

Background Report
Law and Regulation for the Reduction of Risk from Natural Disasters
in the State of Odisha, India
A Desk Law Survey
October 2012

Acknowledgements

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List of abbreviations

Bhubaneswar Regulations	<i>Bhubaneswar Development Authority (Planning and Building Standards) Regulations 2008</i>
NDMA	National Disaster Management Authority
ODA Act	<i>Orissa Development Authorities Act 1982</i>
OMC Act	<i>Orissa Municipal Corporation Act 2003</i>
OSDMA	Orissa State Disaster Management Authority

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

Introduction

The State of Odisha, formerly known as Orissa, lies along the eastern coast of India next to the Bay of Bengal. Its geographical features – a 450 km-long coastline, six major rivers which run for hundreds of kilometres, forests, hills, and mountains –¹ make it highly vulnerable to disasters, the most common types experienced being floods and cyclones. In 1999 Odisha was devastated by a super-cyclone and a tidal wave which affected more than 10 million people, caused over 10,000 deaths, and economic damage which ran into millions of dollars.² Flooding occurs on an annual basis but the episodes in 2008 and 2011 proved to be particularly damaging and traumatic.³ The socio-economic impacts from disasters are felt all the more acutely in the State as it is one of the poorest in India, having at least 37% of its 42 million population living in poverty (of which large numbers come from traditionally disadvantaged backgrounds like the *dalit* caste, other scheduled castes, scheduled tribes and indigenous communities) and development levels which fall well behind national and international standards.⁴ The majority of its people live in rural coastal areas and lead agrarian livelihoods.

For Odisha it is therefore essential that there should be proper disaster management frameworks in place, frameworks which focus on reducing disaster risks, mitigating the impacts from disasters, ensuring that communities are aware and prepared for such eventualities, providing rapid relief especially to

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¹ Government of Odisha, 'Official Portal – Topography' at <<http://www.odisha.gov.in/portal/ViewDetails.asp?vchlinkid=GL012&vchplinkid=PL049>> Accessed on 28 October 2012

² International Federation of the Red Cross and Red Crescent Societies (2001), 'Situation Report – India: Orissa Cyclone' Available at: <<http://www.ifrc.org/docs/appeals/99/289917.pdf>> Accessed on 28 October 2012

³ See 'Indian Floods Situation Worsens in UP, Bihar and Orissa' *BBC News Asia*, Available at: <<http://www.bbc.co.uk/news/world-south-asia-15056411>> Accessed on 28 October 2012; 'Orissa Floods: 2,600 Villages Submerged, 11 lakh affected' Available at: <<http://www.ndtv.com/article/india/orissa-floods-2-600-villages-submerged-11-lakh-affected-132855>> Accessed on 28 October 2012

⁴ See United Nations Development Programme, 'Orissa – Economic and Human Development Indicators' Available at: <http://www.undp.org/content/dam/india/docs/orissa_factsheet.pdf> Accessed on 28 October 2012

the remotest and most disadvantaged areas, and helping affected populations with long-term recovery efforts – frameworks which enable Odisha to secure its development goals, and to ensure its survival and that of its people. This need has become all the more critical as climate change is already starting to make its presence felt in some parts of the State, especially the coastal areas.⁵ With there being very little research on whether Odisha’s disaster laws and policies achieve these outcomes,⁶ the present study, commissioned by the International Federation of the Red Cross and the Red Crescent’s Disaster Law Programme, goes towards closing this gap. Set out in a questionnaire format, it closely surveys Odisha’s legal and policy disaster management frameworks, beginning first with an overview of the State’s disaster management laws and institutions, then proceeding to examine whether, how, and to what extent, they impose liability on governments to undertake disaster risk reduction (DRR) activities and to protect populations from disasters. Following this it looks at whether the frameworks promote DRR practices such as establishing early warning systems and risk mapping, focusing particularly on seeing if they provide any scope for community involvement. Finally, in recognition that DRR goes beyond just managing the immediate disaster risks and actual calamity, the survey also reviews various aspects of Odisha’s environmental, building, planning, and information collection laws.

The overall conclusion which can be drawn is that, consistent with the findings from previous studies presented at the 31st International Conference of the Red Cross and Red Crescent in November 2011,⁷ Odisha’s disaster law system and management frameworks are still geared very much towards disaster relief and response as opposed to risk reduction and mitigation. They provide hardly any scope for community involvement or awareness-raising opportunities, though there are a few sporadic instances where this has been recognised at the policy level. Disaster management is approached more as a technical exercise that lies solely within the government’s domain, but for the most part this can be attributed to the frameworks being conceived in a time

⁵ See Orissa Diary Correspondent, Bhubaneswar, ‘Odisha: Climate Change and Biodiversity Discussed’, *OdishaDiary.Co*, 10 July 2012, Available at: <<http://orissadiary.com/ShowEvents.asp?id=35075>> Accessed on 29 October 2012; ‘Climate Change Impacts Agriculture, threatens food security in Odisha’ HNF Video News, 28 October 2011, Available at: <http://hnfvideonews.com/Climate_change_impacts_agriculture_threatens_food_security_in_coastal_Odisha_HNF_VIDEO_NEWS_Bhubaneswar_Orissa_281011046.html> Accessed on 29 October 2012; Indo-UK Programme on Climate Change and Adaptation (2012), *Synthesis Report*, Available at: <<http://www.ids.ac.uk/news/report-finds-climate-change-poses-threat-to-indian-farmers>> Accessed on 29 October 2012

⁶ See Bhavani Prasad Panda and Minati Panda, ‘Analysis of Orissa Relief Code and Disaster Preparedness during Orissa Super Cyclone, 1999’ [2004] NALSARLawRw 5; (2004) 2(1) NALSAR Law Review 77

⁷ See International Federation of the Red Cross and Red Crescent (2011), ‘Law and Disaster Risk Reduction at the Community Level: Background Report’ Available at <http://www.ifrc.org/PageFiles/86597/IC31_DisasterRiskReduction_26Nov_clean_EN.pdf> Accessed on 29 October 2012

where the importance and nature of DRR was still not quite understood, and where systematic frameworks for DRR, like the Hyogo Framework for Action 2005-2015 had not yet been conceived. Moreover, the regulatory mechanisms for matters intrinsic to DRR, are in some instances are generally extremely outdated and fail to give any regard to disaster issues. Odisha's water management frameworks are a key example – it is governed principally by the *Orissa Irrigation Act 1959* which is concerned with regulating the extraction of water for irrigation purposes, and there is hardly any legislation which is turned towards water conservation or drought-proof measures. This reflects a wrongly-held view that disasters are a singular isolated phenomenon which bears no relation to the way the environment is managed as a whole.

Odisha thus faces the immense challenge of reforming and in some cases, completely overhauling its disaster management, environment, building, and planning frameworks. To a certain extent this has been assisted by the Central Government's enactment of the *National Disaster Management Act 2005*, which aims to establish a comprehensive disaster management system that integrates national, state and local levels of government together to address the entire cycle of disasters – from prevention, to risk reduction, risk mitigation, relief, response and finally, recovery, both for the short and long term. The National Disaster Management Authority's various recently developed guidelines on handling different types of disasters also assist the State of Odisha with designing its disaster management approaches. Nonetheless, despite the clarifications these national developments provide, especially on the roles and responsibilities which rest upon State and local governments, they also complicate the disaster management scene as new questions of inter-governmental and inter-agency coordination, legislative consistency, State and district level implementation and funding are raised. Indeed, although the *National Disaster Management Act 2005* has been in operation for seven years, the Odisha State government has hardly implemented its provisions. There are for example, no department disaster management policies in place and an updated State Disaster Management Policy has not yet been devised. The disaster management scene in Odisha and at the national level have been further complicated by the need to address new threats like climate change and food security, both of which are tied into complex global chains of action and actors which make it particularly difficult to develop effective local actions.

In Odisha, as the table demonstrates below, the landscape of disaster management is a highly dynamic, active one, involving a complicated web of issues and actors. While there have been many positive steps which have been taken by the State government and statutory bodies to improve disaster management, and although the legislative and policy developments at the national level have brought an air of reform, the fundamental question which

remains – and which must always be asked – is whether and how effectively the disaster management frameworks are being implemented. Odisha has constantly been plagued by this question, to the point where its people, the ones who ultimately bear the brunt of non-or poor implementation, have a certain degree of scepticism and cynicism about the law.⁸

Summary of the key findings

The following table summarises the outcomes from the research study:

Topic/Issue	Description of Legal Provisions
Governance and law-making structures	<p>India has a federal system and consists of 28 States and 7 Union Territories. Parliamentary forms of government operate both at the national and state level. The <i>Constitution of India 1949</i> establishes and sets out the division of powers between national, state and local governments. It also specifically creates governance bodies for urban areas (municipalities which are administered by municipal corporations) and panchayats (village councils which are set up to administer rural areas).</p> <p>The State of Odisha was formed on 1 April 1936 pursuant to the <i>Government of India (Constitution of Odisha) Order 1936</i>. Previously, it was part of Bihar and portions of the Madras Presidency and Central Provisions. In 1937 it achieved self-rule. The State has a unicameral system of parliament, with the Odisha Legislative Assembly being the law-making body.⁹ The Legislative Assembly's term runs for every five years and is currently headed by Chief</p>

⁸ See P Sainath (1996), *Everybody Loves a Good Drought: Stories from India's Poorest Districts*, Penguin Books India, New Delhi, India; Sanjoy Patnaik (2008) *Status Report: Land Rights and Ownership in Orissa*, United Nations Development Programme, India. This comment is also based on the author's personal exchanges with locals.

⁹ <http://ws.ori.nic.in/ola/brief.htm>

	<p>Minister Naveen Patnaik. The Governor of Odisha is the head of State but the position is largely a ceremonial one.¹⁰</p> <p>Odisha is divided into 30 districts, 58 sub-divisions, 316 tahasils (groups of villages which are administered by panchayats) and 314 development blocks.¹¹ Laws passed by the Odisha Legislative Assembly, as well as certain laws enacted by the Central government, are applicable to the State.</p>
Level of governmental responsibility for disaster management	Before the enactment of the <i>National Disaster Management Act 2005</i> , by convention primary responsibility for disaster management has rested with the State government, while the Central government plays an assisting role. However, the statute now distributes responsibility for disaster management across national, state and local governments.
Key disaster management instruments	<i>Orissa Relief Code 1996, National Disaster Management Act 2005, Orissa State Disaster Management Policy 2005, National Disaster Management Policy 2009</i>
Key disaster management institutions	Odisha State Disaster Management Authority; Revenue and Disaster Management Department, Government of Odisha; National Disaster Management Authority
Overall orientation of disaster management instruments	<p><i>Orissa Relief Code 1996</i> – disaster response</p> <p><i>Orissa State Disaster Management Policy 2005</i> – mostly disaster response but some provisions made for DRR disaster preparedness, mitigation and prevention.</p> <p><i>National Disaster Management Act 2005</i> - all aspects of disaster management cycle</p>

¹⁰ See generally, *Constitution of India 1949* Part VI, Chapter II

¹¹ Revenue Department, Government of Odisha, 'Administrative Units'. Available at: <http://www.orissa.gov.in/revenue/ADMN_UNIT/adm_unit.htm>. Accessed on 22 October 2012

	<i>National Disaster Management Policy 2009</i> - all aspects of the disaster management cycle
Scope for community/civil society/Red Cross/women involvement in disaster management institutions	None.
Provision for DRR expenditure in government budgets	Mainly provided through departmental policies, not legislative mechanisms. The <i>National Disaster Management Act 2005</i> now requires State governments to establish funds at the district and state level specifically for disaster relief and mitigation.
Sources of government liability in DRR e.g. failure to warn, faulty warnings	<i>Constitution of India 1949; National Disaster Management Act 2005</i> , the common law
Compulsory insurance system against effects of natural disasters	None
Laws regulating specific types of disasters i.e. cyclones, droughts, storms, landslides/avalanches, fires, heat/cold waves, floods, insect infestations	None. However the <i>Orissa Relief Code 1996</i> sets out the relief measures which should be provided for each type of disaster.
Laws imposing general obligations to establish early warning systems	None.
Sectoral laws establishing Early Warning Systems and information collection (risk mapping) measures for	None.

specific types of disasters	
Laws addressing threats to food security	None, but the Central government has drafted a national food security bill. This has yet to be introduced into Parliament
Laws addressing climate change	None. Odisha has a draft climate change policy (<i>Orissa Climate Change Action Plan 2010-2015</i>)
Telecommunications laws which include DRR concerns	None
Disaster management laws which regulate collection and publication of baseline population data	None. Population data collection regulated by national census laws.
Building and construction laws enacted	<i>Orissa Municipal Corporation Act 2003</i> ; regulations passed by local development authorities
Building and construction laws include mechanisms for building approvals, inspections, regulating large buildings	Yes
Building and construction laws provide for emergency/transitional shelter	No.
Land use/planning laws enacted	<i>Orissa Development Authorities Act 1982</i>
Land use/planning laws include public open spaces for evacuation and	No

emergency vehicle access	
Land use/planning laws regulate development of high risk sites	No.
Land registration system present in Odisha	<i>Registration Act 1908</i>
Responsible institution for land surveys	Revenue and Disaster Management Department, Government of Odisha
Land ownership by women, religious groups, non-nationals	Yes. <i>Hindu Succession Act 1958, Indian Succession Act 1925, Muslim Personal Law (Shariat) Application Act 1937, Foreign Exchange Management Act 1999</i>
Recognition of traditional/customary occupation/management/use of land and its resources	Only for forests. <i>Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006</i>
Compulsory land acquisition laws	<i>Land Acquisition Act 1894</i>
Recognition of adverse possession	Common law recognition
Recognition of squatters' rights	<i>Government Land Settlement Act 1962; Orissa Prevention of Land Encroachment Act 1972</i>
Laws for clearing slums	No, some constitutional law limitations on this
Laws for recognising or regularising slums and providing social services	At present provided for through state policies rather than legislation e.g. <i>Housing for All: Slum Rehabilitation and Development Policy for Orissa, Scheme for Affordable Housing.</i>

	The Odisha State government is planning to enact a statute which confers property rights on slum dwellers (Odisha Property Rights to Slum Dwellers and Prevention of New Slums Bill 2012)
Laws providing that informal settlements are included in Early Warning Systems and community-based DRR	No.
Laws for controlling urban floods	No, but some recognition of this issue in water management policies.
Institutions responsible for flood control and management	Department of Water Resources, Government of Odisha
Perspective adopted in environment management legislation	Environment protection and human safety
Environment Impact Assessments include requirements to consider disaster risks	Environmental Impact Assessments require project proponents to consider disaster risks and the social impacts on communities.
Environment management legislation focus on mitigating disaster risks e.g. deforestation, flood prevention, water storage, water conservation	Extremely few measures in place.
Recognition of customary rights to water	Only as an incident of traditional rights to forest land recognised by the <i>Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006</i>

Legislative requirements that DRR be included in school curriculums	None
Legislative requirements that public authorities should conduct public education and awareness on DRR	None, though there is some recognition of the need to do so at the policy level.

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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./pa ras.	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 1949	Part V ('The Union') Part VI ('The States'); Part IX ('The Panchayats'); Part IXA ('The Municipalities')	The <i>Constitution of India 1949</i> establishes 3 levels of government: a) Union: Governs in relation to matters of national interest b) State: Governs state matters or matters of local interest ¹² c) Local: State-created local governments for urban areas (municipalities) and for rural areas (panchayats) The State of Odisha is divided into 30 districts, 58 sub-divisions, 316 tahasils (groups of villages which are administered by panchayats) and 314 development blocks. ¹³
2. Is there a separate law on decentralisation of government functions? How does it decentralise?	Constitution of India 1949; Orissa Panchayat Samiti Act 1959;	Arts 243B, 243G,	The <i>Constitution of India 1949</i> requires States to create local governments for rural and urban areas. ¹⁴ States are to endow the panchayats and municipalities with 'such powers and authority as

¹² Article 245 and Schedule 7 of the *Constitution of India 1949* set out the division of legislative responsibilities between the Union and States.

¹³ Revenue Department, Government of Odisha, 'Administrative Units'. Available at: <http://www.orissa.gov.in/revenue/ADMN_UNIT/adm_unit.htm>. Accessed on 22 October 2012

¹⁴ *Constitution of India 1949* Arts 243B, 243Q

1. BACKGROUND INFORMATION			
Legal Research Questions	Short Title, no. & date of law/ regulation	No.ss./pa ras.	Answers, comments & extracts (please use quotation marks for all extracts)
For example, does it establish new institutions or delegate powers to provincial/local government?	Orissa Grama Panchayats Act 1964; Zilla Parishad Act 1991	243H, 243Q, 243W, 243X	<p>are necessary' for them to function as institutions of self-government.¹⁵ States are also empowered to enact laws which devolve powers and responsibilities to panchayats and municipalities so that they can prepare plans and implement schemes for economic development and social justice. Powers and functions to implement schemes relating to any matters stated in the Eleventh Schedule (for Panchayats) and the Twelfth Schedule (for Municipalities) can be conferred on them.</p> <p>Panchayats and municipalities may also be given collection, appropriation and levy powers for taxes, duties, tolls and fees.¹⁶</p> <p>The State of Odisha went on to create a three-tier panchayat raj system by enacting the <i>Orissa Panchayat Samiti Act 1959</i>, which creates the panchayat at the block level, the <i>Orissa Grama Panchayats Act 1964</i> which creates the panchayat at the village level, and the <i>Orissa Zilla Parishad Act 1991</i> which creates the panchayat at the district level. The <i>Orissa Municipal Corporation Act 2003</i> created local governments for small and large urban areas, as well as areas which are in transition from rural to urban (known as Notified Area Councils).</p>
3. Looking at the Constitution and/or	Constitution of India 1949	Schedules	The <i>Constitution of India 1949</i> does not allocate legislative powers

¹⁵ *Constitution of India 1949* Arts 243G, 243W

¹⁶ *Constitution of India 1949* Arts 243H, 243X

1. BACKGROUND INFORMATION			
Legal Research Questions	Short Title, no. & date of law/ regulation	No.ss./pa ras.	Answers, comments & extracts (please use quotation marks for all extracts)
decentralisation law, is there any mention of allocation of responsibility at the different levels for reducing risks related to natural disasters?		7, 11 and 12	or responsibilities for disaster risk reduction or disaster management to a specific level of government. ¹⁷ However, the State and Central governments have proceeded on the footing that States have the primary responsibility for relief, rehabilitation and rescue measures in the event of natural disasters, while the Central Government plays a supportive role by providing physical and financial resources. ¹⁸
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).			Refer to study on national disaster management laws

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.

¹⁷ See *Constitution of India 1949*, Schedules 7,11 and 12

¹⁸ See Planning Commission, Government of India (2007), *Five Year Plan 2002-2007, Volume 1: Dimensions and Strategies*, pp. 191- 195. Available at: <http://planningcommission.nic.in/plans/planrel/fiveyr/10th/volume1/v1_ch7.pdf>. See also Subrat Das, (2005) 'Public Policy towards Natural Disasters: Disconnect Between Resolutions and Reality' Prepared for the Centre for Budget and Governance Accountability. Available at: <http://www.cbgaindia.org/files/working_papers/Public%20Policy%20towards%20Natural%20Disasters%20in%20India.pdf>. Das argues that this creates some uncertainty over whether taking adequate measures for disaster mitigation and preparedness should also be deemed as the direct responsibility of the States.

