

Background Report
Law and Regulation for the Reduction of Risk from Natural Disasters
in India – Federal Law
A National Law Desk Survey
October 2012

Acknowledgements

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Law and Regulation for the Reduction of Risk from Natural Disasters in India: A Desk Survey

Executive Summary

India is one of the most disaster prone countries of the world. Until recently, India's approach to Disaster Management was more reactive and relief centric. The Government of India brought about a paradigm shift in the approach to disaster management after the Gujarat Earthquake of 2001. The new approach rests on the idea that development cannot be sustainable unless disaster mitigation is built into the development process. For this purpose, mitigation efforts need to be multi-disciplinary spanning across all sectors of development. The recent emphasis on mitigation has also stemmed from the belief that investments in pre-disaster preparedness are more cost effective than expenditure on relief and rehabilitation. The new holistic and integrated approach has been embodied by the enactment of several laws and policies related to disaster risk reduction.

This paper aims to consider some of these rules and regulations put into place to deal with natural (not manmade) disasters, against a given set of questions. The effectiveness of enforcement and implementation of these laws is not included in the research. Additionally, this paper seeks to elaborate on federal, national level laws for the country of India without taking into consideration laws that may have been implemented at the state level.

The institutional and policy mechanisms for response, relief and rehabilitation were established well by the time of the independence in 1947 and since. More recently, in December 2005, the Government of India (GoI) enacted the Disaster Management Act, 2005. This was followed by the National Disaster Management Policy being put into place in 2009. These instruments help bring about a change in the relief centric approach and helped codify the more pro-active, prevention driven approach towards disaster management. While widespread progress has been made, there continue to be some gaps that need to be addressed still.

As far as early warning mechanisms are concerned, there exist some provisions for this, especially with regards to disasters such as floods and earthquakes. However, there is little or no legislation with regard to other disasters like heat waves and cold waves, insect infestations etc.

As for the community involvement in DRR, provisions have been made for community capacity building and awareness generation. Yet, enough attention has not been paid to involving the community in mitigation measures. Early Warning Systems do not consult or encourage participation of at-risk populations. No role in DRR for vulnerable groups such as women, children and the has been delineated in the legal regime.

There are plenty of relevant laws regulating aspects of daily life, such as land laws, telecommunication laws, urban planning, constitutional and other legal rights and guarantees that address issues related to DRR. While an attempt to incorporate DRR into some of these laws can be noticed, DRR isn't always prioritized.

Although India seems committed to strengthening the institutional and legislative framework for reducing the risks of disasters, some gaps continue to remain. This survey is done as a part of a global synthesises report on law and regulation for DRR in natural disasters. It is hoped that the this study will serve as a useful guide to other researchers and organizations working on the issue of Disaster Risk Reduction in India.

List of Abbreviations

ACWC	Area Cyclone Warning Centres
BIMSTEC	Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation
CBO	community-based organisations
CCMNC	Cabinet Committee on Management of Natural
CDMIS	Cyclone Disaster Management Information System
CWC	Central Water Commission
DAC	Department of Agriculture & Cooperation
DDMA	District Disaster Management Authority
DM	Disaster Management
DRR	Disaster Risk Reduction
EWS	Early Warning System,
GoI	Government of India
HLC	High-Level Committee
IMD	Indian Meteorological Department
MHA	Ministry of Home Affairs
MoEF	Ministry of Environment and Earth.
MoES	Ministry of Earth Sciences
NBC	National Building Code of India
NCC	National Cadet
NCMC	Crisis Management Committee
NCRMP	National Cyclone Risk Mitigation Project

NDMA	National Disaster Management Authority
NDRF	National Disaster Response Force
NEC	National Executive Committee
NGO	Non-governmental Organization
NIDM	National Institute for Disaster Management
NLRMP	National Land Records Modernisation Programme
NSS	National Service Scheme
NTP	National Telecom Policy,
NWP	National Water Policy
NYKS	Nehru Yuvak Kendra Sangathan
PRI	Panchayati Raj Institutions
RM	Risk Management
SAARC	South Asian Association for Regional Cooperation
SDMA	State Disaster Management Authority
SDMC	SAARC Disaster Management Centre
SDRF	State Disaster Response Force
SEC	State Executive Committee
SHG	Self-help Group
SOI	Survey of India
TCPO	Town and Country Planning Organization
ULB	Urban Local Bodies
UNDP	United Nations Development Programme

UT

Union Territory

1) Introduction

As per the definition provided by the United Nations Office for Disaster Risk Reduction, "Disaster risk reduction (DRR) is the concept and practice of reducing disaster risks through systematic efforts to analyse and reduce the causal factors of disasters. Reducing exposure to hazards, lessening vulnerability of people and property, wise management of land and the environment, and improving preparedness for adverse events are all examples of disaster risk reduction." This National Desk Survey seeks to provide a snapshot of the extent of legal regulation related to DRR in India.

The survey begins with providing an outline of the government and law-making structure, and by identifying relevant laws and regulations put into place for the purpose of reducing risks from natural disasters. Not only the legal and institutional regime for DRR, but various other laws regulating aspects of daily life, such as building codes, land title registrations, telecommunication, and people's rights are taken into account to analyze the incorporation of DRR elements within them.

Legislative measures are delineated by providing answers to a given set of questions that have been organised around the first four of five priorities laid down in the Hyogo Framework for Action, 2005-2015. These focus on:

1. Ensuring that disaster risk reduction (DRR) is a national and a local priority with a strong institutional basis for implementation, including through "policy, legislative and institutional frameworks"
2. Identifying, assessing and monitoring disaster risks and enhance early warning
3. Using knowledge, innovation and education to build a culture of safety and resilience at all levels
4. Reducing the underlying risk factors

Since this is a desk survey, resort has been taken in online and library sources. The primary law dealing with Disaster Management in India is the Disaster Management Act of 2005. Although it can be seen as the overarching legal document that encompasses various aspects of the legal framework for DRR, there exist several other legislative and policy instruments that pertain to various aspects of DRR. For the purpose of this study, 'an attempt has been made to take into account all laws, acts, bills, as well as implementing policies and guidelines. This paper focuses on primary sources to try and analyze the extent of DRR regulation in India.

2) Summary of Main Natural Hazards and Risks in India

India's unique geo-climatic conditions have made it vulnerable to several natural disasters in the past. Natural Calamities such as floods, droughts, cyclones, earthquakes and landslides have been a frequent phenomena in India. Around 60% of the landmass is prone to earthquakes, over 40 million hectares of land is vulnerable to floods; approximately 8% of the total area to cyclones and 68% of the area to drought. From 1990-2000, each year on an average, about 4344 people died and about 30 million people were affected in other ways by disasters.

Seventy five percent of the annual rainfall is received during June to September monsoon. As a consequence, almost all rivers contain heavy discharge of water during this time. Problems of sediment deposition, drainage congestion and synchronization of river floods with sea tides in the coastal plains, has made the problem of floods even worse in the country. Agricultural communities tend to suffer the most.

A drought, on the other hand, is the fall in water or moisture content significantly below the normal or expected amount for a temporary period. A drought occurs as a result of inadequate rainfall, a lack of irrigation facilities etc. Rajasthan is the most drought prone state of India.

The East Coast has been especially prone to cyclones although the West Coast doesn't remain entirely unsusceptible. October and November are the months when more than half the storms developing in the Bay of Bengal or cross the east coast.

As far as earthquakes are concerned, the Himalayan and sub-Himalayan regions, Kutch and the Andaman and Nicobar Islands are particularly prone.

Hazards in India are widespread throughout the country, and while one part could be suffering from a heat wave, another part there could be experiencing a severe cold spell. Geological conditions make several regions in India highly susceptible.

3) Governmental & Law-making structure

The Government of India (GoI) was established by the Indian Constitution. It is the central authority responsible for governing twenty eight states and seven union territories (UTs).

The government works on the basis of a division of powers between the executive, the legislative and the judiciary. The President, or the head of the state, heads the executive branch. The legislature or the Parliament is bicameral in nature and consists of a lower house, the *Lok Sabha* and the upper house, the *Rajya Sabha*. The judicial branch has the Supreme Court as the apex court, under which there are 21 High Courts and a number of lower level civil, criminal and family courts located at the district level. Such a division of powers is followed at the state level also. Together with state governments, the central government forms part of the federal framework of governance that is followed in India. By the 73rd and 74th amendments to the constitution, a system of local governance at the district and municipal level was institutionalized.

Being a federal country, laws in India can be made at the state level as well as the central level. Which one of the two governments is responsible for legislating on a particular subject is governed by the three lists - the Union List, the State List, and the Concurrent List- provided in the Seventh Schedule of the Constitution of India. The Constitution elaborates further on when the Central Government can decide to legislate on a matter, for instance during an emergency.

The legislative procedure in India for the Central Government requires the proposed law to be passed by the two houses of the Central Legislature. Similarly, the procedure for the states necessitates passing of a bill by the State *Vidhan Sabha* (Lower House) and State *Vidhan Parishad* (Upper House), if this exists in the state.

4) Detailed Table of DRR Legislation Based on the Research Questions

1. Background information 14

2. Institutional frameworks, resourcing and community participation in DRR: 16

 Part One. Disaster Management Law & Institutions..... 16

 A. Disaster Management Institutions 16

 B. Hyogo Framework for Action & Climate Change Institutions..... 22

 C. DRR priority and resource allocation in government 23

 Part Two. Responsibility, accountability and liability for natural disaster risk reduction 24

 A. Constitutional Rights & Guarantees for the Population 24

 B. Liability & Insurance..... 26

3. Early warning and reduction of underlying risk factors through regulation 28

 Part One. Rapid-onset disasters, sectoral and specific regulation based on identified risks and community participation 28

 A. Cyclones, tornadoes, or storms? 28

 B. Earthquake/Tsunami? 32

 C. Fire?..... 37

 D. Floods? 39

 E. Heat/cold waves?..... 43

 F. Insect Infestations? 45

 G. Landslides and avalanches? 47

H.	Volcanoes?	50
Part Two.	Slow-onset disasters, sectoral and specific regulation based on risks and community participation	52
I.	Drought and related famine?.....	52
J.	Other food security risks?	54
Part Three.	Early Warning, Hazard Mapping and Risk Information.....	56
A.	Early Warning.....	56
B.	Risk identification, assessment and monitoring.....	60
Part Four.	Regulation of the Built Environment	61
A.	Building Codes.....	61
B.	Land Use Planning Laws.....	67
C.	Land tenure.....	70
D.	Informal and precarious settlements.....	72
E.	Urban Water and Flood Management.....	78
Part Five.	Regulation of the Natural & Rural Environment.....	79
A.	Human Risks in Environmental Change	79
B.	Forests.....	81
C.	Rivers and watercourses.....	82
D.	Drought and food security	83
4.	Information management and exchange, community level DRR education & awareness	84

1. Background information

Using secondary and legal sources, identify and describe briefly in the table below the governmental structure of the subject country to assist readers understand how the different levels of law and regulation relate to each other.

1. BACKGROUND INFORMATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
Identify laws that indicate the structure of government, including the number of levels of government and the extent of decentralisation of governmental functions, such as: constitutional framework for different levels of government (e.g. national/provincial/local), and specific laws on decentralisation.			
1. How many levels of government are there, and what are they called? How many administrative areas are there (e.g. provinces, local government areas)?	Constitution of India		Centre, state, local. Local government includes <i>panchayats</i> (local administration by five locally elected citizens), and municipalities.
2. Is there a separate law on decentralisation of government functions? How does it decentralise? For example, does it establish new institutions or delegate powers to provincial/local government?	Constitution of India	Part XI	India being a federal country, powers are distributed between the union and the states. Part XI of the constitution elaborates on the relationship between the two. Article 246 enumerates the legislative powers of the central parliament and the state legislatures as per the 3 different lists mentioned in the Seventh Schedule of the Constitution. These 3 lists are the Union List, the State List and the Concurrent List. The national parliament can legislate with respect to a matter under the State List a) in the national interest(Art. 249) or b) if a proclamation of emergency is in force (Art. 250).
	The Constitution, (73rd and 74th Amendment Act), 1992.	Part IX and Part IXA. 11th and	The 73rd and 74th Amendments to the Constitution formally recognised a third tier of government at the sub-state level, thereby creating the legal conditions for local self-rule – or Panchayati Raj in rural areas and Municipalities in urban and sub-urban areas. The 11th and 12th schedules delineate the powers of Panchayats

1. BACKGROUND INFORMATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
		12th Schedules.	and Municipalities respectively.
3. Looking at the Constitution and/or decentralisation law, is there any mention of allocation of responsibility at the different levels for reducing risks related to natural disasters?			The subject of disaster management does not find mention in any of the three lists in the Seventh Schedule of the Indian Constitution. However, there is scope to encourage local governments to take up DRR activities if DRR is viewed not as a standalone subject but as a larger development issue.
4. Is this country a member of any regional organisation(s) that make(s) regulations or agreements or issues guidelines for member states that could impact on disaster management or risk reduction? Is so, please name the organisation(s).			Yes. <ul style="list-style-type: none"> - South Asian Association for Regional Cooperation (SAARC): A SAARC Disaster Management Centre (SDMC) was established in New Delhi. SDMC has undertaken the work of knowledge and information dissemination among the SAARC countries and has set up the SAARC Disaster Knowledge Network. - Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is considering making disaster management one of its key areas of cooperation. - Hyogo Framework for Action 2005

2. Institutional frameworks, resourcing and community participation in DRR:

The aim is to identify laws that establish the governmental institutions and structures relevant to DRR, and which set out their mandates, and resource allocation mechanisms, including the extent of involvement of communities and civil society. These may include specialist disaster management institutions, bodies established to implement the Hyogo Framework for Action, or authorities charged with planning for adaptation to climate change, as well as government bodies responsible for planning and oversight, public administration at all levels, land use planning, building controls, environmental management, and telecommunications. However, to avoid repetition, the sectoral institutions are not included in this question but are part of the data requested in the section on reducing underlying risks.

