Strengthening Disaster Risk Governance Framework in India: Learnings from global best practices

# **Inception Report** (additions)

08.12.2020

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#### Strengthening Disaster Risk Governance Framework in India:

#### Learnings from global best practices

#### **Inception Report**

#### **A.** Introduction:

Disaster Risk Management (DRM) refers to the systematic process of using policies, strategies and capacities of the society including communities to prevent new disaster risk, reduce existing disaster risk and manage residual risk, contributing to the strengthening of resilience and reduction of disaster losses (UNDRR). Since the adoption of Hyogo Framework for Action 2005-2015, countries around the world have made significant progress in DRM, like in terms of technological advancements, institutional capacities, and arrangements. In India, the disaster risk governance framework has evolved significantly after the enactment of Disaster Management Act (2005). However, several envisioned outcomes are yet to be achieved like the integration of disaster risk reduction in development planning. The Sendai Framework for Disaster Risk Reduction (2015-2030) (SFDRR) infused a renewed sense of urgency and need among the member nations for strengthening the disaster risk governance and building resilience to disasters through well-integrated and risk informed policies, plans, programmes and budget at all levels of governance. The DRM systems need to set out the goals and specific objectives for reducing disaster risks together with related actions to accomplish the objectives guided by the SFDRR goals, targets and actions. Linkages to sustainable development and climate change adaptation plans need to be made at the policy level so as to mainstream their implementation.

The National Disaster Management Authority (NDMA), headed by the Prime Minister of India, is the apex body for Disaster Management in India. The institutional mechanism of state and district level authorities for Disaster Management is governed by the Disaster Management Act, 2005. The Disaster Management Act, 2005 was also impressed upon during the COVID-19 response as it envisaged the role of all ministries and agencies in the measures to be taken for the response to the situation.

The ongoing COVID-19 pandemic has strongly brought forth various underlying vulnerabilities and systemic risks in the existing risk governance mechanism across the globe. The current initiative of the NDMA presents an opportunity to explore the DRM systems around the world, with a special focus on aspects of its localization, integration with development planning, monitoring and regulatory mechanisms, financial mechanisms, multi-& cross-sectoral engagements, risk communications, local actions, etc.

"Strengthening Disaster Risk Governance Framework in India: Learnings from global best practices" is being undertaken as part of the National Cyclone Risk Mitigation Project (NCRMP) of the NDMA.

#### **B.** Objective:

The key objectives of the current study are to undertake:

- a. Analysis of the DRM systems and processes in the selected eight countries namely- Australia, Canada, Germany, Indonesia, Japan, Philippines, Turkey, and the United States of America; and,
- b. Highlight good practices that could be adopted for the Indian context.

## C. Scope:

With the recognition of continual process of learning and iterative exploration of different aspects of DRM systems, this initiative/ study is aimed at strengthening the disaster risk governance framework in India by harvesting lessons from global best practices.

The study will intend to capture the essence of the integration of disaster risk reduction practices in development planning and linkages to sustainable development and climate change adaptation at the policy level. The analysis will include case studies drawn from disasters by addressing the 17 Indicative Questions as per Annexure-1.

Primarily, the following aspects of DRM will be studied for analysis:

- a. Structure of the concerned Department/Agency/Institutions;
- b. Functions of the concerned Department/Agency/Institutions;
- c. Important features of core risk governance process and organization capacity;
- d. Measures undertaken for disaster risk reduction;
- e. Integration of resilience into development planning and growth;
- f. Interface between Government and private sector;
- g. Role of education and voluntary institutions;
- h. Ways lessons are drawn from disasters.
- i. Vertical as well as horizontal linkages of Disaster Management Agency with various Government Agencies / Ministries / Departments within that country