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/state disaster management (DM) or civil protection law or regulation? - or a group of regulations? Describe.	Orissa Relief Code 1996; State Disaster Management Policy 2005 (Resolution No. IVF, (OSDMA) 13/2004, 9870/R dated 4 th March 2005 Revenue Department); National Disaster Management Act 2005		Odisha does not have its own principal overarching statute for disaster management. The key regulatory instruments are the <i>Orissa Relief Code 1996</i> (presently undergoing revisions ¹⁹), the <i>State Disaster Management Policy 2005</i> and the <i>National Disaster Management Act 2005</i> , which was enacted by the Central government to create a comprehensive, integrated system of disaster management throughout the whole nation.
6. Is there also a national/ state disaster management policy? Is this established by a law? Provide details.	Orissa Disaster Management Policy 2005; No. IVF(OSDMA) 13/2004-9870/R		Disaster management policies exist both at the national and state level. ²⁰ The present discussion shall focus only on Odisha's state disaster management policy. On 4 March 2005, the Revenue Department of Odisha passed a resolution to enact the <i>State Disaster Management Policy 2005</i> for Odisha, several months before the <i>National Disaster Management Act 2005</i> came into force (23 December 2005). The Department

¹⁹ Personal communication from the Office of the Special Relief Commissioner, Odisha, 29 August 2012

²⁰ See National Disaster Management Authority, Ministry of Home Affairs, Government of India (2009), *National Policy on Disaster Management 2009*

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>did so as a response to the following:</p> <ul style="list-style-type: none"> • The proclamation of the decade 1990-2000 as the International Decade for National Disaster Reduction by the General Assembly of the United Nations and the World Conference on Natural Disasters Reduction at Yokohoma, Japan, in 1994. • The Government of India's establishment of the High Powered Committee in 1999 to prepare a national disaster management plan and to suggest institutional reforms required at all levels for effective disaster management. • The creation of the National Committee on Disaster Management with the Prime Minister as Chairperson to consider the necessary institutional and legislative measures needed to develop a long-term 'natural calamities' strategy • Orissa's background of devastating disasters.²¹ <p>The policy was not enacted pursuant to any statutory requirements and does not carry any legislative force. At present there are no indications that it will be revised so that it conforms with the requirements of the <i>National Disaster Management Act 2005</i> and the <i>National Policy on Disaster Management 2009</i>.</p> <p>The essential purposes of the <i>State Disaster Management Policy 2005</i> are to promote total risk management and vulnerability</p>

²¹ Revenue Department, Government of Orissa, *State Disaster Management Policy 2005*, Resolution No. IVF, (OSDMA) 13/2004, 9870/R dated 4th March 2005

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)
			reduction by strengthening the physical infrastructure as well as the bio-physical, psychological, social and economic conditions of the people and to make them more disaster resilient. ²²
7. Is the DM law a national/state 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?	Odisha Relief Code 1996; National Disaster Management Act 2005	Clause 2(1) Section 2	The <i>Odisha Relief Code 1996</i> and the <i>National Disaster Management Act 2005</i> apply throughout the State of Odisha. ²³ While the purpose of the former is to guide the Odisha State Government in administering relief measures for natural calamities, ²⁴ the latter aims to create a comprehensive disaster management system which consists of national, state and local elements (refer to study on national disaster management laws). ²⁵ Consistent with the division of disaster management responsibilities between State and Central governments, the <i>Orissa Relief Code 1996</i> envisages that the Central government will play a supportive role in the State's relief responses. ²⁶
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?	Orissa Relief Code 1996 National Disaster Management Act 2005	Clause 5 Sections 38(1), 38(2)(k),	Since the 1930s, Odisha has had its own code for relief, rescue and rehabilitation measures. The <i>Bihar and Orissa Famine Code 1930</i> , enacted by the British, was replaced by the Odisha government with the <i>Orissa Relief Code 1980</i> as it was far too outdated and restricted in scope. It was then replaced in 1996 with the <i>Orissa Relief Code 1996</i> . Its objectives were to provide for the

²² Revenue Department, Government of Orissa, *State Disaster Management Policy 2005*, Resolution No. IVF, (OSDMA) 13/2004, 9870/R dated 4th March 2005 p.2

²³ *National Disaster Management Act 2005* s 2; *Orissa Relief Code 1996* cl 2(1)

²⁴ *Orissa Relief Code 1996* cl 2(1)

²⁵ See generally, *National Disaster Management Act 2005*

²⁶ See eg, *Orissa Relief Code 1996* cl 8, which describes funding arrangements with the Central government. See also, Panda, Bhavani Prasad; Panda, Minati, 'Analysis of Orissa Relief Code and Disaster Preparedness during Orissa Super Cyclone, 1999' [2004] NALSARLawRw 5; (2004) 2(1) NALSAR Law Review 77 p. 81

2. INSTITUTIONAL FRAMEWORKS, RESOURCING AND COMMUNITY PARTICIPATION IN DRR

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		38(2)(l)	<p>administration of relief measures in the State so that no one should die of starvation and to prevent the physical deterioration and destitution of people. It also sought to enable people to resume their ordinary pursuits of life and to prevent any harm to their economic well-being.²⁷</p> <p>The <i>Orissa Relief Code 1996</i> was enacted before there were any national-level disaster management laws in place. Now that the <i>National Disaster Management Act 2005</i> has been enacted, while there has been no statement on how the <i>Orissa Relief Code 1996</i> fits with the statute, it is suggested that the connection between the two should be premised on s 38(1) of the <i>National Disaster Management Act 2005</i>. This authorises the State Government to take ‘such further measures as it deems necessary or expedient for the purpose of disaster management’. Sections 38(2)(k) and 38(2)(l) define ‘such further measures’ as : providing rehabilitation and reconstruction assistance to the victims of any disaster, and measures which are ‘necessary’ or expedient’ for securing the effective implementation of the <i>National Disaster Management Act 2005</i>’s provisions.</p> <p>When the <i>Orissa State Disaster Management Policy 2005</i> came into force, the Odisha government had planned to enact a State Disaster Management Act.²⁸ It is uncertain whether such intentions still hold given that the <i>National Disaster Management Act 2005</i></p>

²⁷ *Orissa Relief Code 1996* cl 5

²⁸ Revenue Department, Government of Orissa, *State Disaster Management Policy 2005*, Resolution No. IVF, (OSDMA) 13/2004, 9870/R dated 4th March 2005 p. 5

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			has been established.
<p>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?</p>	<p>Societies Registration Act 1860;</p> <p>Finance Department Resolution No. IFC 74/99-51779/F;</p> <p>Revenue and Disaster Management Department Resolution No. 42317/R&DM 2008;</p> <p>National Disaster Management Act 2005</p>	<p>Section 18</p>	<p>The Orissa State Disaster Mitigation Authority was set up as an autonomous organisation in 1999 by the Finance Department Resolution No. IFC- 74/99-51779/F and was registered under the <i>Societies Registration Act 1860</i> as a non-profit making and charitable institution for the interest of the people of Orissa. It is administered by the Department of Revenue and Disaster Management. In 2008, pursuant to the Revenue & Disaster Management Department Resolution No. 42317/R&DM, its name was changed to the Orissa State Disaster Management Authority (the ‘OSDMA’)</p> <p>The OSDMA’s mandate is to:</p> <ol style="list-style-type: none"> 1. To take up relief, restoration and reconstruction activities and measures for socioeconomic revival for mitigating the damages caused or likely to be caused due to any disaster; 2. To take up programmes and schemes that will prevent occurrence of any disaster or minimize the damaging effect due to any disaster; 3. To undertake specific studies to identify programmes and schemes to be taken up to evaluate the various measures taken and suggest suitable action;

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>4. To accept grants, donation, funds from the State Government, Government of India, bilateral or multi-lateral funding agencies, non- governmental organization (NGOs), semi-governmental organizations, State Government and Central Government undertakings, public or private companies, trusts, private individuals interested in participating in or supporting the disaster mitigation works;</p> <p>5. To raise loans if necessary</p> <p>6. To take up relief, restoration and reconstruction activities and measures for socioeconomic revival for mitigating the damages caused or likely to be caused due to any disaster.²⁹</p> <p>As there have been no modifications to its mandate, it is unclear whether the Orissa State Disaster Management Authority is to assume the functions of the State Disaster Management Authority as stated under s 18 of the <i>National Disaster Management Act 2005</i>.</p>
10. Does the DM policy use the same or different implementing institutions from the DM law? Describe.	Orissa State Disaster Management Policy 2005;	p.4, at [3.1]	Both the <i>Orissa Relief Code 1996</i> and the <i>Orissa State Disaster Management Policy 2005</i> contemplate the Revenue and Disaster Management Department as the administrative department for disaster management. The Special Relief Commissioner oversees

²⁹ Revenue and Disaster Management Department, Government of Orissa, 'Change of Name of 'Orissa State Disaster Mitigation Authority' to 'Orissa State Disaster Management Authority', Resolution No.IVF(OSDMA)16/08 - 4 2 3 1 7 /R&DM, 27 September 2008 p. 1

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	Orissa Relief Code 1996	Clause 11	the provision of relief measures and the OSDMA is to play a coordinating role in the pre and post-disaster phases. ³⁰ Other government departments may also be involved in disaster management or, depending on the type of disaster, become the coordinating body. For example, the Health Department could be the nodal department for epidemics, while in drought situations the Agriculture and Water Resources Departments would be responsible for providing irrigation facilities, wells, and seed supplies. ³¹
11. Does the DM law or other law deal with: a. Disaster response ³² ? b. Disaster preparedness ³³ ? c. Disaster mitigation ³⁴ and prevention ³⁵ ? d. Disaster risk reduction ³⁶ (DRR)?	Orissa Relief Code 1996 National Disaster Management Act 2005	Sections 18, 23, 30, 31, 34, 36,	The <i>Orissa Relief Code 1996</i> primarily addresses disaster relief and responses to different types of disasters. It covers matters such as control room operations, the provision of emergency food supplies, arrangements for financial and military assistance, transport, special relief to artisans and weavers, damage assessments and law and order. ³⁷ The Code also has some provisions for disaster preparedness. For instance, it prescribes that there should be early warning systems, identification of

³⁰ *Orissa Relief Code 1996* cls 12, 13, 15-17; *Orissa State Disaster Management Policy 2005* at [3.1], p.4. It should be noted that the *Orissa Relief Code 1996* does not describe what role the OSDMA should play as the body was established after the statute was enacted.

³¹ Revenue Department, Government of Orissa, *State Disaster Management Policy 2005*, Resolution No. IVF, (OSDMA) 13/2004, 9870/R dated 4th March 2005 at [3.1], p.4; *Orissa Relief Code 1996* cl 1

³² "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."

³³ "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."

³⁴ "The lessening or limitation of the adverse impacts of hazards and related disasters."

³⁵ "The outright avoidance of adverse impacts of hazards and related disasters."

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
e. If it includes DRR, how is it defined? (include definition)		37, 39, 40, 41	cyclone shelters, and stocking of emergency food supplies. ³⁸ The <i>National Disaster Management Act 2005</i> imposes additional requirements upon State governments, local authorities, district disaster management authorities and state disaster management authorities to undertake disaster preparedness, response, mitigation, prevention, and risk reduction measures (for a detailed discussion about these requirements, refer to the national study on disaster management laws). ³⁹
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.	Societies Registration Act 1860; Finance Department Resolution No. IFC 74/99-51779/F; Revenue and Disaster Management Department Resolution No. 42317/ R&DM 2008; Orissa Relief Code 1996		The <i>Orissa Relief Code 1996</i> assigns relief and response responsibilities to a range of government ministries – the Panchayat Raj Department, the Women and Child Development Department, the Higher Education and Youth Services Department, the Mass Education Department, the Forest and Environment Department, the Fishery and Animal Resources Department, the Health and Family Welfare Department, the Home Department, the Water Resource Department, the Planning and Coordination Department, the Rural Development Department, the Food and Consumer Welfare Department, the Harijans and Welfare

³⁶ “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>.

³⁷ See generally, *Orissa Relief Code 1996*

³⁸ *Orissa Relief Code 1996* cls 100, 103

³⁹ *National Disaster Management Act 2005* ss 18, 23, 30, 31, 34, 36, 37, 39, 40, 41

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	National Disaster Management Act 2005	Clause 11 Section 39	<p>Department, the Housing and Urban Development Department, the Works Department, and the Revenue and Excise Department.⁴⁰</p> <p>Responsibility for DRR rests across all departments of the State government. The <i>National Disaster Management Act 2005</i> states that it shall be the responsibility of every State department to take measures which are necessary to prevent, prepare and mitigate disaster risks.⁴¹</p> <p>The State Disaster Management Policy 2005 affirmed the position that the Revenue Department should be the administrative department for disaster management.⁴²</p> <p>Pursuant to the Revenue and Disaster Management Department's resolution, DRR responsibilities have been assigned to the Orissa State Disaster Management Authority.⁴³</p> <p>The <i>National Disaster Management Act 2005</i> also assigns DRR responsibilities to State governments. For instance, it states that each State government is responsible for taking measures which are necessary to prevent, mitigate and prepare for disasters, and to integrate into its development plans and projects measures for</p>

⁴⁰ Orissa Relief Code 1996 cl 11

⁴¹ *National Disaster Management Act 2005* s 39(a)

⁴² Revenue Department, Government of Orissa, *State Disaster Management Policy 2005*, Resolution No. IVF, (OSDMA) 13/2004, 9870/R dated 4th March 2005 at [3.1], p.4

⁴³ Revenue Department, Government of Orissa, *State Disaster Management Policy 2005*, Resolution No. IVF, (OSDMA) 13/2004, 9870/R dated 4th March 2005 p.1, Aim and Objective 2

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			preventing disasters and mitigating disaster risks. Funding is to be provided accordingly to implement these measures. ⁴⁴
<p>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?</p> <p>a. National?</p> <p>b. Provincial/state?</p> <p>c. Municipal/local?</p>	<p>Orissa Relief Code 1996;</p> <p>Orissa State Disaster Management Policy 2005;</p> <p>Revenue and Disaster Management Department Resolution No. 42317/R&DM 2008;</p> <p>National Disaster Management Act 2005;</p> <p>National Disaster Management Policy 2009</p>		<p>No. None of Odisha's disaster management instruments prescribe a role for civil society in the OSDMA.⁴⁵ The involvement of civil society has not been completely disregarded though, for the <i>Orissa State Disaster Management Policy 2005</i> does provide that help and cooperation from community-based organisations, NGOs and other civil society institutions should be solicited for there to be effective disaster management.⁴⁶</p>
<p>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</p>	<p>Orissa Relief Code 1996;</p> <p>Orissa State Disaster</p>		<p>There are no legislative provisions or policies which prescribe a role for the Indian Red Cross in the OSDMA.⁴⁷ However, the <i>Orissa Disaster Management Policy 2005</i> does state that for effective disaster management, the State's disaster management strategy</p>

⁴⁴ *National Disaster Management Act 2005* ss 39(a), 39(b), 39(c), 38

⁴⁵ See *National Disaster Management Act 2005* ss 17, 18; Finance Department, Resolution No. IFC- 74/99-51779/F, 28th December 1999

⁴⁶ Revenue Department, Government of Orissa, *State Disaster Management Policy 2005*, Resolution No. IVF, (OSDMA) 13/2004, 9870/R dated 4th March 2005 at [3.2.1.10] p. 6

⁴⁷ See generally, Finance Department Resolution No. IFC- 74/99-51779/F, 28th December 1999; *Orissa Relief Code 1996*

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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 the role? At what levels?</p> <p>a. National?</p> <p>b. Provincial/state?</p> <p>c. Municipal/local?</p>	<p>Management Policy 2005;</p> <p>Revenue and Disaster Management Department Resolution No. 42317/R&DM;</p> <p>Finance Department Resolution No. IFC- 74/99-51779/F</p>		<p>should aim at coordinating the efforts of various stakeholders, the Indian Red Cross being expressly mentioned as one of them.⁴⁸</p>
<p>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?</p> <p>a. National?</p> <p>b. Provincial/state?</p> <p>c. Municipal/local?</p>	<p>Orissa Relief Code 1996;</p> <p>Orissa State Disaster Management Policy 2005;</p> <p>Revenue and Disaster Management Department Resolution No. 42317/R&DM 2008;</p> <p>Finance Department Resolution No. IFC- 74/99-</p>		<p>No, there are no legislative provisions or policies which prescribe a role for women in the OSDMA.⁴⁹ However, the <i>Orissa State Disaster Management Policy 2005</i> states as one of its disaster management principles that the participation of women should be emphasised in all stages of disaster management and that their special problems in disaster situations should be recognised.⁵⁰ It also states that when conducting risk assessments, 'efforts will be made to minimise vulnerability of disadvantaged groups like women...' and that to facilitate community participation, women self-help groups will receive special attention.⁵¹</p>

⁴⁸ Revenue Department, Government of Orissa, *State Disaster Management Policy 2005*, Resolution No. IVF, (OSDMA) 13/2004, 9870/R dated 4th March 2005 at [3]

⁴⁹ See generally, Finance Department Resolution No. IFC- 74/99-51779/F, 28th December 1999; *Orissa Relief Code 1996*

⁵⁰ Revenue Department, Government of Orissa, *State Disaster Management Policy 2005*, Resolution No. IVF, (OSDMA) 13/2004, 9870/R dated 4th March 2005 at [2], p.3

⁵¹ Revenue Department, Government of Orissa, *State Disaster Management Policy 2005*, Resolution No. IVF, (OSDMA) 13/2004, 9870/R dated 4th March 2005 at [3.2.7], p.

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	51779/F; Revenue and Disaster Management Department Resolution No. 42317/R&DM		
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?	Orissa Relief Code 1996; Orissa State Disaster Management Policy 2005; Finance Department Resolution No. IFC- 74/99-51779/F; Revenue and Disaster Management Department Resolution No. 42317/R&DM		No roles or participatory mechanisms are specified for communities or vulnerable groups in the OSDMA. ⁵² There is however, a principle in the <i>Orissa State Disaster Management Policy 2005</i> stating that ‘disaster management should aim to create an enabling environment for ensuring higher participation of all stakeholders’. ⁵³ It states further that the Government will actively promote, through its own agencies, NGOs and other stakeholders, active community participation in risk assessment, vulnerability analysis, mitigation, planning and implementation of response and rehabilitation activities. ⁵⁴
17. Describe the main differences in the scope of the DM law and the DM	Orissa Relief Code 1996;	Clause 9	The <i>Orissa Relief Code 1996</i> primarily focuses on disaster relief but in certain situations it provides for disaster prevention and risk

⁵² See generally, Finance Department Resolution No. IFC- 74/99-51779/F, 28th December 1999; *Orissa Relief Code 1996*

⁵³ Revenue Department, Government of Orissa, *State Disaster Management Policy 2005*, Resolution No. IVF, (OSDMA) 13/2004, 9870/R dated 4th March 2005, p. 3

⁵⁴ Revenue Department, Government of Orissa, *State Disaster Management Policy 2005*, Resolution No. IVF, (OSDMA) 13/2004, 9870/R dated 4th March 2005 at [3.2.9] p.

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
policy concerning prevention and disaster risk reduction.	Orissa State Disaster Management Policy 2005		<p>reduction measures. This is usually where such measures would go towards improving the response, relief and recovery measures to be implemented.⁵⁵</p> <p>The <i>Orissa State Disaster Management Policy 2005</i> on the other hand covers all aspects of disaster management – the pre-disaster phase, the response phase, and the recovery and rehabilitation phase – and requires that they are integrated with normal development planning at all levels. State departments are to set aside a certain amount of their budget for preparedness and prevention measures. Risk reduction indicators are to be used as one of the monitoring indices for developmental activities in the State.⁵⁶</p> <p>By providing for the entire cycle of disaster management, the <i>National Disaster Management Act 2005</i> closes the legislative gaps created in the <i>Orissa Relief Code 1996</i>.⁵⁷</p>
18. Does the DM law or policy, or other legislation, provide for oversight mechanisms on DRR implementation, including reporting and/ or parliamentary oversight?	Orissa State Disaster Management Policy 2005; Orissa Relief Code 1996;		The <i>Orissa Relief Code 1996</i> does not provide for oversight mechanisms. However, the <i>Orissa State Disaster Management Policy 2005</i> states that ‘as documentation of the various phases and aspects of disaster management is important for recording valuable experiences and identifying areas where improvements are possible, the OSDMA will document various disaster events,

⁵⁵ *Orissa Relief Code 1996* cl 9

⁵⁶ Revenue Department, Government of Orissa, *State Disaster Management Policy 2005*, Resolution No. IVF, (OSDMA) 13/2004, 9870/R dated 4th March at [3], p. 4

⁵⁷ For instance, as discussed previously, the statute requires State governments to undertake disaster preparation, prevention, mitigation and capacity building measures. See *National Disaster Management Act 2005* s 38

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	National Disaster Management Act 2005 Right to Information Act 2005	Sections 20, 22 Sections 4(1)(b), 4(1)(c)	<p>highlighting lessons learnt in association with other involved organisations.’⁵⁸This provides some scope for monitoring the implementation of DRR.</p> <p>As the <i>Orissa Disaster Management Policy 2005</i> commits the Odisha government to ‘evolving appropriate measures to improve the quality of disaster management’,⁵⁹ this could be relied upon to create accountability mechanisms.</p> <p>The <i>National Disaster Management Act 2005</i> also provides additional oversight mechanisms The statute makes it compulsory for each State government to establish a State Executive Committee. Consisting mainly of the secretaries of government department, the committee’s main functions are to coordinate and monitor the management of disasters in the State.⁶⁰ So far there are no indications that such a committee has been established in Odisha.</p> <p>The <i>Right to Information Act 2005</i>, by requiring Central and State governments and statutory authorities to publish reports on their activities, provides yet another mechanism for creating some transparency in the State’s disaster management processes.⁶¹</p>

⁵⁸Revenue Department, Government of Orissa, *State Disaster Management Policy 2005*, Resolution No. IVF, (OSDMA) 13/2004, 9870/R dated 4th March at [3.4.4], p. 12

⁵⁹Revenue Department, Government of Orissa, *State Disaster Management Policy 2005*, Resolution No. IVF, (OSDMA) 13/2004, 9870/R dated 4th March at [3.4.4], p. 12

⁶⁰ *National Disaster Management Act 2005* ss 20, 22

⁶¹ *Right to Information Act 2005* ss 4(1)(b) , 4(1)(c). See eg, Revenue and Disaster Management Department, ‘Important Policies and Decisions s 4(1)(c)’. Available at: <
http://rtiodisha.gov.in/dept_home.php?id=25&oid=46&sid=19>

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
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?	Orissa Relief Code 1996; Orissa State Disaster Management Policy 2005; National Disaster Management Act 2005		The <i>Orissa Relief Code 1996</i> and the <i>Orissa State Disaster Management Policy 2005</i> do not adhere to the Hyogo Framework for Action as they were enacted before the Framework was conceived. Nonetheless, it should be noted that one of the reasons for enacting the <i>Orissa State Disaster Management Policy 2005</i> was because of the United Nations' declaration of 1990-2000 as the International Decade for National Disaster Reduction and at the World Conference on Natural Disasters Reduction at Yokohama, Japan, in 1994. ⁶² For a discussion of whether the <i>National Disaster Management Act 2005</i> allocates responsibility for implementing the Hyogo Framework for Action to an institution, refer to the study on national laws.
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?	Orissa Climate Change Action Plan 2010-2015		No. Odisha has yet to implement its response to climate change. In 2010, following the Government of India's development of the National Action Plan on Climate Change, the Odisha Government assigned the Forests and Environment Department with the task of developing a climate change action plan for the state. The final draft was sent to the Union Government's Ministry of Environment and Forests for approval in the middle of 2011. ⁶³ Approval has not been granted, thus holding back the action plan's implementation.

