drills witnessed by the team demonstrated that the task forces, particularly the first aid and rescue teams are well aware of their roles and responsibilities.
- *Composition:* The *Village* Disaster Management Committees are mostly elected PRI members and government functionaries.

90. These members of PRIs and government functionaries are aware of hazards and their roles in emergency response.

91. The DRM program has taken the first steps towards building in women's participation in the program by ensuring women's membership in the Disaster Management Committees and Task Forces and by involving them in the training programs. The table below shows the percentage of women who are part of the DMCs and DMTs.

<i>No. of women as a percentage of total participants</i>				
<i>S.No.</i>	<i>Women's Participation</i>	<i>Bihar</i>	<i>Orissa</i>	<i>Gujarat</i>
1.	<i>District PRI</i>	14	29	29
2.	<i>Block PRI</i>	15	27	29
3.	<i>GP DMC</i>	23	23	NA
4.	<i>GP DMT (First-aid)</i>	42	32	NA
5.	<i>GP DMT (Search & Rescue)</i>	26	22	NA
6.	<i>Village DMC</i>	14	22	37
7.	<i>Village DMT (first aid)</i>	27	32	41
8.	<i>Village DMT (Search & Rescue)</i>	21	21	15

92. The above figures show that in a less developed State like Bihar also the process of women's participation has shown positive results and as the program moves forward, the women's participation level will improve further. The fact that such a beginning has been made, particularly going by the percentages at community level in these three States, speaks of a major break-through achieved under this program for women's participation.

4.4 Risk Assessment and Planning Process

93. The preparation of village and GP Disaster Management (DM) Plans is community-based to the extent that community members know that such a plan is prepared. Target driven nature of the program pushes completion of plan formats provided and formation of DMT and DMCs at village level

4.5 Plan Format for Village Disaster Risk Management

94. In each state, standardized planning formats have been developed as a tool to facilitate the preparation of disaster management plans. These formats are indeed useful tools to assist the DMCs to put together a resource inventory and develop a good database of relevant people to be contacted in emergency. The plans currently include information such as how many houses have thatched roofs, how many tractors and boats exist in the village, important people to contact in or outside the village in the event of an emergency.

4.6 Training and Capacity Building for Disaster Risk Reduction and Planning

95. Capacity building is at the core of the program implementation strategy and has been given substantial attention. Search and rescue and first aid skills demonstrated by the Rescue and First Aid Task Force, have added value in upgrading skills for emergency response and enhanced people's awareness of risks and preparedness.

Reported by States as of December 05

Bihar

GP Level

Village Level

DMC members trained 15,205, of whom women are 2587

DMT Search and Rescue members trained 3876, of whom women are 610

DMT First Aid members trained 2904

Gujarat

Block level

DMC members trained 4865, no statistics on women trained

DMT First Aid Members trained 3193

Search and Rescue members trained 859

PRI members trained 4027, of whom 27% are women

Village volunteers trained 5345, of whom 34% are women

Masons trained 269

Orissa

GP level

DMC members trained 45,692 of whom women trained are 23%

DMT members trained in First Aid 235 of whom women are 33%

DMT members trained in Search and Rescue 155 of whom women are 23%

4.7 Fostering social networks

96. Cluster or sub-taluka forums are being used in to orient villages to the DRM program. These forums lay the basis for future training and planning activities in which the same clusters can be used. Clusters can be a useful learning forum to disseminate good practices, initiate or strengthen inter-village coordination. Networking at this level is cost effective, can lead to multi village cooperation and can be sustained beyond the project for development actions.

97. The evaluation team came across several good practices which were either observed or recounted to the team. These should be disseminated not only at the state and district levels but also at block and village levels as they can be effectively used to inform the efforts of other villages, districts and states:

98. Good practices

- State and district level melas/ fairs to raise awareness among stakeholders (Bihar)
- Songs as awareness raising tools (Khagaria, Bihar)
- Clear devolution of roles and responsibilities for Gram Panchayats with power to reallocate grain and funds from other programs in emergency. (Orissa)

- GP storage facilities for food grain.(Orissa)
- Mason's training cum demonstration of safe structures (Bihar)
- Awards for best contingency plans (Orissa)
- Tagging trained team members with line depts.(proposed in Orissa)
- Inter-village coordination (observed in Orissa)
- Contingency funds mobilized through community contribution (Orissa)
- Community grain banks (Not observed directly but is part of strategy in drought affected villages in Orissa.)
- Agreements among community members to shelter vulnerable families.
- Joint management committees for cyclone cum community centers (Orissa – non DRM district, related not observed)
- Community resolution not to cook after 9am to prevent summer domestic fires
- Incorporating flood safety features in cluster community housing under Indira Awas Yojana through community consensus, voluntary labor.(Madhura Musahri, Khagadia, Bihar)
- Block level MOUs between government and boat owners to provide boats at fixed prices during emergencies.

4.8 Training manuals and guidelines

Training manuals show that there is a comprehensive understanding at the level of the state agencies and NGOs who prepared these on the principles and outcomes of a community based disaster management process.

4.9 Monitoring and Evaluation

99. Currently UNVs /DPOs meet once a month at the state level to review progress and share lessons. For monitoring women's participation and gender equity gender disaggregated data is available for number of women members of DMCs and DMTs and number of women trained in various DMC, PRI, Rescue and First Aid trainings. There is a comprehensive list ofoutput indicators for the monitoring the program.

4.10 Weaknesses

100. **Implementation Arrangements/ Operational Guidelines:** While the objectives and outcomes of the program clearly emphasize community participation and gender equity in developing risk mitigation strategies, the project approach and implementation arrangements to achieve these objectives are less than adequate in the Phase I districts.

101. Broad goals of participation are not divided into sub goals and key activities that states can translate into operational guidelines. In the absence of such guidelines, states and districts have resorted to a targeted approach focused on outputs rather than outcomes. The process/ operational guidelines, project cycle and project plan by which outputs are to be achieved are not part of the program design.

102. **Inadequate human resources to undertake large scale capacity building as per targets:** In Gujarat, the appointment of a taluka PSO has meant that the entire

taluka around 100 villages have to be covered DRM effort. DRM outreach was viewed as a huge challenge by implementers as the program was resource thin –in terms of human resources and funds.

103. **Orientation is limited to PRIs and government functionaries:** On orienting stakeholders to the DRM planning process at the community level, currently, the scope of DRM orientation is largely limited to holding orientation workshops for elected PRI members and functionaries. There is a need to develop a wider awareness strategy that reaches out to the larger community, particularly vulnerable groups.

104. **Public awareness of hazards, vulnerabilities and plans at community level** is low. Identification of issues in relation to hazards, vulnerabilities and risks faced has yet to be fully appreciated by communities. Low levels of awareness result in low levels of participation in preparation of DRM plans at various levels among the major thrust areas of the program.

105. **Village Disaster Management Committees And Task Forces:** The decision to form specific committees should follow the needs identified. Instead it was seen that every village had numerous committees of which only two were active.

106. *Composition:* The Village Disaster Management Committees are mostly elected PRI members and government functionaries. In some villages the Committees are made up primarily of government functionaries who dominate the village processes. Participation of civil society members - from self-help groups, youth groups was kept to minimum or not considered as essential. Women are under represented in the Committees. In the Task forces, women were clustered in the first aid task forces. The process of selecting members is not done in an open transparent manner.

107. *Roles and Responsibilities* of DRCs and Task Forces in Non-Crisis periods should be clear. Teams and committees should be trained to become community experts/ resource persons who can be called upon in non crisis periods. In order to function effectively the Disaster Management Committees should be given adequate information, responsibilities and resources to undertake risk reduction activities.

108. *Community Participation in Planning Process:* There appears to be limited participation in the planning process. In the villages visited, people were not aware of the contents of the plan and did not view it as a tool that they could use for handling risks. In most of the villages visited, people found it difficult to recall what activities were undertaken in what sequence, despite their general awareness that something did happen.

109. Within villages, the vulnerable groups, usually the poor, face greater risk and yet, it seems they are the last to be involved or consulted in the process of plan preparation. The plan process is *target driven* i.e. completion of the plan is prioritized over a *community driven process* that ensures that the entire village has full knowledge and ownership of the DRM plan.

110. *Plan Format for Village Disaster Risk Management:* Plans are currently a good inventory and database but operational plans or actions are missing. Thus the

updating process is also devoid of actions or new analysis or new community experiences and is restricted to updating of figures such as numbers of pregnant women, children, etc. There are very few clearly identifiable local level risk management initiatives, recognized or built upon besides the routine DM Plans from among the sample villages visited.

111. **Outcome indicators for the program.** The following are listed indirect outcomes of the program:

- Reduction of expenditure on disaster relief & increased investment in preparedness measures.
- Sharing of disaster relief cost by the community.
- Self-reliant village, Gram Panchayat, Blocks and Districts for preparedness.
- Convergence of services & links to area development plans.
- People's awareness and participation increased.
- Access to information by the people.
- Safe housing construction

112. In a project where community based disaster risk management is stated as a key objective, the above-mentioned outcomes should be the direct outcomes of this project.

113. **Valuing community contributions:** One of the indirect outcome indicators is "sharing of disaster relief cost by the community". This is commonly seen as an indicator of community participation and ownership. In the case of disaster risk management, it is evident from the informal relief and emergency response related activities undertaken by communities that they are already sharing relief costs but the invisibility of their local risk reduction and rapid response initiatives as well as their non-monetary nature renders their contributions invisible. The DRM program should in fact take stock of the services and resources that communities provide through self help initiatives and aim to strengthen and upscale these as part of the CBDRM strategies.