#### D. Overall Research Framework for the study: DRM Systems Assessment Framework

The effective implementation of DRM systems is contingent on sound institutional capacities by key actors at different levels of government, the private sector and civil society as well as effective coordination between these actors and levels. An effective DRM system encompasses all the four priorities of SFDRR: Priority 1 on "Understanding Disaster Risk" focuses on leveraging the knowledge on practices for disaster risk assessment so as to develop cross-sectoral approaches which are tailored to specific contexts. Further, the Priority 2 of SFDRR highlights assessment of the *technical, financial and administrative* disaster risk management capacity to deal with the identified risks at the local and national levels. The Priority 3 of SFDRR highlights the importance mainstreaming investment in disaster risk reduction for resilience in the socio-cultural contexts and integrating voluntary sector into DRM planning. The priority 4 of SFDRR focuses on public policies to strengthen the coordination and funding mechanisms for pre- and post- disaster recovery and reconstruction. However, considering the focus of assessment, the study will primarily focus on Priority 2 and its linkages with other 3 Priorities.

Steered by the SFDRR priorities and the indicative questions of the NDMA, the following framework for DRM Systems Assessment will be used for the study.

The DRM Systems Assessment Framework aims to assess the existing structures, resources and capacities in order to identify the gaps and improve the effectiveness. The systems approach establishes the linkages between disaster risk management with development planning, sustainability and resource allocation. Under this, critical aspects of existing DRM systems such as DRM institutions, their governance, key functions, capacities to undertake

#### Inception Report

these functions, mechanism for monitoring their performance and impact, engagement and management of key stakeholders and vertical & horizontal linkages with various sub-aspects as shown in figure 1 below are identified for assessing the DRM systems.



Figure 1: DRM Systems Assessment Framework

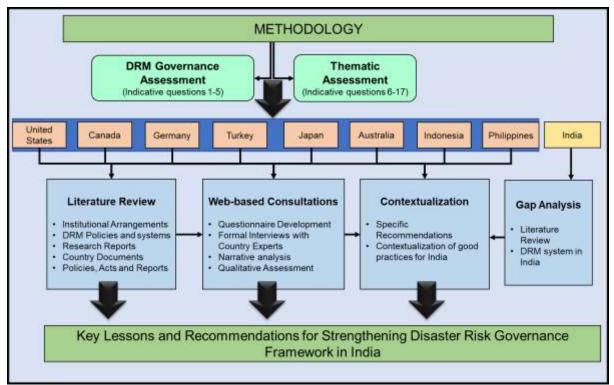
## E. Methodology:

Disaster Risk Governance (DRG), as defined by the UNDP, refers to the way in which public authorities, civil servants, media, private sector, and civil society at community, national and regional levels cooperate in order to manage and reduce disaster and climate related risks, and to ensure that sufficient levels of capacity and resources are made available to prevent, prepare for, manage and recover from disasters.

The DRM Systems assessment study will be divided in two parts of DRM Governance Assessment which will be carried out for all eight countries and the thematic case study-based assessment for the eight countries, covering key themes of DRM. Figure 2 demonstrates the overall methodology while figure 3 specifies the contents under DRM governance assessment and thematic areas for case study assessment.

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The *secondary literature review* will be undertaken to study the national level reports, national disaster management plans, policies, country level reports such as SFDRR monitoring reports, voluntary national reviews and other related reports by international agencies.



**Figure 2: Methodology** 

The thematic approach for case studies will allow in-depth and multi-faceted capturing of the inter-related issues. It will provide for qualitative analysis of the thematic issues of risk reduction and management and enable in-depth understanding to draw good practices. Further, it will allow intensive investigation through literature review as well as interviews that will foster analysing causal factors to deduce appropriate inferences. The case studies will be identified through literature review and then validated through the web-based consultations.

As mentioned, the secondary literature review will be followed by in-depth *web-based consultations* with identified country experts and DRM practitioners. The interviews will be guided through a semi-structured questionnaire. Based on the consultations, narrative analysis will be undertaken to complement the findings of the secondary literature review on the various governance aspects as well for the country specific case studies.