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
Part One. Disaster Management Law & Institutions			
The key question in relation to DM laws is whether they exist and, if so, the extent to which they incorporate longer term disaster risk reduction, as well as prevention. Issues for investigation include: progress in the development of comprehensive DM legislation (at national level, provincial and local levels), what, if any, elements of existing DM laws and regulations relate to risk reduction and prevention for natural disasters; and whether there is a specified DM role for communities, civil society and the National Red Cross or Red Crescent Society (especially in recognition of its auxiliary status in humanitarian response).			
A. Disaster Management Institutions			
5. Is there a national disaster management (DM) or civil protection law or regulation? - or a group of regulations? Describe.	Disaster Management Act, 2005		Yes. The Disaster Management Act aims to legislate for the effective management of disasters and for matters connected therewith.
6. Is there also a national disaster management policy? Is this established by a law? Provide details.	Disaster Management Policy, 2009		Yes. The Disaster Management Policy of India was framed on the basis of the Disaster Management Act, in 2009. The National Disaster Management Authority established by the DM Act was held responsible for coordinating the enforcement and implementation of the policy and plan for disaster management as per Article 6 of the DM Act.

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
7. Is the DM law a national law applicable throughout the territory of the subject country? If so, does it establish an integrated national system with elements at provincial, local and/or community level?	Disaster Management Act, 2005	Article 1 (2)	Yes. The Law extends to the whole of India. The law tries to establish an integrated national system by providing for the establishment of DM institutions at the national, state and district levels.
8. Are there separate provincial or local DM laws? Are these connected with the national DM law in any way? e.g., is there a hierarchy of laws between them, or a common institutional structure?			Many states have their own, separate disaster management laws. Examples include the Bihar Disaster Management Act, 2004; Uttaranchal Disaster Mitigation, Management and Prevention Act, 2005; the Gujarat State Disaster Management Act, 2003 and the Uttar Pradesh Disaster Management Act, 2005. The subject of disaster management is not mentioned in the state, the union or the concurrent list. Such a subject usually comes under the residuary powers of the Union under entry 97 of the Union List. One view, therefore, holds that the Parliament has the competence to legislate on this subject. However, by practice and convention, State governments have been primarily responsible for managing disasters. The Union government, however, plays a key role by aiding in provision of physical and financial resources as well as by providing complementary measures such as early warning and co-ordination of efforts of all Union ministries, departments and organizations.
9. Does the DM or other law establish one or more specialist DM institutions? What are they (i.e. what are their names and what type of body are they) and what are their mandates?	Disaster Management Act, 2005		Yes. Firstly, the act provides for the establishment of the National Disaster Management Authority (NDMA) with the Prime Minister as Chairman. The NDMA has responsibility for laying down the policies, plans and guidelines for disaster management for ensuring timely and effective response to disaster. (Chapter II, Article 3) The Act also provides for the constitution of the National Executive Committee to assist the National Authority in the performance of its

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>functions. (Chapter II, Article 8)</p> <p>Chapter III elaborates on the State Disaster Management Authorities headed by the respective Chief Ministers, to spearhead and implement a holistic and integrated approach to disaster management in India. (Chapter III, Article 14)</p> <p>Chapter IV makes provisions for the setting up of District Disaster Management Authorities (DDMA). (Chapter IV Article 25)</p> <p>The act also provides for creation of National Institute of Disaster Management to train; carry out research and support policy formulation. (Chap. VII, Article 42)</p> <p>The National Disaster Response Force (NDRF) has been constituted under the DM Act by up-gradation/conversion of eight standard battalions of Central Para Military Forces i.e. to build them up as a specialist force to respond to disaster or disaster like situations. (Chapter VIII, Article 44)</p> <p>Additionally, the Institutional Arrangements that existed even before the passing of this Act include: Cabinet Committee on Management of Natural Calamities (CCMNC), Cabinet Committee on Security, High-Level Committee (HLC), National Crisis Management Committee (NCMC)</p>
10. Does the DM policy use the same or different implementing institutions from the DM law? Describe.	Disaster Management Policy, 2009		It uses the same implementing institutions.
11. Does the DM law or other law deal	Disaster Management		a. Yes. Article 2(e) defines "disaster management" as inclusive of

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
with: a. Disaster response ¹ ? b. Disaster preparedness ² ? c. Disaster mitigation ³ and prevention ⁴ ? d. Disaster risk reduction ⁵ (DRR)? e. If it includes DRR, how is it defined? (include definition)	Act, 2005		<p>measures to promptly respond to any threatening disaster situation Article 44 provides for the constitution of a National Disaster Response Force and Article 46 provides for the creation of a National Disaster Response Fund.</p> <p>b. Yes. Article 2(e) defines disaster management as including disaster preparedness.</p> <p>c. Yes. Article 2(e)(1) and Article 2(e)(2) include prevention and mitigation as part of disaster management. Article 11(3) elaborating on the National Plan provides for mitigation and prevention. Article 47 accounts for the creation of a National Disaster Mitigation Fund. The Tenth Five Year Plan emphasizes the fact that development cannot be sustainable without mitigation being built into developmental process .</p> <p>d. No</p>

¹ “The provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.”

² “The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions.”

³ “The lessening or limitation of the adverse impacts of hazards and related disasters.”

⁴ “The outright avoidance of adverse impacts of hazards and related disasters.”

⁵ “The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.”

Note: These definitions are taken from the 2009 UNISDR Terminology on Disaster Risk Reduction, obtained here: <http://www.unisdr.org/we/inform/terminology>.

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			e. Not Applicable
12. Does the DM law (or any other law) or policy allocate DRR responsibilities in one or more government ministries? If so, which ministries? Describe their allocated roles.	Disaster Management Act, 2005	Article 36, 37 DM Policy	DRR responsibilities are not assigned per say. However, Disaster Management responsibilities are allocated to all ministries. Initially, the Department of Agriculture and Cooperation had the nodal responsibility for managing disasters. After the Gujarat earthquake in 2001, this responsibility was shifted to the Ministry of Home Affairs. Due of the technical nature of certain disasters, the ministries that are responsible for dealing with the specific subject become gain nodal responsibility for that type of disaster.
13. Does the DM law or policy prescribe a role in DM institutions for civil society? If so, how defined and what is the role? At what levels? a. National? b. Provincial/state? c. Municipal/local?	Disaster Management Act, 2005		Coordination and encouragement efforts with civil society are to be made by different levels of government but no specific, defined role. Sections 38 (2)(a), 22(2)(j) and 30(2)(xix) of the Act mandate State Governments, SECs of SDMA and DDMA for collaboration with stakeholder agencies including NGOs for the purpose of improving the effectiveness of DM. The Act also mandates NGOs to act in an equitable and non-discriminatory manner while assisting or protecting the disaster affected communities. As per sections 24(j) and 34 (l), the responsibility to monitor this falls upon the SEC and DDMA of the State.
14. Does the DM law or policy prescribe a role in DM institutions for the National Red Cross or Red Crescent Society? If so, how defined and what is the role? At what levels? a. National? b. Provincial/state?			No

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
c. Municipal/local?			
15. Is there any provision in the DM law or policy to ensure that women have a role and a voice in the DM institutions? If so, how is this regulated or encouraged by law? At what levels does the law provide for women's participation in DM institutions? a. National? b. Provincial/state? c. Municipal/local?			No
16. Does the DM law or policy prescribe a role in DM institutions for communities? If so, how defined and what is the role? Does it specify any mechanisms to ensure a voice for all elements of the community in DRR, e.g. a. Women? b. Different cultural or ethnic groups? c. Vulnerable groups, including children, older persons, persons with disabilities? d. Socially isolated groups and the very poorest people?	Disaster Management Policy, 2009 Disaster Management Act, 2005	Section 2.3.1 Article 22(i)	Section 2.3.1 of the DM Policy puts forth that a holistic and integrated approach is to be taken towards disaster management. Further it provides that the themes underpinning the policy include community based DM, including last mile integration of the policy, plans and execution. Article 22(i) of the Act which elaborates on the functions of the State Executive Committees provides that SECs must promote general education, awareness and community training. However, not much emphasis is laid on ensuring participation of community members or on defining a specific role for different members of the community.
17. Describe the main differences in the scope of the DM law and the DM policy concerning prevention and			The law itself provides for the creation of policy by the NDMA. As a result, there are no significant differences between the two.

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
disaster risk reduction.			
18. Does the DM law or policy, or other legislation, provide for oversight mechanisms on DRR implementation, including reporting and/ or parliamentary oversight?			No
B. Hyogo Framework for Action & Climate Change Institutions			
19. Does legislation establish any institutions (including committees), or allocate to an existing body, implementation of the Hyogo Framework for Action? What institutions? What are their designated roles in DRR?			<p>For the purpose of implementing the Hyogo framework's activities, a working group under the chairmanship of Joint Secretary (DM), MHA was established. The group comprises representatives from Ministries of Rural Development, Panchayati Raj, Urban Development, Health and Family Welfare, Environment and Forests, Women and Child Development, Earth Sciences, Science and Technology and also from Planning Commission, NIDM and NDMA. The responsibilities are designated as follows:</p> <ul style="list-style-type: none"> • Priority Action 1: Ministry of Panchayati Raj, NIDM for human resources, Planning Commission for financial resources, DM Division of MHA. • Priority Action 2: National Remote Sensing Agency, Central Water Commission, India Meteorological Department, Geological Survey of India, DM Division of MHA. • Priority Action 3: NIDM, DM Division of MHA, CBSE, NCERT, other research organizations, NDMA, Ministry of Health, HRD, and • Priority Action 4: Ministry of Environment and Forest, Rural Development, Science and Technology, Health and Family Welfare, Urban Development, Planning Commission, DM Division of MHA, NIDM and NDMA. • Priority Action 5: DM Division of MHA.

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
20. Does legislation establish any institutions (including committees), or allocate to an existing body, planning and implementation for adaptation to climate change? What institutions? What are their designated roles in DRR?			India does not as of yet have a comprehensive law to deal with climate change. There do, however, exist various environmental laws in India. Many policies have been advanced under the aegis of existing environmental and other sectoral legislations so as to tackle the climate change
21. Do the implementation mechanisms for the Hyogo Framework, climate change adaptation and DM institutions intersect? If so, how? Are their mandates complementary or do they overlap? Describe.			Yes.
C. DRR priority and resource allocation in government			
22. Does the budgetary process provide for any dedicated budget line items for DRR and/or minimum percentages for DRR expenditure by government institutions? If so, is there a budget allocated to DRR at national level? How is this prescribed?	Disaster Management Act, 2005	Chapter IX	Chapter IX of the DM Act elaborates on finance, accounts and audits. It provides for the creation of a National Disaster Response Fund (Article 46), National Disaster Mitigation Fund (Article 47), State Funds (Article 48), the allocation of funds by ministries and departments (Article 49), and elaborates on emergency procurement and accounting (Article 50). The Government of India created the National Disaster Response Fund and State Disaster Response Fund as per the provisions of the DM Act in 2010. The Finance Commission (a statutory body constituted to define financial relations between the Centre and the States) is appointed by the GoI every five years and is responsible for reviewing the policy and funding mechanisms for DM. A Calamity Relief Fund (CRF) has been set up in each State as per the recommendations of the Eleventh Finance Commission. If funds from the CRF prove to be insufficient during a calamity, then States can seek assistance from the National

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			Calamity Contingency Fund (NCCF), created at the Central Government level.
23. Is there a budget allocated to DRR at provincial/state level (if relevant)? How is this prescribed?			Refer to Q. 22
24. Is there a budget allocated to DRR at municipal or local level? How is this prescribed?			Refer to Q. 22
Part Two. Responsibility, accountability and liability for natural disaster risk reduction			
The aim is to identify relevant constitutional or other guarantees that may underpin government responsibility, liability and affected persons' rights to compensation. These may include rights to: safety /life; not to be discriminated against; protection of livelihoods; health; compensation; and to information relevant to DRR. One specific issue on the question of liability, is whether governments are liable for failure to prevent natural disasters affecting the population, including for failure to warn, or for making an erroneous warning. A second, related, issue is whether private individuals are liable for damage caused to others from their property during natural disasters, or for faulty advice/warnings given. A third element is whether there is any system of compulsory insurance against the effects of natural disasters.			
A. Constitutional Rights & Guarantees for the Population			
25. Are there any guarantees in the constitution or another law relating to individual or collective rights that may underpin government responsibility or liability, and affected persons' rights to compensation for damage from natural disasters? If so, do these relate to: a. DRR in general? b. Safety /Life c. Right to Food? d. Right to adequate shelter or	Constitution of India		a. No. b. Yes. (Chapter III, Article 21) c. There is no mention of a right to food in the constitution. However attempts have been made to have article 21 encompass the right to food in various court judgments. Article 47 of the Directive Principles of State Policy (Chapter IV) directs the state to "regard the raising of the level of nutrition and the standard of living of its people...as among its primary duties," d. Not specifically but some judgements have encompassed it

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>housing?</p> <p>e. Non-discrimination, (and other relevant civil and political rights)?</p> <p>f. Livelihoods, Health (and other economic, social and cultural rights)?</p> <p>g. Compensation for losses due to natural disasters?</p> <p>h. Information?</p>			<p>under Right to Life as per article 21.</p> <p>e. Yes. Equality before law (Chapter III, Article 14)</p> <p>f. The directive principles under part III of the Constitution cover some social and economic rights. Although these are supposed to be non-justiciable, they have been used to help support arguments to cover these rights under article 21</p> <p>g. No. However, in the Maneka Gandhi Case, the Supreme Court put forth that the state is obliged to preserve and protect human life under article 21, including the right to live without the deleterious invasion of pollution, environmental degradation and ecological imbalances i. Several judgements now point towards the fact that the right to rescue, relief and rehabilitation is a fundamental right.</p> <p>h. No. However, certain judgements have encompassed it under Article 19(1) which is the Right to Freedom of Expression which is not possible unless all information is available.</p>
<p>26. Do the above constitutional or other guarantees give residents any personal right of action against the state if the government breaches these rights? E.g. access to a constitutional court, or a claim in a human rights court or tribunal? If so, explain how the law enables this to occur, and who has the right to make</p>			<p>No information was provided.</p>