⁶² Revenue Department, Government of Orissa, *State Disaster Management Policy 2005*, Resolution No. IVF, (OSDMA) 13/2004, 9870/R dated 4th March at [3.4.4], p. 1

⁶³ Jayajit Dash, 'Orissa send final Climate Action Plan to MoEF', *Business Standard*, 17 June 2011. Available at: < <http://www.business-standard.com/india/news/orissa-sends-final-climate-change-action-plan-to-moef/439381/>>, Accessed on 24 October 2012

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>There are no indications that a climate change-specific statute will be enacted.</p> <p>The draft of the <i>Orissa Climate Change Action Plan 2010-2015</i> states that a climate change agency will be created, but its role is more to coordinate an inter-departmental response to implement the plan's measures, and to be the contact point for the Government of India and external stakeholders for climate change issues. Its primary functions are to provide advisory, supervisory and co-ordination services to the Odisha State.⁶⁴ The responsibility for climate change adaptation has been distributed across all the departments and government agencies rather than allocated to one specific institution.⁶⁵</p> <p>The Climate Change Action Plan does recognise the link between climate change and disasters, and pays particular regard to its impacts on health (disease and malnutrition), food security and the state's coastal areas.⁶⁶ It prescribes a range of measures, such as flood mapping, micro-level vulnerability assessments, constructing flood and cyclone shelters, developing a hydrological framework, improving flash-flood management systems, strengthening coastal protection methods, developing a techno-legal regime for constructing disaster-resilient housing and public infrastructure,</p>

⁶⁴ Forests and Environment Department, Government of Odisha (2010), *Draft Orissa Climate Change Action Plan 2010-2015*, p. 60

⁶⁵ See generally, Forests and Environment Department, Government of Odisha (2010), *Draft Orissa Climate Change Action Plan 2010-2015*, esp pp. 59-63 and Annexure 4

⁶⁶ Forests and Environment Department, Government of Odisha (2010), *Draft Orissa Climate Change Action Plan 2010-2015*, p. 20

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			and integrating climate change risk into the state's disaster management policy. ⁶⁷ These measures are to be undertaken by the OSDMA and a range of government departments. ⁶⁸
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.	Orissa Climate Change Action Plan 2010-2015; Orissa Relief Code 1996		The <i>Orissa Relief Code 1996</i> , the <i>Orissa State Disaster Management Policy 2005</i> and the draft <i>Orissa Climate Change Action 2010-2015</i> use a 'whole of the government' approach towards disaster management and climate change. All government departments and agencies, including specialised disaster management and climate change agencies (for example the OSDMA), have to integrate these issues into their work. ⁶⁹ Thus it can be said that the implementation mechanisms all intersect and complement one another, and gives recognition to the inter-relatedness of climate change and disaster issues.
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?			For a discussion of budget allocations for DRR at the national level, refer to the study on national disaster management laws.
23. Is there a budget allocated to DRR at provincial/state level (if relevant)?	Constitution of India 1949;	Articles	Thus far financing for disaster management has mainly been for disaster relief rather than DRR and has been provided

⁶⁷ Forests and Environment Department, Government of Odisha (2010), *Draft Orissa Climate Change Action Plan 2010-2015*, pp. 20-22

⁶⁸ Forests and Environment Department, Government of Odisha (2010), *Draft Orissa Climate Change Action Plan 2010-2015* pp. 84-86

⁶⁹ *Orissa Relief Code 1996*, Chapter 2; Forests and Environment Department, Government of Odisha (2010), *Draft Orissa Climate Change Action Plan 2010-2015*, Annexure 4

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
How is this prescribed?	Orissa Relief Code 1996 National Disaster Management Act 2005	267(1), 267(2) Clause 8 Sections 48, 49	<p>predominantly through policy measures. Financing has been regarded as being the joint responsibility of State and Central governments.⁷⁰</p> <p>In recognition that many States do not have the financial resources to cope with sudden calamities like famine, drought and floods, on the recommendation of the IX Finance Commission the Central government created the Calamity Relief Fund Scheme.⁷¹ Effective since 1995, the scheme establishes Calamity Relief Funds in each State so that governments can meet the expenditure for providing immediate relief to victims of natural calamities. 75% of the fund is to be contributed by the Central government and 25% by States.⁷² The amount of the State's contribution is reviewed annually based on its budget. It is administered by a State Level Committee whose main responsibility is to see that it is properly administered. Additional funds are available through a similar scheme, the National Calamity Contingency Fund.⁷³</p> <p>Use of the funds is subject to direction from the Central Government's Ministry of Home Affairs. Every five years it draws</p>

⁷⁰ Finance Commission India, Government of India, (2010), *Report of the Thirteenth Finance Commission 2010-2015*, p. 186

⁷¹ The Finance Commission is established pursuant to *Article 280 of the Constitution of India 1949*. Its functions are to make recommendations to the President on: (a) distribution of tax proceeds between Union and State governments (b) the principles which should govern the grants-in-aid to States out of the Consolidated Fund of India (c) the measures needed to supplement the financial resources of States and Panchayats.

⁷² Finance Commission India, Government of India, (2010), *Report of the Thirteenth Finance Commission 2010-2015*, p. 188

⁷³ See Finance Commission India, Government of India, (2010), *Report of the Thirteenth Finance Commission 2010-2015*, pp. 188-190; Ministry of Finance, Government of India, 'National Calamity Relief Fund'. Available at:

< http://finmin.nic.in/the_ministry/dept_expenditure/plan_finance/FCD/national-calamity.asp>

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>up a list of items and norms of expenditure (spending caps), but these relate more to disaster relief and recovery. Some examples are: ex-gratia payment to families of deceased persons and loss of a limb or eyes, supplementary nutrition, assistance to small and marginal farmers for loss of land and restoring their crops, draining off floodwaters, and replacing animals.⁷⁴</p> <p>The <i>Orissa Relief Code 1996</i> contemplates these two schemes as its main sources of funds for relief measures.⁷⁵ The State of Odisha does not have its own legislative provisions requiring that budgets should be established specifically for DRR – this is left to state government departments to determine for themselves according to the schemes and programs they have decided to implement. The primary department responsible for disasters, the Revenue and Disaster Management Department, allocates funding mainly for relief rather than mitigation measures.⁷⁶ The <i>State Disaster Management Policy 2005</i> does not make any provisions for finances.</p> <p>Now that the <i>National Disaster Management Act 2005</i> has been</p>

⁷⁴ See eg Ministry of Home Affairs, Government of India, ‘Revised list of items and norms of assistance from calamity Relief Fund (CRF) and National Calamity Contingency Fund (NCCF) for the period 2005-2010’, Ministry of Home Affairs Letter, No. 32-34/2007-NDM-1, 27 June 2007. Available at: <<http://agricoop.nic.in/Drought%20Management/RevisedNorm2007.pdf>>; Ministry of Finance, Government of India, ‘Revised Scheme for Constiution and Administration of National Calamity Contingency Fund (NCCF) based on recommendations of the Eleventh Finance Commission in its Report relating to calamity relief for 2000-2005’, Ministry of Finance Letter, No. 43(11) PF.1/200, July 2000, Available at: < <http://www.ndmindia.nic.in/management/nccfscheme.html> >

⁷⁵ *Orissa Relief Code 1996* cl 8

⁷⁶ See eg, Revenue and Disaster Management Department, Government of Odisha (2011), *Report on the Activities of Revenue and Disaster Management Department 2011-2012*, Available at: <http://www.orissa.gov.in/revenue/activity_rep/2011_12.pdf>

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			enacted, this position may change. Section 48 requires State Governments to establish a State Disaster Response Fund, a District Disaster Response Fund, a State Disaster Mitigation Fund, and the District Disaster Mitigation Fund. The funds are to be made available to state and district disaster management authorities. Departments are also required to make financial provisions in its annual budget for carrying out the activities and programmes set out in its disaster management plan. ⁷⁷
24. Is there a budget allocated to DRR at municipal or local level? How is this prescribed?	<i>Panchayat Samati Act 1999;</i> <i>Zilla Parishad Act 1994;</i> <i>Gram Panchayat Act 1964;</i> <i>Orissa Municipal Corporation Act 2003</i> <i>National Disaster Management Act 2005</i>	Section 20(1)(a) Section 2(1) Section 44(1) Section 24, 25,	The statutes which create governance systems at the local level, the <i>Panchayat Samati Act 1999</i> , the <i>Zilla Parishad Act 1994</i> , the <i>Gram Panchayat Act 1964</i> and the <i>Orissa Municipal Corporation Act 2003</i> do not contain provisions specifically requiring that budgets should be allocated to DRR. However, as panchayats are empowered to spend on activities like developing agriculture, social forestry, livestock, industries, water supplies – general community development programmes and schemes for rural areas, ⁷⁸ and as municipal corporations can fund activities which improve the city's living conditions (for example maintaining waterworks, removing or securing dangerous buildings and places, preventing the spread of infectious diseases, reclaiming unhealthy localities, maintaining streets, and schemes for economic and social development), ⁷⁹ these can go towards reducing the overall impact of disasters.

⁷⁷ *National Disaster Management Act 2005* s 49; See also, Ministry of Home Affairs, Government of India, 'Guidelines on Constitution and Administration of the State Disaster Response Fund (SDRF)' No. 32-3/2010-NDM-1, 28 September 2010, Available at: [http://finmin.nic.in/TFC/Guidelines%20for%20State%20Disaster%20Response%20Fund%20\(SDRF\).pdf](http://finmin.nic.in/TFC/Guidelines%20for%20State%20Disaster%20Response%20Fund%20(SDRF).pdf)

⁷⁸ *Orissa Zilla Parishad Act 1994* s 2(1); *Orissa Gram Panchayat Act 1964* s44(1); *Panchayat Samati Act 1999* s 20(1)(a)

⁷⁹ *Orissa Municipal Corporation Act 2003* ss 24, 25, 26, 152

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
		26, Section 48(d)	<p>Funding for DRR at the local or municipal level also depends on whether there are state and central governments schemes for these activities in place, and whether municipal corporations and panchayats have been charged with the responsibility of implementing these programmes. At present municipal corporations and panchayats have not undertaken specific DRR programmes.</p> <p>The present situation will change with the enactment of the <i>National Disaster Management Act 2005</i>, for the statute requires that District Disaster Mitigation Funds be established and be made available to the District Disaster Management Authorities.⁸⁰</p>
Part Two: Responsibility, accountability and liability for natural disaster risk reduction			
<p>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.</p>			
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	Constitution of India 1949 National Food Security Bill	Arts 15, 21, 32	a. Odisha does not have its own legislation relating to individual or collective rights that may underpin government responsibility or liability for damage from

⁸⁰ *National Disaster Management Act 2005* s 48(d)

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>may underpin government responsibility or liability, and affected persons' rights to compensation for damage from natural disasters? If so, do these relate to:</p> <p>a. DRR in general?</p> <p>b. Safety /Life</p> <p>c. Right to Food?</p> <p>d. Right to adequate shelter or 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</p>	<p>2011</p> <p>National Disaster Management Act 2005</p> <p>Right to Information Act 2005</p>	<p>Clauses 14(1), 15, 16</p> <p>Sections 66, 73, 74</p> <p>Section 4</p>	<p>natural disasters. Such rights would be derived from the <i>Constitution of India 1949</i>, the <i>National Disaster Management Act 2005</i>, the common law and if it gets passed, the <i>National Food Security Bill 2011</i>.</p> <p>b. Article 21 of the Constitution provides that 'no person shall be deprived of his life or personal liberty except according to procedure by law'. This has been read extremely liberally by the Supreme Court of India to encompass the right to food, clothing,⁸¹ education,⁸² a clean environment,⁸³ livelihood,⁸⁴ health,⁸⁵ shelter,⁸⁶ and equal pay for equal work⁸⁷ – essentially every condition that is necessary for leading a better life with human dignity.⁸⁸ Article 32 confers a personal right upon individuals to initiate proceedings in the Supreme Court, which has the powers to issue directions, orders or writs, including writs in the nature of <i>habeas corpus</i>, <i>mandamus</i>, prohibition, <i>quo warranto</i> and <i>certiorari</i>. So far there have been no</p>

⁸¹ *Francies Coralic v Administrator, Union Territory of Delhi* AIR 1981 SC 746

⁸² See eg, *Mohini Jain v State of Karnataka* AIR 1992 SC 1858

⁸³ *Subhash Kumar v State of Bihar* AIR 1991 SC 420

⁸⁴ *Olga Tellis v Bombay Municipal Corporation* AIR 1986 SC 180

⁸⁵ *Vincent v Union of India* AIR 1987 SC 990

⁸⁶ *Shantisar Builders v Narayan Khimal Totame* AIR 1990 SC 630

⁸⁷ *State of M.P.V. Pramod Batiya* AIR 1993 SC 286

⁸⁸ See eg, *Bandhua Mukti Morcha v Union of India* AIR 1984 SC 802. For an overview of how the Supreme Court of India has interpreted Article 21, see Justice N.K.Jain(2006), 'Article-21 of the Constitution of India', *Legal Literacy and Awareness Series* 7 5/2006, Rajasthan State Human Rights Commission. Available at:<

<http://rshrc.nic.in/07%20Human%20Right%20Article-21.pdf>>

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
natural disasters? h. Information?			<p>judicial proceedings seeking to enforce Article 21 in the context of natural disasters. Nonetheless these provisions, it is suggested, can be interpreted as imposing a constitutional duty upon national and state governments to ensure that all measures necessary to uphold Article 21 in disaster situations, such as disaster risk reduction activities to protect life, food and water, proper shelter, healthcare and livelihood support, are taken.</p> <p>c. If passed by Parliament, the National Food Security Bill 2011 will add another guarantee that all disaster affected persons will have access to food. Clause 14(1) states that if the State Government declares that an emergency or disaster situation exists, it will provide subsidised food grains at priority quantities and rates. All destitute persons, senior citizens, pregnant and nursing women and children, will be provided with two free freshly cooked meals every day, for 3 months and the disaster. All households shall be assured of at least 200 days of wage employment for one year at minimum wages or equivalent income if wage employment is not available. State governments are also to ensure that all persons, households, groups or communities living in starvation or conditions akin to starvation are provided with appropriate food to restore them to conditions of good health of body and mind.⁸⁹</p>

⁸⁹ National Food Security Bill 2011 cls 15, 16

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>d. See b) above</p> <p>e. The prohibition against discrimination on the basis of religion, race, caste, sex and place of birth is embodied in Article 15 of the Constitution. Section 61 of the <i>National Disaster Management Act 2005</i> also prohibits discrimination on the grounds of sex, caste, community, descent and religion when providing compensation and relief to disaster victims. These provisions ensure that no discrimination by the State can occur in any disaster management activity it undertakes.</p> <p>f. No information is provided</p> <p>g. The <i>National Disaster Management Act 2005</i> only provides for compensation if premises have been requisitioned.⁹⁰ It confers immunity on officers, employees, and persons working on behalf of State and Central governments, as well as State, Central and District Disaster Management Authorities.⁹¹ No suit, prosecution or other proceeding can be undertaken against them for any work they have carried out in good faith for the purposes of the Act, rules or regulations.⁹² Arguably, if these officers are negligent in their work and this leads to loss or damage from disasters, the common law of torts could be applied so that they receive damages. There may be a personal right of action</p>

⁹⁰ *National Disaster Management Act 2005* s 66

⁹¹ *National Disaster Management Act 2005* s 73

⁹² *National Disaster Management Act 2005* ss 73, 74

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>against the official or the State itself.</p> <p>h. India has the <i>Right to Information Act 2005</i> which applies to all levels of government. However, it only provides all citizens with the right to access records from the public authorities about its functions, activities, finances, rules, administration and particulars about its officers and duties.⁹³ It does not confer a right to access general information about disasters.</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 such claims. 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</p>	<p>Constitution of India 1949</p> <p>Orissa High Court Public Interest Litigation Rules 2010</p> <p>Orissa High Court Rules 1984</p> <p>Supreme Court of India Rules 1966</p>	<p>Arts 32, 39A 226</p> <p>Rules 3, 4</p> <p>Chapter XV, cl 19;</p> <p>Chapter XX, cls 20-21;</p> <p>Chapter XVI cl 10</p>	<p>a. Articles 32 and 226 of the Constitution guarantee the right to initiate proceedings in the Supreme Court of India (the nation's apex court) and the High Court of Orissa (state apex court) to enforce fundamental rights in the Constitution. Both courts can issue directions, orders or writs, including <i>habeas corpus</i>, <i>mandamus</i>, prohibition <i>quo warranto</i> and <i>certiorari</i>.⁹⁴ The right to launch such proceedings is not just limited to individuals whose rights have been infringed – any 'public spirited citizen' can approach the court and file a petition in the name of public interest/welfare. If initiated in the High Court of Orissa, the petitions must involve the larger public interest, and genuinely aimed at redressing public harm or public injury, rather than securing personal gain, private motive or oblique motive.⁹⁵ If initiated in the Supreme Court of India, such petitions should pertain to environment pollution,</p>

⁹³ *Right to Information Act 2005* s 4

⁹⁴ *Constitution of India 1949* Arts 32, 226

⁹⁵ *Orissa High Court Public Interest Litigation Rules 2010* Rules 3, 4

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>poorest people cannot access the remedy?</p> <p>d. Are there financial limitations on any such claims (minimums or maximums)?</p>	<p>National Disaster Management Act 2005</p> <p>Orissa Relief Code 1996</p>	<p>Part IX, Order XLI</p> <p>S 71</p>	<p>disturbance of ecological balance, forests and wildlife, and other matters of public importance.⁹⁶ Proceedings launched in the public interest are known as Public Interest Litigation (PIL)</p> <p>Under the <i>National Disaster Management Act 2005</i>, only the Supreme Court and High Court have the jurisdiction to entertain suits or proceedings over anything relating to the Act.⁹⁷ The <i>Orissa Relief Code 1996</i> does not provide any avenues for relief.</p> <p>b. The Orissa High Court Rules do not explicitly state that claimants can represent themselves, but it is presumed that this is allowed.⁹⁸ Similarly for PILs filed in the High Court of Orissa, there does not seem to be a prohibition against self-representation.⁹⁹ The Supreme Court of India also does not appear to impose such restrictions.¹⁰⁰</p> <p>c. Article 39A of the Constitution directs States to provide free legal aid to ensure that all citizens are not denied opportunities for securing justice by reason of economic or</p>

⁹⁶ Supreme Court of India (2003) 'Compilation of Guidelines to be followed for entertaining letters/petitions received in this court as Public Interest Litigation'. Available at: <<http://supremecourtsofindia.nic.in/circular/guidelines/pilguidelines.pdf>>

⁹⁷ *National Disaster Management Act 2005* s 71

⁹⁸ See generally, *Orissa High Court Rules 1984*, esp Chapter VI. The *Orissa High Court Rules 1984* can be accessed at: <<http://www.orissahighcourt.nic.in/rules/hcrules.htm>>

⁹⁹ See *Orissa High Court Public Interest Litigation Rules 2010*

¹⁰⁰ See generally, *Supreme Court Rules 1966* and Supreme Court of India (2010), *Supreme Court of India Practice and Procedure: A Handbook of Information*, 3rd ed, Supreme Court of India

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			other disabilities. Odisha has enacted the <i>Legal Services Authorities Act 1987</i> which provides free and competent legal services to the weaker sections of society. ¹⁰¹ Costs are according to the High Court of Orissa's and Supreme Court of India's discretion. ¹⁰²
B. Liability & Insurance			
27. Does legislation (including case law, where applicable) make government agencies liable for failure to prevent natural disasters affecting the population?	Constitution of India 1949	Arts 21,300	<p>No such legislative provisions exist either at the state or national level.¹⁰³ Nonetheless if the failure to prevent natural disasters has led to a breach of fundamental rights in the <i>Constitution of India 1949</i>, like the right to life,¹⁰⁴ this could impose liability on the State. Article 300 of the <i>Constitution of India 1949</i> allows State and Central governments to be sued. If the interests of the wider public were affected, this could found the basis of a PIL case.</p> <p>If the omission has led to quantifiable damage or injury to persons and property, it is suggested that common law tort principles would also apply to impose liability on government agencies.</p>

¹⁰¹ *Orissa Legal Services Authorities Act 1987*; See also, Orissa State Legal Services Authority, 'About Us'

<http://www.oslsa.in/index.php?option=com_content&view=article&id=1&Itemid=2>

¹⁰² *Orissa High Court Rules 1984* Chapter XV, cl 19, Chapter XX, cls 20-21, Chapter XVI cl 10; *Supreme Court of India 1966*, Part IX, Order XLI