The key experts and practitioners from each of the eight countries will be identified and categorised into different sectors (as indicated in table 1) so as to cover varied and multi-sectoral perspectives on DRM from the selected countries. NDMA may also suggest some country wise experts and practitioners for web-based consultations, if needed.

| L                   |   | 0   | countries   |  |   |  |
|---------------------|---|---|---|--|---|--|
| Countries/Experts & | National  | Local   | Civil Society   | Private  | Academia  |  |
| Practitioners       | Government  | Government  |   | Sector   |   |  |
| USA                 | Federal<br>Emergency<br>Management<br>Agency<br>(FEMA)          | StateofColoradoState of SouthCarolinaState of TexasBoulderCounty,ColoradoCityofCharleston,South Carolina,CityofHouston, Texas | Insurance<br>Institute for<br>Business and<br>Home Safety<br>(IBHS)                     | Claire B.<br>Rubin<br>Claire B.<br>Rubin &<br>Associates                                   | Eric McNulty<br>Associate<br>Director<br>National<br>Preparedness<br>Leadership<br>Initiative<br>Harvard T.H.<br>Chan School<br>of Public<br>Health |  |
| Germany             |   | e.g. City of<br>Cologne   |   | Natascha<br>Bing<br>Research<br>Associate<br>German Red<br>Cross                           | Ortwin Renn<br>Scientific<br>Director<br>Institute for<br>Advanced<br>Sustainability<br>Studies   |  |
| Canada              |   | e.g. City of<br>Victoria  | Stephen<br>Tyler,<br>Adaptive<br>Resource<br>Management                                 | Paul Kovacs<br>Executive<br>Director<br>Institute for<br>Catastrophic<br>Loss<br>Reduction | Kari Hansen<br>Tyler, Pacific<br>Climate<br>Impacts<br>Consortium   |  |
| Japan               | Cabinet Office,<br>Second<br>Secretary                          | Hyogo<br>prefecture<br>government<br>Saijo city<br>government<br>Kurashiki city<br>government                                 | SEEDS Asia<br>CWS Japan   | JBP (Japan<br>Business<br>Platform)  | Tohoku<br>University<br>University of<br>Tokyo<br>Kyoto<br>University   |  |
| Indonesia           | BNPB<br>(Disaster<br>Management<br>Agency)                      | Bandung city  | CWS<br>Indonesia<br>U Inspire<br>Indonesia<br>(Rahma<br>Hanifa)                         | ТВС  | Krishna<br>Pribadi,<br>Harkunti<br>Rahayu<br>(ITB)  |  |
| Turkey              | AFAD<br>(Disaster and<br>Emergency<br>Management<br>Presidency) | Istanbul city<br>office   | Zeynep<br>Sanduvac<br>(Plan<br>International)   | TBC  | Ankara<br>university<br>(Professor<br>Burchak<br>Basbug)  |  |
| Australia           | Emergency<br>Management<br>Australia                            | Northern<br>Territory<br>Emergency<br>Service   | Red Cross<br>NT (or<br>Australasian<br>Institute of<br>Emergency<br>Services<br>(AIES)) | TBC  | University of<br>New Castle   |  |
| Philippines         | Office of Civil<br>Defense                                      | Makati city<br>(Atty. Violetta<br>Seva)   | National<br>Resilience<br>Council   | SM (Mr. Sy)  | Ateneo<br>University  |  |

## Table 1: Proposed Experts and Practitioners across different sectors from eight countries

|  | (NRC): Malu | (Antonia |
|--|-------------|----------|
|  | Erni        | Loyzaga) |

The study will provide impressions from our research that will cover how these organizations operate that are informed by all of the detail spelled out in this report. The semi-structured interviews will be used to learn what the interviewees find important in their institutional structures. The data from secondary resources as well as interviews will be compiled and assessed to draw good practices relevant for India. Besides reviewing the eight selected countries, DRM system of India will also be assessed to identify the barriers and gaps for effective and efficient delivery of DRM system. The lessons from the eight countries will be mapped/ overlaid on the identified barriers and gaps to come up with *specific recommendations for India*.