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>such claim. E.g.</p> <p>a. Is it an individual or a collective right?</p> <p>b. Can claimants represent themselves?</p> <p>c. Are there costs that mean the poorest people cannot access the remedy?</p> <p>d. Are there financial limitations on any such claims (minimum or maximum)?</p>			
B. Liability & Insurance			
27. Does legislation (including case law, where applicable) make government agencies liable for failure to prevent natural disasters affecting the population?	Disaster Management Act, 2005	Chapter X article 56	No While there is no liability for failure to prevent disasters from affecting the population, Article 56 of the DM act provides that if an officer fails to perform his duty as per the provisions of this Act shall be made punishable unless he had obtained the express written permission of his official superior or had another lawful excuse for it.
28. Are government agencies liable for failure to warn or for making an erroneous warning of natural disaster? If so, what kind of liability? – civil, criminal or both? If so, what are the legal mechanisms for injured parties to seek redress? Are these individual or collective actions, or both?	Disaster Management Act, 2005	Chapter X article 55	Article 55 describes the liability for offences made by departments of the government, erroneous warning being one such offence. However, government agencies have legal immunity in these cases as per article 74.
29. Do government agencies that fail to warn or make an erroneous warning	Disaster Management Act, 2005	Article 74	Yes. Article 47 elaborates on the Immunity from legal process. and puts forth that "officers and employees of the Central Government,

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
have legal immunity? If governments have immunity from liability, how extensive is this and/or how and where in law is it defined? Does it apply to all levels of government?			National Authority, National Executive Committee, State Government, State Authority, State Executive Committee or District Authority shall be immune from legal process in regard to any warning in respect of any impending disaster communicated or disseminated by them in their official capacity or any action taken or direction issued by them in pursuance of such communication or dissemination."
30. Are private persons (individual or corporate) liable for faulty disaster-related advice or warnings given? Does this apply to volunteers? If so, what kind of liability? – civil, criminal or both? If so, what are the legal mechanisms for injured parties to seek redress? Are these individual or collective actions, or both?	Disaster Management Act, 2005	Chapter X article 54, 58	Article 54 puts forth the punishment for false warning providing that anyone who makes or circulates a false alarm or warning as to disaster or its severity or magnitude, leading to panic will be punishable by law. Article 58. elaborates on liability for offences under this act by companies. False warning is one such offence for which corporations too can be held accountable. However, no mention is made of volunteers.
31. Are private persons (individual or corporate) liable for damage caused to others from their property during natural disasters? If so, what kind of liability? – civil, criminal or both? If so, what are the legal mechanisms for injured parties to seek redress? Are these individual or collective actions, or both?			No
32. Is there any system of compulsory insurance against the effects of natural disasters? If so, how is this established by law and what are the main elements of the scheme?			No

3. Early warning and reduction of underlying risk factors through regulation

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>Parts One and Two: Are there laws or regulations relating to preparedness, prevention and/ or risk reduction against the following specific natural hazards (if relevant)? Such regulations may include some specific laws on rapid-onset disasters – Part One – such as fire regulations and fire service, as well as building codes (e.g. earthquake, fire, hurricanes/cyclones), land zoning and land use planning regulations (e.g. flood plain exclusions, unstable land) , disaster management / civil protection laws, and environmental management laws concerning rivers and forests (flood mitigation, erosion prevention against landslides and floods). There may be similar or a different range of laws concerning slow-onset disasters such as drought and other food security issues – Part Two. There may therefore be some overlap with the subsequent sections, but the main aim of Parts One and Two of this section is to identify which risks have separate regulation in the subject country, and in which laws.</p>			
Part One. Rapid-onset disasters, sectoral and specific regulation based on identified risks and community participation			
A. Cyclones, tornadoes, or storms?			
33. Is there a specific law about this hazard (i.e. not the main DM law)? If so, describe the form of regulation to reduce the impact of this risk (if any), and institutional responsibility. At what level(s) of government is this regulated?	NDMA Guidelines for the Management of Cyclones, 2008		<p>The NDMA has prepared Guidelines for the Management of Cyclones to assist ministries and departments of GoI and state governments to prepare their DM plans. These guidelines are advisory in nature. Although they have been implemented by a national authority, their motive is to assist state governments take action against this calamity.</p> <p>Under the existing legislative framework, the National Cyclone Risk Mitigation Project (NCRMP) has been launched by MHA in the cyclone prone coastal states and Union Territories, keeping in view the vulnerability of the states and their readiness with investment proposals. The NDMA has been designated as the implementing agency. The scheme is regularly monitored by NDMA and MHA</p>
34. Does this law specify how management of this risk is financed? If so, describe.	NDMA Guidelines for the Management of Cyclones, 2008	Section 9.5.3	<p>Yes. "The sources of funding for all cyclone DM plan related activities will be as follows:</p> <p>(i) Annual Plan/Budget: for mainstreaming cyclone DM plans into</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			developmental plans of respective ministries/departments at the centre and state governments (ii) Centrally Sponsored/Central Sector Schemes. (iii) National Mitigation Projects by NDMA and other specific projects either by the central government or state governments; funded internally/externally. (iv) Public-Private Partnership."
35. Does this law attribute liability for damage caused by: a. failure to warn, or false or faulty warnings of this risk? b. failure to take preventive action including by reducing this risk? c. If so, who may be liable - or immune? d. Is it civil or criminal liability, or both?	NDMA Guidelines for the Management of Cyclones, 2008		No

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
36. Does this law regulate the collection and distribution of information on hazards and risks (risk mapping) in relation to this risk? If so, what authority is responsible and what is their mandate?	NDMA Guidelines for the Management of Cyclones, 2008		<p>These guidelines encourage the establishment of a comprehensive Cyclone Disaster Management Information System (CDMIS) covering all phases of DM.</p> <p>The Indian Meteorological Department (IMD) is the nodal agency for providing cyclone warning services. Area Cyclone Warning Centres (ACWC) of IMD generate these special warning bulletins and transmit them every hour in the local languages.</p> <p>The Ministry of Home Affairs (MHA) is the focal point at the national level and it coordinates appropriate dissemination of warnings received from IMD, Central Water Commission (CWC), etc.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>37. Does this law provide for consultation and/or participation about risk mapping, Early Warning or general DRR regarding this risk by affected or at-risk communities? How? If so, does it provide for participation or a voice for all parts of those communities, including:</p> <p>a. Women?</p> <p>b. Different cultural or ethnic groups?</p> <p>c. Vulnerable groups, including children, older persons, persons with disabilities?</p> <p>d. Socially isolated groups and the very poorest people?</p>	<p>NDMA Guidelines for the Management of Cyclones, 2008</p>	<p>Section 6.4.3</p> <p>Section 6.4.3</p> <p>Section 6.4.7</p>	<p>Section 6.4.3 provides that the "planning for DM should enlist horizontal partnership of the community which has to be sought through well recognised techniques like participatory rural appraisal, focused group discussions, etc., involvement of ULBs and PRIs, NGOs, SHGs and all CBOs and, most importantly, the vulnerable groups which are most likely to be affected." It further goes on to say that historical knowledge of past disasters and traditional coping skills need to be taken into account in the preparation of plans at various levels.</p> <p>Section 6.4.4 provides for the capacity-building of stakeholders. Section 6.4.7 encourages volunteerism from within the community.</p> <p>a. No</p> <p>b. No</p> <p>c. Yes</p> <p>d. No</p>
<p>38. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?</p>	<p>NDMA Guidelines for the Management of Cyclones, 2008</p>	<p>Chapter II</p>	<p>Chapter II of the guidelines elaborates on early Warning Systems. At the moment the India Meteorological Department (IMD) is responsible for early warnings related to Cyclones. While multi-lingual warning dissemination is encouraged to facilitate a community based disaster response, no mention is made of community involvement in EWS.</p> <p>However, the NCRMP emphasizes the strengthening of community capacity in maintaining and operating the EWS as well as</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			community mobilization during an emergency.
<p>39. If communities are involved in Early Warning Systems (EWS), does this law provide that they:</p> <p>a. Assist in the design of local and community EWS?</p> <p>b. Establish or maintain EWS?</p> <p>c. Provide information for the EWS?</p> <p>d. Have direct and timely access to relevant warnings and data on emerging risks (e.g. telephone, radio or internet access to meteorological or seismological data and analysis)?</p>	<p>NDMA Guidelines for the Management of Cyclones, 2008</p>		<p>a. No.</p> <p>b. The guidelines say nothing about this. The operation manual for the NCRMP however, encourages community participation in EWS.</p> <p>c. No</p> <p>d. Yes</p>
B. Earthquake/Tsunami?			
<p>40. Is there a specific law about this hazard (i.e. not the main DM law)? If so, describe the form of regulation to reduce the impact of this risk (if any), and institutional responsibility. At what level(s) of government is this regulated?</p>	<p>NDMA Guidelines for Management of Earthquakes, 2007</p> <p>NDMA Guidelines for Management of Tsunamis, 2010</p>		<p>National Disaster Management Guidelines have been developed for the Management of Earthquakes. These are advisory in nature.</p> <p>There also exists the National Core Group for Earthquake Risk Mitigation. Additionally, the National Earthquake Risk Mitigation Project has been initiated by the GoI.</p> <p>For the management of Tsunamis too, the NDMA has published a set of guidelines that aim to assist all stakeholders and to guide relevant ministries and departments of the national and state governments, in the preparation of their DM Plans. These too are advisory in nature.</p>
<p>41. Does this law specify how management of this risk is financed? If so, describe.</p>	<p>NDMA Guidelines for Management of Earthquakes, 2007</p>	<p>Section 1.9</p>	<p>Section 1.9.1 requires central ministries, departments and state governments to prepare DM plans in accordance with the guidelines to improve earthquake preparedness, mitigation and</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>emergency response. As per section 1.9.2, the DM plans are to be funded by resources gathered as a result of the “efforts of central and state governments to mainstream DM concerns into developmental programmes such as the Jawaharlal Nehru National Urban Renewal Mission (JNNURM); from allocations to be made by various central governments/departments and state governments in their five-year/annual plans; and from resources available in prevailing response/mitigation funds at various levels, as well as from specially undertaken mitigation projects like the proposed National Earthquake Mitigation Project, the Urban Earthquake Vulnerability Reduction Project (UEVRP), etc.</p> <p>Additional resources may also be mobilised for specific activities as part of Public Private Partnership (PPP) efforts or, from other sources of funding wherever necessary.”</p>
	NDMA Guidelines for Management of Tsunamis, 2010	Section 7.7.3	As per section 7.7.3, the sources of funding for the management of Tsunamis will be the same as above.
<p>42. Does this law attribute liability for damage caused by:</p> <ol style="list-style-type: none"> failure to warn, or false or faulty warnings of this risk? failure to take preventive action including by reducing this risk? If so, who may be liable - or immune? Is it civil or criminal liability, or both? 			No. The guidelines have been prepared to provide assistance to all stakeholders in their disaster management activities and attribute no legal liability for carrying them out.
43. Does this law regulate the collection	NDMA Guidelines for	Executive	The Executive summary of the guidelines provides that

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
and distribution of information on hazards and risks (risk mapping) in relation to this risk? If so, what authority is responsible and what is their mandate?	Management of Earthquakes, 2007	Summary	vulnerability mapping of earthquake-prone areas and the creation of an inventory of resources for effective response will be on the agenda of central ministries and departments and state governments, as well as other key stakeholders and nodal agencies concerned as parallel processes.
		Section 7.5	Section 7.5.2 puts forth that the Ministry of Earth Sciences (MoES) with the aid of the Earthquake Risk Evaluation Centre (EREC) will “encourage the development of standardised methods for earthquake risk assessment and scenario development, support studies to collect the data and knowledge required, develop state-of-the-art reports, and evolve a procedure for undertaking pilot projects in risk assessment and scenario analysis” Section 7.5.5 states that the MoES in collaboration with nodal scientific agencies and institutions, will ensure the preparation of large-scale landslide hazard maps of areas of high vulnerability.
	NDMA Guidelines for management of Tsunamis, 2010	Section 3.2	Section 3.2.1 provides for the establishment of a vulnerability and risk assessment project.
	Section 2.4.1	In general, the Indian National Centre for Ocean Information Services (INCOIS), inaugurated by the MoES in October 2007, is the nodal agency for monitoring Tsunamis in India and for collecting and providing information on them on the basis of predictive models created through their network of observatories. The guidelines provide that a vulnerability assessment of natural and built environment due to tsunami impact should be done for shores and harbours by the MoES.	