¹⁰³ See *Orissa Relief Code 1996, National Disaster Management Act 2005*

¹⁰⁴ *Constitution of India 1949* Art 21

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			There is some judicial ambiguity over whether the doctrine of sovereign immunity would preclude action from being taken against the State. ¹⁰⁵
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?	National Disaster Management Act 2005	Sections 54, 55, 74	<p>Section 54 of the <i>National Disaster Management Act 2005</i> states that whoever makes or circulates a false alarm or warning as to disaster or its severity or magnitude, which leads to panic, shall be upon conviction be punished with imprisonment extending to one year or a fine. If this criminal offence is committed by a government department, the Head of the Department will be held liable and punished accordingly unless she or he can prove that the offence was committed without his/her knowledge, or that she/he exercised all due diligence to prevent the commission of the offence.¹⁰⁶ Officers of the department are also liable if the offence had been committed with their consent, connivance or neglect.¹⁰⁷</p> <p>Despite the unequivocal words used in s 54, those working for Central, State and district- level governments and disaster management authorities may be immune from its operation. Section 74 grants immunity to officers and employees of the Central government, the National Disaster Management Authority, the National Executive Committee, the State Government, the State Disaster Management Authority, State Executive Committee,</p>

¹⁰⁵ For a discussion on the doctrine of sovereign immunity, see Law Commission of India, (2012) ‘Consultation Paper on Manmade Disasters’. Available at: <http://lawcommissionofindia.nic.in/reports/manmadedisaster.pdf> pp.23-24

¹⁰⁶ *National Disaster Management Act 2005* s 55(1)

¹⁰⁷ *National Disaster Management Act 2005* s 55(2)

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>and District Disaster Management Authority, for any warning they have communicated or disseminated by them, or any actions or direction issued by them in pursuance of the communication or dissemination, in their official capacity in respect of any impending disaster.</p> <p>It is suggested that the use of the term ‘false warning’, rather than ‘erroneous warning’, indicates that these provisions relate only to deliberately fraudulent warnings, rather than those warnings which turn out to be wrong but were issued in good faith.</p> <p>There is no specific offence for the failure to warn.</p> <p>Given that these are criminal offences it is assumed that it would be the State, rather than injured parties, which will initiate proceedings seeking redress.</p> <p>Injured parties wishing to bring individual proceedings against government agencies may be able to do so by relying on common law tort principles. This is subject to sovereign immunity and state vicarious liability principles (see above). If the interests of the wider public were affected, this could found the basis of a PIL case.</p>
<p>29. Do government agencies that fail to warn or make an erroneous warning have legal immunity? If governments have immunity from liability, how extensive is this and/or how and</p>	<p>National Disaster Management Act 2005</p>	<p>Sections 73, 74</p>	<p>Yes. Section 74 of the <i>National Disaster Management Act 2005</i> grants officials and employees of the State Government, the State Disaster Management Authority, State Executive Committee, and the District Disaster management Authority, immunity from legal proceedings over warnings issued by them in relation to impending</p>

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<p>where in law is it defined? Does it apply to all levels of government?</p>			<p>disasters. This immunity extends to any action taken or direction issued by them in the pursuance of the communication or dissemination of the warning.</p> <p>Further immunity is granted by s 73 of the <i>National Disaster Management Act 2005</i> which states that no suit, prosecution or proceeding can be brought against officers and employees of State and Central governments, or State, local, and national disaster management authorities in respect of any work they have carried out in good faith.</p>
<p>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?</p>	<p>National Disaster Management Act 2005</p>	<p>Sections 54, 58</p>	<p>Section 54 of the <i>National Disaster Management Act 2005</i> states that ‘whoever makes or circulates a false alarm or warning as to disaster or its severity or magnitude, leading to panic, shall on conviction, be punishable with imprisonment which may extend to one year or with fine’. Prima facie this would apply to private persons as well as volunteers who issue or circulate disaster-related advice or warnings, but as discussed above this provision may be directed only at those which have the element of deliberate fraud. Advice or warnings given in good faith without malice could be excluded by this provision.</p> <p>If false warnings or alarms were given by a company or body corporate, s 58 imposes liability on every person in charge of and responsible for the company’s business and the company. However, no liability will be placed on the person if she or he can show that the false warning was given without his/her knowledge, or that his/her exercised due diligence to prevent the false warning</p>

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			from being disseminated. ¹⁰⁸ Directors, managers, secretaries and other officers of the company will also be liable if the false warnings were given with their consent or were disseminated due to their negligence. ¹⁰⁹ As discussed above, the use of the words 'false warnings' rather than 'erroneous warnings' suggests that these provisions are not applicable to <i>bona fide</i> warnings.
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?			Odisha does not have legislation providing for such situations. ¹¹⁰ The common law of tort, it is suggested, would come into operation. For example, the aggrieved party could show that the defendant was negligent in failing to remove flood hazards on his property and this caused damage to the plaintiff's property.
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?			There is no system of compulsory insurance. The IX Finance Commission had examined the feasibility of establishing a national insurance fund into which State governments would contribute a percentage of their receipts, but concluded that providing insurance cover to all affected/vulnerable cover to all affected/vulnerable people, most of whom are poor with little to insure, would not be a viable option and would run into serious operational difficulties. ¹¹¹

¹⁰⁸ National Disaster Management Act 2005 s 58(1)

¹⁰⁹ National Disaster Management Act 2005 s 58(2)

¹¹⁰ See eg Orissa Relief Code 1996; National Disaster Management Act 2005

¹¹¹ Finance Commission India, Government of India, (2010), *Report of the Thirteenth Finance Commission 2010-2015* p. 187

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>			
<p>Part One. Rapid-onset disasters, sectoral and specific regulation based on identified risks and community participation</p>			
<p>A. Cyclones, tornadoes, or storms?</p>			
<p>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?</p>	<p>Orissa Relief Code 1996; By-Laws of the Orissa State Disaster Mitigation Authority 1999; National Disaster Management Act 2005</p>	<p>Ch V Rule 6(b)</p>	<p>Odisha's cyclone management regime is governed by the <i>Orissa Relief Code 1996</i>.¹¹² The statutory mandates of the OSDMA and the Special Relief Commissioner, by requiring that the two organisations undertake disaster preparedness and risk reduction activities generally, ensure some institutional responsibility for reducing the risk of cyclones.¹¹³</p> <p>The <i>National Disaster Management Act 2005</i> contains no provisions on cyclones.</p>

¹¹² *Orissa Relief Code 1996* Chapter V

¹¹³ *Bye-Laws of the Orissa State Disaster Mitigation Authority 1999* r 6(b); Special Relief Commissioner, 'Introduction'. Available at: <<http://www.orissa.gov.in/disaster/src/intr.htm>> Accessed on 24 October 2012

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)
34. Does this law specify how management of this risk is financed? If so, describe.	Orissa Relief Code 1996 Bye-Laws of the Orissa State Disaster Management Authority	Clause 8 Rule 13	Finance for cyclone relief measures would come from State and Central relief funds. ¹¹⁴ Funding is also provided through State and Central government grants. ¹¹⁵ For measures which are being carried out by the OSDMA, the bye-laws specify that they would be financed by grants, donations, funds from the State Government, the Government of India, bilateral or multi-lateral funding agencies, NGOs, semi-governmental organisations, State and Central Government undertakings, public or private companies, trusts, private individuals interested in or disaster mitigation works or loans. ¹¹⁶
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?	Orissa Relief Code 1996 National Disaster Management Act 2005	Ch V	No, the cyclone provisions in the <i>Orissa Relief Code 1996</i> do not impose liability for failing to warn, false or faulty warnings, or failing to take preventative action against cyclones. ¹¹⁷ Liability may nonetheless be imposed through the <i>National Disaster Management Act 2005's</i> provisions on warnings an through common law principles (see above discussion in Part Two on liability)
36. Does this law regulate the collection and distribution of information on	Orissa Relief Code 1996	Clauses 98,99	The Orissa Relief Code 1996 guides the collection and distribution of information on cyclone hazards and risks. It contemplates the

¹¹⁴ *Orissa Relief Code 1996* cl 8

¹¹⁵ *Orissa Relief Code 1996* cl 8

¹¹⁶ *Bye-Laws of the Orissa State Disaster Mitigation Authority 1999* r 13

¹¹⁷ *Orissa Relief Code 1996* Chapter V

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hazards and risks (risk mapping) in relation to this risk? If so, what authority is responsible and what is their mandate?			Indian Meteorology Department as the main body responsible for monitoring the weather and warning against severe weather phenomena like tropical cyclones, dust storms, heavy rains and heat waves which could cause destruction of life and property. ¹¹⁸ Cyclone monitoring is also conducted by the Meteorological Centre of Bhubaneswar. ¹¹⁹ Other parties responsible for communicating cyclone warnings to the community are the Control Room of the Revenue Department, the All India Radio Station, Doordashan and District Collectors. ¹²⁰
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: <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 	Orissa Relief Code 1996	Clause 122	<p>The <i>Orissa Relief Code 1996</i> only provides for education and training programmes to increase the community's preparedness for cyclones.</p> <p>Topics to be covered are:</p> <ul style="list-style-type: none"> • Background information on cyclones • Relief operations • Evacuation procedures • Measures for protecting life and property. • Actions to be taken during cyclones.¹²¹ <p>The OSDMA is currently implementing the Government of India's</p>

¹¹⁸ *Orissa Relief Code 1996* cls 98,99

¹¹⁹ *Orissa Relief Code 1996* cl 98

¹²⁰ *Orissa Relief Code 1996* cls 99(6), 99(7)

¹²¹ *Orissa Relief Code 1996* cl 122

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very poorest people?			National Cyclone Risk Management Project, which essentially consists of building cyclone shelters, constructing and strengthening all-weather roads to cyclone shelters, raising and strengthening saline embankments, improving early warning and communication systems, enhancing local communities' capacity to respond to disasters, improving access to emergency shelters, and strengthening the disaster risk management capacity across all government levels. ¹²² The Project's Operations Manual makes some reference to improving community capacity for cyclones by holding technology training sessions. ¹²³ It also mentions that community involvement has been incorporated throughout the design of the National Cyclone Risk Management Project, as well as in shelter management and early warning systems. Shelter management committees and corpus funds are the main community participation mechanisms utilised. ¹²⁴
38. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?	Orissa Relief Code 1996	Clauses 99, 122	The <i>Orissa Relief Code 1996</i> contains some provisions on Early Warning Systems for cyclones but does not mention community involvement. ¹²⁵ It only requires that communities are educated on how to respond to the warnings. ¹²⁶

¹²² See OSDMA (2011), 'National Cyclone Risk Mitigation Project (NCRMP)-Orissa as on 10.03.11' Available at: <

<<http://www.osdma.org/ViewDetails.aspx?vchglinkid=GL042&vchplinkid=PL057>> p.1

¹²³ National Disaster Management Authority, (2010) *National Cyclone Risk Mitigation Project (NCRMP) Operations Manual*, Available at: <

<<http://www.osdma.org/OperationsManual.pdf>> p. 12

¹²⁴ National Disaster Management Authority, (2010) *National Cyclone Risk Mitigation Project (NCRMP) Operations Manual*, Available at: <

<<http://www.osdma.org/OperationsManual.pdf>> p. 44

¹²⁵ *Orissa Relief Code 1996* cl 99

¹²⁶ *Orissa Relief Code 1996* cl 122(2)

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			The Operations Manual of the National Cyclone Risk Management Project refers to community involvement in early warning systems, but does not provide any further detail about how this is facilitated. ¹²⁷
39. If communities are involved in Early Warning Systems (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)? 			See above discussion, Question 34
B. Earthquake/Tsunami?			
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	Orissa Relief Code 1996 National Disaster Management Act 2005	Clause 24	The <i>Orissa Relief Code 1996</i> does not make any reference to earthquake or tsunamis, but in 2009 the State government announced that it would add these two hazards into the State's list of natural calamities and amend the relief code accordingly. This was following warnings made by the Consortium of Indian Scientists in 2005 that Orissa could be hit by a tsunami due to

¹²⁷ National Disaster Management Authority, (2010) *National Cyclone Risk Mitigation Project (NCRMP) Operations Manual*, Available at: <<http://www.osdma.org/OperationsManual.pdf>> p. 44

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regulated?			<p>undersea earthquakes in the South Asian region, and a study by the OSDMA in 2007 which found that 328 coastal villages were prone to tsunamis. It also identified cities like Bhubaneswar, Cuttack and Sambalpur as vulnerable to earthquakes.¹²⁸ The <i>National Disaster Management Act 2005</i> does not have any provisions relating to earthquakes or tsunamis.</p> <p>The OSDMA, under its mandate of improving the State's overall disaster preparedness, has upon the recommendations of the Government of India's Ministry of Home Affairs, created a hazard safety cell to act and advise the State government in constructing earthquake-resistant lifeline buildings. 27 engineers have also been trained in construction and retro-fitting techniques for earthquake situations.¹²⁹</p> <p>Presently, a high level committee chaired by the Development Commissioner and the Additional Chief Secretary is considering adopting the National Expert Committee's proposed model amendments and bye-laws on:</p> <ul style="list-style-type: none"> a) Town and country planning regulations b) Land-use/ zoning regulations

¹²⁸ Debabrata Mohanty, 'Orissa Govt to Add Tsunamis, Earthquakes to Relief Code', *Indian Express*, 30 May 2009. Available at: < <http://www.indianexpress.com/news/orissa-govt-to-add-tsunamis-earthquakes-to-relief-code/468200/>>

¹²⁹ OSDMA, 'Earthquake Vulnerability Reduction', Available at: < <http://www.osdma.org/ViewDetails.aspx?vchglinkid=GL002&vchplinkid=PL007>>, p.2 Accessed on 24 October 2012

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			<p>c) Development control regulations d) Building regulations¹³⁰</p> <p>Other than providing some basic information about tsunamis, the OSDMA does not appear to have instituted specific activities for this risk.¹³¹</p> <p>As the <i>Orissa Relief Code 1996</i>'s cyclone provisions are also meant to reduce the impact and risks of tidal disasters,¹³² these could help address the risk of tsunamis (for a discussion of cyclone regulations, refer to the previous section)</p>
41. Does this law specify how management of this risk is financed? If so, describe.			No, see above (question 36)
42. 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			No, see above (question 36)

¹³⁰OSDMA, 'Earthquake Vulnerability Reduction', Available at: < <http://www.osdma.org/ViewDetails.aspx?vchglinkid=GL002&vchplinkid=PL007>>, p.2 Accessed on 24 October 2012

¹³¹<http://www.osdma.org/ViewDetails.aspx?vchglinkid=GL002&vchplinkid=PL009>

¹³² *Orissa Relief Code 1996* cl 24

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immune? d. Is it civil or criminal liability, or both?			
43. 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?	Orissa Relief Code 1996; National Disaster Management Act 2005		There are no laws regulating the collection and distribution of information on earthquake risks. ¹³³ As for the institutional responsibility for risk mapping, the Indian Meteorological Department, Government of India has the specific task of monitoring seismic activity and providing earthquake warnings to States, Central government, and all user agencies. ¹³⁴ It also evaluates the seismicity of different parts of the country for development projects. The responsibility for tsunami warnings has been vested with the Indian National Centre for Ocean Information Services, an autonomous body under the Ministry of Earth Sciences, Government of India. ¹³⁵ It runs the Tsunami and Storm Surge Early Warning System which was established in 2007 and disseminates the information so gathered to a wide range of users, such as the navy, coast guards and merchant ships. ¹³⁶
44. Does this law provide for			No, there are no legislative provisions at all for community

¹³³ See eg, *Orissa Relief Code 1996, National Disaster Management Act 2005*

¹³⁴ Indian Meteorological Department, Government of India, 'IMD's Mandate' Available at: < <http://www.imd.gov.in/doc/mandate.htm> > Accessed on 24 October 2012

¹³⁵ Ministry of Earth Sciences, Government of India, 'Right to Information Act 2005: Disclosure of Information as per the Requirement of Section 4 of the Act'. Available at: <<http://dod.nic.in/New%20RTI%20Particulars.pdf>> p.4 ; See also Indian National Centre for Ocean Information Services (2008), *Annual Report 2007-08*. Available at < http://www.incois.gov.in/documents/ANNUAL_REPORTS/2007-2008_English.pdf > p. 8

¹³⁶ Ministry of Earth Sciences, Government of India, 'Right to Information Act 2005: Disclosure of Information as per the Requirement of Section 4 of the Act'. Available at: <<http://dod.nic.in/New%20RTI%20Particulars.pdf>> pp.4, 16

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<p>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? 			<p>participation in earthquake/tsunami warning systems.</p>
<p>45. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?</p>			<p>No, there are no legislative provisions at all for community participation in earthquake/tsunami early warning systems.</p>
<p>46. 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 			<p>No, there are no legislative provisions at all for community participation in earthquake/tsunami early warning systems.</p>

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emerging risks (e.g. telephone, radio or internet access to meteorological or seismological data and analysis)?			
C. Fire?			
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?	Orissa Relief Code 1996 National Disaster Management Act 2005 Orissa Forest Act 1972 Forests (Conservation) Act	Clauses 127, 131 Section 28(a), 36(j), 36(k)	The <i>Orissa Relief Code 1996</i> provides for fire accidents. It recognises that house damage from fire accidents are a serious problem in the State; such accidents occur due to the high flammability of the building materials (timber, bamboo, mud walls and straw), and the homes being built extremely close together. ¹³⁷ The <i>Orissa Relief Code 1996</i> 's relief provisions do not extend to fires in other contexts, e.g. jungle fires from natural or human causes, which is a recurring problem in Odisha. ¹³⁸ The <i>National Disaster Management Act 2005</i> does not make any reference to fires. The <i>Orissa Relief Code 1996</i> only prescribes measures to 'relieve the distress of the fire-afflicted' people', one of which is providing loans for building fire-proof homes. ¹³⁹ While the OSDMA does have the mandate to engage in fire risk reduction activities there are no indications that it has done so. ¹⁴⁰ The Special Relief Commissioner is the body responsible for implementing fire relief measures. ¹⁴¹

¹³⁷ *Orissa Relief Code 1996* cl 127

¹³⁸ Ashok Pradhan, 'Forest Fires Singe Orissa Green Cover', *Times of India*, 30 April 2012, Available at: < http://articles.timesofindia.indiatimes.com/2012-04-30/bhubaneswar/31506184_1_forest-fires-fire-incidents-forest-survey>

¹³⁹ *Orissa Relief Code 1996* cls 127, 131

¹⁴⁰ See generally, OSDMA, < <http://www.osdma.org/>>

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	1980		Managing forest fire risks comes under the Forests and Environment Department, whose responsibility it is to protect, manage and conserve forests pursuant to the <i>Orissa Forest Act 1972</i> and the <i>Forests (Conservation) Act 1980</i> . ¹⁴²
48. Does this law specify how management of this risk is financed? If so, describe.	Orissa Relief Code 1996	Clause 129(1)	The <i>Orissa Relief Code 1996</i> only states that funding for relief measures from accidental house fires should, if the damage is widespread and throws people into a state of helplessness, come first from the voluntary actions of the private sector and individuals. ¹⁴³ If the distress suffered is particularly acute, funding should be sourced from government relief funds. ¹⁴⁴ Funding for managing forest fire risks comes from the Forests and Environment Department's general finances, whose budget is determined by the Finance Department. ¹⁴⁵ Depending on the nature of the management activity some funding from Central government would be provided as well.
49. Does this law attribute liability for damage caused by:	Orissa Relief Code 1996	Clause 138;	Failure to take preventative action to reduce fire risks in one's home may make it more difficult to say that the fire was an

¹⁴¹ See generally, Special Relief Commissioner, < <http://www.orissa.gov.in/disaster/src/src.htm>>

¹⁴² See eg s 28(a) of the *Orissa Forest Act 1972* which states that if a person wilfully or by gross negligence creates a fire in a declared reserved forest, the State government can suspend all rights to forest produce or pasture, s 36(j) of the *Odisha Forests Act 1972* which provides general protection and management powers for declared protected forests, and s 36(g) which confers powers to protect from fire timber lying in declared protected forests and reserved trees.