4.10 Recommendations

114. **Training and Capacity Building for Disaster Risk Reduction and Planning:** The training curricula or capacity building for the Committees does not visibly include themes that empower village leaders to take lead on Disaster Management such as assessing risk, vulnerabilities, planning disaster mitigation activities and finally managing disasters and linking it to risk reduction in the long term. While outputs and roles are laid out in training materials, the process by which these are to be accomplished are not.

115. In addition, facilitation capacities need to be upgraded to ensure widespread participation (inclusion of economically and socially marginalized communities and women) at all stages so that they too are stakeholders in the Village Disaster Management Plan.

116. Training inputs to communities is one-time. Even though the Gram Panchayat Training Manual states clearly that “training would be a continuous process” Unless trained personnel remain active and use their skills regularly in non-crisis times they will not be able to deploy their skills during a crisis. No special training for women is being provided¹⁴.

117. Though there are women members in Disaster Management Committees (DMCs) and Disaster Management Teams (DMTs), their presence in most of the cases is somewhat passive than actual, as they are largely not involved in the decision-making role related to plan preparation including the allocation of roles and responsibilities. More women were in first aid and shelter management DMTs, rather than in key activities -damage assessment and relief related activities, despite their day-to-day contributions in relief, restoration of housing, livelihoods, providing crisis credit etc.

118. *Fostering social networks:* Cluster forums are being used in to orient villages to the DRM program These forums can be used strategically in the subsequent stages to enrich community participation. Clusters can be a useful learning forum to disseminate good practices, initiate or strengthen inter-village coordination. Networking at this level is cost effective, can lead to multi village cooperation and can be sustained beyond the project for development actions.

119. *Decentralized district and block training teams:* Training for Committees to mobilize stakeholders including vulnerable groups for a participatory planning process and building linkages with institutional actors to operationalize plans is required. The program would benefit from creating decentralized district and taluka teams. These teams can include professionals, paraprofessionals (village leaders who have demonstrated expertise or capabilities) and resource persons who can be called upon to support capacity building at the village level.

120. There are already local resource persons and institutions available. They should be strategically utilized to build local capacity and disseminate good practices. Each district can, have a pool of empanelled, accredited teams trained in disaster management.

121. The standardized planning format would be better utilized as baseline data which should be analyzed and built upon to create a collectively owned action plan that analyses risk, mobilizes and deploys resources and collective capacities of the different social groups and identifies ways to reduce risk in the short, medium and long term.

122. The quality of plans prepared by the officials and the DRM Committees would be enhanced by:

- Including the needs of socially and economically neglected groups, not just physically vulnerable

¹⁴ Page 6 of the project document states that ‘*Special training for women in first aid, shelter management, water and sanitation and rescue and evacuation, etc*’ is part of the programme strategy

- Reducing vulnerability by identifying and planning for mitigation measures that may require multi-village cooperative action and interventions by block, district, state or national authorities.
- Translating district data on hazards in simple formats for communities to assist micro planning
- Undertaking limited amount of primary data collection at the village level to verify secondary data in plans, both to ensure accuracy of data as well as to strength data collection skills.

123. **Management Effectiveness** Management systems that seek to implement a community driven planning process should be reoriented to develop and strengthen mechanisms to do this –as illustrated in what follows:

In Dhenkanal (a non-DRM district visited by the team) PRI officials meet every 15 days at GP, block and district levels and government officials attend each of these meetings. This enables PRI officials and government to share information on problems being faced at the village level and this information is fed into the block and district levels. This system was initiated in the drought prone districts to prevent malnutrition deaths. The fortnightly meetings ensure high information flows and the district administration can take rapid action to respond to problems at block, GP or villages level. The district collector also stated at the meeting that continuous interaction not only enhance information flows, but also lead to government functionaries being more accountable to PRI members.

124. *Role of UNVs:* Management support from UNVs has to be about facilitating *other actors* to undertake various activities. Currently UNVs are involved in managing the everyday functions of the programs at the state level and are the primary driving force behind this program. This has serious implications for the sustainability of the program in the absence of the UNV. Their capacities would be more strategically utilized in developing and facilitating innovative capacity building strategies that could swiftly scale up and sustain the DRM Program.

125. *Village level resource teams:* UNVs can train cadre of motivators at sub-taluka level. An inventory of resource persons and MIS should be put in place at village; taluka and district level so that officials can call on these resource persons. Cluster level workshops currently being used for orientation can be used not only for orientation, but also for sharing community plans, conducting peer exchanges and generating solutions for risk reduction. Both human and financial resources can be maximized at cluster level by creating common facility centers, technical teams and knowledge centres

126. *Outcome indicators :* Currently indicators being used to measure progress measure output not outcomes. i.e, number of men and women trained or plans completed. Outcome indicators are required to measure capacities of those trained and measure effectiveness of plans completed.

127. *Some suggested indictors could be:*

128. Mainstreaming local disaster concerns into district plans: The preparedness process at present focuses and builds capacities for emergency response. As long-term disaster mitigation is a complex process and requires coordination and communication among different stakeholders in the community, different levels of government; as well as more long-term action.

129. At present the identification and analysis of such issues is rarely done and often there is a reluctance to record them in the plans, as they cannot be easily addressed at the village level. Rather than discarding these concerns, the village disaster management planners should be encouraged to identify, analyze and communicate these issues across villages and to institutional actors at the village, block, district and state level. It is these priorities and needs that should be addressed in the state and national plans.

130. *Scaling up learning from good practices*: The scaling up mechanism in the CBDRM is not clear at present. The starting point is to develop a strong knowledge management component that includes identification of good practices and dissemination of lessons at state and district levels as part of a overall scaling up strategy.¹⁵ Villages demonstrating good practices in DRM should be given recognition by the state, media coverage and awards as well as grants to set up a risk reduction fund. This requires that criteria for good practices be identified, good practices be identified and documented.

131. Currently UNVs /DPOs meet once a month at the state level to review progress and share lessons. As the UNVs are very closely involved in the day-to-day management of the DRM program, the lessons and insights from their experience should be used as key lessons to inform the future planning of the program.

132. *Need for qualitative indicators to assess participation*: At present gender disaggregated data is available for number of women trained in various DMC, PRI, Rescue and First Aid trainings. However, the program requires monitoring and evaluation systems to regularly assess the quality of women's participation in preparing and implementing the DRM plan

133. *Creating demand for DRM*: The program would benefit from a clear set of structured activities that aim to create an enabling environment for implementation of DRM in a district.

134. For this purpose each district can design and launch environment-building activities. It could be useful to appoint a multi-stakeholder mobile team that includes NGOs, and PRI members to reach out in the entire district. This team can provide valuable insights on local concerns, specific vulnerabilities readiness of communities to design the District Public Awareness Campaign. Most important, an enabling environment should motivate informed participation by village communities and women in DRM activities. The unpredictable nature of disasters and the fear associated with risks, suggest that a social marketing strategy that frames the DRM

¹⁵ Page 18 of the project document says that as part of the capacity building activities '*exposure visits of Government Officials, PRIs and DMTs will be arranged to the best practice areas in sustainable recovery and preparedness on disaster risk management for capacity building.*'

concept in terms of economic and social benefits resulting in enhanced community resilience could kick start demand for a DRM program that facilitates management of disaster risks faced by communities.

135. *Selection of women representatives in DMCs and DMTs:* Women candidates can be selected in Mahila Sabhas. Selecting the right candidates is important. Candidates should meet criteria set by the village including willingness to be available in times of crisis, share information, network and be in service.

136. *Clear project cycle and facilitation:* The need for a well-defined project cycle that is widely understood, accompanied by hands-on facilitation cannot be overstated. This is spelt out in the guidelines prepared (by UNDP/GOI) for the preparation of the disaster plans¹⁶. A step-by-step process is essential which would then guide communities to take up the awareness, risk and vulnerability assessment; plan preparation and operationalize risk reduction plans linked to development priorities.

¹⁶ See GoI-UNDP Gram Panchayat Disaster Management Training Manual

Chapter 5: Gender Equity in DRM

5.0 GENDER EQUITY IN DRM

5.1 Introduction

137. A gender perspective on disaster risk management sees women's empowerment and community based disaster risk management as strengthening one another. The GOI- UNDP Disaster Risk Management Program provides an opportunity for women at the grassroots to empower themselves by undertaking new public roles; and thus to reposition themselves in the eyes of their families, communities and governing institutions. At the same time this empowerment process advances women's capacities to contribute to a viable, community owned disaster management plans and effectively participate in implementing such plans.

138. Women from self-help groups in villages visited by the Evaluation Team are aware of the empowerment potential of such a program.

In Dadhapatna village in Khurda, Orissa, when women members of self-help groups were asked about the benefits of women's participation in planning, the response of the women emphasized the potential of the DRM planning process to empower women. She explained that, even though the self-help group had initiated several activities to support the relief and recovery processes, they had never been part of a public decision making process. But now this DRM program was an opportunity for women to change this. She said, "women were not coming out of their homes to participate in any public activity but this planning process is an opportunity for women to come out and do something."

5.2 Strengths

139. **Goals, Objectives¹⁷, Program Design:** The Government of India-UNDP Disaster Risk Management Program lists gender equity disaster preparedness as one of four main objectives.