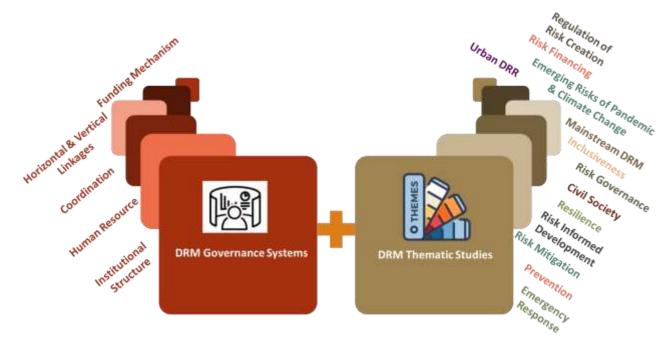


Figure 3: DRM Governance Assessment Aspects and Thematic Areas for Assessment

#### E.1 DRM Governance Systems Assessment:

The components covered under governance system broadly relate to the aspects/ indicative questions 1 to 5 (as per Annex-1). The sub-components for assessment of each of the components are explained below:

#### a. Institutional Structure:

The institutional structure will include the study of the organizational features and structure of the lead disaster management agencies in the eight countries. It will identify how certain actions

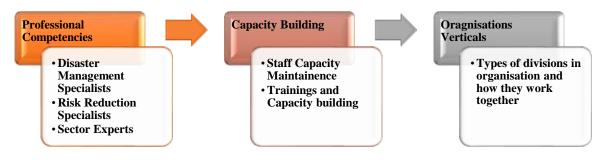


and activities are directed in order to achieve the goals of the DRM. It includes understanding the overall vision, mandate and authority of the agency. The key sub-components for study of institutional structure are mentioned in figure 4.

#### Figure 4: Sub-components of Institutional Structure

#### b. Human Resource:

The second component will focus on surveying the practices of the human resources deployed in the identified institutions to understand the strengths of professional competency. It will include a broad overview of the types of expertise (e.g. disaster management specialists, risk reduction specialists, sector experts, etc.), an understanding of how staff capacity is maintained and built as requirements and agency focus changes and broadly how different divisions work together.



**Figure 5: Human Resource** 

#### c. Functions

The component of function will include studying the type of activities undertaken by the lead disaster management agencies and their standing within the overall DRM structure. Thus, it will include understanding the i) Strategies and general (long-term and short term) objectives of the organisation ii) Core responsibilities (activities undertaken) during the various phases of disaster management (pre disaster, during and post disaster)

#### d. Horizontal and Vertical Linkages

The governance assessment study will also explore the flow of direction/ information/ guidance/ reporting between levels (e.g. how does a city government work with state and national government). This will include i) understanding communication channels, ii) tracing of hierarchy, iii) communication with lateral departments. Figure 6 (below) depicts the key stakeholders to consider to establish horizontal and vertical linkages.

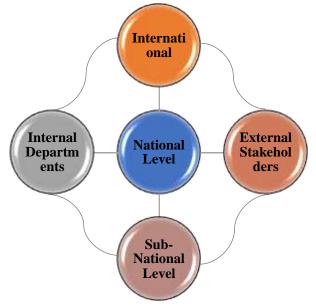


Figure 6: Horizontal and Vertical Linkages

#### e. Funding Mechanism

The funding mechanism will assess the key features of: funding sources; and process of allocations across various aspects of DRM system; very broadly, the type of projects undertaken within the funding source (e.g. preventative vs. corrective measures, grey infrastructure focus vs. grey/green/blue, etc.); and, where interviewees/the literature indicate the most significant successes in terms of cost-effective risk reduction.

#### **E.2 Thematic Assessment:**

The thematic assessment will be undertaken to extract good practices. The cases on good practices from the eight countries will be identified for different themes relevant to DRM. The identified themes are mentioned in table 2 below.