¹⁴³ *Orissa Relief Code 1996* cl 129(1)

¹⁴⁴ *Orissa Relief Code 1996* cl 142

¹⁴⁵ Finance Department, Government of Odisha, 'Particulars of Organisation, Functions and Duties', Available at:

< <http://www.odisha.gov.in/finance/rtiact/man1.pdf>>

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<p>a. failure to warn, or false or faulty warnings of this risk?</p> <p>b. failure to take preventive action including by reducing this risk?</p> <p>c. If so, who may be liable - or immune?</p> <p>d. Is it civil or criminal liability, or both?</p>	Orissa Forests Act 1972	<p>Ch 6</p> <p>Sections 27(b), 37(d), 79</p>	<p>accident, thus precluding the owner from receiving relief under the <i>Orissa Relief Code 1996</i>.¹⁴⁶ No funding is available to victims of fire who have encroached and constructed their homes on 'objectionable' government lands (government land where habitations are not permitted).¹⁴⁷</p> <p>For forest fires, the <i>Orissa Forests Act 1972</i> does not impose liability on forest officers for any act or omission done in good faith under the Act. Thus if an officer fails to warn or provides faulty or false warnings about risks of forest fires, or fails to take preventative action for forest fires, but was acting in good faith, no liability will be imposed.¹⁴⁸ As the <i>Orissa Forests Act 1972</i> places criminal liability on any person who, in protected or reserved forests, negligently causes a fire or kindles a fire without taking steps to control its spread, this could also extend to persons who fail to take preventative actions to reduce the risk of forest fires.¹⁴⁹</p>
<p>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?</p>	Orissa Forests Act 1972	Section 36(g)	<p>There are no laws for collecting and distributing information on the risks of house fires. For forest fires in protected forests, the collection and distribution of information on hazards and risks could come under the general forest management and protection duties of the Forests and Environment Department.¹⁵⁰</p>

¹⁴⁶ For the range of relief measures available, see *Orissa Relief Code 1996*, Chapter VI

¹⁴⁷ See *Orissa Prevention of Land Encroachment Act 1972*; *Orissa Relief Code 1996* cl 138

¹⁴⁸ *Orissa Forests Act 1972* s 79

¹⁴⁹ *Orissa Forests Act 1972* ss 37(d), 27(b)

¹⁵⁰ *Orissa Forests Act 1972* s 36(g)

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<p>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:</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? 	<p>Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forests Rights) Act 2006</p>	<p>Section 3(i)</p>	<p>There are no laws for community consultation and participation in risk mapping, early warning and DRR for fires.</p> <p>For forest fires though, if there are traditional forest dwellers residing in the forest area, the <i>Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forests Rights) Act 2006</i> could provide consultation and participation opportunities for general disaster risk reduction activities and early warning. Under s 3(i), recognised traditional forest dwellers have the right to protect, regenerate, conserve, or manage any community forest areas where they have been traditionally protecting and conserving for sustainable use. Thus any activity that they carry out to reduce the risk of forest fires, can be covered by this provision.</p>
<p>52. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?</p>			<p>There are no legal provisions for fire early warning systems.</p>
<p>53. If communities are involved in EWS, does this law provide that they:</p> <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 			<p>There are no legal provisions for fire early warning systems.</p>

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relevant warnings and data on emerging risks (e.g. telephone, radio or internet access to meteorological or seismological data and analysis)?			
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?	Orissa Relief Code 1996	Clauses 45, 48, 56, 74	<p>Floods are recognised to be an endemic problem in Odisha, but there are no specific laws on this matter. The <i>Orissa Relief Code 1996</i> prescribes the pre-flood measures, flood relief operations and post-flood arrangements which are to be undertaken by the Special Relief Commissioner,¹⁵¹ district collectors,¹⁵² and various government departments like the Water Resources Department,¹⁵³ the Agriculture Department,¹⁵⁴ and the Revenue Department.¹⁵⁵</p> <p>Flood risk reduction activities are mostly carried out by the OSDMA under the Government of Orissa's Disaster Risk Management Programme. This programme is supported by the Government of India's Ministry of Home Affairs and the United Nations Development Programme.¹⁵⁶</p>

¹⁵¹ See eg *Orissa Relief Code 1996* cl 56

¹⁵² See eg *Orissa Relief Code 1996* cl 45

¹⁵³ See eg *Orissa Relief Code 1996* cl 48

¹⁵⁴ See eg *Orissa Relief Code 1996* cl 74

¹⁵⁵ See generally, *Orissa Relief Code 1996*, Chapter 1V

¹⁵⁶ See generally, OSDMA, 'Disaster Risk Management Programme'

<<http://www.osdma.org/ViewDetails.aspx?vchglinkid=GL003&vchplinkid=PL013&vchslinkid=SL005&vchtlinkid=TL000>>

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55. Does this law specify how management of this risk is financed? If so, describe.	Orissa Relief Code 1996	Clause 8(a)	Flood risk reduction activities carried out under the Disaster Risk Management Programme are funded by the Government of India and the United Nations Development Programme. ¹⁵⁷ Funding for relief measures are provided by the Government of India and the Government of Orissa through various relief funds and grants. ¹⁵⁸
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?	Orissa Relief Code 1996; National Disaster Management Act 2005		The <i>Orissa Relief Code 1996</i> does not prescribe any liability for these matters. The Indian Meteorology Department, within the Ministry of Earth Sciences, is the main body responsible for monitoring rainfall and issuing flood warnings. ¹⁵⁹ For flood-prone inter-state river basins, the Central Water Commission of the Water Resources Department has the responsibility of providing flood forecasting services. ¹⁶⁰ There are no laws attributing liability to these two bodies for failing to warn of floods or to take preventative action against their occurrence. Nonetheless, as discussed previously in the 'Liability

¹⁵⁷ See National Disaster Management Authority (2011), *Progress Report: GOI-UNDP Disaster Risk Reduction Programme (2009-2011)*, Available at:

<<http://ndma.gov.in/ndma/undpdrproject/progressreport.pdf>> Accessed on 24 October 2012

¹⁵⁸ *Orissa Relief Code 1996* cl 8(a)

¹⁵⁹ See generally, Indian Meteorology Department, Government of India, 'Right to Information Act 2005: Manual 1' Available at:

<<http://www.imd.gov.in/doc/rtimanual/manual1.htm>> Accessed on 24 October 2012

¹⁶⁰ Central Water Commission, 'Major Activities of CWC' <<http://www.cwc.nic.in/main/webpages/activities.html>> Accessed on 24 October 2012

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			and insurance' section (under 'Responsibility, accountability and liability for natural disaster risk reduction), the <i>National Disaster Management Act 2005</i> can impose liability for faulty or false warnings and the failure to take preventative action. The common law of tort can also be relied upon.
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?			<p>There are no laws governing the collection and distribution of information on flood risks. As mentioned in Question 52, the responsibilities for these activities rest primarily at the Central government level, with the Indian Meteorological Department and the Central Water Commission.¹⁶¹</p> <p>Amongst general meteorological duties, the Indian Meteorological Department is responsible for providing equipment and setting up observational equipment in States, maintaining fast telecommunication links within the country and the world for disseminating observations, and for disseminating weather information, advisories, and warnings to the public, government Departments and District authorities.¹⁶²</p> <p>The Central Water Commission has the general responsibility of initiating, coordinating and furthering in consultation with State governments, schemes for the control, conservation and utilisation of water resources in the relevant State for the purposes of flood</p>

¹⁶¹ Indian Meteorology Department, Government of India, 'Right to Information Act 2005: Manual 1' Available at: <<http://www.imd.gov.in/doc/rtimanual/manual1.htm>>; Central Water Commission, 'Major Activities of CWC' <<http://www.cwc.nic.in/main/webpages/activities.html>>

¹⁶² Indian Meteorology Department, Government of India, 'Right to Information Act 2005: Manual 1' Available at: <<http://www.imd.gov.in/doc/rtimanual/manual1.htm>>

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			management, irrigation, navigation, drinking water supply and water power generation. It also has the powers to construct and execute these schemes. ¹⁶³
<p>58. 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> <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? 			<p>There are no legal provisions on community consultation and participation. Neither the Central Water Commission nor the Indian Meteorological Department appear to include the public or communities in their hydrology monitoring or early warning activities.¹⁶⁴</p> <p>Nonetheless opportunities for community participation in risk reduction activities are provided for under the Government of India and UNDP's Disaster Risk Reduction programme. The programme includes specific components on enhancing the community's capacities in disaster preparedness, response, mitigation and disaster risk reduction planning. Particular focus is given to the needs and vulnerabilities of women and members of Scheduled Castes/Tribes.¹⁶⁵</p> <p>Under this component, the OSDMA is establishing Disaster</p>

¹⁶³ Central Water Commission, 'Major Activities of CWC' <<http://www.cwc.nic.in/main/webpages/activities.html>>

¹⁶⁴ See generally, Indian Meteorology Department, <<http://www.imd.gov.in>>; Central Water Commission, <<http://www.cwc.nic.in>>

¹⁶⁵ See United Nations Development Programme(India), (2010), 'CPAP 2008-2012 Annual Work Plan 2010 (January- December)', Available at: <http://www.undp.org/content/dam/india/docs/goi_undp_disaster_risk_reduction_project_2010.pdf> Accessed on 24 October 2012; United Nations Development Programme(India), (2011), 'CPAP 2008-2012 Annual Work Plan 2011 (January- December)', Available at: <http://www.undp.org/content/dam/india/docs/goi_undp_disaster_risk_reduction_project_awp2011.pdf> Accessed on 24 October 2012; United Nations Development Programme(India), (2012), 'CPAP 2008-2012 Annual Work Plan 2012 (January- December)', Available at: <http://www.undp.org/content/dam/india/docs/goi_undp_disaster_risk_reduction_projectawp2012.pdf> Accessed on 24 October 2012

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			Management teams at the village/ward level which are trained in tasks like early warning, search and rescue operations, first aid and water and sanitation, shelter management, trauma counselling, and damage assessment for general disaster situations. The intention is to form these at the Gram Panchayat, municipal and block level as well. ¹⁶⁶
59. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?			There are no legislative provisions for Early Warning Systems.
60. 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)? 			There are no legislative provisions for Early Warning Systems.
E. Heat/cold waves?			

¹⁶⁶OSDMA, 'Activities' < <http://www.osdma.org/ViewDetails.aspx?vchglinkid=GL003&vchplinkid=PL013&vchslinkid=SL005&vchtlinkid=TL003>>

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
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?	Orissa Relief Code 1996	Clause 254	<p>The <i>Orissa Relief Code 1996</i> provides financial relief to bereaved families of sunstroke victims.¹⁶⁷ The Orissa State government has also instituted its own program of measures which are to be implemented by the relevant government departments. Examples are:</p> <ul style="list-style-type: none"> • Instructing Collectors to take all precautionary measures for mitigating heat-wave situations • Reviewing the preparedness activities of government departments against heat wave conditions and drinking water scarcity areas of the State • Instructing the OSDMA to prepare community education materials on heatwaves.¹⁶⁸ <p>Some districts in Odisha have also included heat wave contingency plans in their District Disaster Management Plans.¹⁶⁹</p> <p>Heat waves have not been provided for in national disaster</p>

¹⁶⁷ *Orissa Relief Code 1996* cl 254

¹⁶⁸ Special Relief Commissioner (2011), *Annual Report 2010-11* Available at: <http://www.orissa.gov.in/disaster/src/ANNUAL_REP_04-05/ANNUAL_REPORT2010-11.pdf> pp. 31-34 Accessed on 24 October 2012; 'Orissa Government Gears Up to Counter Heat Stroke', *Orissa Diary*, 14 March 2011, Available at:<<http://www.orissadiary.com/CurrentNews.asp?id=25264>>Accessed on 24 October 2012; Revenue and Disaster Management Department, Government of Odisha, 'Preparedness and precautionary measures to be taken to tackle heat wave situation, 2011' No. 11F-45/11-10/37/R&DM, dated 4 March 2011 Available at: <http://orissa.gov.in/revenue/Relief_Notifications/10137_4_3_11.pdf> Accessed on 24 October 2012

¹⁶⁹ See eg Emergency Operations Centre,(2011), *District Disaster Management Plan Cuttack 2011-12*. Available at: <http://cuttack.nic.in/dis_admin/emergency/DDMP%202011-12.pdf> pp. 70-73 Accessed on 24 October 2012.

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			management frameworks. ¹⁷⁰
62. Does this law specify how management of this risk is financed? If so, describe.			There are no laws prescribing funding for managing heat wave risks. As the national relief funds do not extend to victims of heat waves, the State government has been funding relief and preparedness measures on its own. It however is unable to meet the costs entirely by itself and has been advocating that the Government of India include 'heat wave' in its definition of natural calamities for the purposes of its relief funds. ¹⁷¹
63. 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 Disaster Management Act 2005		There are no laws specifically attributing liability for failing to warn about heat waves, giving false or faulty warnings, and failing to take preventative action. As discussed previously in the 'Liability and insurance' section (under 'Responsibility, accountability and liability for natural disaster risk reduction), the <i>National Disaster Management Act 2005</i> can impose liability for faulty or false warnings and the failure to take preventative action. The common law of tort may also be relied upon if negligence was involved.
64. Does this law regulate the collection and distribution of information on			There are no specific legislative provisions for collecting and distributing heat wave information. The Indian Meteorology

¹⁷⁰ *National Disaster Management Act 2005*

¹⁷¹ OSDMA, 'Heat Wave' <<http://www.osdma.org/ViewDetails.aspx?vchglinkid=GL002&vchplinkid=PL008>>; Special Relief Commissioner (2011), *Annual Report 2010-11* Available at: <http://www.orissa.gov.in/disaster/src/ANNUAL_REP_04-05/ANNUAL_REPORT2010-11.pdf> pp. 31-34 Accessed on 24 October 2012; Ministry of Finance, Government of India, 'National Calamity Contingency Fund' <http://finmin.nic.in/the_ministry/dept_expenditure/plan_finance/FCD/national-calamity.asp?pageid=2> Accessed on 24 October 2012

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
hazards and risks (risk mapping) in relation to this risk? If so, what authority is responsible and what is their mandate?			Department is responsible for collecting information and disseminating warnings about heat waves. ¹⁷²
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: <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? 			No legislation or government directives providing for community consultation and/or participation in risk mapping, early warning or general DRR activities have been established.
66. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?			There are no legislative provisions for heat wave early warning systems.
67. If communities are involved in EWS,			There are no legislative provisions for heat wave early warning

¹⁷²Indian Metrological Department, Government of India, 'Mandate' < <http://www.imd.gov.in/doc/mandate.htm> > Accessed on 24 October 2012

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>does this law provide that they:</p> <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, radio or internet access to meteorological or seismological data and analysis)? 			systems.
68. Describe form of regulation, and institutional responsibility.			No information provided.
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?	<p>Orissa Relief Code 1996</p> <p>Constitution of India 1949</p>	<p>Clauses 3(1), 229</p> <p>Schedule 7, List 1, Items 13, 14,28,41, 42,81</p>	<p>At the State level, there are no laws on insect infestations but it is recognised that they can be a natural calamity.¹⁷³ The <i>Orissa Relief Code 1996</i> states that as after floods pest attacks normally take place e.g. swarming caterpillars, the Agriculture Department should organise pest control operations like dusting or spraying the fields to control the attacks. Aerial spraying may also be carried out with the assistance of the Central government's Ministry of Agriculture.¹⁷⁴</p>

¹⁷³ *Orissa Relief Code 1996* cl 3(1)

¹⁷⁴ *Orissa Relief Code 1996* cl 229

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
		Schedule 7, List 3, Item 29	<p>Controlling insect infestations are however generally mainly managed by the Central government, which does so under its quarantine, customs, trade and commerce, inter-State pests/infectious diseases, and international treaty implementation powers.¹⁷⁵ Its <i>Destructive Insects and Pests Act 1914</i> and the <i>Plant Quarantine Order (Regulation of Import into India) 2003</i> was enacted to prevent the introduction into and the transport from one State to another in India, any insect, fungus or pest which may be destructive to crops.¹⁷⁶ The Department of Agriculture and Cooperation is the body responsible administering pest-related matters.¹⁷⁷</p> <p>Pursuant to its aims of establishing Integrated Pest Management Systems across the nation, the Department of Agriculture, Government of India has developed an e-Pest Surveillance and Pest Management Programme for Odisha. This will be implemented across Orissa's 30 districts in conjunction with the State's Agricultural Department, and provides pest surveillance and monitoring for paddy and non-paddy crops to farmers during the Kharif (autumn) season (2012-2013).¹⁷⁸</p>

¹⁷⁵ *Constitution of India 1949* Schedule 7 List 1 Items 13, 14, 28, 41, 42, 81; *Constitution of India 1949* Schedule 7, List 3, Item 29.

¹⁷⁶ See *Destructive Insects and Pests Act 1914* Available at: < <http://agricoop.nic.in/dtpact.htm> > accessed on 24 October 2012;

¹⁷⁷ Department of Agriculture, Government of India, 'Organisational History of the Department of Agriculture and Cooperation', Available at: < <http://agricoop.nic.in/Orghistory.pdf> >, Annexure 1, Accessed on 24 October 2012

¹⁷⁸ Office of the Director, Agriculture and Food Production, Odisha, 'Operational Guideline of e-Pest Surveillance and Pest Management Programme –Kharif 2012' No VIIG-07/12-13 741 dated 21 May 2012 Available at: < <http://agrisnetodisha.ori.nic.in/Pest-Disease%20surveillance/e%20pest%20surv%2012%20-13.pdf> > Accessed on 24 October 2012

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			The <i>National Disaster Management Act 2005</i> contains no provisions on insect infestations.
70. Does this law specify how management of this risk is financed? If so, describe.	Orissa Relief Code 1996	Clause 229	The <i>Orissa Relief Code 1996</i> specifies that funding for spraying and dusting crops is to be provided by the State Department of Agriculture. ¹⁷⁹ Funding for the e-Pest Surveillance and Pest Management Programme in Odisha is provided by the Central Government's Department of Agriculture and Cooperation through its Rashtriya Krishi Vikas Yojana Green Revolution-II programme. ¹⁸⁰
71. 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?			There are no laws specifically attributing liability for failing to warn about insect infestations, giving false or faulty warnings, and failing to take preventative action. As discussed previously in the 'Liability and insurance' section (under 'Responsibility, accountability and liability for natural disaster risk reduction), the <i>National Disaster Management Act 2005</i> can to some extent be used to impose liability for faulty or false warnings and the failure to take preventative action. The common law of tort may also be relied upon if negligence was involved.
72. Does this law regulate the collection and distribution of information on			There are no laws on this matter. Nonetheless, some monitoring activities would be carried out due to the e-Pest surveillance

¹⁷⁹Orissa Relief Code 1996 cl 229

¹⁸⁰Office of the Director, Agriculture and Food Production, Odisha, 'Operational Guideline of e-Pest Surveillance and Pest Management Programme –Kharif 2012' No VIIG-07/12-13 741 dated 21 May 2012 Available at: < <http://agrisnetodisha.ori.nic.in/Pest-Disease%20surveillance/e%20pest%20surv%2012%20-13.pdf> Accessed on 24 October 2012

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
hazards and risks (risk mapping) in relation to this risk? If so, what authority is responsible and what is their mandate?			<p>programme. The Orissa Agriculture Department has the responsibility for coordinating the overall programme of pest monitoring and advisory system, outsourcing pest monitors, data entry operators and scouts, monitoring pest populations in different villages at the block level and making it available online, alerting farmers of alarming situations, and monitoring the pest population through on-line data reports and to assist in alarming situations through field visits.¹⁸¹</p> <p>The Orissa University of Agriculture and Technology in Bhubaneswar is also involved in this process – it is to assist in pest monitoring, interpreting and issuing pest advice twice a week, documenting weather information in pest surveillance areas and to share the data with all stakeholders, working out crop pest weather relationships in surveillance areas, and developing simple prediction models based on the weather at the end of the season for the future.¹⁸²</p>
73. Does this law provide for consultation and/or participation about risk mapping, early warning or general DRR regarding this risk by			There are no laws on this matter. However, some consultation opportunities are provided as the operational guidelines of the e-pest surveillance programme state that surveillance activities should be conducted with assistance of 'Farmer Friends'. Their role

¹⁸¹ National Centre for Integrated Pest Management, (2010) 'Awareness-cum-Surveillance Programme for the Management of Major Pests of Rice in Odisha' <<http://www.ncipm.org.in/orissa2010/aboutproject.pdf>>

¹⁸² National Centre for Integrated Pest Management, (2010) 'Awareness-cum-Surveillance Programme for the Management of Major Pests of Rice in Odisha' <<http://www.ncipm.org.in/orissa2010/aboutproject.pdf>>

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>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? 			<p>is to monitor and inform the Block Technical Managers on the pest situations in villages.¹⁸³</p>
<p>74. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?</p>			<p>There are no laws establishing early warning systems; nonetheless such systems would be created under the e-pest surveillance programme. Aside from involving Farmer Friends as informants of pest risks in villages (see above), no further community involvement seems to be contemplated.¹⁸⁴</p>
<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? 			<p>As discussed above the scope for participation in any sort of early warning activity is limited to monitoring and surveillance.</p>

¹⁸³Office of the Director, Agriculture and Food Production, Odisha, 'Operational Guideline of e-Pest Surveillance and Pest Management Programme –Kharif 2012' No VIIG-07/12-13 741 dated 21 May 2012 Available at: < <http://agrisnetodisha.ori.nic.in/Pest-Disease%20surveillance/e%20pest%20surv%2012%20-13.pdf> Accessed on 24 October 2012

¹⁸⁴See generally, Office of the Director, Agriculture and Food Production, Odisha, 'Operational Guideline of e-Pest Surveillance and Pest Management Programme –Kharif 2012' No VIIG-07/12-13 741 dated 21 May 2012 Available at: < <http://agrisnetodisha.ori.nic.in/Pest-Disease%20surveillance/e%20pest%20surv%2012%20-13.pdf> Accessed on 24 October 2012

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)
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)?			
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?	Orissa Relief Code 1996	Clauses 230, 254	<p>Although landslides do occur in Odisha,¹⁸⁵ it is considered to be a marginally affected landslide zone.¹⁸⁶ There are no state-level laws or policies specifically providing for its management. It is possible that landslide risks would be addressed incidentally under flood risk management programmes.</p> <p>The Orissa Relief Code 1996 recognises that landslides can make agricultural lands unsuitable for further cultivation because of heavy silting. Accordingly, it provides subsidies to farmers so that they can reclaim the lands.¹⁸⁷ The general relief clauses can also be utilised to provide financial assistance to families of deceased landslide victims.¹⁸⁸</p>