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>44. Does this law provide for consultation and/or participation about risk mapping, early warning or general DRR regarding this risk by affected or at-risk communities? How? If so, does it provide for participation or a voice for all parts of those communities, including:</p> <p>a. Women?</p> <p>b. Different cultural or ethnic groups?</p> <p>c. Vulnerable groups, including children, older persons, persons with disabilities?</p> <p>d. Socially isolated groups and the very poorest people?</p>	<p>NDMA Guidelines for Management of Earthquakes, 2007</p>	<p>Section 1.8</p>	<p>Section 1.8.1 explains that the Risk Management (RM) framework, on which the guidelines are based, places communities at the centre, providing a constant interface between the community at risk and other stakeholders. Therefore, a consultative and participatory is emphasized. Further, section 1.8.4 puts forth that the role of community participation in DM is critical for the long-term sustainability of the endeavours made.</p> <p>a. Yes. Section 7.2.1 provides that as part of capacity development, specially designed public awareness programmes will be developed for addressing the needs of women.</p> <p>b. No</p> <p>c. Yes. Section 7.2.1 emphasizes the need for development of public awareness programmes for the physically handicapped, the mentally challenged people, and the elderly</p> <p>d. No specific mention of these groups.</p>
	<p>NDMA Guidelines for Management of Tsunamis, 2010</p>	<p>Section 1.4</p>	<p>Section 1.4, which speaks about the lessons to be learnt from the past emphasized the need for community involvement in the management of Tsunamis.</p> <p>Section 1.4.2: "The traditional and indigenous knowledge of coastal communities about patterns of tsunami...will be documented and shared with</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>tsunami-prone coastal communities.” Further in section 1.4, emphasis is laid on the generation of public awareness and dissemination of knowledge to communities about areas likely to be inundated, possible evacuation areas, designated evacuation routes and safe regions etc.</p> <p>a. Yes. The target group for capacity building includes women. (Section 3.13.11)</p> <p>b. No.</p> <p>c. Yes, as a target group for capacity development. (3.13.11)</p> <p>d. No mention of them.</p>
45. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?	<p>NDMA Guidelines for Management of Earthquakes, 2007</p> <p>NDMA Guidelines for the Management of Tsunamis. 2010</p>	<p>Section 1.5.1</p> <p>Chapter II</p>	<p>The guidelines only briefly bring up the fact that the MoES is the nodal ministry for managing early warning networks and for the dissemination of these early warning messages to all stakeholder groups concerned. No specific mention of communities is made in this regard.</p> <p>Chapter II of NDMA guidelines on Tsunami Preparedness deals with several aspects of Early Warning Systems, the current scenario as well as the improvements required.</p> <p>Section 3.11.1 puts forth that SDMAs and DDMAAs should conduct repeated public awareness campaigns for making communities in coastal areas familiar with the tsunami early warning mechanisms through workshops, drills and exercises, screening of video films, distribution of information resources, posters etc.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>46. If communities are involved in EWS, does this law provide that they:</p> <p>a. Assist in the design of local and community EWS?</p> <p>b. Establish or maintain EWS?</p> <p>c. Provide information for the EWS?</p> <p>d. Have direct and timely access to relevant warnings and data on emerging risks (e.g. telephone, radio or internet access to meteorological or seismological data and analysis)?</p>	<p>NDMA Guidelines for Management of Earthquakes, 2007</p> <p>NDMA Guidelines for the Management of Tsunamis. 2010</p>		<p>Earthquakes:</p> <p>a. No</p> <p>b. No</p> <p>c. No</p> <p>d. No</p> <p>Tsunamis:</p> <p>a. No</p> <p>b. No</p> <p>c. No.</p> <p>d. Yes</p>
C. Fire?			
<p>47. Is there a specific law about this hazard (i.e. not the main DM law)? If so, describe the form of regulation to reduce the impact of this risk (if any), and institutional responsibility. At what level(s) of government is this regulated?</p>	<p>NDMA guidelines on scaling, type of equipment and training of fire services, 2012</p>	<p>Section 3.2.1</p>	<p>Fire services in India come under the 12th schedule of the Constitution under the provisions of Article 243W of the Constitution. The responsibility, therefore, falls upon the municipalities to perform these duties. At the moment, fire prevention services are provided by states, Union Territories (UTs) and ULBs.</p> <p>However, the NDMA has published guidelines on scaling, type of equipment and training of fire services as per its duties under Section 6 of the DM Act 2005. These guidelines aim to provide standardization and revamping of the fire services in India.</p> <p>Section 3.2.1 of the guidelines provides that every state needs to enact its own Fire Act so that fire vulnerabilities can be reduced. For this purpose, the Gol had prepared a draft model Fire Bill and circulated to all the states in 1958. The guidelines encourage those states which have not enacted their own Fire Act to implement</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			them.
48. Does this law specify how management of this risk is financed? If so, describe.	NDMA guidelines on scaling, type of equipment and training of fire services, 2012	Section 3.13.3	Section 3.13.3 specifies that funds for the improvement of fire prevention and fire fighting services should come from a twin pronged approach with the Planning Commission and the 13th Finance commission of India.
49. Does this law attribute liability for damage caused by: a. failure to warn, or false or faulty warnings of this risk? b. failure to take preventive action including by reducing this risk? c. If so, who may be liable - or immune? d. Is it civil or criminal liability, or both?			No
50. Does this law regulate the collection and distribution of information on hazards and risks (risk mapping) in relation to this risk? If so, what authority is responsible and what is their mandate?	NDMA guidelines on scaling, type of equipment and training of fire services, 2012	Chapter 5	Chapter 5 on the Mitigation Plan provides that a Fire hazard response and mitigation plan should be established by ULBs, a major component of which will be risk analysis. For this purpose the local bodies can draw expertise from state level fire agencies as well as the NDMA.
51. Does this law provide for consultation and/or participation about risk mapping, early warning or general DRR regarding this risk by affected or at-risk communities? How? If so, does it provide for participation or a voice for all parts of those communities, including: a. Women?	NDMA guidelines on scaling, type of equipment and training of fire services, 2012	Section 3.11	Section 3.11 elaborates on community participation to help deal with fires. It emphasis organization and training of community members, awareness about do's and dont's and knowledge dissemination among members of the community. However, the community is mentioned as a single entity and no provisions have been made for ensuring a voice for different segments of people within each community.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<ul style="list-style-type: none"> b. Different cultural or ethnic groups? c. Vulnerable groups, including children, older persons, persons with disabilities? d. Socially isolated groups and the very poorest people? 			
52. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?	NDMA guidelines on scaling, type of equipment and training of fire services, 2012		No.
53. If communities are involved in EWS, does this law provide that they: <ul style="list-style-type: none"> a. Assist in the design of local and community EWS? b. Establish or maintain EWS? c. Provide information for the EWS? d. Have direct and timely access to relevant warnings and data on emerging risks (e.g. telephone, radio or internet access to meteorological or seismological data and analysis)? 			Not Applicable.
D. Floods?			
54. Is there a specific law about this hazard (i.e. not the main DM law)? If so, describe the form of regulation to reduce the impact of this risk (if any), and institutional responsibility. At what level(s) of government is this regulated?	National Flood Policy and National Flood Management Programme, 1954		Flood management is an issue on the agenda of states concerned. However, certain national level policy measure in this regard have been put forth. The first such measure taken by the Gol was the establishment of the National Flood Policy and National Flood Management Programme in 1954 with the aim of ridding the country from the menace of floods.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	<p>Model Draft bill on Flood Plain Zoning, 1975</p> <p>NDMA Guidelines on Management of Floods, 2008</p> <p>Flood Management Programme (FMP)</p>		<p>A model draft bill for Flood Plain Zoning was drafted and sent to the State Governments in 1975. However, flood plain zoning regulations have not been enacted and enforced by most of the states</p> <p>In 2007, guidelines were drafted by the NDMA to aid stakeholders with preparedness, prevention, mitigation in the pre-floods phase and with prompt and effective responses, relief and recovery during and in the post flood phase.</p> <p>The GoI recently also launched the Flood Management Programme (FMP) under the aegis of the Ministry of Water Resources (MoWR). The projected cost is Rs.8000 crores for the 11th Plan period (2007-12).</p>
55. Does this law specify how management of this risk is financed? If so, describe.	National Management Guidelines on Management of Floods, 2008	Section 2.5	<p>Funding for the various measures provided in these guidelines is to be sought from central ministries and departments and state governments concerned by making provisions in their annual and Five Year plans.</p> <p>Funding is also to be made available from special mitigation projects to be formulated and implemented by the state governments/SDMAs under the overall guidance and supervision of the NDMA.</p> <p>Additionally, 10 per cent of the Calamity Relief Fund (CRF) is attributed to the purchase of equipment for flood preparedness, mitigation, rescue and relief .</p> <p>Section 2.5.4 provides that a certain percentage of funds available</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			to District Planning and Development Council in the flood prone areas will go towards the implementation of FM schemes in the districts.
56. Does this law attribute liability for damage caused by: a. failure to warn, or false or faulty warnings of this risk? b. failure to take preventive action including by reducing this risk? c. If so, who may be liable - or immune? d. Is it civil or criminal liability, or both?	National Management Guidelines on Management of Floods, 2008		No
57. Does this law regulate the collection and distribution of information on hazards and risks (risk mapping) in relation to this risk? If so, what authority is responsible and what is their mandate?	National Management Guidelines on Management of Floods, 2008	Section 2.5.6 Section 4.4	Yes. Section 2.5.6 provides for the establishment of a National Flood Mitigation Project by the NDMA. One of the primary functions of this project is to carry out special studies on threat perception/vulnerability analysis/flood disaster risk assessment of the flood prone areas. Section 4.4 provides that a centralised mechanism for collection, archival and distribution of hydrological data from various river basins needs to be established on priority basis. In the past the Central Water Commission (CWC) has been responsible for this task. The CWC had initiated, in 1978, a programme for surveying flood prone areas through the Survey of India (SOI) as a pilot scheme, to assist state governments in the preparation of flood risk maps.
58. Does this law provide for consultation and/or participation	National Management Guidelines on Management	Section 7.2	Section 7.2 specifies the various target groups for Capacity Development. These include:

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>about risk mapping, early warning or general DRR regarding this risk by affected or at-risk communities? How? If so, does it provide for participation or a voice for all parts of those communities, including:</p> <ol style="list-style-type: none"> Women? Different cultural or ethnic groups? Vulnerable groups, including children, older persons, persons with disabilities? Socially isolated groups and the very poorest people? 	of Floods, 2008	Section 8.5	<p>“selected representatives and government officials, concerned with the national and state level DM functions, professionals in visual and print media, urban planners, infrastructure development experts, engineers, architects and builders, NGOs, community-based organisations (CBOs), social activists, social scientists, youth organisations such as National Cadet Corps (NCC), National Service Scheme (NSS), Nehru Yuvak Kendra Sangathan (NYKS), school teachers and school children.”</p> <p>Section 8.5 emphasized the need for community-based disaster preparedness and response coordination among various organisations.</p> <p>However, no specific delineation of different categories of community members is made.</p>
59. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?	National Management Guidelines on Management of Floods, 2008	Section 4.4	<p>Section 4.4 on the Expansion and Modernisation of Flood Forecasting Services mentions that the CWC, IMD and the state governments should establish basin-wise system of Flood Forecasting and early warning. But the issue of EWS is not explored in great depth.</p> <p>No elaboration on role of communities.</p>
60. If communities are involved in EWS, does this law provide that they: <ol style="list-style-type: none"> Assist in the design of local and community EWS? Establish or maintain EWS? Provide information for the EWS? Have direct and timely access to relevant warnings and data on emerging risks (e.g. telephone, 	National Management Guidelines on Management of Floods, 2008		No elaboration on role of communities.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
radio or internet access to meteorological or seismological data and analysis)?			
E. Heat/cold waves?			
61. Is there a specific law about this hazard (i.e. not the main DM law)? If so, describe the form of regulation to reduce the impact of this risk (if any), and institutional responsibility. At what level(s) of government is this regulated?			No
62. Does this law specify how management of this risk is financed? If so, describe.			N/A
63. Does this law attribute liability for damage caused by: <ul style="list-style-type: none"> a. failure to warn, or false or faulty warnings of this risk? b. failure to take preventive action including by reducing this risk? c. If so, who may be liable - or immune? d. Is it civil or criminal liability, or both? 			N/A
64. Does this law regulate the collection and distribution of information on hazards and risks (risk mapping) in relation to this risk? If so, what authority is responsible and what is their mandate?			N/A

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>65. Does this law provide for consultation and/or participation about risk mapping, early warning or general DRR regarding this risk by affected or at-risk communities? How? If so, does it provide for participation or a voice for all parts of those communities, including:</p> <ul style="list-style-type: none"> a. Women? b. Different cultural or ethnic groups? c. Vulnerable groups, including children, older persons, persons with disabilities? d. Socially isolated groups and the very poorest people? 			N/A
<p>66. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?</p>			N/A
<p>67. If communities are involved in EWS, does this law provide that they:</p> <ul style="list-style-type: none"> a. Assist in the design of local and community EWS? b. Establish or maintain EWS? c. Provide information for the EWS? d. Have direct and timely access to relevant warnings and data on emerging risks (e.g. telephone, radio or internet access to meteorological or seismological 			N/A

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
data and analysis)?			
68. Describe form of regulation, and institutional responsibility.			N/A
F. Insect Infestations?			
69. Is there a specific law about this hazard (i.e. not the main DM law)? If so, describe the form of regulation to reduce the impact of this risk (if any), and institutional responsibility. At what level(s) of government is this regulated?			No
70. Does this law specify how management of this risk is financed? If so, describe.			N/A
71. Does this law attribute liability for damage caused by: <ul style="list-style-type: none"> a. failure to warn, or false or faulty warnings of this risk? b. failure to take preventive action including by reducing this risk? c. If so, who may be liable - or immune? d. Is it civil or criminal liability, or both? 			N/A
72. Does this law regulate the collection and distribution of information on hazards and risks (risk mapping) in relation to this risk? If so, what authority is responsible and what is their mandate?			N/A

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>73. Does this law provide for consultation and/or participation about risk mapping, early warning or general DRR regarding this risk by affected or at-risk communities? How? If so, does it provide for participation or a voice for all parts of those communities, including:</p> <ul style="list-style-type: none"> a. Women? b. Different cultural or ethnic groups? c. Vulnerable groups, including children, older persons, persons with disabilities? d. Socially isolated groups and the very poorest people? 			N/A
<p>74. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?</p>			N/A
<p>75. If communities are involved in EWS, does this law provide that they:</p> <ul style="list-style-type: none"> a. Assist in the design of local and community EWS? b. Establish or maintain EWS? c. Provide information for the EWS? d. Have direct and timely access to relevant warnings and data on emerging risks (e.g. telephone, radio or internet access to meteorological or seismological 			N/A