The cases of eight countries will be undertaken through literature review as well as web consultations. The identified case studies will be shortlisted depending on their merit and applicability for Indian context. A total of eight cases will be undertaken and each of the case will be tagged as per the themes addresses. The aim of the cases would be to capture the successful practices which are unique and suitable to Indian context for adoption. The cases would also highlight the challenges faced and the steps required to make the approach work.

|       | 1 401  | c 2. m | usuanve |        |       | r Case stu | uics uii | normny    |             |
|-------|--|--------|---------|--------|-------|------------|----------|-----------|-------------|
| S.No. | Countries  | USA    | Germany | Canada | Japan | Indonesia  | Turkey   | Australia | Philippines |
|       | Themes   |        |         |        |       |            |          |           |             |
| 1     | <b>Risk Mitigation</b>                                 |        |         |        |       |            |          |           |             |
| 2     | Emergency<br>Response                                  |        |         |        |       |            |          |           |             |
| 3     | Risk Informed<br>Development                           |        |         |        |       |            |          |           |             |
| 4     | Prevention   |        |         |        |       |            |          |           |             |
| 5     | Resilient<br>Development                               |        |         |        |       |            |          |           |             |
| 6     | Risk Governance  |        |         |        |       |            |          |           |             |
| 7     | Empowerment of<br>Civil Society                        |        |         |        |       |            |          |           |             |
| 8     | Emerging Risks   |        |         |        |       |            |          |           |             |
| 9     | Mainstream DRM   |        |         |        |       |            |          |           |             |
| 10    | Regulation of Risk<br>Creation in<br>Political Economy |        |         |        |       |            |          |           |             |
| 11    | Risk Financing   |        |         |        |       |            |          |           |             |
| 12    | Inclusiveness  |        |         |        |       |            |          |           |             |
| 13    | Urban DRR  |        |         |        |       |            |          |           |             |

Table 2: Illustrative Matrix to cover Case studies uniformly

## **E.2.1 Indicative Themes:**

The themes are inter-related and cross-cutting in nature; therefore, one case study may cover more than one aspect of the identified themes. The themes broadly correspond to indicative questions 6 to 17 as per annex-1. The sub-components proposed under each component are broad and may vary depending on availability of data across the countries and the nature and type of the cases. However, the study will try to include the impressions of the following key themes and their sub-components.

#### 1. Risk Mitigation

Risk mitigation is a strategy to prepare for and lessen the effects of the potential hazards (UNDRR). Risk mitigation is done focussing on the inevitability of the hazards. It consists of steps that can be taken before the disaster event so as to reduce its impact.

The risk mitigation can be captured considering the following elements in the national policies, plans and initiatives:

- i) Risk identification and assessment studies e.g. HRVC studies
- ii) Mitigation measures undertaken like engineering techniques and hazardresistant construction, safe seismic designs for building construction etc.
- iii) Processes of implementation and monitoring

## 2. Emergency Response

Emergency Response includes the provision of emergency services during and immediately after a disaster to save lives, reduce injuries, ensure further safety and provide for the basic needs of the survivors (UNDRR).

The sub-components for the study of Emergency Response can include:

- i) Existence of Disaster Response Teams/Quick Response Teams
- ii) Training and capacity building of response agencies
- iii) SOPs and Protocols for response mechanism

## 3. Risk informed development planning

The risk-informed development is pre-requisite for sustainable development. It ensures that development does not create and mitigate new/ existing risks to build resilience in the society. Risk, resilience and sustainability go hand-in-hand. The sub-components to understand the best practices under risk informed development planning can include:

- i) Processes and practices to include risk informed decision-making
- ii) Policies and tools to integrate risk considerations in development planning
- iii) Risk communication systems and mechanisms

#### 4. Prevention

Prevention refers to avoidance of the probable hazard and its probable impacts. The assessment of good practices of prevention can include:

- i) Preventive measures through land use and other regulations
- ii) Prevention/Planning and Implementation

## 5. Integration of Resilience in development planning

Resilience refers to the ability of a system and a society as a whole to resist, absorb and recovery from the effects of a disaster in a timely and efficient manner (UNDRR). The resilience of a community in respect to potential hazard events is determined by the degree to which the community has the necessary resources and is capable of organizing itself both prior to and during times of need. The sub-categories for the same can include:

- i) Policies, institutional arrangements and practices for integrating resilience concerns into development and sectoral planning.
- ii) Measures for reduction in losses from disaster
- iii) Aspects of DRM included in other sectors

## 6. Risk Governance and Risk Sharing

Risk governance refers to application of the principles of good governance to the identification, assessment, management and communication of risks. It includes an inclusive approach to, assess, manage and communicate important risk issues with all the stakeholders. The subcomponents for the same can include:

- i) Level of involvement of stakeholders like civil society and private sector to capture the various perspectives on the risk and its associated opportunities.
- ii) Business Continuity Planning
- iii) Procurement practices
- iv) Practices to govern collaborative action with the government
- v) Adoption of risk governance frameworks
- vi) Principles of Risk sharing in the design and functioning of the institutions

## 7. Empowerment of Civil Society

Empowerment of civil society organisations is important to bring in last mile delivery of the services and also to ensure the participatory governance approach. Civil society can improve the performance and reduce risk by strengthening governance and accountability. It also provides opportunity to learn the ground realities and requirement. The categories to assess and understand practices for the empowerment of civil society can be as follows:

- i) Knowledge-sharing activities between government, academia and civil society
- ii) Transparent and inclusive risk reduction strategy.
- iii) Community based DRM initiatives

## 8. Management of Emerging Risks of climate change and pandemics

Risks are ever evolving and changing. COVID-19 has brought pandemics as priority for management of emerging risks. The emerging risks of climate change and pandemics are not limited to a defined space and time. Due to increased inter-connectivity and mobility, the emerging risks become more complex to manage. This requires agile and adaptable systems to prepare for and respond to the risks. The important factors to study the management of emerging risks of climate change and pandemics can be:

- i) Comprehensive understanding and incorporation of new and emerging risks in Disaster Planning and Policies
- ii) Measures for climate change risk management
- iii) Measure for COVID-19 pandemic management

# 9. Mainstream DRM into culture and society through citizen participation and volunteerism

Mainstreaming DRM requires cross-sectoral approach to plan and implement the policies of DRM. Systemic mainstreaming requires coordination at the central level to ensure that various sectors undertake the initiatives for DRM. The SFDRR underscores the importance of mainstreaming DRR within sustainable development and further enlarges the scope of mainstreaming to include the respective business models and practices of businesses, professional associations, financial institutions and philanthropic foundations. The important sub-components for assessment can include:

i) Regulatory measures to ensure mainstreaming of DRM

- ii) Examples of policies in other sectors that incorporate DRR
- iii) Activities to include volunteers in the DRM sector

## **10.** Regulation of risk creation in political economy

Preventing the creation of new disaster risks, and accountability for disaster risk creation are needed at all levels. SFDRR highlights the need for dedicated action to tackle underlying disaster risk drivers, such as poverty and inequality, unplanned and rapid urbanization etc. Therefore, the essential categories of the assessment under this component can include:

- i) Management policies to compound risk creation factors
- ii) Regulation for private disaster risk reduction investment
- iii) Investment in technology for resilience

## 11. Risk financing

Risk financing involves ability of the organisation to cover the losses in cost-effective way. Risk financing is preceded by risk understanding and risk assessment. The possible subcomponents for risk financing include:

- i) Availability of risk financing options in public and private sector
- ii) Disaster loss assessment tools and techniques
- iii) Insurance policies for risk sharing for probable hazards

## 12. Inclusiveness for women, LGBTQ, persons with disability, other marginalised community

Leave no one behind is the central, transformative theme of the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs). The 'all-of-society approach' of SFDRR calls for people-centred and inclusiveness in Disaster Risk Reduction. The possible sub-components for inclusiveness can be:

- i) Availability of disaggregated data by gender, LGBTQ, persons with disability and other marginalised groups
- ii) Participation and Leadership of members from marginalised groups in policy making
- iii) Inclusivity in HRVC assessments for mitigation and prevention strategies