¹⁸⁵ See eg <http://orissadiary.com/Rayagarda/ShowDistrictNews.asp?id=13382>; http://www.telegraphindia.com/1110616/jsp/orissa/story_14116777.jsp

¹⁸⁶ <http://ndma.gov.in/ndma/landslidezone.html>

¹⁸⁷ *Orissa Relief Code 1996* cl 230

¹⁸⁸ *Orissa Relief Code 1996* cl 254

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
77. Does this law specify how management of this risk is financed? If so, describe.	Orissa Relief Code 1996	Clauses 254, 8	Funding for landslide relief is provided through State government funds with assistance from the Central government if need be. ¹⁸⁹
78. Does this law attribute liability for damage caused by: <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? 	National Disaster Management Act 2005		There are no laws specifically attributing liability for failing to warn about landslides, giving false or faulty warnings, and failing to take preventative action. As discussed previously in the 'Liability and insurance' section (under 'Responsibility, accountability and liability for natural disaster risk reduction), the <i>National Disaster Management Act 2005</i> can to some extent be used to impose liability for faulty or false warnings and the failure to take preventative action. The common law of tort may also be relied upon if negligence was involved.
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?			There are no laws on this matter. At present Odisha does not have a system for collecting and distributing information on landslide hazards and risks. Based on the NDMA's Guidelines on Landslide Management, this will be established at the national level, the relevant bodies being the Geological Survey of India in the Ministry of Mines, State Directorates of Geology and Mining, the Wadia Institute of Himalyan Geology, the National Institute of Disaster Management, the National Remote Sensing Centre, Border Roads Organisations and State Special Relief Commissioners. ¹⁹⁰
80. Does this law provide for			At present there are no laws, policies or systems in place for

¹⁸⁹ Orissa Relief Code 1996 cls 254, 8

¹⁹⁰ National Disaster Management Authority, Government of India, *National Disaster Management Guidelines: Management of Landslides and Snow Avalanches*, Available at: <<http://ndma.gov.in/ndma/guidelines/LandslidesSnowAvalanches.pdf>>pp. 105-107 Accessed on 24 October 2012

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>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> <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? 			<p>landslide risk monitoring. The NDMA's Guidelines on Landslide Management indicate that when such systems are established, community participation and/or consultation will be limited mainly to community risk awareness-raising /education programmes.¹⁹¹</p>
<p>81. Does this law provide for Early Warnings Systems (EWS) for this risk? If so, does it require community involvement in EWS?</p>			<p>See above (Question 75)</p>
<p>82. If communities are involved in Early Warning Systems (EWS), does this law provide that they:</p> <ol style="list-style-type: none"> Assist in the design of local and community EWS? 			<p>See above (Question 75)</p>

¹⁹¹ National Disaster Management Authority, Government of India, *National Disaster Management Guidelines: Management of Landslides and Snow Avalanches*, Available at: <<http://ndma.gov.in/ndma/guidelines/LandslidesSnowAvalanches.pdf>>pp. 113-116, 105-107 Accessed on 24 October 2012

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
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)?			
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?			N/A – there are no volcanoes in Orissa.
84. Does this law specify how management of this risk is financed? If so, describe.			N/A – there are no volcanoes in Orissa.
85. 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			N/A – there are no volcanoes in Orissa.

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<p>immune?</p> <p>d. Is it civil or criminal liability, or both?</p>			
<p>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?</p>			<p>N/A – there are no volcanoes in Orissa.</p>
<p>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:</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>N/A – there are no volcanoes in Orissa.</p>
<p>88. Does this law provide for Early Warnings Systems (EWS) for this</p>			<p>N/A – there are no volcanoes in Orissa.</p>

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risk? If so, does it require community involvement in EWS?			
89. If communities are involved in Early Warning Systems (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)? 			N/A – there are no volcanoes in Orissa. N/A – there are no volcanoes in Orissa.
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: <ul style="list-style-type: none"> a. Rain and river water storage, distribution and conservation 	Orissa Relief Code 1996	Clauses 6, 31,34	The <i>Orissa Relief Code 1996</i> regulates drought management in Odisha. Although principally concerned with providing relief responses to drought and situations where there is inadequate rainfall, it does contain a few measures for drought preparedness. It requires that a Master Plan for drought-prone areas be prepared in which durable, remunerative, productive, and asset-creating schemes and projects are devised, as well as long-term measures

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>measures?</p> <p>b. Development and maintenance of ground water extraction, storage and distribution?</p> <p>If so, describe the forms of regulation. At what level(s) of government is this regulated?</p>	<p>Orissa Groundwater (Regulation, Development and Management) Bill 2011</p>	<p>Clauses 5(5),6</p>	<p>which will go towards permanently resolving drought problems e.g. reclamation of saline land.¹⁹² There should also be a contingency plan which allows for these measures, schemes and projects to be implemented as soon as drought situations develop.¹⁹³ No river or rain conservation measures are specified, but there are provisions for constructing wells and tanks to provide drinking water.¹⁹⁴</p> <p>Drought preparedness is otherwise mainly provided through government schemes and policies.¹⁹⁵ There are no formal regulations on using groundwater but presently, there is a bill awaiting passage before the Odisha Parliament for the development, regulation and management of groundwater.¹⁹⁶ The Bill establishes the Orissa Groundwater Authority which regulates the extraction and use of groundwater so that natural replenishment levels in aquifers are not exceeded. It is also to take steps to augment groundwater recharge.¹⁹⁷</p>
<p>91. Is there a specific law or institutional mandate for early warning and response to drought, to mitigate the</p>	<p>Orissa Relief Code 1996</p>	<p>Clauses 23-30,</p>	<p><i>Early Warnings</i></p> <p>While the <i>Orissa Relief Code 1996</i> specifies the parties responsible</p>

¹⁹² Orissa Relief Code 1996 cl 31; see also Orissa Relief Code 1996 cl 6

¹⁹³ Orissa Relief Code 1996 cl 31; see also Orissa Relief Code 1996 cl 6

¹⁹⁴ Orissa Relief Code 1996 cl 34; see also Orissa Relief Code 1996 cl 6

¹⁹⁵ See Department of Water Resources, Government of Odisha (2007), *Orissa State Water Policy 2007* at [9.5] Available at:

< http://www.orissa.gov.in/waterresources/policy/State_Water_Policy_2007.pdf>; Department of Water Resources, Government of Odisha (2004), *Orissa State Water Plan 2004*, pp. 105-106 Available at: < <http://www.dowrorissa.gov.in/SWPlan2004/REPORT/Final%20Report.pdf>>

¹⁹⁶ Orissa Groundwater (Regulation, Development and Management) Bill 2011

¹⁹⁷ Orissa Groundwater (Regulation, Development and Management) Bill 2011 cls 5(5), 6

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>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>	<p>National Disaster Management Act 2005</p> <p>Orissa Irrigation Act 1959</p>	<p>34(g), 36</p> <p>Sections 20, 20A(2), 22(c), 22(d)</p>	<p>for collecting rainfall, weather and crops data, and for making drought declarations,¹⁹⁸ it is unclear who has the responsibility of issuing early warnings for drought. Based on the NDMA's Guidelines on Drought Management, it is suggested that this task rests with the Indian Meteorology Department and Central/State agriculture, water resources, and revenue and disaster management departments.¹⁹⁹ Though it does not specifically have the mandate, the OSDMA would probably have some involvement in disseminating warnings as well. There are no provisions in the <i>National Disaster Management Act 2005</i> on drought.</p> <p><i>Water Use Restrictions</i></p> <p>The <i>Orissa Irrigation Act 1959</i> confers the State government with general powers to prescribe or issue rules or orders to regulate the supply of water from irrigation works. Such rules or orders can relate to rates, conditions or any other matter.²⁰⁰ Powers are also conferred to stop the supply of water for:</p> <p>(a) Whenever and so long as it is necessary to do so to supply in rotation the legitimate demand or other persons entitled to water</p> <p>(b) Whenever and so long as it may be necessary to do so in order to prevent the wastage or misuse of water.²⁰¹</p>

¹⁹⁸ *Orissa Relief Code 1996* cls 23-30

¹⁹⁹ National Disaster Management Authority, Government of India (2010), *National Disaster Management Guidelines: Management of Drought*, National Disaster Management Authority, New Delhi, p. 28 Available at: < http://ndma.gov.in/ndma/guidelines/NDMA_Droughtguidelines.pdf >

²⁰⁰ *Orissa Irrigation Act 1959* s 20

²⁰¹ *Orissa Irrigation Act 1959* ss 22(c), 22(d)

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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 powers, exercised by the Department of Water Resources, can be used to restrict water use.</p> <p><i>Water Diversion Powers</i></p> <p>Like restricting the use of water, the State government's powers to prescribe or issue rules or orders to regulate the supply of water from irrigation works can be used to divert, pipe or transport to drought-affected areas.²⁰² While the <i>Orissa Irrigation Act 1959</i> also allows the State government to regulate the diversion of water, such powers are contemplated to be exercised more for industrial and commercial purposes rather than for drought.²⁰³</p> <p>The <i>Orissa Relief Code 1996</i> allows water to be carried to villages if measures like constructing wells and renovating water tanks are insufficient in providing drinking water. Permission from the Revenue Department or the Special Relief Commissioner is required before water can be provided.²⁰⁴ The <i>Orissa Relief Code 1996</i> also requires that if drought is declared, an 'all out' effort should be made to save crops, such as by providing lift irrigation facilities and water pumps.²⁰⁵ If in any particular year rainfall is inadequate, small temporary earth dams can be constructed by the</p>

²⁰² *Orissa Irrigation Act 1959* s 20

²⁰³ *Orissa Irrigation Act 1959* s 20A(2)

²⁰⁴ *Orissa Relief Code 1996* cl 34(g)

²⁰⁵ *Orissa Relief Code 1996* cl 36

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			district administration across flowing mullahs, streams and rivers to divert water for irrigation and other uses. ²⁰⁶
92. Do the above laws or mandates specify how management of drought and famine risk is financed? If so, describe.	Orissa Relief Code 1996	Clause 8(c)(ii)	The <i>Orissa Relief Code 1996</i> states that funds for drought relief measures should come from the State Calamity Relief Fund (jointly funded by Central and State governments), the State Plan, and if the State is in dire need of further financial assistance, from Central government. ²⁰⁷ Drought management measures are typically implemented through policies and government schemes. Funding is provided through the Central and State governments. ²⁰⁸
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 what is their mandate?	Orissa Relief Code 1996	Clauses 23-25	The <i>Orissa Relief Code 1996</i> sets out the procedures for recording rainfall, weather trends and crop situations. For instance, the officer in charge of monitoring rain-gauges in district blocks is to submit reports to the revenue collector and the Director of Agriculture and Food Production. The revenue collectors are to make fortnightly reports on weather and crops conditions and review rainfall statistics, which are then submitted to the Revenue

²⁰⁶ *Orissa Relief Code 1996* cl 36(c)

²⁰⁷ *Orissa Relief Code 1996* cl 8(c)(ii)

²⁰⁸ Some examples of government schemes are: Drought Prone Area Programme (Central government sponsored), National Watershed Development Projects for Rainfed Areas (Central government sponsored) and Integrated Watershed Management Programme. For a list of water management schemes currently being implemented in Odisha, see Orissa Watershed Development Mission, 'Schemes and Programmes' <<http://www.orissawatershed.org/scheme.php>> Accessed on 24 October 2012. See also Department of Water Resources, Government of Orissa (2011), *Outcome Budget 2011-12* Available at: <<http://www.dowrorissa.gov.in/BudgetOutcome/2011-12/OutcomeBudget2011-12.pdf>> Accessed on 24 October 2012

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			Department and the Special Relief Commissioner so that they can determine whether any special measures are required. ²⁰⁹ The Indian Meteorology Department would also play a role as it has the specific mandate to take meteorological observations, provide meteorological information and statistics, make forecasts, and warn against specific weather phenomena. ²¹⁰
<p>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:</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? 	<p>Orissa Relief Code 1996</p> <p>Orissa Irrigation Act 1959</p>		<p>No, the <i>Orissa Relief Code 1996</i> and the <i>Orissa Irrigation Act 1959</i> do not provide any opportunities at all for community participation or consultation in drought and famine risk, early warning, and general DRR for drought. This position may change however as the NDMA's Guidelines on Drought Management calls for community participation and capacity building in activities like planning and monitoring drought conditions, and carrying out drought mitigation activities. Specific reference is made to the roles women Self-Help Groups and panchayats can play in drought mitigation activities (for example rainwater harvesting), running public distribution systems, operating day care centres, overseeing water distribution, and promoting greater equity and efficiency in natural resource management.²¹¹</p>

²⁰⁹ *Orissa Relief Code 1996* cls 23-25

²¹⁰ Indian Meteorology Department, Government of India, 'IMD's Mandate'. Available at: <<http://www.imd.gov.in/doc/mandate.htm>> Accessed on 24 October 2012

²¹¹ National Disaster Management Authority, Government of India (2010), *National Disaster Management Guidelines: Management of Drought*, New Delhi. Available at: <http://ndma.gov.in/ndma/guidelines/NDMA_Droughtguidelines.pdf> pp. 48-49 Accessed on 24 October 2012

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
J. Other food security risks?			
<p>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).</p> <p>a. If so, describe the form of regulation to reduce the impact of these risks (if any), and institutional responsibility</p> <p>b. At what level(s) of government is this regulated?</p>	<p>Environment (Protection) Act 1984;</p> <p>Air (Prevention and Control of Pollution) Act 1981;</p> <p>Orissa Forest Act 1972;</p> <p>Orissa Development Authority Act 1972</p> <p>Essential Commodities Act 1955</p>	<p>Sections 3, 3A, 4, 5</p>	<p>Aside from drought, factors such as overpopulation, declining agricultural productivity, land degradation, urbanisation, climate change, changes in consumption patterns, inadequate livelihood opportunities, inflation, international competition, and the trade of basic food staples as agricultural commodities, all threaten food security.²¹²</p> <p>For some of these risks like climate change, there are no legislative measures yet in place to mitigate their impacts. As mentioned previously Odisha does not have climate change legislation and its draft climate change policy does not specifically contemplate food security issues.²¹³ Nonetheless some of the measures contained within, such as developing sustainable soil, water and crop management practices, would go towards helping to improve food security.²¹⁴ for other risks like land degradation and increased urbanisation, existing statutes in Odisha like the <i>Environment (Protection) Act 1984</i>, the <i>Air (Prevention and Control of Pollution) Act 1981</i>, the <i>Orissa Forest Act 1972</i> and the <i>Orissa Development Authority Act 1972</i> can be used to mitigate these risks.²¹⁵ These</p>

²¹² See S Mahendra Dev and Alakh N. Sharma (2010), *Food Security in India: Performance, Challenges and Policies*, Oxfam India Working Paper Series 7, Available at: <http://www.oxfamindia.org/sites/www.oxfamindia.org/files/working_paper_7.pdf> Accessed on 25 October 2012; 'Climate Change Poses Serious Threat to Food Security', *The Hindu*, 25 October 2012. Available at <<http://www.thehindu.com/news/cities/Visakhapatnam/article2749281.ece>> Accessed on 24 October 2012; Bharat Dogra, 'Divisions in Food Security', *Civil Society*, Vol 9 No.11-12 September-October 2012

²¹³ See generally, Government of Odisha (2010), *Draft Orissa Climate Change Action Plan 2010-2015*, Available at: <http://www.odisha.gov.in/forest&environment/ActionPlan/CAP_Report_Draft.pdf>

²¹⁴ Government of Odisha (2010), *Draft Orissa Climate Change Action Plan 2010-2015*, Available at: <http://www.odisha.gov.in/forest&environment/ActionPlan/CAP_Report_Draft.pdf> p. viii

²¹⁵ For a discussion about the *Orissa Development Authority Act 1972* and planning controls, see 'Part Four: Regulation of the Built Environment'

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	National Food Security Bill 2011	Clauses 32, 33	<p>statutes are implemented by various government departments in Odisha like the Forest and Environment Department.</p> <p>The problem of food security is not a new one in Odisha and over the last decade there have been about ten centrally-sponsored government food schemes operating in the state, such as the National Food Security Mission, the National Rural Employment Guarantee Scheme, Antyodaya Anna Yojana, the Mid-Day Meal Scheme and the Public Distribution Scheme.²¹⁶ Their purposes is to distribute food and essential supplies to persons living in poverty and are administered by a number of departments, such as the Food Supplies and Consumer Welfare Department and the Department of Agriculture and Food Production in Odisha. Other government schemes targeting issues like agricultural productivity would also help to address food security issues.</p> <p>The Central government's <i>Essential Commodities Act 1955</i> allows it to control prices of essential commodities, order waste or arable land to be brought under cultivation for food crops, compel the sales of essential commodities, and regulate their distribution and production, if the government is of the opinion that doing so is necessary or expedient to do so to maintain or increase supplies of</p>

²¹⁶ For a discussion about the effectiveness of the schemes, see Parshuram Rai (2011), 'Performance Audit of Food Security Schemes in Orissa and UP', Centre for Environment and Food Security, New Delhi. Available at: < <http://www.indiawaterportal.org/node/22111>> Accessed on 24 October 2012. See eg, Food Supplies and Consumer Welfare Department, Government of Orissa, 'Citizen Charter' Available at: < http://darpn.nic.in/darpgwebsite_cms/Document/file/ccfoodorissa.pdf>

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>essential commodities, or to secure their equitable distribution and availability at fair prices.²¹⁷ It can issue orders to State governments directing them on these matters.²¹⁸ This statute can be used to reduce the impacts of food security risks.</p> <p>Presently the National Food Security Bill 2011 is before Parliament. It essentially establishes a system for distributing food grains and meals to persons living in poverty, pregnant women and lactating mothers, children between the ages of six months and 14 years, malnourished children, disaster affected persons, and destitute, homeless and starving persons.²¹⁹ State governments and local authorities are to ensure the proper implementation of the Bill and that the food supplies do reach the target populations.²²⁰ The Bill has attracted controversy due to its methodology for identifying target populations and the amount of food supplied.²²¹</p>
96. Does the above law or mandate specify how management of food security is financed? If so, describe.	National Food Security Bill 2011	Clauses 4,5,6, 7,8,9, 11,20,21,	Hereon the discussion shall focus on the National Food Security Bill 2011. Costs for procuring and supplying food to target populations are generally shared between Central and State governments. ²²²

²¹⁷ *Essential Commodities Act 1955* ss 3, 3A

²¹⁸ *Essential Commodities Act 1955* ss 4, 5

²¹⁹ See generally, National Food Security Bill 2011

²²⁰ National Food Security Bill 2011 cls 32, 33

²²¹ See eg, Abusaleh Shariff and Devendra Bajpai, 'National Food Security Bill and Risks of Exclusion', *Economic Times*, 23 April 2012, Available at:

< http://articles.economictimes.indiatimes.com/2012-04-23/news/31386876_1_exclusion-households-urban-areas> ; Editorial, Parliamentary Panel Studying Food Security

Bill: Minister' *The Hindu*, July 27 2012 Available at: < <http://www.thehindubusinessline.com/industry-and-economy/agri-biz/article3693203.ece>>

²²² National Food Security Bill 2011 cls 4,5,6,7,8,9,11,20,21,22,23,30,31,32

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		22,23, 30, 31, 32	
<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, the National Food Security Bill 2011 does not contain any provisions for collecting information on hazards to food security. Nonetheless the existing monitoring systems for floods, insect infestations and drought would help with establishing whether there are risks to agricultural production, and consequently, risks to food security (see previous discussion on floods, insect infestations and drought warning systems)</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 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? 			<p>No, the National Food Security Bill 2011 does not contain any opportunities for community consultation and participation on reducing risks to food security. As discussed above, very little scope for community consultation is provided in flood, insect infestations, drought management frameworks. In Part Five 'Regulation of the Natural and Rural Environment', environment management frameworks also do not provide much scope for community participation.</p>

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Part Three. Early Warning, Hazard Mapping and Risk Information			
A. Early Warning			
<p>99. In addition to the sectoral laws above, is there any general obligation to establish early warning systems (EWS) in the disaster management law?</p> <p>a. If so, does this include institutional mandates on EWS?</p> <p>b. Which institution(s) are involved and what are their mandates on EWS?</p> <p>c. Is there legal provision for financing of EWS?</p>	<p>National Disaster Management Act 2005</p>	<p>Sections 38, 38(2)(h)</p>	<p>Pursuant to the <i>National Disaster Management Act 2005</i>, the Odisha State government must establish early warning systems if guidelines issued by the National Disaster Management Authority have specified that this measure should be undertaken.²²³ Otherwise, the government is only required to do so if it considers that doing so would be 'necessary or expedient for the purpose of disaster management'.²²⁴ Odisha does not have any laws imposing a general obligation to establish early warning systems.²²⁵</p> <p>So far the guidelines issued by the NDMA for the different types of disasters contemplate the Central Government as having the primary responsibility for establishing early warning systems.²²⁶ The National Disaster Management Policy 2009 assigns State government a supportive role in early warning systems generally—they are to provide the Indian Meteorological Department the</p>

²²³ *National Disaster Management Act 2005* s 38

²²⁴ *National Disaster Management Act 2005* ss 38, 38(2)(h)

²²⁵ See eg, *Orissa Relief Code 1996*

²²⁶ See National Disaster Management Authority, Government of India, (2008) *National Disaster Management Guidelines: Management of Floods*, National Disaster Management Authority, New Delhi pp.36-42; National Disaster Management Authority, Government of India, *National Disaster Management Guidelines: Management of Cyclones*, National Disaster Management Authority, New Delhi pp.16-53; National Disaster Management Authority, (2010) Government of India, *National Disaster Management Guidelines: Management of Drought*, National Disaster Management Authority, New Delhi, pp. 23-31; National Disaster Management Authority, Government of India, (2010) *National Disaster Management Guidelines: Management of Landslides and Snow Avalanches*, National Disaster Management Authority, New Delhi, pp. 52-62; National Disaster Management Authority, Government of India, (2010) *National Disaster Management Guidelines: Management of Tsunamis*, National Disaster Management Authority, New Delhi, pp. 17-45

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			required infrastructure for upgrading or establishing meteorological observation systems. They are also to assist with the dissemination of warnings to local communities. ²²⁷
100. Does EWS regulation include requirements for community consultation and participation in development of EWS? Describe.			Odisha does not have laws on establishing EWS. The <i>National Disaster Management Act 2005</i> , the National Disaster Management Policy 2009 and disaster management guidelines issued by the NDMA do not prescribe opportunities for community consultation and participation in the development of EWS. ²²⁸
101. Does EWS regulation provide for community-based early warning data collection? Describe.			No, the <i>National Disaster Management Act 2005</i> , the National Disaster Management Policy 2009 and disaster management guidelines issued by the NDMA issued by the NDMA see data collection as a mostly scientific activity and do not involve the community.
102. Does EWS regulation provide for timely and reliable access for at-risk communities to EWS, meteorological or seismological data (as relevant)? Describe.			No, the <i>National Disaster Management Act 2005</i> does not contain any provisions for the timely and reliable access to EWS, meteorological information.