140. *Goal:* sustainable Reduction in Disaster Risk in some of the most hazard prone Districts in selected States of India

141. *Indicators:* The indicators of achievement of this goal would be:

- Risk reduction factored in rapid disaster recovery
- Disaster mitigated and development gains protected
- Disaster risk considerations mainstreamed into development
- Gender equity in disaster preparedness

142. **Program mandate for special attention to women:**

The project document states¹⁸
Special groups such as women, disabled persons, children, etc. are more vulnerable in an emergency situation and hence require special attention.

¹⁷ GOI-UNDP (2002) 'Disaster Risk Management Program: Community Based Disaster Reduction and Recovery Through Participation of Communities and Local Self Governments.' p.8

¹⁸ *ibid.*, p.16

143. Experiences following large-scale disasters in Maharashtra and Gujarat demonstrate that grassroots women's collectives, can if supported, rapidly mobilize a critical mass of affected communities residing in a widespread area. Once organized, these women can acquire non traditional skills, take on information gathering and construction supervision roles often considered to be in the male domain and overcome male opposition and skepticism, and take on active leadership to rebuild their communities. Women's groups first involved in restoring housing, later created businesses, mobilized funds, led development committees and reorganized critical services.¹⁹

5.2.1 Program Performance

144. *Representation of women in DRM Committees and Teams:* There has been an effort to ensure that women are represented in trainings as well as Disaster Management Committees and Task Forces.

145. *Fostering social networks:* Inter-village cluster level workshops are the first point of contact and used by the administration to orient communities to the DRM concept. These forums are attended primarily by village functionaries and PRI members. Anganwadi workers are usually active in these forums. These forums have the potential to be used later to enhance inter village collaboration and learning.

146. *Awareness on DRM through Gram Sabha:* Once village representatives attend taluka or sub-taluka cluster forums they are expected to create public awareness in their villages. Often this means that the Gram Panchayat calls for a Gram Sabha. Gram Sabha is viewed as a forum to orient communities; to convince the village community of the need for the DRM Program and gain the community's agreement to form task forces and participate in risk assessment, mapping and planning exercises²⁰.

147. *Role of self-help groups:* Self help groups have an advantage as they can facilitate women's participation. They are already organized, articulate and experienced in collective management of credit and other resources, although they are of varying rather than uniform capacities. The training manual for Panchayats acknowledges the advantage of bringing women from SHGs into this process by recommending that SHG leaders be part of the Village Disaster Management Committees²¹.

In Dadhapatna village, Khurda district, Orissa, discussions with women revealed that there were four SHGs in the village at the time of the cyclone. One of them had a corpus Rs. 60,000 from their income

¹⁹ See Yonder, A., P.Gopalan and S.Akcar (2005) 'Women's Participation in Disaster Relief and Recovery' SEEDS, No.22.

²⁰ The Gram Sabha meeting is expected to result in:

The village community is convinced of the need for the DRM program, they are willing to participate in discussion and mapping exercises and are prepared to volunteer as DMT members, undergo training and undertake the responsibilities that they have assumed as DMT members²⁰

²¹ GOI-UNDP Disaster Risk Management Program 'Gram Panchayat Disaster Management Training Manual'

generating activities. This group decided to distribute these funds to members who had to rebuild their homes, which were destroyed in the cyclone. In addition, the SHGs mobilized community contributions to buy food and collected relief supplies and distributed them in their village. One woman explained that she had gone to the Tehsildar's offices on behalf of other women who did not receive any compensation. "if four groups could do so much to help people after the cyclone, imagine how much more could be done if there were more such groups" today there are 22 SHGs in this gram panchayat.

148. *Risk Assessment and Planning:* In each of the three states visited women shared with the Evaluation Team their perceptions of risk and some of their risk reduction strategies, making it clear that women have an analysis and a perception of the key risks to their communities.

Women in Boriad village in Vadodara, Gujarat also explained how during floods when they suffered several days of water logging, lack of access to toilets was a serious problem for women and ensuring hygiene and sanitation in households.

In Batipara Panchayat, Orissa some SHGs have decided to lend 10% of their corpus as loans to the Disaster Management Committee in the event of an emergency.

In Dhenkanal Orissa, one woman explained how before the floods she would move the cattle to higher ground and store dried food in high shelves in the kitchen.

149. *Capacity Building and Training:* A key strategy in the program is special capacity building and training for women in first aid, shelter management, water and sanitation and rescue and evacuation. Women are viewed as contributors in emergency action.

150. Data on the numbers of women trained both as a percentage of DMC members trained and as a percentage of Task Force members trained shows that the DRM program has taken significant steps to involve women in the DMCs and Task Forces.

151. The Evaluation Team met with an all-women's search and rescue team being trained in Baroda district of Gujarat, officials which countered the commonly held belief among most officials and communities that women should focus on first aid and running common kitchens as they were not capable of participating in search and rescue operations because they wear saris and this would interfere in their speed and mobility.

5.3 Weaknesses

152. *Mobilizing and sustaining women's participation:* While guidelines for holding cluster meetings state that government functionaries at the village level and community leaders should be present at these forums. There are no guidelines that

explicitly acknowledge the social barriers to women's participation or devise strategies to encourage their presence in such forums.

153. *Program design does not address the cultural and social barriers to women's participation:* While the program mandate for women's participation is positive, mobilization of women is not an activity planned for. It is well known that women do not automatically stand up and participate. Social and cultural barriers to participation make it impossible for women to act and speak out as individuals.

154. It is well recognized that women who are organized, gain the confidence to collectively analyze their practical and strategic interests. This is a necessary step towards facilitating women to play multiple roles in the entire project cycle.

Adequate representation of women in Disaster Management Committees and Teams shall ensure their participation in decision-making in all stages of the disaster continuum. This would result in formulation of gender equitable and sustainable community plans for disaster preparedness.²²

155. While women's presence in Disaster Management Committees and Task Forces is a necessary first step towards their participation in decision-making, it does not ensure their "participation in decision making in all stages of the disaster continuum"

156. Women members of DMCs in such settings require the support of empowered women's groups to analyze and voice the differential gender impact of disaster and the responses to these.

157. Placing women in the same category as disabled persons, children, etc underscores their vulnerability, emphasizing their passive, beneficiary roles without recognizing their roles as agents of rapid response, recovery, and reconstruction. While recognizing gender related vulnerabilities, a gender equitable program should seek to reposition women in the eyes of their communities and should build on women's capacities and roles as active agents of recovery and community resilience building.

158. *Awareness:* Women were not clear on the DRM concept and equally unclear on how they could intervene or participate in the DRM program.

159. At inter-village cluster on workshops which are the first point of contact used by the administration to orient communities to the DRM concept and program the majority of the participants are men.

160. Gram Sabhas, generally used for awareness raising at village level and gaining the consent of village to implement the DRM program and create the DMCs and Task Forces - are usually dominated by men, both in terms of presence and voice

²² GOI-UNDP(2002) 'Disaster Risk Management Program: Community Based Disaster Reduction and Recovery Through Participation of Communities and Local Self Governments.' p.16

161. The Evaluation Team was informed by health workers and anganwadi workers at first aid training in Baroda district in Gujarat that women's attendance and participation in such forums as Gram Sabhas is abysmally low.

162. *Women are under represented:* Findings from field visits revealed that women are under-represented in the DMCs and Task Forces. The Disaster Management Committees met by the evaluation team had no more than 10-20% women members.

163. Data reported from the State Programs as of December 05 states that in Bihar women DMC members trained as a percentage of total number of village level DMC members trained in Bihar as of December 2005 is 1.64%. In Orissa, the number of women trained as a percentage of all village level DMC members trained are 23%²³.

164. The women met, who were members of the DMCs are primarily anganwadi workers, health workers or PRI members. As paid government functionaries or elected members, the identity from which these women operate is that of government functionaries or elected officials not as citizens or representatives of women. Health workers and anganwadi workers who interacted with the evaluation team in Gujarat also said they are over burdened with too many other responsibilities -which they must prioritize in their roles as government functionaries - to pay attention to this initiative.

165. *SHG participation:* While SHGs were present in almost all the villages visited in the three states, the evaluation team did not encounter DMCs where SHG leaders were being given leadership roles or SHG capacities were being harnessed to mobilize women or their inputs sought in order to improve the quality of the DRM plan.

166. *Capacity Building and Training:* While a key strategy in the program is special capacity building and training for women in first aid, shelter management, water and sanitation and rescue and evacuation,²⁴ there is no explicit guideline that builds women's capacities to undertake a gendered analysis of risk and to build on their own risk reduction strategies. Women are viewed as contributors in emergency action but not in providing data or analysis of risks.

167. *Risk Perception and Analysis:* Despite women's understanding of disasters and their efforts to protect assets and initiate self-help recovery processes at the household and community level, women's roles are not acknowledged in the public arena. The most important lesson here is that the DRM program is not based on a gendered analysis of what roles men and women take on in times of disasters and in non crisis times. An opportunity to build upon existing social capacities is thus lost. Moreover, these initiatives are not reflected or expanded upon in the village disaster risk management plan.

168. As quality of women's participation is not seen as a key outcome there are no indicators to measure it hence no data readily available on participation of women in Committees or Teams. The only data available is from numbers of women present in committees, task forces or at trainings.

²³ Corresponding data for Gujarat is not available.

²⁴ GOI-UNDP(2002) 'Disaster Risk Management Program: Community Based Disaster Reduction and Recovery Through Participation of Communities and Local Self Governments.' p.16

5.2 RECOMMENDATIONS

169. If gender equity is a key objective of this program as is stated in the project document then the implementation process must be oriented to accomplishing two sub-objectives:

- a. Reposition women as change agents in building community resilience
- b. Ensure that women are empowered through participation in a clear project cycle from awareness to planning, implementation and monitoring

170. *Facilitation of a project cycle:* As in the case of the community participation, there should be a clear project cycle that informs and facilitates women's participation through each step – awareness, mobilization, risk assessment, planning and operationalization - of the disaster management process.