## 13. Urban Disaster Risk Management and Urban Resilience

The New Urban Agenda focuses on well-planned and well-managed urbanization as a tool for sustainable development. Most cities in the developing world are located in areas which are prone to earthquakes, floods, landslides and other hazards. COVID-19 pandemic also showed the dire impact of disasters in urban areas and inter-dependency of peri-urban and rural areas with urban infrastructure. Some of the categories for assessment of urban disaster risk management and urban resilience can be as below:

- i) City DRM Governance Models
- ii) Urban Planning and mainstreaming of DRM
- iii) Resilience of Critical Infrastructure

#### E.3 Contextualisation for India:

The eight case studies would be finalised based on secondary literature review and inputs from web-based consultations will be used to analyse and draw best practices. Based on the overall

#### Inception Report

best practices, specific recommendations would be suggested for India considering the needs and relevance.

#### F. Timeline:

There are three important deliverables of this study which spans for 90 days. The Inception Report is to be submitted within 10 days of the commencement of the contract. The first draft including preliminary findings and case study reports to be submitted within 60 days. The final report will be submitted at the end of 90 days period. Suggestions and feedback based on fortnightly review meetings with NDMA will be duly incorporated in the study report.

| Week 1  | Week 2            | Week 3          | Week4  | Week 5               | Week 6      | Week7     | Week 8 | Week 9  | Week 10    | Week 11     | Week 12 |
|---|-------------------|-----------------|--|----------------------|-------------|-----------|--------|---------|------------|-------------|---------|
| Inceptio<br>report<br>Deliverabl<br>Finalizatio | <b>1</b><br>le 1: | Draft re        | port on DR   | M Governan           | ce System A | ssessment |        |         |            |             |         |
| Methodolo<br>the study                          | ogy of            | Delive<br>• Lit | with ;<br>rable 2:<br>erature Rev                          | global best p<br>iew |             |           | ••     |         | Final r    | eport       | 0       |
|   |                   | • Sta<br>• We   | se study dev<br>ikeholder co<br>ib-Consultat<br>p Analysis | nsultation           |             |           | 1      | Context | k incorpor | of Case Stu | dies    |

#### **Figure 7: Timeline**

#### • Detailed Work-plan

The table 3 below states the activity wise detailed work plan:

Table 3: Detailed Work-Plan

|    | Activities/Weeks                           | 1 | 10<br>days | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|----|--|---|------------|---|---|---|---|---|---|---|---|----|----|----|
|    | Fortnightly Review<br>Meetings             |   |            |   |   |   |   |   |   |   |   |    |    |    |
| A. | Inception Report                           |   |            |   |   |   |   |   |   |   |   |    |    |    |
|    | Literature Survey                          |   |            |   |   |   |   |   |   |   |   |    |    |    |
|    | Methodology                                |   |            |   |   |   |   |   |   |   |   |    |    |    |
|    | Case Study Format                          |   |            |   |   |   |   |   |   |   |   |    |    |    |
|    | Questionnaire Format                       |   |            |   |   |   |   |   |   |   |   |    |    |    |
|    | Review and Approval of<br>Inception Report |   |            |   |   |   |   |   |   |   |   |    |    |    |
| B. | Draft Report                               |   |            |   |   |   |   |   |   |   |   |    |    |    |

|    | Secondary Literature<br>Review                 |  |  |  |  |  |  |  |
|----|--|--|--|--|--|--|--|--|
|    | Case Study development                         |  |  |  |  |  |  |  |
|    | Web Consultations                              |  |  |  |  |  |  |  |
|    | Draft Report with preliminary findings         |  |  |  |  |  |  |  |
|    | Review and feedback on Draft Report            |  |  |  |  |  |  |  |
| C. | Final Report                                   |  |  |  |  |  |  |  |
|    | Contextualisation of Case<br>Studies for India |  |  |  |  |  |  |  |
|    | Specific Recommendations                       |  |  |  |  |  |  |  |
|    | Review and Approval of the Final Report        |  |  |  |  |  |  |  |