²²⁷ National Disaster Management Authority, Government of India, *National Policy on Disaster Management 2009*, National Disaster Management Authority, p. 19

²²⁸ See National Disaster Management Authority, Government of India, (2008) *National Disaster Management Guidelines: Management of Floods*, National Disaster Management Authority, New Delhi pp.36-42; National Disaster Management Authority, Government of India, *National Disaster Management Guidelines: Management of Cyclones*, National Disaster Management Authority, New Delhi pp.16-53; National Disaster Management Authority, (2010) Government of India, *National Disaster Management Guidelines: Management of Drought*, National Disaster Management Authority, New Delhi, pp. 23-31; National Disaster Management Authority, Government of India, (2010) *National Disaster Management Guidelines: Management of Landslides and Snow Avalanches*, National Disaster Management Authority, New Delhi, pp. 52-62; National Disaster Management Authority, Government of India, (2010) *National Disaster Management Guidelines: Management of Tsunamis*, National Disaster Management Authority, New Delhi, pp. 17-45

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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> <p>a. geographical coverage of telecommunications to include remote and/or at-risk areas?</p> <p>b. priority access to communications technology for at-risk communities and responders to disaster?</p> <p>c. access for vulnerable groups such as the elderly and persons with disabilities?</p> <p>d. Support for early warning systems?</p>	<p>Constitution of India 1949;</p> <p>Indian Telegraph Act 1885;</p> <p>Indian Wireless Act 1933;</p> <p>Information Technology Act 2000</p>	<p>Schedule 7, Item 31</p>	<p>Schedule 7, Item 31 of the <i>Constitution of India 1949</i> provides that the Central government should have power over posts, telegraphs, telephones, wireless, broadcasting and other like forms of communication. The Central government's legislation on telecommunications does not contain any reference to DRR.²²⁹</p> <p>In its National Telecom Policy 2012, the Department of Telecommunications has devised a range of measures for disasters and emergencies which contemplate State government involvement. These are:</p> <ul style="list-style-type: none"> • To emphasize the active role of both private sector and Government including the State Governments and Local bodies to enable the growth of telecom infrastructure necessary for meeting the telecommunication demand of the country and leveraging USOF where appropriate. • To review and simplify sectoral policy for Right of Way for laying cable network and installation of towers, etc. for facilitating smooth coordination between the service providers and the State Governments/ local bodies. • To facilitate development of guidelines for provision of common service ducts for orderly growth of telecom infrastructure in consultation with all concerned Ministries/

²²⁹ See generally, *Indian Telegraph Act 1885, Indian Wireless Act 1933, Information Technology Act 2000*

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>Departments, State Governments and Local bodies.</p> <ul style="list-style-type: none"> • To mandate for mapping and submission of information of the infrastructure assets on the standards based inter-operable GIS platform by all telecom infrastructure/ service providers to the licensor. • To promote use of In-Building Solutions (IBS) and Distributed Antenna Systems (DAS) and their siting in coordination with Ministry of Urban Development by aligning the National Building Code as well as embedding these critical requirements in the process of developmental planning and finalization of master plans for rural and urban areas in consultation with the State Governments. • To prescribe sectoral Standard Operating Procedures for aiding effective and early mitigation during disasters and emergencies. • To encourage use of ICTs in prediction, monitoring and early warning of disasters and early dissemination of information. • To facilitate an institutional framework to establish nationwide Unified Emergency Response Mechanism by providing nationwide single access number for emergency services.²³⁰ <p>The policy also contains a commitment to undertake a comprehensive review of the <i>Indian Telegraph Act 1885</i>, its rules</p>

²³⁰ Department of Telecommunications, Government of India, (2012) National Telecommunications Policy 2012, Available at: <<http://www.dot.gov.in/ntp/NTP-06.06.2012-final.pdf>> pp. 13-15 Accessed on 25 October 2012

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			and other allied legislations to make them consistent with the policy's objectives. ²³¹
<p>104. Does the above law impose, or allow for the imposition, of any restrictions on use of certain types of telecommunications equipment</p> <p>a. Generally throughout the territory?</p> <p>b. In specified areas?</p> <p>c. Under specified circumstances?</p>	<p>Indian Telegraph Act 1885</p> <p>Indian Wireless Act 1933</p> <p>Telecom Regulatory Authority of India Act 1996</p>	<p>Section 20</p> <p>Section 6</p> <p>Sections 11(1)(b), 11(1)(c), 11(1)(e), 11(1)(k),</p>	<p>No. The <i>Indian Telegraph Act 1885</i> only imposes penalties on establishing, using, maintaining or working telegraphs without authorisation.²³² The <i>Indian Wireless Act 1933</i> similarly only imposes liability for possessing a wireless telegraphy apparatus or transmitter without a licence.²³³</p> <p>The Telecom Regulatory Authority of India has some power over the use of telecommunications equipment, as it can recommend the type of equipment to be used by service providers,²³⁴ ensure the technical compatibility and effective inter-connection between different service providers,²³⁵ recommend the terms and conditions of licence to a service provider,²³⁶ ensure that such terms are complied with,²³⁷ protect the interest of the consumers of telecommunication service,²³⁸ and monitor the quality of the services provided.²³⁹ It can make regulations and issue directions to carry out these activities.²⁴⁰</p>

²³¹ Department of Telecommunications, Government of India, (2012) National Telecommunications Policy 2012, Available at: <<http://www.dot.gov.in/ntp/NTP-06.06.2012-final.pdf>> p. 19 Accessed on 25 October 2012

²³² *Indian Telegraph Act 1885* s 20

²³³ *Indian Wireless Act 1933* s 6

²³⁴ *Telecom Regulatory Authority of India Act 1997* s 11(1)(k)

²³⁵ *Telecom Regulatory Authority of India Act 1997* s 11(1)(c)

²³⁶ *Telecom Regulatory Authority of India Act 1997* s 11(1)(b)

²³⁷ *Telecom Regulatory Authority of India Act 1997* s 11(1)(e)

²³⁸ *Telecom Regulatory Authority of India Act 1997* s 11(1)(i)

²³⁹ *Telecom Regulatory Authority of India Act 1997* s 11(1)(j)

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		11(1)(j), 13, 36	
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?			No, as discussed above (Section A, 'Early Warning') there are no laws which regulate the collection and distribution of information on hazards and risks.
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?			No, as discussed above (Section A, 'Early Warning') there are no laws which regulate the collection and publication of seismological, meteorological and climatic data. This is done mainly through guidelines and policies.
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	Constitution of India 1949	Arts 246, 243W	Population data collection is regulated by the <i>Census Act 1948</i> . The <i>Constitution of India 1949</i> confers the Central Government with the exclusive power to carry out censuses. ²⁴¹

²⁴⁰ Telecom Regulatory Authority of India Act 1997 ss 36, 13

²⁴¹ Constitution of India 1949 Art 246; Seventh Schedule, List I, Item 69

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
and who is responsible for this, and under what law?	Census Rules 1990 Census Act 1948	Seventh Schedule, List 1, Item 69; Seventh Schedule, List III, Item 30; Twelfth Schedule, Item 16 Section 3	It also gives concurrent powers to State and Central governments to legislate in relation to vital statistics including the registration of births and deaths. ²⁴² State governments can devolve this power to municipalities. ²⁴³ The Ministry of Home Affairs, Government of India carries out censuses pursuant to the <i>Census Act 1948</i> and its regulations. ²⁴⁴ There is no specific requirement that censuses should be carried out in high risk areas; instead, s 3 of the <i>Census Act 1948</i> states that the Central government can undertake this task in the whole or part of its territories whenever it may consider it necessary or desirable to do so. The most recent census, conducted in 2011, was for the 'population of India' and extended to the State of Jammu and Kashmir, as well as the snow-bound non-synchronous areas of Himachal Pradesh and Uttarakhand. ²⁴⁵

²⁴² *Constitution of India 1949* Art 246; Seventh Schedule, List III, Item 30

²⁴³ *Constitution of India 1949* Art 243W; Twelfth Schedule, Item 16

²⁴⁴ *Census Rules 1990*

²⁴⁵ See Ministry of Home Affairs, Office of the Registrar General, Notification No - 362 dated 27-02-2009.

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	Orissa Municipal Corporation Act 2003	Sections 24 (xiv); 26(b)(viii)	In Orissa, municipal corporations have been given the powers to perform functions and implement schemes in relation to vital statistics. ²⁴⁶ They have a compulsory obligation to make adequate provisions on the registration of births and deaths, ²⁴⁷ which they have fulfilled with the support of the State government. ²⁴⁸ The State otherwise relies on the Central government's census for its population data. ²⁴⁹
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	Constitution of India 1949	Art 243W;	As the <i>Constitution of India 1949</i> contemplates State governments and municipalities as the main regulators of building, construction,

²⁴⁶ *Orissa Municipal Corporation Act 2003* s 26(b)(viii)

²⁴⁷ *Orissa Municipal Corporation Act 2003* s 24(xiv)

²⁴⁸ See eg Bhubaneswar Municipal Corporation, 'e-services' Available at: < bmc.gov.in> Accessed on 25 October 2012

²⁴⁹ See Population Census India, 'Orissa Population Census Data 2011' Available at: <www.census2011.co.in/census/state/orissa.html> Accessed on 25 October 2012

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>authority is responsible for its implementation?</p>		<p>Twelfth Schedule, Items 1, 2</p>	<p>urban planning and land use activities, India does not have a national building and construction law.²⁵⁰ Instead the Central government has model laws e.g. the <i>Model Town and Country Planning Act 1960</i> and the <i>Model Building Bye-Laws 2004</i>, and national building standards, which are meant to guide State governments, municipal authorities and panchayats in designing their regulatory frameworks for these activities.²⁵¹</p> <p>The <i>National Building Code of India 2005</i> was devised by the Bureau of Indian Standards to provide guidelines for regulating building construction activities across the country. It contains administrative regulations, development control rules, general building requirements, fire safety requirements, stipulations regarding materials, structural design and construction, and building and plumbing services. It is meant to be adopted by all agencies involved in building construction works.²⁵² In the National Policy on Disaster Management 2009, it was stated that municipal regulations such as development control regulations, building bye-laws and structural safety features will need to be aligned with the <i>National Building Code of India 2005</i>, and that its observance by State governments and municipalities should be made mandatory.²⁵³</p>

²⁵⁰ *Constitution of India 1949* Art 243W, Twelfth Schedule, Items 1, 2

²⁵¹ See National Disaster Management Division, Ministry of Home Affairs, Government of India, *Building a New Techno-Legal Regime for Safer India*, Building Materials and Technology Promotion Council, Ministry of Urban Employment and Poverty Alleviation, Government of India, pp. 6-10

²⁵² See Bureau of Indian Standards, 'National Building Code of India 2005' Available at: <www.bis.org.in/sf/nbc.htm> Accessed on 25 October 2012

²⁵³ National Disaster Management Authority, Ministry of Home Affairs, Government of India (2009) *National Policy on Disaster Management 2009*, National Disaster Management Authority, pp.23-24

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>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?</p>	<p>Orissa Development Authorities Act 1982</p> <p>Bhubaneswar Development Authority (Planning and Building Standards) Regulations 2008</p> <p>Orissa Municipal Corporation Act 2003</p>	<p>Sections 7, 8-14, 21, 123 , 125</p>	<p>In Odisha, building and construction regulations exist at the local level rather than at the state level. The State government passed the <i>Orissa Development Authorities Act 1982</i> to establish development authorities in urban areas; these authorities were meant to ensure that such areas would develop in a systematic and planned manner.²⁵⁴ The authorities' powers comprise of preparing development plans (including zonal development plans),²⁵⁵ undertaking works pertaining to housing construction, shopping centres, markets and industrial estates, providing public amenities, regulating the development and use of land, undertaking schemes for improvement, and clearing slums.²⁵⁶ There are 9 Development Authorities in Odisha at the moment.²⁵⁷</p> <p>Section 123 allows the State Government, after consulting with the development authority, to make rules for the purposes of the <i>Orissa Development Authorities Act 1982</i>. Section 124 permits authorities to frame regulations which are consistent with the statute. These have to be approved by the State government. Under these provisions the Bhubaneswar Development Authority has passed the <i>Bhubaneswar Development Authority (Planning and Building Standards) Regulations 2008</i> to regulate building practices within its area. The Cuttack Development Authority also</p>

²⁵⁴ *Orissa Development Authorities Act 1982 s 7*

²⁵⁵ *Orissa Development Authorities Act 1982 ss 8-14*

²⁵⁶ See generally, *Orissa Development Authorities Act 1982* 'Statement of Objects and Reasons', s 7

²⁵⁷ See Housing and Urban Development Department, Government of Odisha, 'Development Authorities'. Available at:

< [http://urbanorissa.gov.in/\(S\(hrjpe455snbbut45wqrcueqk\)\)/pa_development_authority.html](http://urbanorissa.gov.in/(S(hrjpe455snbbut45wqrcueqk))/pa_development_authority.html) > Accessed on 24 October 2012

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>has planning and building regulations but its legal status is unclear (it has not appeared in the gazette),²⁵⁸ and the Rourkella Development Authority in 2011 passed its own set of regulations.²⁵⁹ It is similar to its Bhubaneswar counterpart.</p> <p>For areas which do not have a development authority but are governed by a municipal corporation, the <i>Orissa Municipal Corporation Act 2003</i> will be the source of building controls. This statute applies to all urban areas which have municipal corporations established to administer them.</p>
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, general building design and construction, health requirements, water & sanitation etc.)? List these categories of regulation.	<p>Bhubaneswar Development Authority (Planning and Building Standards) Regulations 2008 (<i>'Bhubaneswar Regulations'</i>);</p> <p>Orissa Municipal Corporation Act 2003 (<i>'OMC Act'</i>);</p>	<p>Regs 27(1), 84</p> <p>Chapters III, VI, XV,</p>	<p>Hereafter the discussion will focus on the <i>Bhubaneswar Development Authority (Planning and Building Standards) Regulations 2008 ('Bhubaneswar Regulations')</i> and the <i>Orissa Municipal Corporation Act 2003 ('OMC Act')</i>. The <i>Orissa Development Authorities Act 1982</i> does not contain building controls.</p> <p><i>Scope</i></p> <p>While the <i>OMC Act</i> does contain a number of provisions which regulate building construction, this is done much more extensively</p>

²⁵⁸ See Cuttack Development Authority, 'Planning and Building Standard Regulation' Available at: < http://as1.ori.nic.in/cdacuttack/Planning_regulation.html Accessed on 25 October 2012

²⁵⁹ Secretary, Rourkela Development Authority, Notification, Orissa Gazette Notification No. 596 Dated 15 January 2011. Available at: <<http://orissa.gov.in/govtpress/pdf/2011/596.pdf>> Accessed on 25 October 2012 ; For a list of building bye-laws which have been enacted in India, see National Real Estate Building Council, Government of India, 'Building Bye-Laws' Available at: < <http://www.naredco.in/notifications.asp?st=3&links=gnc3&foo=bar&page=1>>

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	Orissa Development Authorities Act 1982	XVI, XVII, XVIII, XIX, XXII Sections 638(1), 638(2), 641(c)	<p>by the <i>Bhubaneswar Regulations</i>. Some efforts have been made to align these regulations with the <i>National Building Code 2005</i>,²⁶⁰ but it is not within the ambit of this survey to conduct a detailed comparison between the two.</p> <p>The <i>OMC Act</i> covers the following:</p> <ul style="list-style-type: none"> • Drains and drainage works²⁶¹ • Solid waste management²⁶² • Water supply²⁶³ • Streets²⁶⁴ • Buildings²⁶⁵ • Urban environmental management, community health and public safety²⁶⁶ <p>The <i>Bhubaneswar Regulations</i> regulate all these matters far more extensively, such as by prescribing in great detail how land zoning and building construction should be carried out.²⁶⁷</p>

²⁶⁰ See eg *Bhubaneswar Regulations* reg 27(1). See also *Bhubaneswar Regulations* reg 84, which provides that the *National Building Code of India 2005* shall be applicable where no express provisions have been made by the *OMC Act*, the *Bhubaneswar Regulations*, the Development Plan, the Town Planning Scheme, and the resolutions of the Bhubaneswar Development Authority.

²⁶¹ *OMC Act* Chapter XV

²⁶² *OMC Act* Chapter XVI

²⁶³ *OMC Act* Chapter XVII

²⁶⁴ *OMC Act* Chapter XVIII

²⁶⁵ *OMC Act* Chapter XIX

²⁶⁶ *OMC Act* Chapter XXII

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p><i>Liability</i></p> <p>Section 641(c) of the <i>OMC Act</i> imposes fines for building or reconstructing buildings contrary to the <i>OMC Act</i> and the <i>Bhubaneswar Regulations</i>. Sections 638(1) and (2) impose fines for breaching building, drainage, water and street controls under the <i>OMC Act</i>.²⁶⁸</p>
111. Does this law include mechanisms for individual building approvals? If so, which institution(s) have responsibility for this?	<p>OMC Act</p> <p>Bhubaneswar Regulations</p>	<p>Sections 443-446</p> <p>Regulations 5, 9</p>	<p>Generally, Municipal Commissioners of cities grant approvals for any type of work relating to buildings and building use.²⁶⁹ However in the case of areas covered by the Bhubaneswar Development Authority, persons wishing to erect, re-erect, make additions, demolish, or alter need to submit a building plan to the Authority for approval before undertaking these activities.²⁷⁰</p>
112. Does this law include mechanisms for building inspections? If so, which institution(s) have responsibility for this? Does it apply to: <ul style="list-style-type: none"> a. New buildings? b. Renovations / extensions of existing buildings? c. Existing buildings where there is no 	<p>OMC Act</p>	<p>Sections 454, 526, 532, 533, 535, 537, 671</p>	<p>Section 454 of the <i>OMC Act</i> confers Municipal Commissioners with the powers to, at any time, inspect the erection, re-erection or execution of any works relating to buildings. No notice of his or her intention to do so needs to be given. Section 671 allows Municipal Commissioners, or any other officer authorised by him or her, to enter any building or land to make an inspection of any work which has been authorised by the <i>OMC Act</i> or which is necessary to fulfil the purposes of the statute.</p>

²⁶⁷ See eg Bhubaneswar Regulations Part III ('Zoning Regulations'), Part IV ('General')

²⁶⁸ For a list of offences under the *OMC Act*, see Schedule I and Schedule II.

²⁶⁹ *OMC Act* ss 443-446

²⁷⁰ *Bhubaneswar Regulations* regs 5, 9

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
building application, such as old buildings that may no longer be safe?	Bhubaneswar Regulations	Regulations 14, 16(5), 20(2)	<p>These provisions enable Municipal Commissioners to inspect new buildings, those which are being renovated, extended or altered, and existing buildings which may be unsafe, unfit for human habitation, overcrowded or unsanitary.²⁷¹</p> <p>For areas under the Bhubaneswar Development Authority, all construction or work for which a building permit has been issued can be inspected by the Authority 'at all reasonable hours with prior intimation'.²⁷² Regulation 20(2) of the <i>Bhubaneswar Regulations</i> allows it to examine buildings which are unsafe or damaged, while Regulation 16(5) subjects certified occupied multi-storied buildings and other special buildings to periodic physical inspection by the Authority.²⁷³ These provisions allow the Authority to inspect the same range of buildings as Municipal Commissioners.</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?	OMC Act	Sections 638(1), 638(2), 641(c)	Section 641(c) of the <i>OMC Act</i> imposes fines for building or reconstructing buildings contrary to the <i>OMC Act</i> and the <i>Bhubaneswar Regulations</i> . Sections 638(1) and 638(2) impose fines for breaching building, drainage, water and street controls under the <i>OMC Act</i> . ²⁷⁴
114. Do the building regulations have	OMC Act	Sections	<i>Schools</i>

²⁷¹ *OMC Act* ss 526, 532, 533, 535, 537

²⁷² *Bhubaneswar Regulations* reg 14

²⁷³ Special buildings are ones with education, assembly, institutional, industrial storage and hazardous and mixed occupancies. See *Bhubaneswar Regulation* reg 16(4).