171. Such a project cycle requires ongoing facilitation to assist women to undertake a gender analysis and then strategize on how to intervene in the DRM plan. The implementation arrangements currently do not appear to include any resource persons or teams with a strong gendered analysis of disaster risk management. A combination of professional and para professional teams including women CBO leaders can be used to facilitate women's participation in the DRM Program.

172. Wider representation of women: Wider representation of women is required. Women who are members of civil society groups and in leadership are likely to articulate women's gender concerns and thus required to bring gender issues into the DRM process. It is recommended that in future the program makes it mandatory that women make up at least 30 % of all Committees and Task Forces and to ensure that women representatives in the DMCs include self help group leaders and members of civil society.

173. *Gender sensitization of program staff:* The DRM Program needs to urgently sensitize implementers on how women represent the human face of disasters and development. Women can play multiple roles - as problem solvers, information providers and in overseeing risk reduction initiatives.

174. In addition, the costs of not involving women need to be made explicit. It is therefore imperative that the program mobilize women as a pre-requisite to their effective participation in the disaster management continuum.

175. *Women's forums to strengthen women's voice:* It is clear that women need exclusive forums in which they can learn about the DRM Program and understand it in terms of its potential to address gender concerns. Women interviewed, expressed a willingness to explore these issues in smaller ward level, group meetings, so that area specific problems could be articulated. gram sabhas and other forums exclusively for women be organized in order to orient women to the DRM concept and program.

176. *Recognition of women's roles in disaster management:* Women's analyses of risk and women's risk reduction strategies are not reflected in the DRM plans. Reflection of the gendered experience of disaster means necessarily drawing on women's time tested ways of coping with risk. This can be done through focused

group discussions and by getting women to voice their gender priorities in restoring livelihoods, rebuilding home, ensuring access and quality in essential services thereby ensuring gender concerns are addressed.

177. Formal acknowledgement of women's roles and contributions to relief and recovery and thus in disaster reduction is needed in the VDMP. This will be a positive step in the direction of empowering for women, as it would value their knowledge and shift public perception of women from vulnerable, passive beneficiaries to active contributors.

178. From a practical perspective incorporating women's resilience building and recovery strategies in the disaster management plans would identify and scale up successful initiatives and thus upgrade the quality of the plans.

179. *Capacity assessment:* The evaluation team recommends a capacity assessment exercise with women to achieve a clear articulation of not only their vulnerabilities but also their local risk reduction initiatives and capacities developed.

180. *Gender analysis of disaster:* Capacity building for a gender-equitable DRM program should facilitate a gendered analysis. Undertaking this exercise, of the gender-differentiated effects of natural disasters, e.g. in the post tsunami assessment women complained of how losses in cash, jewelry and household assets were never recorded or compensated. Instead, livelihoods tools and equipments in relation to men were clearly viewed as important losses to be compensated. Similarly, long lasting impacts of disasters - of how women's work time and conditions change - in terms of care giving and income generating work and ways in which disaster related aid and entitlement programs many a time tend to further exacerbate gender inequities need to be understood and addressed.

181. At the same time capacity building to strengthen women's capacities to address power asymmetries and reduce risk should include skill sets and knowledge that can be continually used and refined during non-crisis times for development as well as drawn upon during disasters. Women should be trained in participatory methods -of information gathering and analysis building upon local risk reduction strategies. By participating in local development processes women can test newly acquired knowledge and skills.

182. Existing self-help groups and other organized groups of women need to be involved in planning and implementing DRM plans.

183. Women's collectives such as Mahila Mandals and Bhajan Mandals are also present in every village and there is scope to activate these and give them clear roles in the disaster management process.

In Gujarat, interactions with women in Kaya Varuhan village in Vadodara, Gujarat many of whom were members of Bhajan mandals, stated that there are a number of areas in which women pointed they could contribute to disaster management activities. They said they could support the health worker, organize community kitchens, conduct medical camps, help rebuild kaccha houses and ensure that

aid reaches children, disabled and old people first and they are sheltered in safe places.

184. *Women should be encouraged to participate in DMCs and all the Task Forces:* The data from the reports as well as the interactions at the village level point to the fact that women are stereo typed into performing helping roles rather than planning and decision making roles and hence trained in first aid skills and to a much lesser extent for search and rescue. There is scope to expand the range of skills and capacities being imparted to women.

185. *Integrating disaster management plan with development:* Women across all three states – Bihar, Orissa and Gujarat - had very practical suggestions on development interventions required to mitigate disaster risk in their villages. Very simply, women’s comments implied that -what is good for development is good in times of disasters. In village after village, they listed what needs done - roads and the canal bridges if repaired, would allow children to attend schools in monsoon, how the health centre needs more staff and clearing drains would allow flood waters drain off flow. In all three states visited by the evaluation team , women reiterated concerns on vulnerable housing, services and infrastructure. While these themes clearly require more long term commitment and actions, they pinpoint the disaster mitigation measures that would sustain community interest in DRM However these interventions are often seen as being outside the scope of the DRM Program and thus are not reflected in the village risk reduction plans. It is important that that these issues be recognized as women’s priorities and therefore community concerns that need to be addressed up-streamed into the block, district, state and national disaster mitigation efforts.

In Madura Musahri village, Khagaria district of Bihar where cluster housing settlements that incorporate flood proof features have been built under the Indira Awas Yojana, women said that their troubles were not over as they had no healthcare centers and they needed better roads to bring relief supplies to their villages. Other community members reiterated the need for roads as it would reduce their economic vulnerabilities by enabling them to transport milk to markets.

Similarly, in Batipara panchayat in Orissa women members of the DMC said,

“Hamarey gaon may koi suvidha nahin hai”- our village lacks basic services and infrastructure” After the floods they began addressing these problems because they did not want their communities to face these problems again. Thus the Gram Panchayat is seeking to improve drinking water facilities by raising the height of tube wells, improving roads, planting trees to prevent soil erosion, getting a health centre and improving roads.”

In Pipalia village, Vadodhara district in Gujarat, the medical officer explained that during floods, the village is not flooded but the access roads to the health centre. Is usually the first to be blocked. This health centre usually gets about 100 patients per day. As the

panchayat did not have adequate land the health sub-centre has been built in a low lying area. During the discussions with the evaluation team the GP members and the Block officials present said that they would explore development program funds to address this problem.

Chapter 6: Findings and Recommendations

6.0 FINDINGS AND RECOMMENDATIONS

6.1 Findings

186. The project has created awareness in understanding the concept of disaster risk reduction and in imparting confidence to the people that risk of natural hazards can be reduced with preparedness and mitigation approach. There is a shift in understanding that natural disasters are not the wrath of God and that this can be mitigated with pre planning initiatives.

187. At the district and state levels it has been able to initiate the process of pre disaster planning and helped the institutions and systems in understanding the paradigm shift from relief and response to prevention, preparedness and mitigation.

188. It has helped initiate the process of formulating state policies on disaster management.

189. The ongoing initiatives in Orissa and Gujarat, after the Super Cyclone and Earthquake respectively, provided the basis of understanding the importance of risk reduction, which helped the project in taking off in these two states. These initiatives have funding from external sources (WB,ADB,DFID etc) and hence have been resource rich. Whereas in Bihar, there have been apparent resource constraints (no externally funded projects) and the process has taken longer because of no such background of mega disasters. The experiences of the system and institutions in Gujarat and Orissa of implementing mitigation projects have facilitated the process of implementation of the project.

190. Bihar's progress especially at the lower level has been slow in terms of participation but presents an equal level of awareness on DRM issues. The recent events of the States to increase awareness (Chetana) and the demand for similar events to bring about awareness at the district level is an indication of the opportunity that the State offers in terms of mainstreaming DRM concepts. As pointed out resources is an issue and is one of the challenges.

191. The program is better received in those areas, which have experienced major disaster in their recent memory such as the areas hit by super cyclone in Orissa (1999), and by earthquake in Gujarat (2001). There also has been a better appreciation of the program benefits in areas in Bihar, Orissa and Gujarat, which experience floods almost every year. But it is extremely challenging to create an acceptance for the very need to have a disaster management plan among those rural/urban communities, which have not experienced any major disaster in their living memory. This highlights the need to integrate disaster management concerns into regular development programs and initiatives in order to create a larger ownership of these concerns from a primarily development perspective.

192. The stated design of the project has been ambitious in view of the available resources and time available for its implementation. Given the resources (US\$ 34 million), the question that is constantly raised is as to whether the program is spread too thinly over larger number of districts with too many components.

193. The project has been developed within the contours of the decentralization agenda of Government of India and the States. The committees function broadly within the Panchayati Raj set up but self-help groups and other community-based organizations have yet to be sufficiently mobilized as vehicles to advance participation.

194. Gender concerns are addressed through mandatory representation of women in Disaster Management Committees (DMCs) and Disaster Management Teams (DMTs), but their number is much less as against the envisaged 30% representation. Women have yet to be more pro-actively involved in plan preparation processes including hazard/vulnerability/capacity/risk analysis. Gender mainstreaming efforts and outcomes are uneven across states.

195. **Capacity building:** The range of capacity building activities has been impressive in quantitative terms.(half a million people trained in various training programs).The focus of training has largely been on preparedness for response, as reflected in good quality search and rescue and first aid training across most of the districts visited in Gujarat, Bihar and Orissa. Capacities for participatory risk analysis have yet to be adequately built at the community level as a primary precondition to plan preparation at the village level.