### **G.** Support Required from NDMA

- i. Recommend names of experts and practitioners from the selected countries, if any, for consultations;
- Sharing data/ reports related to India needed for the study. While we will access relevant data/ reports, as available, from websites, it will be helpful to get information/ documents on procedures/ protocols of decision-making on various aspects of DRM

## • Annexure 1:

## 17 Indicative questions to be explored through country-examples

(i) How are the lead disaster management agencies in these 8 countries (USA, Canada, Germany, Japan, Australia, Turkey, Indonesia and Philippines) organized? What are different parts / constituents of these agencies?

(ii) What are the strengths of agencies in these countries, in terms of professional competence, staff, management practices, linkages, training capacities, etc.

(iii) What are the disaster management functions carried out by these agencies? How is their standing within the overall DRM structure?

(iv) How do these agencies work laterally with other ministries / agencies and horizontally with lower jurisdictions?

(v) How are these agencies funded?

(vi) Are there good examples of structure and functions of DRM institutions (Agencies/ Authorities) in these countries that have demonstrated effective delivery of risk mitigation, emergency response functions, risk informed development planning and can be adapted for the Indian context?

(vii) What can be learnt from good practices for disaster risk reduction (primarily mitigation and prevention/avoidance) measures in these countries, that can be adapted for the Indian context?

(viii) What are some good examples of policies, institutional arrangements or practices for integrating resilience concerns into development and sectoral planning (including interface between DRM agencies and other departments)?

(ix) What are good practices (including policies) for institutionalising and encouraging private sector's role in DRM (including business continuity planning and procurement practices) and governing collaborative action with the government?

(x) What are some good examples regarding how countries have conceptualized overarching risk governance frameworks, for example the principle of "risk- sharing" in Japan underpins the design and functioning of institutions?

(xi) What are good practices for empowering civil society for civil society contributions in DRM and driving collaborative action with the government?

(xii) What are some good examples of policies, institutional arrangements, financing arrangements, or practices for better governance of emerging risks, such as those from climate change and pandemics like COVID-19?

(xiii) What are good examples of policies, institutional arrangements, or practices that have enabled large-scale citizen participation, sustained volunteerism, and mainstreaming of DRM into culture and society?

(xiv) What are some good examples of policies and institutions that enable regulation of risk creation in a political economy context like India's?

(xv) What are good practices for risk financing that can be integrated into/adapted for the Indian context?

(xvi) What are the existing good practices for institutionalising DRM capacity building and fostering leadership for risk governance, especially amongst those who are

underrepresented such as women, LGBTQ, persons with disability, and other marginalised social groups?

(xvii) Are there good practices for urban disaster risk management/ urban resilience, that can be adopted?

#### • Annexure 2

Annexure 2: Format for recording and analysis of Case Studies Title (Name of Country)

**Brief Description to highlight Thematic Relevance:** 

#### Background

• Brief country specific background

## **Key Characteristics**

- Literature review findings
- Inputs from web-based consultations with country experts

## **Governance Mechanism**

• Key aspects of DRM governance mechanism

Key Takeaway lessons for Indian Context

• Best Practices

#### • Annexure-3

Annexure 3: Format of Semi-Structured Questionnaire for Interviews with country level experts on web-based consultations

| Name of Country Expert                 |  |
|--|--|
|  |  |
| Designation                            |  |
|  |  |
| Sector                                 |  |
| Contact                                |  |
|  |  |
| Key aspects of Governance Mechanism of |  |
| DRM                                    |  |
| Functions of the Disaster Management   |  |
| Agencies                               |  |
| Coordination and Communication         |  |
| Mechanisms                             |  |
| Human Resource Management at DRM       |  |
| Institutions                           |  |
| Key capacity building initiatives      |  |
|  |  |
| Funding Sources for DRM                |  |
|  |  |
| Case-study specific questions          |  |
|  |  |

### **Questionnaire for Web Based Consultations/Interviews**