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
data and analysis)?			
G. Landslides and avalanches?			
76. Is there a specific law about this hazard (i.e. not the main DM law)? If so, describe the form of regulation to reduce the impact of this risk (if any), and institutional responsibility. At what level(s) of government is this regulated?	National Disaster Management Guidelines on Management of Landslides and Snow Avalanches, 2009	Executive summary	<p>These guidelines provide that the state governments/SDMAs of landslide affected areas in consultation with the NDMA will establish the necessary techno-legal and techno-financial mechanisms to address this problem in their states.</p> <p>In addition, the guidelines provide that District plans for land use could be developed to minimise the risk of landslides. Further, the district administration is to generate a community contingency fund for the purpose of post-disaster issues. An important role is to be assigned to the NDMA and the nodal agency (GSI) in these plans for the purpose of coordinating and ensuring their implementation at the national, state, district, and local levels.</p>
77. Does this law specify how management of this risk is financed? If so, describe.	National Disaster Management Guidelines on Management of Landslides and Snow Avalanches, 2009	Section 11.6	<p>In section 11.6 it is specified that specific allocations towards landslide management should be made in the Five-Year and Annual Plans, by central and state ministries/departments. Further, it provides that 10 per cent of the Calamity Relief Fund is also to be made available for the purchase of equipment for landslide preparedness and mitigation, as well as for rescue and relief operations. Finally, the NDMA proposed national landslide mitigation project in the Eleventh Five-Year Plan is to aim to comprehensively deal with basic issues of landslide hazard management in India.</p> <p>Section 11.6.1 further elaborates that Disaster management plans need to be mainstreamed into development plans and wherever necessary and possible, involvement of the corporate sector is to be sought.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
78. Does this law attribute liability for damage caused by: <ul style="list-style-type: none"> a. failure to warn, or false or faulty warnings of this risk? b. failure to take preventive action including by reducing this risk? c. If so, who may be liable - or immune? d. Is it civil or criminal liability, or both? 			No
79. Does this law regulate the collection and distribution of information on hazards and risks (risk mapping) in relation to this risk? If so, what authority is responsible and what is their mandate?			Geological Survey of India (GSI) has been designated as a nodal agency for conducting landslide risk analysis and state specific studies are already carried out by GSI. These guidelines don't make any other provisions for risk mapping purposes. Snow and Avalanche Study Establishment is the nodal agency for conducting studies related to avalanches.
80. Does this law provide for consultation and/or participation about risk mapping, Early Warning or general DRR regarding this risk by affected or at-risk communities? How? If so, does it provide for participation or a voice for all parts of those communities, including: <ul style="list-style-type: none"> a. Women? b. Different cultural or ethnic groups? c. Vulnerable groups, including children, older persons, persons 	National Disaster Management Guidelines on Management of Landslides and Snow Avalanches, 2009	Guidelines Overview Section 8.2	The guidelines emphasise that district level community based preparedness plans are crucial for management of landslides. The district administration is to be responsible for constituting village level disaster management committees that enforces disaster preparedness plans. These committees will include local elected representatives, government functionaries, local non-governmental organisations/community based organisations and other local groups. Section 8.2.2 on community education provides that investments in disaster education, public awareness, community leadership development, and disaster

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
with disabilities? d. Socially isolated groups and the very poorest people?			education of unemployed youth, physically challenged, elderly, women, and school children is to be promoted. a. Yes b. No specific mention c. Yes d. No specific mention
81. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?	National Disaster Management Guidelines on Management of Landslides and Snow Avalanches, 2009	Section 1.5	Yes. Section 1.5 delves into Early Warning Systems for Landslides. Section 1.7.5 deals with Early Warning Systems against Snow Avalanche Hazards The importance of a community based early warning system is repeatedly emphasized in this document. "People-centred early warning systems empower the communities to prepare for and confront the fury of natural disasters."
82. If communities are involved in Early Warning Systems (EWS), does this law provide that they: a. Assist in the design of local and community EWS? b. Establish or maintain EWS? c. Provide information for the EWS? d. Have direct and timely access to relevant warnings and data on emerging risks (e.g. telephone, radio or internet access to	National Disaster Management Guidelines on Management of Landslides and Snow Avalanches, 2009		a. No specific mention of this. b. No Specific mention of this. c. No specific mention of this but in section 2.4.1 it is put forth that landslide inventory maps are to be created derived from historical archives, field data collection, interviews of the affected community. d. Yes.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
meteorological or seismological data and analysis)?			
H. Volcanoes?			
83. Is there a specific law about this hazard (i.e. not the main DM law)? If so, describe the form of regulation to reduce the impact of this risk (if any), and institutional responsibility. At what level(s) of government is this regulated?			No
84. Does this law specify how management of this risk is financed? If so, describe.			N/A
85. Does this law attribute liability for damage caused by: <ul style="list-style-type: none"> a. failure to warn, or false or faulty warnings of this risk? b. failure to take preventive action including by reducing this risk? c. If so, who may be liable - or immune? d. Is it civil or criminal liability, or both? 			N/A
86. Does this law regulate the collection and distribution of information on hazards and risks (risk mapping) in relation to this risk? If so, what authority is responsible and what is their mandate?			N/A

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
87. Does this law provide for consultation and/or participation about risk mapping, Early Warning or general DRR regarding this risk by affected or at-risk communities? How? If so, does it provide for participation or a voice for all parts of those communities, including: a. Women? b. Different cultural or ethnic groups? c. Vulnerable groups, including children, older persons, persons with disabilities? d. Socially isolated groups and the very poorest people?			N/A
88. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?			N/A
89. If communities are involved in Early Warning Systems (EWS), does this law provide that they: a. Assist in the design of local and community EWS? b. Establish or maintain EWS? c. Provide information for the EWS? d. Have direct and timely access to relevant warnings and data on emerging risks (e.g. telephone, radio or internet access to			N/A

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
meteorological or seismological data and analysis)?			
Part Two. Slow-onset disasters, sectoral and specific regulation based on risks and community participation			
I. Drought and related famine?			
90. Is there a specific law or institutional mandate for drought preparedness and risk reduction, especially for agriculture and related industries? In particular: a. Rain and river water storage, distribution and conservation measures? b. Development and maintenance of ground water extraction, storage and distribution? If so, describe the forms of regulation. At what level(s) of government is this regulated?	NDMA Guidelines on Management of Drought, 2010 Draft National Water Policy 2012 (NWP)		There exist the National Disaster Management Guidelines on Management of Drought. These guidelines are advisory and aim to assist state governments and central and state ministries in the development of their DM plans. a. Yes b. Yes (Section 4.3.1) The Ministry of Water Resources published the Draft National Water Policy 2012 (NWP) on June 7, 2012. The draft NWP was placed before the National Water Board and National Water Resources Council in February 2012. It was finalized and adopted by the National Water Resources Council on August 9, 2012 and is under deliberation by the National Water Board. a. Yes (Section 5 and 8) b. Yes. (Section 5) As per the constitution, it is the states that have the responsibility to put into place suitable policies, laws, and regulations on water (Item 17 in List II of the Seventh Schedule or the State List). The NWP seeks to provide an overarching national legal framework of general principles on water that can be used by states to draft their legislation on the governance of water.
91. Is there a specific law or institutional mandate for early warning and	The drought early warning surveillance and early		Yes. a. The drought early warning surveillance and early response

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>response to drought, to mitigate the effects of drought and help prevent famine? In particular:</p> <p>a. Is an institution legally mandated to issue drought early warnings? If so, how is this regulated?</p> <p>b. Is an institution legally mandated to impose water use restrictions? If so, at what level(s) of government?</p> <p>c. Is there legal provision for diversion, piping or transporting water to drought-affected areas? If so, at what level(s) of government?</p>	response system		<p>system prepared by the Department of Agriculture & Cooperation (DAC) in 2004, involves at least 11 Ministries and departments. The IMD is responsible for drought forecasting. It compiles weekly rainfall summaries on the basis of which it determines the occurrence of meteorological droughts on a sub-divisional basis(as the country is divided into 36 subdivisions.) The data is then transmitted to an institutional mechanism called the Inter-Ministerial Crop Weather Watch Group (CWWG), which was set up in 1979, in the Ministry of Agriculture, which meets every Monday through the year. This way measures regarding droughts can now be taken in July-August, i.e within the monsoon season itself.</p> <p>b. The Central Water Commission (CWC) is the apex agency in the field of water resources including flood management in India and is mandated to take decisions regarding water use.</p> <p>c. No</p>
92. Do the above laws or mandates specify how management of drought and famine risk is financed? If so, describe.	National Disaster Management Guidelines on Management of Drought, 2010	Chapter 2	Chapter 2 of the guidelines elaborates on the Institutional framework and financial arrangements. However, instead of giving specific details about how drought and famine risk is to be financed, a general framework of disaster management institutions and financing is provided.
93. Do the above laws or mandates regulate the collection and distribution of information on drought and related famine risks? If so, what authority is responsible and	National Disaster Management Guidelines on Management of Drought, 2010	Chapter 3	Chapter 3 on Assessment and Early Warning provides for the establishment of the India Drought Management Centre along with Drought Monitoring Cells at the State levels to facilitate the integration of data and expertise from multiple institutions such as ICAR, NRSC, IMD, Agricultural University, State Departments of

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
what is their mandate?			Irrigation, Ground Water, Revenue, Agriculture, etc., so that a robust method for drought intensity assessment similar to the US Drought Monitor can be put into place in India.
94. Do the above laws or mandates provide for consultation and/or participation about drought and famine risk, early warning or general DRR regarding drought and famine by affected or at-risk communities? How? If so, does it provide for participation or a voice for all parts of those communities, including: a. Women? b. Different cultural or ethnic groups? c. Vulnerable groups, including children, older persons, persons with disabilities? d. Socially isolated groups and the very poorest people?	National Disaster Management Guidelines on Management of Drought, 2010	Section 5.6	Yes. Section 5.6 of the guidelines elaborates on Community Participation. The guidelines encourage the opening up of opportunities for public representatives to contribute to planning and monitoring drought management programmes. a. Mention is made of the important role played by Women's self help groups in mitigation measures. b. No c. No d. Yes. Section 5.4.1 on community awareness elaborates that since low income groups are the most vulnerable to drought, they must be educated about alternate livelihoods, supplementing income, government schemes for them etc.
J. Other food security risks?			
95. Is there a specific law or institutional mandate concerning threats to food security other than droughts? (e.g. predicted effects of climate change, such as inundation of agricultural land and/or mass migration). a. If so, describe the form of regulation to reduce the impact of	National Food Security Bill, 2011	Chapter III, Article 9	The National Food Security Bill is under consideration. Chapter III, Clause 9 of the bill expands on ensuring food security for emergency and disaster affected persons. a. The State Government can decide to provide to affected households, two meals, free of charge, for a period up to three months from the date of disaster.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>these risks (if any), and institutional responsibility</p> <p>b. At what level(s) of government is this regulated?</p>			<p>b. While the responsibility for providing free meals falls on state governments, the costs may be shared as prescribed by the central government.</p>
<p>96. Does the above law or mandate specify how management of food security is financed? If so, describe.</p>	<p>National Food Security Bill, 2011</p>	<p>Chapter X, Clause 31</p> <p>Financial Memorandum</p>	<p>Section 31 of the bill provides that In case of short supply of foodgrains from the central pool to a State, the Central Government is deemed to provide funds to state governments so they are able to meet their obligations under this act.</p> <p>The Financial Memorandum at the end of the bill further clarifies that the "central pool" of foodgrains is to consist of reserves for various food security schemes. The cost for this is to be borne by Central Government as a recurring expenditure. (These buffer stocks are already being maintained by the GOI for its ongoing Targeted Public Distribution System)</p>
<p>97. Does the above law or mandate regulate the collection and distribution of information on hazards and risks to food security, particularly those relating to agricultural production? If so, what authority is responsible and what is their mandate?</p>			<p>No</p>
<p>98. Does the above law or mandate provide for community consultation and/or participation about risk reduction from threats to food security? How? If so, does it provide for participation or a voice for all</p>			<p>No</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	NDMA Guidelines on Information and Communication Systems, 2012	5.2.4	<p>Section 5.2.4 of the policy states that it is necessary to establish, upgrade and modernise the forecasting and early-warning systems for all types of disasters.</p> <p>a. Yes</p> <p>b. The nodal agencies responsible for monitoring and carrying out surveillance, for specific natural disasters, are responsible for their maintenance and up gradation. All States are required to provide to the India Meteorological Department, the required infrastructure for upgradation/ establishment of meteorological observation systems. Partnerships with the World Meteorological Organisation (WMO), Pacific Tsunami Warning System and other regional and global institutions for Early Warning and Forecasting purposes is encouraged.</p> <p>c. Not specifically.</p> <p>Section 5.8 of the NDMA guidelines on Information and Communication System too deals with Forecasting and Early Warning in India and the improvements required in this area.</p>
100. Does EWS regulation include requirements for community consultation and participation in development of EWS? Describe.	Disaster Management Policy, 2009 Disaster Management Act, 2005		No. A general community based preparedness approach is promoted. However, no specific mention is made of community involvement in EWS systems.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
101. Does EWS regulation provide for community-based early warning data collection? Describe.	Disaster Management Act, 2005		No
102. Does EWS regulation provide for timely and reliable access for at-risk communities to EWS, meteorological or seismological data (as relevant)? Describe.	NDMA Guidelines on Information and Communication Systems, 2012		Yes. A community based approach is promoted in the DM Act and Policy and the NDMA Guidelines on Information and Communication Systems specifically make provisions for timely last mile connectivity towards the community.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>103. Does the law regulating telecommunications infrastructure and delivery include any DRR criteria in general, or any specific measures such as:</p> <ul style="list-style-type: none"> a. geographical coverage of telecommunications to include remote and/or at-risk areas? b. priority access to communications technology for at-risk communities and responders to disaster? c. access for vulnerable groups such as the elderly and persons with disabilities? d. Support for early warning systems? 	National Telecom Policy, 2012 (NTP)	Preamble, section 15 Section V	<p>Section 15 of the NTP recognises the importance of robust and resilient telecom networks for adequately addressing the need for proactive support for mitigating disasters.</p> <p>Under section V on Strategies, the following points are made: Section 5.12.emphasizes the prescription of sectoral Standard Operating Procedures to aid effective and early mitigation during disasters and emergencies. Section 5.13 encourages the creation of an appropriate regulatory framework to help provide reliable means of public communication by Telecom Service Providers during disasters. Section 5.14 encourages the use of ICTs in prediction, monitoring and early warning of disasters and early dissemination of information.</p> <ul style="list-style-type: none"> a. No b. No c. No d. Yes. Section 5.14
<p>104. Does the above law impose, or allow for the imposition, of any restrictions on use of certain types of telecommunications equipment</p> <ul style="list-style-type: none"> a. Generally throughout the territory? b. In specified areas? 			No