196. **Quality partnerships:** Effective partnerships have been built for skill based training such as for first aid (Red Cross, CARE), safety and rescue (Fire Services department) and flood rescue (Nauka Talim Kendra in Gujarat).

197. **Sustainability and replicability:** Sustainability is intimately linked to the issue of ownership. The program is being generally perceived as an UNDP program at the state, district and community level. There are variations in the nature and degree of ownership across states and districts. While the project design is broad-based on the mitigation front, the program resources and ability to drive the concept of mitigation by the public agencies (Departments) has been limited to carry forward the design intended.

198. **Strategic resource mobilization and coordination:** is a basic requirement for sustainability and from this perspective, the States, especially Orissa and Gujarat have been in a position to strategically use DRM funds and other program funds effectively to enhance capacity building related actions. These two States have scaled up the program substantially. Further, Orissa and Gujarat have had access to additional funds (from Donors and the Government of India) to retrofit basic infrastructure.

199. **Effective monitoring and evaluation of lessons learnt:** The web-based monitoring system with 52 indicators check list (annexed) currently in place and use is mainly output driven. The information being collected under the project is more in terms of outputs such as plans prepared and people/ staff trained, which doesn't indicate the quality of the activities undertaken. The field level implementation related issues doesn't have any mechanism to be reported to the PMB for the mid course correction

6.3 Recommendations

200. **Sustainability and scaling up:** In order to ensure the long term sustainability of project benefits, integration of disaster management concerns including risk reduction and mitigation into mainstream development activities have to be adopted as the key project strategy. In order to mobilize and sustain community interest (which is identified by implementers as a challenge, particularly in those areas where there has not been any recent disaster) there is a need to identify and link development programs and resources which communities can access to address vulnerabilities. Local priorities and needs in terms of restoration of livelihoods, markets, basic services and infrastructure that connect people to markets and services are critical in the context of disaster. Similarly roles, capacity building, skills, information and human resources need to be built in a manner that enables communities to continually upgrade and refine their skills in a development context so that they can be drawn upon in the context of disaster.

201. For long term sustainability and achieving the development objective it is important to make a shift from a project to a program mode. This would basically mean enlarging the scope of program activities, expanding the time horizon, and making long term resource commitments for achieving the goal of sustainable risk reduction for communities at risk. A programmatic approach would need to work towards enabling community to accept disaster risk mitigation as part of life. The eleventh five year plan must also focus on DRM as one of the major risk reduction initiatives at the community level which are commensurate with the holistic approach of disaster management.

202. The project needs to be scaled up to all the states in the country following an in-depth study of what has worked and what has not worked and the reasons thereof in the Phase II of the DRM Program. The present evaluation study is confined to the phase I of the project which is being implemented only in three states whereas phase II has already completed its third year of the project. The phase II is covering larger canvass and it is being implemented in 169 districts. It would be worthwhile to undertake an in-depth study and evaluation of phase II so that the gaps may be taken care of in future project/program design.

203. **Design and strategy:** The project design should be modified to enhance the focus on community capacity development and the objectives and components of the project need to be rationalized and sharpened accordingly. The components of the project have to be revisited and designed to focus on capacities to be developed which would include capacities related to participatory hazard, risk, vulnerability and capacity assessment, plan preparation, preparedness, training and for strengthening of community level institutions.

204. The DRM program could be positioned as quality intervention, i.e, demand driven. The Center/ State/ Districts can set criteria for village selection based on Gram Panchayat's capability to demonstrate need and vulnerability, responsiveness and inclusion of women and civil society groups. The concept of DRM in terms of creating *Resilient Villages* creates a demand at the village level leading to self-selection by Gram Panchayats. The component should be flexible enough to try and

accommodate the local requirements instead of being locked up in a blue print approach.

205. Soft resources could be segregated into two parts basic training and IEC related actions, and need-based studies of technical importance to each district/region. It would be necessary for the state governments to include mandatory allocation of resources in the State budget and project budget for capacity building [at least 1%] of government budgetary support.

206. The project needs to have a clearly worked out and agreed exit strategy at the very outset. This may spell out the respective roles, responsibilities, and resource commitments of all the stakeholders, particularly Communities at Risk, Central and State Governments, and UNDP. This would mean enhanced resource allocation for Demand based technical assistance and *MHA/States* will also need to support specialization irrespective of location of the Staff. DPO equivalent should be invitation and an additional responsibility at the district level. This would also mean the need to incentivize (monetary) the position. Similarly the project should provide for a graduated capacity building program -move from basic to intermediate to advance level training than general training programs available as of now.

207. In case of a project approach, project cycle at community level must be benchmarked or sequenced. As community participation is envisaged as a voluntary service it is not adequately structured, planned and incentivised in the program in its present form. Missing in the implementation is a project cycle of activities at the community level that link the program goals to the outcomes. Sub-goals need to be identified at each stage, roles of all key stakeholders need to be clearly outlined and the entire cycle from community mobilization to plan preparation – requires clear sequencing, structuring and benchmarking.

- a. Suggested Project Cycle: Pre-planning activities – Orientation of key stakeholders
- b. Public awareness
- c. Formation of DRM Committees and Teams
- d. Risk and vulnerability assessment
- e. Preparation of VDRM Plans
- f. Operationalize plans linked to development priorities

208. Knowledge management: A system of knowledge management aimed at articulating and sharing learning with all the stakeholders on a continuous basis needs to be worked out and put in place. This could focus primarily on the learning taking place within the project but must also keep its eye on learning coming from outside. This must include a mechanism to identify, document and share good practices (such as monthly review of information on hazard scenario in vulnerable areas being practiced in Dhenkanal district of Orissa) with others on a regular basis. There is a need to develop state and national level platforms where the best practices of the districts and states can be shared once in a year which may be attended by all the stakeholders involved in the project implementation.

209. Routine data for each level of plan should be obtained from the census or secondary sources and more time should be spent on analysis especially on the risks of events for sharing with all the stakeholders.

210. **Monitoring and evaluation:** The present arrangements of monitoring and evaluation system/instruments may be revised to get more field level inputs. There is a need to constitute a team of multi-disciplinary experts (comprising social scientist, economist, public health and structural engineer, gender and livelihood specialist etc. as per project requirement) who can visit the field at least twice in a year to monitor the implementation of the project. If necessary, the feedback will be brought to the PMB and subsequently the directions may be issued to the states for corrections. The similar arrangement may also be done at the state level to monitor the district and community levels implementation.

211. The existing web-based monitoring system needs to be reworked to include outcome monitoring and impact evaluation features and indicators. A more comprehensive system including components such as field based qualitative periodic reviews and community monitoring systems need to be devised and operationalized, besides the existing computerized system.

212. **Training and capacity development:** There needs to be a clearly worked out training and capacity development strategy. This should be based on an assessment of existing capacity gaps and resultant learning, training and technical assistance needs at various levels.

213. While the focus of the program should be on capacity building and IEC, there is also a need to allocate resources for analytical work for documentation, specialized functions/ departments on infrastructure maintenance issues, automating basic documentation function similar to those carried out under IDRN (at least 3 % of Value of the program).

214. **Strengthening and building institutional linkages:** The capacity of UN volunteers/ DPOs/ SPOs should be improved substantially. They should be trained to facilitate community level implementation and carry out policy advocacy at the state level. The DPOs and SPOs should preferably be from within the government system and the UNV/ Staff should be engaged in providing strategic support/ program management support at the State level and specific demand based support for districts/ ATI on relevant issues. This system will also enable UNDP to use the services of UNV's at a national level. This would also mean a need for a well defined HR policy for UNDP to promote specialized skill sets within the volunteer system.

215. The Program may like to use the resources more strategically by intensifying capacity building efforts on the basis of clearly identified capacity gaps and needs as per the objectives of the program; a fresh capacity needs assessment exercise could be undertaken.

216. Since the focus of the project is mainly on community capacity development, there is a need to integrate local resources (human, institutional, financial) with the project components. Some new strategies may also have to be worked out such as

creation of community risk mitigation fund, self help groups, micro credit institutions, Panchayat etc. as active stakeholders.

217. Consultation at village level has to be more frequent. Local level institutions need to facilitate the process of consultation for which especially Panchayat/Gram sabha need to be empowered and be given more / main responsibility.

218. One of the possible options could be to make Panchayat nodal agency for the implementation of the project which would also be in line with the macro policy direction of decentralized governance

219. **Gender Mainstreaming:** Given the social barriers to women's participation and the need to mobilize women's collectives and articulation of risk reduction, a women's DRM Sub- Committee should be formed at the village level. This sub-Committee should bring together community leaders, CBO members, government functionaries and women PRI members who can collectively identify gender priorities; decide on roles and responsibilities they can undertake to reduce risk; and identify their learning needs to upgrade their risk reduction capacities. The members of women sub committee should also be members of village DMC. This done, women representatives in the village DMC may ensure that they are incorporated in the village DRM plan.

220. As in the case of community participation, the gender component of the DRM program requires a pool of gender sensitive – both professionals and para professionals within districts who can be drawn upon to orient, guide and facilitate women's participation in this program. Concretely, at a cluster level, women facilitators preferably Anganwadi workers could be utilized from among extension workers or govt. functionaries and their skills in facilitation enhanced. Their roles would include mobilization of women, forming women committees and ensuring women's gender priorities are surfaced and included in DRM plans.