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
c. Under specified circumstances?			
B. Risk identification, assessment and monitoring			
105. In addition to the sectoral laws above, does the disaster management law regulate the collection and distribution of information on hazards and risks (risk mapping)? If so, what authority is responsible and what is their mandate?	Disaster Management Act, 2005	Article 42 (8)	<p>Article 42(8) provides that the National Institute of Disaster Management will be responsible for planning and promoting training and research in the area of disaster management, and for the documentation and development of a national level information base related to disaster management policies, amongst other duties.</p> <p>Apart from this provision in the DM Act, there was also the Expert Group constituted by the Ministry of Urban Affairs & Employment in 1997 that prepared a Vulnerability Atlas for three common natural hazards in India, namely earthquakes, cyclones and floods.</p>
106. Does the disaster management law, or another law, regulate the collection and publication of seismological, meteorological and climatic data relevant to natural disasters? If so, what does it require and who is responsible for this, and under what law?			<p>There is no specific legislation regarding this, however, the Indian Meteorological Department, established by the Government of India in 1875 is usually responsible for data collection and dissemination regarding this.</p> <p>Reaching out to communities for early warning and forecasting purposes is one of the main activities of the IMD.</p>
107. Does the disaster management law, or another law, regulate the collection and publication of baseline population data, especially in high risk areas? If so, what does it require and who is responsible for this, and under what law?	Census Act, 1948 As amended in 1994		<p>There is the census act which provides for the collection and publication of population data. However, there is no emphasis laid on high risk areas.</p> <p>The central government may through an official gazette decide to undertake the census (Article 3) and for this it may appoint a census staff.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			The census is published regularly. However, there is no specific mention of community level access to data.
Part Four. Regulation of the Built Environment			
The aim is to outline the laws and regulations that set out building and construction standards, relevant approvals and enforcement processes, as well as planning and construction of roads & bridges, and land use planning and zoning, such as: urban and rural planning and zoning, including prohibitions on development of high risk sites, public open space for evacuation, access for rescue services such as fire and ambulance, and including regulation of informal settlements; regulation and responsibility for water storage, distribution and quality control for human consumption, flood mitigation construction and other water management against flooding; land tenure, including mapping and registration of tenure rights (especially participatory land mapping with communities) and any recognition of indigenous land rights and occupiers' rights; regulation of emergency and transitional shelter; and regulation or treatment of informal settlements.			
A. Building Codes			
Identify building and construction codes, including fire, flood and earthquake safety, as relevant to identified risks, including any differences in regulation, such as between large urban construction and small residences in rural villages; building regulations, including approvals, inspection and enforcement; and any regulation of emergency and transitional shelter, and informal settlements.			
108. Is there a national building and construction law? If so, what authority is responsible for its implementation?	The National Building Code of India (NBC), 2005.		There exists the National Building Code of India as implemented in 2005. The code provides guidelines for regulating the building construction activities across India serving as a model code for all agencies involved in building construction.
109. If there is not a national building and construction law, is this issue regulated at provincial/state or local level? If sub-national regulation only, can you find an example of such a law?			No information is provided
110. Does the building and construction law include detailed building codes, regulations or rules? Are these codes mandatory and binding? What areas do they cover (e.g. fire, earthquake,	The National Building Code of India, 2005.		The National Building Code is advisory in nature and contains various guidelines for construction work. Part IV. Fire and Life Safety Part VII. Constructional Practices and Safety

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
general building design and construction, health requirements, water & sanitation etc.)? List these categories of regulation.			Part IV Section 1. Water Supply Drainage and Sanitation. In addition to this, there are hazard specific codes designed by Bureau Of Indian Standard to ensure structural safety against natural hazards like floods, cyclone, landslides and earthquakes.
111. Does this law include mechanisms for individual building approvals? If so, which institution(s) have responsibility for this?	The National Building Code of India, 2005.	Section 1.1 Section 2.1 Section 11.1.2 Section 11.1.3	Section 1.1 provides that no person is to carry out development, to erect, re-erect, make alterations to or demolish any building or cause the same to be done without acquiring a separate permit for such development/building from the Authority. Section 2.1 explains that 'the Authority' having jurisdiction is that which has been created by a statute, for the purpose of administering the code, which may authorize a committee, official or agency to act on its behalf. Section 11.1.2 further elaborates that specific approvals from Civil Aviation Authorities, Fire Services Department, Pollution Control Board, designated authorities under Factories Act/Cinema Regulation Act, Urban Arts Commission, designated Coastal Regulation Zone Authority, Archeological Survey of India, Heritage Committee and any such other authority as may be applicable are to be obtained. Section 11.1.3 provides that in order to avoid separate clearance from all aforementioned bodies, the Authority may constitute a Development/Building Permit Approval Committee consisting of representative of the team of building officials, representatives of all bodies/ organizations from whom clearance for development so only a final approval from the Authority will suffice.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
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<p>112. Does this law include mechanisms for building inspections? If so, which institution(s) have responsibility for this? Does it apply to:</p> <p>a. New buildings?</p> <p>b. Renovations / extensions of existing buildings?</p> <p>c. Existing buildings where there is no building application, such as old buildings that may no longer be safe?</p>	The National Building Code of India, 2005.	Part 2, Section 14.1	<p>Part 2, Section 14.1 provides that all construction for which a permit is required shall be subject to inspection by the Authority. Additionally, certain types of construction that involve unusual hazards or require constant inspection shall come under continuous inspection of special inspectors appointed by the Authority.</p> <p>a. Yes</p> <p>b. Yes</p> <p>c. Yes. Section 3.8 under Part 2 provides that this code does not require the removal, alteration or abandonment, or non-occupancy of an existing building, unless the Authority opines that such building/development constitutes a hazard to the safety of the adjacent property or the occupants itself in which case the code becomes applicable.</p>
<p>113. Does this law include mechanisms for enforcement of codes, including sanctions? What type of sanctions (e.g. fines, whole or partial demolition orders)? If so, which institution(s) have responsibility for this?</p>	The National Building Code of India, 2005.	Part 2, Section 9.1	<p>Section 9.1 covers offences and penalties which the Authority can impose.</p> <p>Section 9.1.1 provides that anyone "who contravenes any of the provisions of the Code or any requirements of obligations imposed on him by virtue of the Code, or who interferes with or obstructs any person in the discharge of his duties, shall be guilty of an offence and the Authority shall levy suitable penalty or take other actions as per the Code. " This penalty can be the collection of arrears of tax.</p> <p>Section 9.1.2 provides that the buildings/developments that flout</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
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			<p>the applicable statutory rules can be demolished or brought within the limits as per the rules.</p> <p>Section 9.1.3 puts forth that in case the code is violated then the registered architect, engineer, structural engineer, supervisor, town planner, landscape architect, urban designer and utility service engineer that is responsible for the supervision of the construction/development and for the completion certificate, will be liable to penalties as prescribed by the Authority.</p>
<p>114. Do the building regulations have special standards or requirements for:</p> <ol style="list-style-type: none"> schools? hospitals? fire stations? other public buildings that may also be required as collective centres in case of disaster (e.g. ministries, sports complexes, churches, mosques etc.)? 	The National Building Code of India, 2005.		<p>There are no special requirements for the following buildings. However, section 5 on Community open spaces and amenities provides for reservation of a certain amount of land for recreational purposes and for other amenities such as parking.</p>
<p>115. Do the building regulations or land use planning laws (or other special laws) include regulation of large commercial buildings and developments (such as multi-storey shopping centres, office buildings and factories)? Identify & describe.</p>	The National Building Code of India, 2005.	Part 0, Section 31.	<p>Buildings are classified as Residential, Educational, Institutional, Assembly, Business, Mercantile, Industrial, Storage and Hazardous in groups and sub-division as classified in Part 4 on 'Fire and Life Safety'. The code has various provisions on development control rules and general building requirements; building materials; fire and life safety; structural design; constructional practices and safety; building and plumbing services; and landscaping, signs and outdoor display structures with respect to different types of buildings.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
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116. Do the building laws/regulations include large, multi-storey apartment buildings? Identify & describe.	The National Building Code of India, 2005.	Part 2, Section 12.2.5.1	Section 12.2.5.1 of the code elaborates on the building plan for multi -storeyed/special buildings. Construction of these buildings can only be commenced after approval in 2 stages. During stage 1, a sanction for planning is to be obtained from the Authority. After this, a complete set of structural plans, sections, details and design calculations duly signed by engineer along with the complete set of details duly approved in Stage 1 is to be submitted. Once approval is granted in stage 2, then construction can be started.
117. Do the building laws/regulations include small self-built constructions? Identify & describe.	The National Building Code of India, 2005.		No. However, Special requirements for low income housing are provided. ANNEX F (Clause 12.23) provides for special requirements of low income housing in rural areas. ANNEX C covers requirements for low income housing in Urban Areas.
118. Do the building laws/regulations differ as between urban and rural settings? If building laws/regulations are different in rural settings, what are the main differences compared with urban settings? E.g. a. the extent of regulation? b. the level of government at which it is regulated? c. other?			No.
119. Do the building/planning laws/regulations include emergency and transitional shelter? If so, what form of regulation and which institution(s) have responsibility for	The National Building Code of India, 2005.	Section 2.1.18 Section 3.2.5	Yes. Section 2.1.18 speaks about structures which are erected for a short period, such as hutments at project sites, for rehabilitation, temporary defence constructions, exhibition structures, etc. Section 3.2.5 elaborates certain rules for temporary buildings and structures. For instance, these are only permitted in Fire Zones No.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			Regional grid for electricity; Defence; and other government services for the community. These may be exempted from the point of view of the byelaws. However section 12.1.1.2 goes on to elaborate on which governmental construction do not come under this exemption.
122. Are there other matters relevant to DRR that are regulated in the building and construction laws of the subject country?	The National Building Code of India, 2005. NDMA Guidelines On Ensuring Disaster Resilient Construction of Buildings and Infrastructure financed through Banks and Other Lending Institutions		The Code does try to “meet the requirements of different regions of the country, both urban and rural, by taking into consideration factors, such as, climatic and environmental conditions, geographical terrain, proneness to natural disasters, ecologically appropriate practices, use of eco-friendly materials, reduction of pollution, protection and improvement of local environment and also socio-economic considerations, towards the creation of sustainable human settlements.” Additionally, there exist the National Disaster Management Guidelines for Disaster Resilient Constructions which elaborate on some advisory measures.
B. Land Use Planning Laws			
The aim is to identify whether there are national laws and statutory authorities with responsibility for land zoning and/or land use planning. If there is not a national law or authority, the issue may be regulated at provincial/state or local level and examples of these laws may not be available. However, although land use planning is frequently regulated at local government level, the underlying principles or institutional responsibilities may be included in national or provincial laws. Also, many major cities now have planning law overlays that cross local government boundaries, and may be determined under national or provincial/state laws. In other cases, special regimes have been established to manage the course of a major river that crosses many local boundaries (and these laws may also refer to bilateral treaties about cross-boundary water management - for DRR as well as water use – which may bring them under national law through the treaty powers).			
123. Are there national laws and statutory authorities with responsibility for land zoning and/or land use planning?	Model Town and Country Planning Act , 1960 Revised Model Town and		The Town and Country Planning Organization (TCPO), an organisation of the Central government, is responsible for dealing with regional, urban and rural planning and developmental policies. The TCPO formulated a Model Town and Country Planning

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	Country Planning Act , 1985 Revised Model for Urban and Regional Planning and Development, 1991		Act in 1960 which was revised in 1985. The revised version has been the primary basis for the enactment of most urban and regional planning legislation in the States and UTs. More recently, in 1991 a revised model for Urban and Regional Planning and Development (guidelines on Urban Development Plan Formulation and Implementation (UDPFI)) was brought out by the TCPO in order to combine land planning with development. These model acts have aided in the development of land without having to resort to compulsory land acquisition under the Land Acquisition Act of 1894.
124. Is this issue regulated at provincial/state or local level? If so, can you find an example of such a law at each level?			Yes. Most states have their own town planning laws based on the Model laws mentioned above. An example is the Maharashtra Regional and Town Planning Act of 1966.
125. Does the land use planning and/or zoning law include processes for: a. Formal release of land for new developments? b. Approval of each new urban development? c. Approval of major commercial developments?	Revised Model for Urban and Regional Planning and Development, 1991		Model Urban & Regional Planning and Development Law : a. Chapter XI on acquisition, assembly and disposal of land elaborates on the various mechanism by which land can be acquired or disposed off for development purposes. b. Chapter VII, article 63 elaborates on the process of asking and getting permission for development. c. No different procedure.
126. Does the land use planning and/or zoning law include prohibitions on development of high risk sites (e.g. unstable land prone to subsidence,	Revised Model for Urban and Regional Planning and Development, 1991	Chapter II, Section 4 (2)(ii)	The guidelines don't impose any prohibitions on development in sites prone to natural disasters. However, the powers and functions of the State Urban & Regional Planning Board (Chapter II) and the metropolitan Planning Committee (Chapter III) include the