221. If women are to be mobilized and their interest in disaster risk reduction sustained then it is important that DRM Program be located in the context of women's everyday survival and development priorities. The DRM Program should ensure that capacity building and roles should be both disaster and development oriented so that women's interest is sustained and their skills are continually being honed, and can be drawn upon in the event of an emergency.

Others

222. The Village level output/sensitizations should include an overall plan of the district so that villagers can comprehend the impact of decisions beyond their villages to appreciate the plans better. The quality of maps needs to be improved and the project should focus on assimilating generating better maps at least up to the Taluk level, though better village maps would also be of help.

223. At least during consultations at village level, use of imageries should be encouraged to provide an overview of the region and the impact of actions at the upper reaches on the village population, this is of relevance for floods and storm surges in coastal areas.

224. DRM , as a concept , needs to be mainstreamed at the State / Department level and more specifically at State Level budgetary allocation for preventive and routine maintenance of assets. This action is critical to assess the impact of the utility of the Community Based Plans being supported as part of this project. Though this is not one of the objectives of the programs this will need to be focused as part of the next phase.

225. The Mock drills are not being organized regularly. It is crucial that mock drills are conducted at all levels, particularly at community levels, at least twice a year and the inputs obtained are integrated with the disaster management plans.

226. It is necessary that the qualitative assessment of the disaster management plans at all levels carried out and the outcome of the assessment as well as the conclusions drawn from the mock drills are gainfully utilized while updating the DMPs once in a year .

Annexures

ANNEX 1 GOALS, OBJECTIVES AND BROAD AREAS OF ENQUIRY

PSO		Broad Content	Activities/ Areas of Enquiry
I	National Capacity Building to Institutionalize system of natural disaster risk management at MHA	<ul style="list-style-type: none"> ▪ Systemic Support to MHA ▪ Capacity building of functionaries ▪ Support to NCDC and NFSC to strengthen them as resource centers ▪ Exposure visits [<i>in country</i>]- best practices in DRM and sustainable recovery ▪ Support for policy initiatives with the High Powered Committee... Gender, decentralization 	<ul style="list-style-type: none"> ▪ From UNDP:- nature of Support provided ▪ Key outputs in terms of exact nature of support provided to HPC and the outcomes <p>Areas of Enquiries</p> <ul style="list-style-type: none"> ▪ Policy initiatives defined, extent of implementation and ▪ Resource committed? Beyond the life of the project ▪ Key actions by different government- post support as mentioned above ▪ Relevance of decentralization in this context, measures of achievement
II	Environment building, education, awareness and strengthening capacities at all levels in DRM and sustainable recovery	<ul style="list-style-type: none"> ▪ Area specific Disaster Strategies ▪ Finalization of Districts Plans ▪ Sensitization of stakeholders on DRM ▪ State specific awareness campaigns ▪ School primers, Teacher training, Mock drill at schools ▪ Development of manuals for dist/ block GP/ community... ▪ Development of manual for hazard resistant houses... ▪ Stakeholder training... ▪ Manuals for Training and orientation of DMTs ▪ IEC, campaigns 	<ul style="list-style-type: none"> ▪ Consultations with national and State Govts-Outcome reports <p>Outcomes – Plans</p> <ul style="list-style-type: none"> ▪ How many finalized? ▪ How many operational? ▪ Resources committed for plans? <p><i>Discussions with Trainers</i></p> <ul style="list-style-type: none"> ▪ on participation quality ▪ quality and effectiveness of TOT programs ▪ feedback on Program content <p><i>and Trainees</i></p> <ul style="list-style-type: none"> ▪ lessons learnt ▪ lessons implemented ▪ relevance of training ▪ importance given to local practices ▪ partnership issues with Gram Panchayats and district officials in operationalizing the plans ▪ any constraints addressed post training ▪ relevance of manuals and plans in DRM

III	Multi Hazard preparedness, response and mitigation plans for DRM at State District Block Village Ward Level Target 125	<ul style="list-style-type: none"> ▪ GIS based hazard and vulnerability mapping ▪ Networking of nodal agencies ▪ Formation of Disaster Management committee at all levels ▪ Inventory of resources at all levels for response ▪ Formation of Disaster Management Teams ▪ Mock Drills ▪ <i>IT based early warning systems [Check?]</i> ▪ Ant National and state Control rooms ▪ Training masons, engineers, architects ▪ Tech demos. 	<p><i>Enquiries /Outputs:</i></p> <ul style="list-style-type: none"> ▪ <i>Extent of GIS systems- coverage, quality of data input and current levels of application</i> ▪ <i>Teams formed, purpose, extent of discussions and periodicity</i> ▪ <i>Review of inventory and updation mechanism</i> ▪ <i>Review of mock drill in one of the centers to be determined on site[all state]</i> ▪ <i>Nature of systems provided, current status and operational issues</i>
IV	Networking knowledge on effective approaches, methods and tools for DRM and promoting policy frameworks at State and National Levels	<ul style="list-style-type: none"> ▪ National database on disaster risk management ▪ Cap building assessment and National training plan for Natural DRM ▪ Capacity building of ATIs on DRM ▪ R&D on DRM ▪ Annual report on Risk and Vulnerability ▪ Sharing best practices ▪ Linking states/ agencies through the Web ▪ Consultation and studies on climate change ▪ GIS based disaster vulnerability database for application in the states 	<p><i>Areas of enquiry</i></p> <ul style="list-style-type: none"> ▪ <i>Review content of data base and questions as above</i> ▪ <i>Extent of operationalization of the CB plan and</i> ▪ <i>Quality of dissemination</i>

OUTCOMES OF THE PROGRAM AS PER DESIGN:

- Administrative and institutional framework developed for Natural Disaster Risk Management Cell in Ministry of Home Affairs.
- Enhanced capacity in Ministry of Home Affairs for natural disaster risk management
- Disaster risk management cell with scientific warning dissemination system at MHA able to provide adequate and timely support to the implementing agencies.
- Comprehensive disaster risk management framework and recovery strategies in 125 districts of 12 program states within proposed 6 years.
- Aware and informed community in 125 hazard-prone districts on disaster risk management and mitigation.
- 125 multi-hazard prone districts have multi-hazard disaster risk management, response and mitigation plans based on vulnerability and risk assessment of women and children towards natural disasters.
- Greater participation of elected women representatives of local self-governments in 125 districts in the process of disaster preparedness and risk management.
- Enhanced capacity of the 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.
- Enhanced capacity of women in First aid, Shelter management, Water and Sanitation and Rescue Evacuation.
- Well-equipped disaster risk management information centers at selected States and Districts.
- Emergency kit at all selected districts of 12 states.
- Manual, training module and awareness strategies are available for replication in other areas.
- Enhanced capacity of the training institutions for training in disaster risk management.
- Trained skilled masons and engineers for hazard-resistant housing.
- Models for dissemination of best practices in retrofitting in roof top rainwater harvesting.
- Knowledge network for better involvement of stakeholders
- National and State database on natural disaster risk management developed.
- Vulnerability and Risk Reduction Reports prepared for integration of vulnerable reduction into development programs to allocate resources more effectively to the needy states.

ANNEX 2: GOALS, OBJECTIVES AND BROAD AREAS OF ENQUIRY

PSO		Broad Content	Activities/ Areas of Enquiry
I	National Capacity Building to Institutionalize system of natural disaster risk management at MHA	<ul style="list-style-type: none"> ▪ Systemic Support to MHA ▪ Capacity building of functionaries ▪ Support to NCDC and NFSC to strengthen them as resource centers ▪ Exposure visits [<i>in country</i>]- best practices in DRM and sustainable recovery ▪ Support for policy initiatives with the High Powered Committee... Gender, decentralization 	<ul style="list-style-type: none"> ▪ From UNDP:- nature of Support provided ▪ Key outputs in terms of exact nature of support provided to HPC and the outcomes <p>Areas of Enquiries</p> <ul style="list-style-type: none"> ▪ Policy initiatives defined, extent of implementation and ▪ Resource committed? Beyond the life of the project ▪ Key actions by different government- post support as mentioned above ▪ Relevance of decentralization in this context, measures of achievement
II	Environment building, education, awareness and strengthening capacities at all levels in DRM and sustainable recovery	<ul style="list-style-type: none"> ▪ Area specific Disaster Strategies ▪ Finalization of Districts Plans ▪ Sensitization of stakeholders on DRM ▪ State specific awareness campaigns ▪ School primers, Teacher training, Mock drill at schools ▪ Development of manuals for dist/ block GP/ community... ▪ Development of manual for hazard resistant houses... ▪ Stakeholder training... ▪ Manuals for Training and orientation of DMTs ▪ IEC, campaigns 	<ul style="list-style-type: none"> ▪ Consultations with national and State Govts-Outcome reports <p>Outcomes – Plans</p> <ul style="list-style-type: none"> ▪ How many finalized? ▪ How many operational? ▪ Resources committed for plans? <p><i>Discussions with Trainers</i></p> <ul style="list-style-type: none"> ▪ on participation quality ▪ quality and effectiveness of TOT programs ▪ feedback on Program content <p><i>and Trainees</i></p> <ul style="list-style-type: none"> ▪ lessons learnt ▪ lessons implemented ▪ relevance of training ▪ importance given to local practices ▪ partnership issues with Gram Panchayats and district officials in operationalizing the plans ▪ any constraints addressed post training ▪ relevance of manuals and plans in DRM