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
flood plains, and contaminated sites)?		Chapter III , section 17(2)(a)	formulation of a perspective development plan which pays due regard to natural hazard prone areas.
127. Does the planning / zoning law include public open space for evacuation?	Revised Model for Urban and Regional Planning and Development, 1991		No
128. Does the planning / zoning law allocate or require allocation of land for emergency or transitional shelter in preparation for potential disaster?			No
129. Does the planning / zoning law include provisions for infrastructure installation (water and drainage, sewers, telecommunications, energy) in new developments?	Revised Model for Urban and Regional Planning and Development, 1991	Chap. II, Sec. 4(2)(vii) Chap. III, Sec. 17 (2) (a) (vii) Chap. IV, Sec. 26(2)(v)	The law itself doesn't provide for infrastructure installation. However, the powers and functions of the State Urban & Regional Planning Board (Chapter II) and the Metropolitan and District Planning Committee (Chapter III & IV) include the formulation of a perspective development plan which takes into consideration infrastructural development, if necessary.
130. Does the planning / zoning law include street width regulations for future traffic flow and to ensure access for emergency services such as fire and ambulance?	Revised Model for Urban and Regional Planning and Development, 1991		No

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>131. Does the planning / zoning law differ as between urban and rural settings? If different in rural settings, what are the main differences compared with urban settings? E.g.</p> <p>a. the extent of regulation?</p> <p>b. the level of government at which it is regulated?</p> <p>c. other?</p>	Revised Model for Urban and Regional Planning and Development, 1991		<p>The model law covers regulations for both urban and rural areas. The State and Regional Planning Board is responsible for assisting the Metropolitan and District Committees in their work which is elaborated on in Chapters III and IV.</p> <p>a. No</p> <p>b. Yes (Chapter III and IV outline the constitution and duties of the Metropolitan and District Planning Committees)</p> <p>c. No.</p>
<p>132. Does the planning / zoning law include any other matters relevant to disaster risk reduction?</p>	Govt. order no. 31/35/2003-NDM-II, January 20, 2004.		<p>In 2004, the Ministry of Home Affairs developed Model guidelines with necessary recommendations for amendments of Zoning Regulations, Development Control Regulations, Town and Country Planning Act and building byelaws so that structural safety is made viable in hazard prone areas. Several State governments have in fact revised and modified their land use zoning regulations and byelaws to include matters related to DRR. Compliance mechanisms to ensure the implementation of building codes have also been adopted.</p>
C. Land tenure			
<p>133. Is there a national system of land title registration established under law?</p> <p>a. If sub-national regulation, at what level of government does this occur, if at all? If sub-national, can you find an example of such a law?</p> <p>b. Does the legal mandate for this</p>	Registration Act, 1908.		<p>The Registration Act requires the registration of documents relating to real property rights with the sub-registrar. However, this act does not help confer titles on people.</p> <p>On 21st August, 2008, India decided to move away from the present system of “presumptive” property titles to the Torrens system which involves clearer property titles, as the Cabinet approved the Department of Land Resources “National Land</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>system require computerisation and/central record at national level? If not, how and where does it require records to be kept?</p>	<p>The Land Titling Bill, 2011 (Revised)</p>		<p>Records Modernisation Programme” (NLRMP).</p> <p>a. As per the Indian Constitution, “Land” is a State subject for which state governments are responsible. All states have the obligation to legislate on the matter keeping in mind the idea of Conclusive Titling as well as the local requirements of the state. To aid this project the Central Government is developing a model land titling law.</p> <p>b. Chapter 3 of the NLRMP guidelines provides for the computerization of registration and integration with the Land Record Management System. Under this programme, computerization of land records have been done and has been partly successful in Karnataka, Tamil Nadu, and parts of Uttar Pradesh, and Maharashtra.</p>
<p>134. Are there institutions mandated to survey land and/or register title? Does this mandate:</p> <p>a. require or allow community participation in land mapping or surveying for the purpose of establishing titles and/or occupancy and/or usage rights?</p> <p>b. establish a timeframe for the conclusion of land mapping?</p> <p>c. allocate resources for land mapping?</p>	<p>The National Land Records Modernization Programme (NLRMP) Guidelines, Technical Manuals and MIS 2008-09</p>		<p>Most Indian States have two to three agencies dealing with property records. For instance, the Revenue Department is usually responsible for preparing and maintaining textual records. The Survey and Settlement Department prepares and maintains the maps while the Registration Department is responsible for verification of encumbrances and registration of transfer, mortgage, etc. of property. Some states even possess a Consolidation Department instead of a Survey and Settlement Department.</p> <p>The NLRMP aims to put into a place a single-agency for property records.</p> <p>a. No</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>b. No</p> <p>c. Section 21 of NLRMP guidelines deals with funding. 21.1(b) provides that for the purposes of surveys and resurveys, central funding may contribute upto 50% of the approved unit cost norm for the States and 100% for the UTs.</p>
<p>135. Does the land title system allow anyone to purchase or own land, or does it exclude anyone? E.g. can the following own and inherit land under this system:</p> <p>a. Women?</p> <p>b. All ethnic or religious groups?</p> <p>c. Non-nationals?</p>			<p>Ownership rights over a piece of property are governed by several different laws in India. Moreover, different communities are governed by different personal laws. While purchase of land is more easily permissible, inheritance is governed by Hindu Succession Act for Hindus, the Muslim law (which is different for Shias and Sunnis) for Muslims and the Indian Succession Act of 1925 for Parsis and Christians and they all have different provisions regarding women, ethnic and religious groups and non nationals.</p>
<p>136. If there is no standardised land title, is there another way to legally recognise land tenure rights (e.g. indigenous title based on ancestral lands, or established occupation or use, or other traditional rights to use resources such as gathering or hunting or water rights)? Describe.</p>			<p>A land title is accorded in a 'presumptive' manner. For this, entries under the registration act are read along with personal laws and other records in order to investigate titles to a property. However, since 2008, there has been a move towards more conclusive titling.</p>
<p>137. Is there any legal recognition of traditional or customary law and practice regarding land occupation or ownership, or community or collective management of land? If so, describe the relevant legislation or</p>			<p>Since titles are determined in a presumptive manner, for this purpose investigations of multiple records and complex facts and issues are taken into account. Customary law and practices are, hence, given due weight in the recognition of titles. For example, in Hindu Law customs are given a lot of importance as a source of the law itself. Any age old custom which has been followed by a</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
case law.			community is recognized as Law.
<p>138. Is there legislation or case law that recognises land tenure as a result of occupation, such as:</p> <p>a. adverse possession (use and occupation of land over a certain period of years in the absence of the legal owner, resulting in a change of ownership)?</p> <p>b. 'squatters' rights' (including any rights to continue inhabiting land and/or vacant buildings or to be given notice of eviction if contested by the legal owner)?</p>	Indian Limitation Act, 1963	Article 65, Schedule I	<p>a. Yes. The Limitation Act prescribes a 12 year limitation for a suit dealing with possession of immovable property or any interest therein based on titles. The 12 years are counted from the time "when the possession of the defendants becomes adverse to the plaintiff" Article 64 explains that 12 years from the date of dispossession is the starting point of limitation under Article 64. Article 65 as well as Article 64 read with Section 27 (Extinguishment of right to property) implies that if a suit is not filed by the person affected, within the period of limitation prescribed, then, not only the period of limitation comes to an end, but the right based on title or possession gets extinguished.</p> <p>b. Yes. See Q. 137</p> <p>However, as mentioned in the previous question, an attempt to bring about a change was made in 2008. The Supreme Court of India, in two recent decisions, namely, Hemaji Waghaji vs. Bhikhabhai Khengarbhai and State of Haryana Vs. Mukesh Kumar, for instance, took a different approach.</p>
139. If there are parallel systems for recognition of land tenure, such as customary law vs. registered freehold title, does one type of legal claim take precedence over the other?			See Q. 137

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>140. Is there any law or legal mechanism that allows government authorities to compulsorily purchase or requisition land for public purposes? If so, do these purposes include:</p> <p>a. risk reduction from natural disasters?</p> <p>b. land to be kept for evacuation or emergency or transitional shelter?</p>	<p>Land Acquisition Act, 1894</p> <p>Land Acquisition, Rehabilitation and Resettlement Bill, 2011.</p>		<p>The Land Acquisition Act allows the GoI to take over land for public purposes.</p> <p>a. Yes. Article 3 (f)(v) defines public purposes as including the provision of residential land to those affected by natural calamities.</p> <p>b. Not exactly. However, article 17 elaborates on special powers in case of urgency wherein the government may take possession of land in case of an emergency.</p> <p>There is also the Land Acquisition, Rehabilitation and Resettlement Bill, 2011 which is currently under deliberation but that makes provisions for disaster affected communities.</p>
<p>141. Is there a land tribunal or other dispute resolution mechanism that provides for resolution of land tenure disputes? If so, is this accessible to communities? – to individuals?</p> <p>a. Can people without financial means access this system? E.g. are there fees, or requirements to engage lawyers?</p> <p>b. Are such tribunals or mechanisms available throughout the territory, including in rural areas?</p>			<p>No. Cases can be taken to civil courts by there is no special mechanism for resolving land disputes.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION

Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
D. Informal and precarious settlements			
<p>Informal settlements (also called slums or shanty towns) are areas of housing constructed on land to which the occupants had no prior legal claim. The housing is generally constructed by the occupants from available materials and does not comply with building and planning laws. These unplanned settlements are not served with public infrastructure such as water, sewers/drainage, roads or telecommunications, or public services such as schools and medical facilities. They are especially vulnerable to the effects of natural disaster, as they are often built on high-risk land (precarious settlements), with poor construction materials and methods, and the residents are not protected from the effects of, for example, water contamination during flooding. Informal settlements sometimes arise from mass migrations to the outskirts of large cities following disaster (including slow-onset disasters such as drought and famine). However, many of these settlements exist for many years and become established townships. Approaches taken by governments tend to follow one of three paths: (1) ignore informal settlements for the purpose of regulation, (2) relocate residents either through forced evictions and demolition, or planned resettlement schemes, or (3) regularize them. The latter approach has been taken in Brazil under its Statute of the City administered by the Ministry of Cities, which seeks to progressively regularize and integrate under local government, existing informal and precarious settlements.</p>			
<p>142. Is there a law that mandates clearing of slums / informal or precarious settlements?</p> <p>a. If so, what is the policy reason given (if any) for such clearance?</p> <p>b. Does it require or empower government authorities to evict or resettle residents? Or to demolish such settlements?</p> <p>c. If residents are to be moved, does this law require the provision of alternative housing? If so, how is this financed?</p> <p>d. If mandated, is there a process for eviction? E.g. notice periods, dispute resolution through land tribunals?</p> <p>e. Are there any other protections for the human rights and livelihoods of</p>	<p>Slum Areas (Improvement and Clearance) Act, 1956</p>		<p>Yes</p> <p>a. India's First Five Year Plan (1951-56) put forth that "from a national point of view it was better to pay for the cost of clearing slums than to continue to pay the mounting cost of slums and suffer their destructive effects upon human lives and property indefinitely."</p> <p>b. Yes. Chapter IV, Article 9 gives the power to declare any slum area to be a clearance area to the competent authority.</p> <p>c. Chapter V, Article 14 provides for the right to receive compensation. However, nothing is said about alternative housing. The more recent draft model Property Rights to Slum Dwellers Act, 2011 makes provisions for resettlement.</p> <p>d. Chapter V deals with the acquisition of land and elaborates on the process of eviction and acquisition.</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
residents who are evicted or relocated?			e. Chapter Vi is on the protection of tenants from eviction. Article 19 provides that tenants in slum areas not to be evicted without permission from the competent authority.
<p>143. Is there a law that mandates recognition and/ or regularization of slums / informal settlements?</p> <p>a. If so, describe the legal regime for regularization, including the responsible institutions.</p> <p>b. Does regularization include the introduction of building codes? Are these mandatory and binding?</p> <p>c. Does regularization include the construction of public infrastructure? If so, how is this financed?</p> <p>d. Does this law authorise or mandate the provision of social services to informal settlements?</p> <p>e. Does this law include any other regulatory measures to address the vulnerability of such settlements to risk from natural disasters?</p>	Draft model Property Rights to Slum Dwellers Act, 2011		<p>Indian states are responsible for their own slum upgrading policies. Several state governments have enacted legislations on the different aspects of slums. Examples include the establishment of Slum Redevelopment Authority, Patta Act, and the amended versions of the 1956 Act.</p> <p>A draft national slum policy too was presented by the Central Ministry of Urban Development and Poverty Alleviation but it met with a lack of support from other central departments.</p> <p>a. Recently, a draft model Property Rights to Slum Dwellers Act was proposed by the government. Chapter III speaks about the City/Urban Area Slum Re-Development Committee and Chapter IV discusses the State Slum Redevelopment Authority.</p> <p>b. No</p> <p>c. Article 10 on Slum redevelopment, up-gradation and resettlement schemes delves into this briefly. Sub-section (1) provides that the City / Urban Area Slum Redevelopment Committee will be liable to prepare schemes for up gradation/resettlement which are to</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>include basic civic and infrastructure services. However, there is no mention of funding.</p> <p>d. While the Draft Slum Policy emphasized on provision of certain basic social services, there is no mention of them in the Draft Act.</p> <p>e. No</p>
<p>144. Does any law require that informal settlements are included in:</p> <p>a. Early Warning Systems?</p> <p>b. Community based DRR education and training?</p>			<p>a. No</p> <p>b. No</p>
<p>145. Does any law provide a mechanism for recognition of tenure for residents of informal settlements?</p> <p>a. If so, what types of tenure (e.g. full title, right to occupy or use, right to purchase, tenancy)?</p> <p>b. If so, and such settlements are on privately owned land, is there provision for compensation of those with prior legal tenure?</p>	Draft model Property Rights to Slum Dwellers Act, 2011		<p>Squatters on public or private land have no security of tenure and remain prone to eviction.</p> <p>However, the draft model Property Rights to Slum Dwellers Act aims to change this.</p> <p>a. Section 3(1) on Property Rights in the form of dwelling space provides that "every landless person living in a slum area in any city or urban area on 4th June, 2009, shall be entitled to a dwelling space at an affordable cost."</p> <p>b. Article 4 (3) provides that "where the slum is located on private land, the City / Urban Area Slum Re-development Committee may in collaboration with the private land owner prepare a scheme for redevelopment or up-</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			gradation or resettlement of the slums as the case may be, and for this purpose the Government may compensate the private owner for the land forgone through incentives including grant of additional Floor Space Index and / or transfer of development rights etc."
E. Urban Water and Flood Management			
146. Is there one or more national laws regulating and allocating institutional responsibility for water storage, distribution and quality control for human consumption? Is urban water management principally a national, or provincial/state or local responsibility?			The water law framework in India is governed by many different principles, rules and acts adopted over many decades. Statutory water law also includes a number of pre- and post-independence legislation on irrigation, embankments, drinking water supply, irrigation, floods, water conservation, river water pollution, rehabilitation of evacuees and displaced persons, fisheries and ferries. In general, water law is largely state based as per the constitutional scheme. Item 17 in list II of 7 th schedule or the State list.
147. If there is a national water authority, does its mandate include risk reduction or preparedness for safeguarding the water supply in the face of natural disasters?	Draft National Water Policy 2012		In June 2012, the Ministry of Water Resources published its Draft National Water Policy. Although it is currently under deliberation, it does place a greater emphasis on preparedness for disasters.
148. Does a national law allocate responsibility for flood mitigation construction and other water management against urban flooding (if relevant to the subject country)? If so, what authority is responsible?	NDMA guidelines on Urban Flood Management, 2010		There exist the National Disaster Management Guidelines on Urban Flooding published by NDMA. However, these are merely advisory in nature and do not allocate responsibility to any authority per say. They aim to help various ministries, state governments and their local bodies in the formulation and implementation of their plans for urban flood management.
149. If flood mitigation and water			While flood management laws are enforced at the state level,

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
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management against urban flooding is regulated at the sub-national level, at what level of government does this occur? Can you find an example of such a law?			Structural and other measures against urban flooding are entrusted to Civic Authorities and Municipal Corporations. For example, the Mumbai Municipal Corporation took up the revamping of the drainage system, along with the augmentation of railway culverts at various flood prone areas, and the removal of obstructions of water mains, cables etc.
Part Five. Regulation of the Natural & Rural Environment			
Outline the laws and regulations concerning environmental management from the perspective of human safety, preservation of livelihoods and food security, including the regulation of exploitation of natural resources, water management, and reducing risks from natural events such as floods, earthquake, drought, landslides, and wildfires, such as: forestry regulation concerning wildfires, deforestation and erosion relevant to prevention of landslides and floods; environmental impact assessments; river and water catchment management relevant to flood prevention and mitigation, and water storage and distribution for human and agricultural consumption; prevention measures relating to drought, especially protection of people, livestock and crops in the face of drought, including water reserves against the risk of drought; and other prevention and risk management mechanisms to maintain food security, including measures to prevent desertification.			
A. Human Risks in Environmental Change			
150. Is there legislation on environmental protection? If so, what institution has responsibility?	The Environment Protection Act, 1986 The Forty-Second Amendment Act, 1976	Chapter II, Article 3(1) Part III, Article 51(g) Part IV, Article 48A	The Central government has the power to take all expedient measure to protect and improve the quality of the environment. Other specific legislations include, Water Act, 1974; Indian Wildlife (Protection) Act, 1972 and the Control of Pollution Act,1981 The 42 nd Amendment to the Constitution added article 51A (g) in a new chapter entitled 'Fundamental Duties', imposing a responsibility on every citizen 'to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creature.' Article 48A was added to the directive principles of state policy. It puts forth that that, 'The State shall endeavor to protect and improve the environment and to safeguard the forests and wild life of the country.'

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
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<p>151. Does the above mandate include environmental management from the perspective of:</p> <ul style="list-style-type: none"> a. human safety? b. preservation of livelihoods? c. food security, especially concerning protection of crops and livestock? 	The Environment Protection Act, 1986		<ul style="list-style-type: none"> a. Yes. The introduction to the Act puts forth that the Act aims to provide for the protection and improvement of the environment and the prevention of hazards to human beings, other living creatures, plants and property. b. No c. No
<p>152. Does this law provide for environmental impact assessments (EIAs) of any proposed new private and public industrial developments?</p>	The Environment Protection Act, 1986	Environment Impact Assessment Notification S.O.60(E).	Yes. The notification on Environmental Impact Assessment (EIA) of developmental projects which was issued on 27/1/1994 under the provisions of the Environment (Protection) Act. This made EIA mandatory for 29 categories of developmental projects. To this list, another item was added in the year 2000.
<p>153. If there are EIAs, do the criteria include:</p> <ul style="list-style-type: none"> a. human risk factors from changes to the environment, including life and health as well as livelihoods and food security? b. assessment in light of the known natural hazards affecting the relevant locality, or downstream communities (where relevant)? 	Environment Impact Assessment Notification S.O.60(E)		<ul style="list-style-type: none"> a. Not specifically. However, the application form or Form A requires details such as waste likely to be generated and pollution likely to be caused etc. b. The application Form A consist of a blank regarding Risk Assessment Report and Disaster Management, which needs to be filled out.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
154. Is there a law that makes any authority responsible for the regulation of exploitation of natural resources from the perspective of human safety during natural disasters? For example, preventing cross-contamination from industrial sites during flooding, or control of extraction methods to manage flooding and/or erosion?			No
B. Forests			
155. Is there legislation on forest management (if relevant to the subject country)? If so, what institution has responsibility?	Forest Conservation Act, 1980, amended in 1988.		Yes. The Forest Conservation Act. The Central government is the overlooking authority. Article 3 provides for that the Central Government may constitute a Committee to advise that Government with regard to matters related to forest conservation.
156. Does the above mandate include forest management from the perspective of natural disaster risk reduction, such as: a. prevention of wildfires? b. deforestation and erosion relevant to prevention of landslides and floods? c. other hazards, (such as encroachment by wildlife into agricultural land or villages)? Describe the scope.	National Forest Policy, 1988		a. No b. No c. No While the Forest Conservation Act says nothing about the aforementioned disaster, sections of the National Forest Policy are dedicated to these issues. Section 4.8.2 puts forth that the incidence of forest fires in the country is high and that special precautions must be taken for this.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>Section 2.1 puts forth that “the basic objectives that should govern the National Forest Policy are the following: · Checking soil erosion and denudation in the catchment areas of rivers, lakes, reservoirs in the "interest of soil and water conservation, for mitigating floods and droughts and for the retardation of siltation of reservoirs.”</p> <p>The policy does not mention other hazards.</p>
157. Does the law recognize customary laws and practices as to the use and management of forests and their resources?	Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006		While the Forest Conservation Act itself does not specifically address the issue of customary law and practices, there does exist the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006. This law deals with the rights of forest-dwelling communities to land and other resources, which have been denied to them for several decades now as a consequence of a of prevailing colonial forest laws.
158. Does the law provide for use, conservation or management of forests and their resources by communities?	Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006		<p>The Forest Conservation law itself says nothing about the role of communities. However, participation of communities in conservation and management of forests was given its due importance in the National Forest Policy.</p> <p>The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 too emphasises the involvement of communities.</p>
C. Rivers and watercourses			
159. Is there legislation on river and watercourse management (if relevant to the subject country)? If so, what institution has responsibility?	River Boards Act, 1956. Inter-State River Water Disputes Act, 1956		<p>Regulation as well as development of interstate rivers is a subject under the Union List.</p> <p>There exists the River Boards Act, 1956 which provides for the establishment of River Boards for the regulation and development of interstate rivers and river valleys. It is the Central government that’s also responsible for the adjudication of any dispute about the distribution or control of the waters in any interstate river or</p>

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			river valley. The Central Water Commission (CWC), an attached office of the Ministry of Water Resources, is the primary technical organization dealing with water resources. Its River Management Wing is responsible for the management of rivers.
160. Does the above mandate include river management from the perspective of natural disaster risk reduction, such as: a. Riverbed management relevant to flood prevention and mitigation? b. Water storage and distribution for human, agricultural and industrial consumption in rural areas? Describe the scope.	River Boards Act, 1956.	Chapter III, Article 13	a. Yes. Chapter III, Article 13 (a)(iv) puts forth that river boards are responsible for promotion and operation of schemes for flood control. b. Yes. Chapter III, Article 13 elaborates on the river boards' function to promote and operate schemes for water conservation, irrigation, hydropower projects etc.
161. Does the law recognize customary laws and practices as to the use and management of rivers and their resources?			No
162. Does the law provide for use, conservation or management of rivers and their resources by communities?			No
D. Drought and food security			
163. Is there any legislation providing for risk reduction and prevention measures relating to drought (if relevant)? If so, does this include any institutional mandate or			There is no such legislation but there exist the NDMA Guidelines for the Management of Droughts, 2010 and other national level schemes such as the Drought Prone Area Programme (DPAP), and the Integrated Watershed Management Programme.

3. EARLY WARNING AND REDUCTION OF UNDERLYING RISK FACTORS THROUGH REGULATION			
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responsibility to protect people, livestock or crops in the face of drought?			
164. Does the above mandate include the construction and maintenance of water reserves, including against the risk of drought?	NDMA Guidelines for the Management of Droughts, 2010		Chapter 4 of the guidelines which is on Prevention, Preparedness and Mitigation emphasizes measures such as watershed developments.
165. Is there any other legislation relevant to risk management to maintain food security in the face of natural disasters, including any special measures to prevent desertification (if relevant)?			Again, there is no specific legislation but there are several GOI sponsored programmes that include the Rural Works Programme, Desert Development Programme (DDP), Food for Work Programme, Integrated Watershed Management Programmes etc

4. Information management and exchange, community level DRR education & awareness

Most elements of information, education and awareness will normally be done through policy rather than law, but the legal framework may require public institutions to make DRR information available to the public and/or to carry out public and school education and awareness on reducing risk from natural disasters. For example, there could be a Ministerial directive under the Education Act requiring the inclusion of DRR in the school curriculum. [If this requires repetition of information given above, please note 'see above' and refer to the relevant question number.]

4. INFORMATION MANAGEMENT AND EXCHANGE, COMMUNITY LEVEL EDUCATION & AWARENESS			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
166. Is there a law that regulates the collection and publication of seismological, meteorological and climatic data relevant to natural disasters? a. If so, what does it require and who			See Q. 106

4. INFORMATION MANAGEMENT AND EXCHANGE, COMMUNITY LEVEL EDUCATION & AWARENESS			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>is responsible for this, and under what law?</p> <p>b. Does it provide for community level access to the data?</p>			
<p>167. Is there a law that regulates the collection and publication of baseline population data, especially in high risk areas?</p> <p>a. If so, what does it require and who is responsible for this, and under what law?</p> <p>b. Does it provide for community level access to the data?</p>			See Q. 107
<p>168. Does the education law or regulations require inclusion of DRR awareness in the school curriculum? Does this law or another law such as the DM law also require community DRR education?</p>	NDM Policy		<p>There is no overarching national education law in India. However, the DM Act makes some provisions for DRR related education. Article 10.2. (p) provides that the National Executive Committee must promote general education and awareness in relation to disaster management.</p> <p>Similarly, article 22.2(i) provides that the state executive committee must promote general education, awareness and community training about disasters that the state is prone to. Further, article 42.(9)(f) puts forth that the National Institute, for the discharge of its functions, may develop educational materials for disaster management including academic and professional courses.</p> <p>NDM Policy too makes some provisions for education. Section 10.2.2 emphasizes training for professionals. Section 10.6.1 provides for the introduction of the subject of DM, by the Ministry</p>

4. INFORMATION MANAGEMENT AND EXCHANGE, COMMUNITY LEVEL EDUCATION & AWARENESS			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			of Human Resource Development, in the curriculum through the Central Board of Secondary Education, Secondary Education Board as well as the State School Boards by state governments. Section 10.5.1 mentions that professional schools must add DM related coursework. The curricula of graduate and postgraduate and that at the National level, the Ministry of Human Resource Development will encourage the development of DM as a distinct academic discipline, in the universities and institutes of technical excellence.
169. If there is a national disaster management policy, does this require any public authorities to conduct public education and awareness on DRR? a. If so, which authorities and what are they required to do? b. In particular does it require DRR education in schools?	National Disaster Management Policy, 2009		Various sections of the NDM Policy are dedicated to public education and awareness on DRR. a. Different sections of the DM Policy try to bring in various actors for the generation of awareness and education purposes. For instance, section 5.3.5 provides that the media should be utilized for information and knowledge dissemination in all phases of DM. Section 10.3.1 outlines that the NIDM will aid in developing and facilitating the implementation of the National training schedule for DM. It will also be the nodal institution for regional and international cooperation for training. b. See Q. 168
170. If the above law or the national disaster management policy requires public education, does this provide for community level DRR awareness? If so, does this make any provision for community participation in the development and delivery of public	National Disaster Management Policy, 2009		Yes. Section 10.4.1 elaborates on building the capacity of communities as they are the first responders to disasters. This is to include awareness, sensitisation, orientation and developing skills of communities and community leaders.

4. INFORMATION MANAGEMENT AND EXCHANGE, COMMUNITY LEVEL EDUCATION & AWARENESS			
Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
education and awareness campaigns?			
171. Does legislation provide for any designated role for the Red Cross or Red Crescent National Society as an auxiliary to government in DRR education and awareness at community level?	National Disaster Management Policy, 2009		Yes. Section 10.4.1 on capacity building of the community provides that assistance from the Red Cross among other Civil Defence organizations and NGOs/other voluntary organisations will be encouraged.
172. Does legislation provide for any designated role for Civil Society in DRR education and awareness at community level?			Yes. see Q. 171 and 172.
173. Does any law provide for community-level results in DRR, such as: a. Natural disaster warnings that extend to community level? b. Implementation of incentives to carry out community based DRR, or disincentives to ignore or increase risks from natural disasters? c. Community involvement in land-use and urban planning? d. Community involvement in and education concerning building codes?			a. See Q.17 b. See Q.17 c. No d. No

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