III	Multi Hazard preparedness, response and mitigation plans for DRM at State District Block Village Ward Level Target 125	<ul style="list-style-type: none"> ▪ GIS based hazard and vulnerability mapping ▪ Networking of nodal agencies ▪ Formation of Disaster Management committee at all levels ▪ Inventory of resources at all levels for response ▪ Formation of Disaster Management Teams ▪ Mock Drills ▪ IT based early warning systems [Check?] ▪ Ant National and state Control rooms ▪ Training masons, engineers, architects ▪ Tech demos. 	<p><i>Enquiries /Outputs:</i></p> <ul style="list-style-type: none"> ▪ <i>Extent of GIS systems- coverage, quality of data input and current levels of application</i> ▪ <i>Teams formed, purpose, extent of discussions and periodicity</i> ▪ <i>Review of inventory and updation mechanism</i> ▪ <i>Review of mock drill in one of the centers to be determined on site[all state]</i> ▪ <i>Nature of systems provided, current status and operational issues</i>
IV	Networking knowledge on effective approaches, methods and tools for DRM and promoting policy frameworks at State and National Levels	<ul style="list-style-type: none"> ▪ National database on disaster risk management ▪ Cap building assessment and National training plan for Natural DRM ▪ Capacity building of ATIs on DRM ▪ R&D on DRM ▪ Annual report on Risk and Vulnerability ▪ Sharing best practices ▪ Linking states/ agencies through the Web ▪ Consultation and studies on climate change ▪ GIS based disaster vulnerability database for application in the states 	<p><i>Areas of enquiry</i></p> <ul style="list-style-type: none"> ▪ <i>Review content of data base and questions as above</i> ▪ <i>Extent of operationalization of the CB plan and</i> ▪ <i>Quality of dissemination</i>

ANNEX 3 DISTRICTS COVERED UNDER PHASE I STATES

<i>Orissa</i>	<i>Balasure</i>	<i>Bhadrak</i>	<i>Cuttack</i>	<i>Ganjam</i>	<i>Jagatsin ghapur</i>	<i>Jajpur</i>	<i>Kendrap ara</i>	<i>Khordha</i>	<i>Koraput</i>	<i>Nuapada</i>	<i>Puri</i>	<i>Rayagad a</i>	Sub- total
District	1	1	1	1	1	1	1	1	1	1	1	1	12
Block	11	7	13	12	5	10	7	9	14	5	10	11	114
GP	268	193	328	278	116	280	185	153	226	109	216	171	2523
Village	2801	1350	1878	1590	681	1802	1052	1431	1958	631	1608	2667	19449
ULB	4	2	4	18	2	2	2	5	4	2	4	3	52
<i>Gujarat</i>	<i>Amreli</i>	<i>Bharuch</i>	<i>Bhavnag ar</i>	<i>Jamnaga r</i>	<i>Junagarh</i>	<i>Kutch</i>	<i>Surat</i>	<i>Patan</i>	<i>Porband ar</i>	<i>Rajkot</i>	<i>Vadodar a</i>	Sub- total	
District	1	1	1	1	1	1	1	1	1	1	1	11	
Block	11	8	11	10	14	10	15	7	3	14	12	115	
GP	0	0	0	0	0	0	0	0	0	0	0	0	
Village	627	660	824	689	868	897	1285	521	155	866	1590	8982	
ULB	7	3	8	9	12	6	4	6	4	9	5	73	
<i>Bihar</i>	<i>Khagaria</i>	<i>Madhuba ni</i>	<i>Muzaffar pur</i>	<i>Sitamarhi</i>	<i>Supaul</i>	<i>Sub-total</i>	<i>Grand Total</i>						
District	1	1	1	1	1	5	28						
Block	7	21	16	17	11	72	301						
GP	129	399	387	273	180	1368	3891						
Village	241	1110	1745	856	554	4506	32937						
ULB	3	4	3	5	3	18	143						

ANNEX 4: ASSESSING GENDER EQUITY IN THE DRM PROGRAM

Indicators of Gender equity	What is envisaged in project design, strategies and implementation arrangements	Good practices and capacities observed during field visits to 3 states	Gaps/ Problems	Recommendations
Women's membership in GP/ Village Disaster Management Committees.	Activities under PSO III states that each DMC would have equal representation of women.	<p>One or two women members present in some DMCs.</p> <p>Usually women members of DMCs and task forces are anganwadi workers or health workers.</p>	<p>Over-all representation of women in DMCs is low (around 10-20%)</p> <p>Members are primarily PRI members or Government functionaries. Anganwadi workers already overburdened</p>	<p>Mandating that 50% of committees and task team members be women.</p> <p>Link women inside DMCs and task forces to women's collectives to ensure support network that enables women - who may feel isolated in committees- to voice their concerns.</p>
Women's membership in task forces	Guidelines for membership of task forces is provided....??	<p>Women present and encouraged to join first aid teams.</p> <p>Presence of a few all-women task forces for search and rescue team and all women shelter team</p>	<p>Participation in task forces is primarily in first aid teams.</p> <p>Even task force members lack confidence, clarity on how their efforts are linked to the larger VDM plan.</p>	
Linkages with women's self-help groups and other women's organizations at village level	VDM Plan states that Self-help groups of women will be directly involved and that DMCs should include heads of women's organizations.	<p>Self help groups present and active in most villages.</p> <p>These groups have organized to assist communities during disasters.</p>	No formal role for self-help groups in contingency plan	SHG should be members of VDMC

Indicators of gender equity	What is envisaged in project design, strategies and implementation arrangements	Good practices and capacities observed during field visits to 3 states	Gaps/ Problems Identified	Recommendations
Women's awareness of disaster risk management concepts		<p>DRM concepts introduced in Gram Sabhas and cluster meetings.</p> <p>Heightened awareness and empowerment of GP members and government functionaries.</p> <p>Some task force and DMC members can articulate their own roles and responsibilities in the event of a disaster.</p> <p>DRM concepts introduced in Gram Sabha meetings</p>	<p>Low awareness of DRM among women</p> <p>Inadequate awareness and information at community level.</p> <p>DRM concepts and terminologies are not user friendly.</p> <p>Low attendance and participation of women in Gram Sabhas.</p>	<p>Create community friendly terminologies and IEC to market DRM concept to communities.</p> <p>Hold women gram sabhas to help women voice their priorities and concerns.</p>
Women's ownership of village contingency plans			Overall low awareness of contingency plans among women.	<p>Use women's cluster meetings, women's Gram Sabhas to disseminate information on content of contingency plans.</p> <p>SHGs or village level CBOs can play communication/ dissemination role.</p>
Women's participation in planning and decision making.	VDM Plan document states that SHG groups of women will be directly involved.	<p>Women present in mapping process.</p> <p>Women can articulate their informal roles and mechanisms eg evacuate to safe places, move livestock, store food and run community kitchens..</p>	<p>No mandatory involvement of women or SHGs</p> <p>Contingency plans don't formally acknowledge contributions and incorporate / build on women's informal coping mechanisms.</p>	Quality of planning process needs to be enhanced to encourage greater analysis and building on indigenous coping mechanisms and evolve from emergency response to mitigation.

Indicators of gender equity	What is envisaged in project design, strategies and implementation arrangements	Good practices and capacities observed during field visits to 3 states	Gaps/ Problems identified	Recommendations
Training and capacity building for women	<p>Special training and capacity building will be provided for women Masons training for women construction workers</p> <p>Trained cadre of village animators – one man and one woman from CBOs, PRIs or NGOs mentioned in VDM Plan document</p>	<p>First aid training being provided for women.</p> <p>In a few cases, search and rescue training being given to women.</p>	<p>Training for women required in other areas to empower women to undertake new roles. .</p> <p>Training provided is one time.</p> <p>Training is supply driven</p> <p>These village level facilitators were missing in Gujarat.</p>	<p>Training should be expanded to areas other than first aid including construction assessment, supervision</p> <p><i>Ensure use of skills and capacities in development planning to ensure that capacities and skills can be deployed in emergencies.</i></p> <p>Develop a cadre of women master trainers</p> <p>Training should be continuous</p> <p>Trainers manuals discuss outcomes of training but not process by which these are arrived at.</p> <p>Scale up good practices and capacities through multi-village cluster level learning forums.</p>

Indicators of gender equity	What is envisaged in project design, strategies and implementation arrangements	Good practices and capacities observed during field visits to 3 states	Gaps/ Problems identified	Recommendations
Sustaining women's interest and capacities in DRM	VDM Plan manual states "...wide representation of women in planning process to ensure sustainability of the program at GP level..."	Women given one time training –primarily in first aid.	<p>Representation of women in DMCs are necessary but not sufficient to ensure participation in decision making or sustainability.</p> <p>One time training makes it difficult to practice and refine skills and capacities</p> <p>Difficult to elicit and sustain women's interest in disaster during non disaster periods.</p> <p>Lack of empowerment and opportunities to participate in the public arena</p>	<p>Need to ensure that women's groups are continually using their planning, negotiating, implementation skills in context of development i.e. during non-crisis periods to sustain interest and ensure that skills and capacities can be used, refined and can be deployed in a crises.</p> <p>Appoint community animator/ facilitator at village level to sustain community and women's participatory processes. SHG play role of facilitator</p>
Clear roles and responsibilities for women's groups	What do the guidelines say????		Women identified primarily as a vulnerable group rather than as active partners in planning and implementing disaster risk management	<p><i>Designate clear development cum disaster management roles for women such as:</i></p> <ul style="list-style-type: none"> - <i>Information communication</i> - <i>Mobilizing communities</i> - <i>Interfacing with panchayats</i> - <i>Monitoring village level program and providing feedback to govt.</i> - <i>Visual assessment of homes and public buildings</i>

Indicators of gender equity	What is envisaged in project design, strategies and implementation arrangements	Good practices and capacities observed during field visits to 3 states	Gaps/ Problems identified	Recommendations
Mainstreaming women's priorities in disaster risk management into development planning		<p>Women state that basic services and infrastructure should be improved to enhance effectiveness of disaster response</p> <p>In one village women members of DMCs and Task forces said that the main benefit of their participation in mapping and contingency planning was that it was empowering for them.</p>	<p>Focus on preparedness and emergency response rather than long term mitigation and lack of women's participation in decision making makes these issues invisible in the plan.</p> <p>Mitigation issues may be more complex requiring intervention by higher authorities and are thus kept out of village plans</p>	<p>More complex mitigation issues should be recorded and fed into taluka, district, state or national plans.</p> <p>SHGs can work with GPs to identify resources for improving access to basic services and infrastructure linked to risk reduction features are built into new infrastructures</p>
Institutionalizing women's active participation in planning and implementing disaster management				<p>Developing self-assessment tools that track women's participation in planning, designing and implementation of DRM</p> <p>Give incentives to those villages/ talukas/ districts that include demonstrate gender equity to participate in the RM process.</p>

ANNEX 5: TARGETS AND PERFORMANCE

Target and Performance		Orissa		Gujarat		Bihar	
Performance as of Feb 06		Target	Actuals	Target	Actuals	Target	Actuals
	Number of blocks to be covered by DRM	145	145	142	142	201	
	Number of GPs to be covered by DRM	3005	3005	0	0	3438	
	Number of villages to be covered by DRM	23234	23234	11342	11342	12856	
	Number of ULBs to be covered by DRM	67		87	87	42	
State	Senior Officer and policy makers (including legislators) oriented	200	110	1300	552	350	120
	State Disaster Management Policy approved	YES	YES	YES	YES	YES	0
	State Disaster Management Act Enacted	YES	NO	YES	YES	YES	1
	State Disaster Management Authority set up	YES	YES	YES	YES	YES	1
	Re-designation of Nodal department as department for DM	YES	NO	YES	NO	YES	0
	State disaster Management plan finalized	YES	NO	YES	YES	YES	0
	State Search & Rescue team formed and members trained	YES	YES	YES	YES	YES	0
	Emergency Operation Centre strengthened and equipped	YES	YES	YES	YES	YES	1
	State relief code amended	YES	NO	YES	NO	YES	0
	Building bylaws amended to include provision as per BIS Codes	YES	NO	YES	NO	YES	0
	Funds available under ongoing schemes for mitigation	YES	NO	YES	YES	YES	0
	DM included curriculum of civil servant training (ATI, police)	YES	YES	YES	YES	YES	0
	DM included in school and university curriculum	YES	YES	YES	YES	YES	0
	DM included in engineers curriculum	YES	NO	YES	YES	YES	0
	DM included in architects curriculum	YES	NO	YES	NO	YES	0
	Strengthening of a state training institute in DM	YES	YES	YES	YES	YES	0
	Master trainers trained at State level	90	317	900	1989	200	142
	Professional bodies and corporate sector sensitized	150	845	100	72	30	0
	Manuals and SOP finalized and approved	15	23	70	38	15	8
	Massive awareness campaigns conducted (TV, Radio, newspaper)	1	1	0	9	25	1

Target and Performance		Orissa		Gujarat		Bihar	
District	Disaster Management Committees formed	16	16	14	14	14	14
	DMC Members and other officials trained	800	446	850	1611	543	891
	<i>other officials trained (Govt Officials, local functionaries...)</i>	240	350	1460	2912	700	73
	Disaster Management plan finalized	16	16	14	14	14	411
	DMT Members trained in First Aid	952	1484	240	545	280	10
	DMT Members trained in Search and rescue	927	673	250	528	280	114
	Emergency Operation Centre equipped	16	16	14	14	14	8
	Emergency kits/search and rescue kits distributed	16	16	14	3476	14	47
	PRIs trained in Disaster Management	320	207	450	1127	700	5
	<i>Of whom Women trained</i>	40%	29%	0.33	0.27	0.3	14
	Teachers trained in Disaster Management	1610	707	1500	14772	1200	1
	NSS & NYKS (or other institution)Volunteers trained in DM	320	4297	1500	3590	1400	863
	Architects trained in disaster resistant tech0logie	64	3	80	100	260	118
	Engineers trained (DM & disaster resistance tech0logies)	740	964	300	255	400	1190
	Disaster resistant demonstration unit constructed	32	7	14	13	14	1319
	Mock drill realized	128	10	56	52	94	85
	District having entered data to the IDRN	16	16	14	14	14	331
	District DM Plans updated by DMC	16	16	56	11	43	3

	Target and Performance	Orissa		Gujarat		Bihar	
Block	DMC formed	145	145	142	142	201	1
	DMC Members trained	4350	3838	2130	5134	4000	14
	<i>other officials trained (Govt Officials, local functionaries...)</i>	1450	1581	1860	6144	2000	1
	Disaster Management plan finalized	145	128	142	125	201	201
	DMT Members trained in First Aid	2900	1484	1500	3206	2000	6128
	DMT Members trained in Search and rescue	2900	670	280	868	2000	509
	PRIs trained in Disaster Management	22178	6156	5000	4143	5380	1403
	<i>Of whom Women trained</i>	31%	27%	0.32	0.27	0.3	78
	Village Volunteers trained at Block level	12020	6062	1800	5429	20000	711
	<i>Of whom Women volunteers trained</i>	31%	26%	0.31	0.34	0.3	87
	Data base of volunteers trained discipline wise created	16	16	200	84	14	137
	Masons trained	2900	1561	1000	269	10500	17
	Mock drill realized	600	10	142	100	1360	3031
	Block DM plans updated by DMC	145	83	284	66	652	665
GP	DMC formed	3005	2942	0	0	3438	4946
	DMC Members trained	54090	45949	0	0	68100	754
	of whom women DMC members trained	30%	0.23	0	0	0.3	5
	Disaster Management plan finalized	3005	2077	0	0	3438	208
	DMT Members trained in First Aid	15025	238	0	0	13752	12
	<i>Of whom Women trained in First Aid</i>	30%	32%	0	0	0.3	14
	DMT Members trained in Search and rescue	15025	155	0	0	13752	2046
	<i>Of whom Women trained in Search and rescue</i>	30%	0.23	0	0	0.3	10005
Mock drill realized	15579	106	0	0	21218	1778	

	Target and Performance	Orissa		Gujarat		Bihar	
Village	Villages DMC formed	23234	17450	11342	11342	12856	489
	DMC Members trained	325276	206490	113420	49448	128560	463
	<i>Of whom Women DMC Members trained</i>	30%	22%	0.2	0.36	0.15	150
	Disaster Management plan finalized	23228	17447	11342	3914	12856	1304
	Village DMT trained in First Aid	116140	20381	22000	14724	25712	268
	<i>Of whom Women trained in First Aid</i>	30%	37%	0.33	0.41	0.5	41
	Village DMT trained in Search and Rescue	116140	14686	20000	9805	25712	3126
	<i>Of whom Women trained in Search and Rescue</i>	30%	22%	0.32	0.14	0.5	16619
	Villages have contingency fund for emergency response	23234	1583	4000	32	12856	2517
	Awareness sensitization meetings	23227	17319	12000	7081	25712	1361
	Number of wall painting realized	0	26	8000	3292	0	2904
	IEC distributed (posters, leaflets, etc...)	23227	49770	11342	11611	12856	606
	Mock drill realized	120258	655	4174	212	78311	3876
	Village DM plan updated by DMC	23227	5151	4174	3376	40055	610
ULB	DMC formed	67	25	87	87	42	328
	DMC Members trained	1005	348	1000	1845	1050	2204
	Disaster Management plan finalized	67	0	87	61	42	830
	Emergency Operation Centre strengthened and equipped	65	0	87	33	42	4298
	Municipalities having amended building bylaws	67	0	87	14	14	124
	Life Line buildings retrofitted	134	0	174	41	14	234
	Number of wall painting realized	67	0	87	48	42	15
	IEC distributed (posters, leaflets, etc...)	67	0	87	87	42	147
	Mock drill realized	250	0	87	31	126	13

ANNEX 6: POST MISSION: STATE SPECIFIC OBSERVATIONS

Bihar:

- The state and district governments have yet to be in the driving seat, particularly in terms of taking up the implementation of the program on the ground.
- Consultation process at the village level has yet to be sufficiently inclusive, as women and men of the rural communities visited were not apparently involved in carrying out hazard/vulnerability/capacity/risk analysis, which is supposed to be the very basis of plan preparation at that level.

Orissa:

- Skill based training in search and rescue and first aid carried out with success, as evident by the quality of mock drills. But there is an increased emphasis on response measures as against risk reduction and mitigation concerns, which require attention.
- Excellent maps of districts and the areas therein available such as in Cuttack, all the disaster managers need to be trained in reading these maps and using them for preparation of plans and updation of plans prepared.
- IT and remote sensing could help in improving perspectives of village/block participants
- Plan could incorporate cost and risk analysis as inputs into plans prepared so as to integrate mitigation concerns into the planning process, especially with regard to key development/ infrastructure departments such as roads, electricity and water.

Gujarat

- Community capacity building for participatory risk assessment still not of the desired quality
- Women representation in Disaster Management Teams (DMTs) still notional, as most of these women are anganwadi workers, and moreover their role in decision making such as who would join which team etc still minimal.