²⁷⁴ For a list of offences under the *OMC Act*, see Schedule I and Schedule II.

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
		8(ii)	<p>government. However, no orders have been made describing how fire stations should be built.²⁸³</p> <p><i>Other Public Buildings</i></p> <p>The <i>OMC Act</i> allows municipal corporations to provide for the maintenance of religious institutions, but it has not exercised this power to prescribe how they should be built or maintained. Section 525(1) of the <i>OMC Act</i> allows municipal commissioners to make special arrangements for maintaining their sanitation whenever large numbers of persons are assembled on particular occasions.²⁸⁴ The <i>Bhubaneswar Regulations</i> do not contain any prescriptions for religious institutions.</p> <p>While the <i>OMC Act</i> does not contain any special provisions for public/community buildings, the <i>Bhubaneswar Regulations</i> contain specifications for matters such as minimum land size,²⁸⁵ the size of surrounding open spaces,²⁸⁶ parking space,²⁸⁷ and interior open space.²⁸⁸</p> <p>For areas covered by the Bhubaneswar Development Authority, the absence of regulations for these buildings under the</p>

²⁸³ See *Orissa Fire Service Act 1993* s 8(ii)

²⁸⁴ *OMC Act* s 525(1)

²⁸⁵ *Bhubaneswar Regulations* reg 30

²⁸⁶ *Bhubaneswar Regulations* reg 31(3)

²⁸⁷ *Bhubaneswar Regulations* reg 35(1)

²⁸⁸ *Bhubaneswar Regulations* reg 36

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<i>Bhubaneswar Regulations</i> and the <i>OMC Act</i> may be addressed by the <i>National Building Code 2005</i> . ²⁸⁹
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.	OMC Act Bhubaneswar Regulations	Regulations 31-41, 84, Part VII	The <i>OMC Act</i> does not contain special provisions for regulating large commercial buildings and developments like multi-storey shopping centres, office buildings and factories. However, the <i>Bhubaneswar Regulations</i> allow the Bhubaneswar Development Authority to control the construction of multi-storied buildings, apartments and commercial buildings. ²⁹⁰ For large commercial buildings and developments in areas covered by the Bhubaneswar Development Authority, they may be subject to the <i>National Building Code 2005</i> for building matters not covered by the <i>Bhubaneswar Regulations</i> and the <i>OMC Act</i> . ²⁹¹
116. Do the building laws/regulations include large, multi-storey apartment buildings? Identify & describe.	Bhubaneswar Regulations	Regulations 31-41, Part VII	The <i>OMC Act</i> does not contain special regulations for large, multi-storey apartment buildings – general building controls such as those relating to height would apply. ²⁹² On the other hand the <i>Bhubaneswar Regulations</i> has an entire chapter on building apartments. The provisions prescribe where apartments cannot be built, how wide roads should be, the land size, maintenance, exits, information and communication technology landing points, and structural safety. ²⁹³

²⁸⁹ *Bhubaneswar Regulations* reg 84

²⁹⁰ See *Bhubaneswar Regulations* regs 31-41, Part VII

²⁹¹ *Bhubaneswar Regulations* reg 84

²⁹² See *OMC Act* ss 449,450

²⁹³ See *Bhubaneswar Regulations* regs 31-41, Part VII

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
117. Do the building laws/regulations include small self-built constructions? Identify & describe.	OMC Act Bhubaneswar Regulations	Section 2 (7) Regulations 2(l)(21)	<p>If these small self-built constructions fall within the definitions of ‘building’ in the <i>OMC Act</i> and the <i>Bhubaneswar Regulations</i>, then the normal building controls under both these pieces of legislation would apply.</p> <p>The <i>OMC Act</i> defines a ‘building’ as a house, including out-house, garage, stable, latrine, godown, shed, hut, wall, fencing platform, verandas, balcony, cornice or projection or part of the building or anything affixed thereto or any wall (other than the boundary wall less than three metres in height) enclosing or intended to enclose any land, signs or outdoor display structures but does not include a tent, samiana or tarpaulin shelter.²⁹⁴ The definition relies on the physical characteristics of the structure.</p> <p>The <i>Bhubaneswar Regulations</i> defines buildings as ‘any structure or erection or part of a structure or erection which is intended to be used for residential, commercial, industrial or any other purpose whether in actual use or not. It goes on to define assembly, commercial, educational, hazardous, industrial, institutional, residential, public utility, storage and multi-level car parking buildings.²⁹⁵ It looks to the purpose of the building rather than its physical characteristics for the definition.</p> <p>Thus whether a not a small self-built construction will be subject to building regulations depends on its purpose and physical</p>

²⁹⁴ *OMC Act* s 2(7)

²⁹⁵ *Bhubaneswar Regulations* reg 2(l)(21)

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			characteristics.
<p>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.</p> <p>a. the extent of regulation?</p> <p>b. the level of government at which it is regulated?</p> <p>c. other?</p>	<p>Constitution of India 1949</p> <p>Orissa Zilla Parishad Act 1991;</p> <p>Orissa Gram Panchayat Act 1964</p> <p>Orissa Panchayat Samiti Act 1960</p>	<p>Art 243G;</p> <p>Eleventh Schedule, Items 10, 13, 23</p> <p>Section 3(3)</p> <p>Section 44</p> <p>Section 20(1)</p>	<p>The <i>OMC Act</i> applies only to urban areas.</p> <p>Panchayats are responsible for the development of rural areas but their functions are mainly to provide basic services to the people of these areas and to implement schemes relating to economic development and social justice.²⁹⁶ While they do have powers over village infrastructure such as rural housing, public utilities, hospitals and streets,²⁹⁷ no building controls seem to be in place.²⁹⁸</p>
<p>119. Do the building/planning laws/regulations include emergency</p>	<p><i>OMC Act</i></p>	<p>Section 34</p>	<p>The <i>OMC Act</i> gives the Mayor of the Municipal Corporation powers to order the immediate sanction of any work or act which she or</p>

²⁹⁶ *Constitution of India 1949* Art 243G

²⁹⁷ See *Constitution of India 1949* Eleventh Schedule, Items 10, 13, 23; *Orissa Zilla Parishad Act 1991* s 3(3); *Orissa Gram Panchayat Act 1964* s 44; *Orissa Panchayat Samiti Act 1960* s 20(1)

²⁹⁸ See further, Panchayati Raj Department, Government of Odisha, <odishapanchayat.gov.in/English/departement.asp> Accessed on 25 October 2012

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and transitional shelter? If so, what form of regulation and which institution(s) have responsibility for this?			<p>he deems is necessary for maintaining services, the safety of the public, or preventing extensive damage to property of the Corporation. Such powers can only be exercised if the Mayor is satisfied that an emergency has arisen and any actions taken will not require the approval, sanction, consent or concurrence of the municipal corporation.²⁹⁹</p> <p>This can be used to establish emergency and transitional shelters. Otherwise, the <i>OMC Act</i> and <i>Bhubaneswar Regulations</i> do not contain any provisions on building emergency and transitional shelters.</p>
<p>120. Do the building laws/regulations include:</p> <p>a. Inspections?</p> <p>b. programmes and/or incentives for making existing buildings safe (e.g. retro-fitting for earthquake resistance, addition of fire escapes, condemning unsafe buildings including demolition orders, tax or funding incentives for owners to fortify buildings)?</p> <p>If so, what form of regulation and which</p>	<p>OMC Act</p> <p>Bhubaneswar Regulations</p>	<p>Sections 459(1), 459(2), 459(3)</p> <p>Regulations 20(3), 20(4), 20(6)</p>	<p>On building inspection powers, see the above response to question 106. In respect of unsafe buildings, if they constitute a danger to public safety, the occupants or passers-by, the <i>OMC Act</i> allows the Municipal Commissioner to:</p> <ul style="list-style-type: none"> • By written notice, require that the owner or occupier of the building or structure, pulls down or repairs the building³⁰⁰ • By written notice, require that the person also sets up a proper and sufficient hoard or fence for protecting passers-by and other persons, with a convenient platform and hand-rail.³⁰¹ • Pull down, fence off, or repair the building before giving notice so as to prevent the danger.³⁰²

²⁹⁹ *OMC Act* s 34

³⁰⁰ *OMC Act* s 459(1)

³⁰¹ *OMC Act* s 459(2)

³⁰² *OMC Act* s 459(3)

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institution(s) have responsibility for this?			<p>The Bhubaneswar Development Authority has the powers to:</p> <ul style="list-style-type: none"> • Issue notices to owners or occupiers of unsafe buildings requiring them to take repairs, improvements or demolitions as specified by the Authority³⁰³ • Order the immediate vacation of the building if it is of the opinion that the building is unsafe or has no provision for exits in the event of fire³⁰⁴ • If the person refuses to leave the buildings or fails to comply with the notice to repair or demolish the buildings, the Authority can cause the danger to be removed by demolition or repairs.³⁰⁵ • In an emergency where there is imminent danger to human life or health, the Authority has the power to cause unsafe buildings or portions thereof to be rendered safe by retrofitting or strengthening it. The Authority has powers of entry to carry out these measures.³⁰⁶ <p>The OSDMA's disaster risk reduction programmes for cyclones and</p>

³⁰³ *Bhubaneswar Regulations* reg 20(3)

³⁰⁴ *Bhubaneswar Regulations* r 20(4)

³⁰⁵ *Bhubaneswar Regulations* r 20(6)

³⁰⁶ *Bhubaneswar Regulations* R 20(6)

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			earthquakes do not include measures for making existing buildings safe. ³⁰⁷ There do not seem to be other programmes and incentives for making existing buildings safe. ³⁰⁸
121. What if any provision is there for planning, approval and construction of public roads, bridges and related public works? – describe the authority(s) & mandate(s).	OMC Act	Sections 347, 352, 379, 380(1), 382, 383, 385(2), 514, 516	The <i>OMC Act</i> vests municipal corporations with the powers to create, alter, widen, extend, improve, restrict traffic, and specify minimum widths of public streets. ³⁰⁹ They also have powers to maintain and construct bridges, subways, viaducts, arches and approaches. ³¹⁰ Other public works powers conferred upon the Orissa Municipal Corporation relate to constructing and maintaining water works to ensure proper and sufficient water is provided to the city, ³¹¹ providing fire hydrants, ³¹² implementing waste management systems, ³¹³ cleaning streets, ³¹⁴ and removing polluted matter. ³¹⁵
122. Are there other matters relevant	Bhubaneswar Regulations	Regulatio	The <i>Bhubaneswar Regulations</i> state that as the city is located in

³⁰⁷See OSDMA, (2011), 'National Cyclone Risk Mitigation Project (NCRMPO-Orissa as on 10.03.2011', Available at: <<http://www.osdma.org/?splChar=4>> Accessed on 25 October 2012; OSDMA, 'UEVRP: Urban Earthquake Vulnerability Reduction Programme' Available at:

<<http://www.osdma.org/ViewDetails.aspx?vchlinkid=GL003&vchplinkid=PL013&vchslinkid=SL008>> Accessed on 25 October 2012

³⁰⁸ See eg, Housing and Urban Development Department, Government of Odisha, <[http://urbanorissa.gov.in/\(S/ddvzys45mwznjq455jjg155\)\)/Default.aspx](http://urbanorissa.gov.in/(S/ddvzys45mwznjq455jjg155))/Default.aspx)>

³⁰⁹ *OMC Act* ss 379, 380(1), 382, 385(1), 383

³¹⁰ *OMC Act* s 384

³¹¹ *OMC Act* s 347

³¹² *OMC Act* s 352

³¹³ *OMC Act* s 516

³¹⁴ *OMC Act* s 514

³¹⁵ *OMC Act* s 518

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
to DRR that are regulated in the building and construction laws of the subject country?		ns 26(1)(F), 44(1)	Seismic Zone III, permission to construct a building will not be granted if structural plans have been prepared without taking this into account. ³¹⁶ It also makes rain water harvesting systems compulsory for all plots which are more than 300 square metres in area. ³¹⁷
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?	Constitution of India 1949	Twelfth Schedule, Item 1	Like building controls, the <i>Constitution of India 1949</i> has allocated urban and town planning responsibilities to local government i.e. municipal corporations and municipalities. ³¹⁸ Nonetheless State governments still retains general urban planning powers. These are usually exercised for regional planning matters. ³¹⁹
124. Is this issue regulated at provincial/state or local level? If so,	ODA Act	Sections 3,	In Odisha, land planning and zoning matters have been left to the Development Authorities which are constituted over declared

³¹⁶ *Bhubaneswar Regulations* reg 26(1)(F)

³¹⁷ *Bhubaneswar Regulations* reg 44(1)

³¹⁸ *Constitution of India 1949* Twelfth Schedule, Item 1

³¹⁹ See Steering Committee on Urban Development and Management, Ministry of Housing and Urban Poverty Alleviation, Government of India, Planning Commission (2011), *Report of the Working Group on Urban Strategic Planning – 12th Fifth Year Plan*, p. 7

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
can you find an example of such a law at each level?	Bhubaneswar Regulations	8,9,10,21(1), 22, 124(1) Part III	development areas pursuant to the <i>Orissa Development Authorities Act 1982</i> (the ' <i>ODA Act</i> '). ³²⁰ Development Authorities are to prepare interim development plans, ³²¹ development plans, ³²² and zonal development plans for their areas. ³²³ They can also undertake development activities, ³²⁴ and prepare town planning schemes. ³²⁵ The <i>ODA Act</i> authorises Development Authorities to, with the prior approval of the State Government, to enact regulations to carry out the purposes of the statute. ³²⁶ Under this provision the Bhubaneswar Development Authority has devised extensive zoning regulations which are contained within its <i>Bhubaneswar Regulations</i> . ³²⁷ The <i>Rourkela Development Authority (Planning and Building Standards) Regulations 2010</i> follows a similar approach. ³²⁸
125. Does the land use planning and/or zoning law include processes for: a. Formal release of land for new	Land Acquisition Act 1894;		<i>Release of Land Processes</i> Neither the <i>ODA Act</i> nor the Bhubaneswar Regulations prescribe formal processes for releasing land for new developments. This it is

³²⁰ *ODA Act* s 3

³²¹ *ODA Act* s 8

³²² *ODA Act* s 9

³²³ *ODA Act* s 10

³²⁴ *ODA Act* s 21(1)

³²⁵ *ODA Act* s 22

³²⁶ *ODA Act* s 124(1)

³²⁷ *Bhubaneswar Regulations* Part III

³²⁸ See Secretary, Rourkela Development Authority, Notification, Orissa Gazette Notification No. 596 Dated 15 January 2011. Available at:

<<http://orissa.gov.in/govtpress/pdf/2011/596.pdf>> Accessed on 25 October 2012 *Rourkela Development Authority (Planning and Building Standards) Regulations 2010* Part III

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>developments?</p> <p>b. Approval of each new urban development?</p> <p>c. Approval of major commercial developments?</p>	<p>Land Acquisition (Orissa Amendment and Validation Act 1959</p> <p>ODA Act</p> <p>Bhubaneswar Regulations</p>	<p>Sections 15, 16</p> <p>Regulation 24</p>	<p>suggested occurs by government land grants and general land transfer and acquisition laws.³²⁹</p> <p><i>Development approvals</i></p> <p>Sections 15 and 16 of the <i>ODA Act</i> prohibit all development projects and activities from being undertaken without the prior approval of the development authority in the relevant area. As such this would extend to the construction of new urban and major commercial developments. The <i>Bhubaneswar Regulations</i> also require that structures or land must be built or used in conformity with zoning laws.³³⁰ This ensures that new urban and major commercial developments are built in properly designated areas.</p>
<p>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, flood plains, and contaminated sites)?</p>	<p>Bhubaneswar Regulations</p>	<p>Regulation 25</p>	<p>Regulating the development of high-risk sites appears to be left to local authorities. While the <i>ODA Act</i> does not contain any such provisions, the <i>Bhubaneswar Regulations</i> set out which high-risk land use activities are prohibited in residential, commercial, industrial, public, semi-public, recreation, utilities and services, transport, agriculture, water bodies and special areas zones. For instance, in residential areas heavy, large, extensive, noxious, obnoxious and hazardous industries are not permitted.³³¹</p>
<p>127. Does the planning / zoning law include public open space for</p>	<p>ODA Act</p>	<p>Sections</p>	<p>Neither the <i>ODA Act</i> nor the <i>Bhubaneswar Regulations</i> contain any references to public open spaces for evacuation. However, zonal</p>

³²⁹ See eg, *Land Acquisition Act 1894* and the *Land Acquisition (Orissa Amendment and Validation) Act 1959*, where the acquisition of lands for establishing aluminium industries, paper mills, staff quarters, rice mills, a ferro-manganese plant and orient colliery were validated by the Odisha government.

³³⁰ *Bhubaneswar Regulations* reg 24

³³¹ *Bhubaneswar Regulations* reg 25

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
evacuation?		9(2), 10(2)(f)(ii) , 10(2)(f)(xi) i), 21(3)(j), 21(3)(z- b), 22(4)(a), 22(4)(g)	plans and development schemes can provide for them as long as they are necessary for the proper development of the area covered by zonal development plans, ³³² are consistent with the objectives of the <i>ODA Act</i> , ³³³ or go towards ensuring the health, comfort, convenience and general betterment of the present and future inhabitants of the development area. ³³⁴ Development authorities can allot or reserve land for all kinds of public purposes such as roads, gardens, open spaces and transport facilities in their zonal plans, development, and town planning schemes. ³³⁵ Accordingly they can rely upon these provisions to plan for public evacuation open spaces.
128. Does the planning / zoning law allocate or require allocation of land for emergency or transitional shelter in preparation for potential disaster?	ODA Act	Sections 9(2), 10(2)(f)(ii) , 10(2)(f)(xi) i), 21(3)(j), 21(3)(z- b), 22(4)(a), 22(4)(g)	The <i>ODA Act</i> and the <i>Bhubaneswar Regulations</i> do not mention land for emergency shelters. Nonetheless development authorities can rely on the same provisions as public open spaces for evacuation (see above question 121) to plan for emergency or transitional shelters.

³³² *ODA Act* s 10(2)(f)(xii)

³³³ *ODA Act* s 21(3)(z-b)

³³⁴ *ODA Act* s 9 (2)

³³⁵ *ODA Act* ss 21(3)(j), 10(2)(f)(ii), 22(4)(a), 22(4)(g)

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
129. Does the planning / zoning law include provisions for infrastructure installation (water and drainage, sewers, telecommunications, energy) in new developments?	OMC Act ODA Act	Chapters XV, XVII, XIX, XXII Sections 21(3)(b), 21(3)(c), 21(3)(p), 21(3)(r), 22(4)(a), 22(4)(j), 22(4)(i)	Infrastructure installation matters are governed by the municipal corporations' regulations on drains and drainage works, ³³⁶ water supply, ³³⁷ buildings, ³³⁸ and urban environmental management and public safety. ³³⁹ The <i>ODA Act</i> provides that development and town planning schemes may address sanitation, ³⁴⁰ drainage, ³⁴¹ sewage, ³⁴² communication, gas and electricity supply matters. ³⁴³
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?	OMC Act	Sections 383(1), 383(2)	Specification of street widths is left to municipal corporations rather than development authorities. Section 383(1) of the <i>OMC Act</i> states that municipal corporations may, from time to time, specify the minimum width for different classes of public streets according to the nature of the traffic likely to be carried on the streets, the localities in which they are situated, and the heights up

³³⁶ *OMC Act* Chapter XV

³³⁷ *OMC Act* Chapter XVII

³³⁸ *OMC Act* Chapter XIX

³³⁹ *OMC Act* Chapter XXII

³⁴⁰ *ODA Act* ss 21(3)(r), 22(4)(a), 22(4)(i)

³⁴¹ *ODA Act* ss 21(3)(p), 22(4)(a), 22(4)(i)

³⁴² *ODA Act* ss 21(3)(c), 22(4)(a), 22(4)(i)

³⁴³ *ODA Act* ss 21(3)(b), 22(4)(a)

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			to which buildings abutting the streets may be erected. No steps or projections are to extend onto the street unless permission has been granted by the municipal corporation. ³⁴⁴ So far there have been no indications that these powers have been exercised. ³⁴⁵
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. a. the extent of regulation? b. the level of government at which it is regulated? c. other?			Planning and zoning laws under the <i>ODA Act</i> would apply equally to urban and rural areas as long as they form part of a declared development area. For rural areas which are not within declared development areas and are outside the control of municipal corporations, developmental/planning controls devised by panchayats would apply (See above discussion under Question 112)
132. Does the planning / zoning law include any other matters relevant to disaster risk reduction?	ODA Act	Section 7	No, but disaster considerations can be incorporated into zonal plans, development schemes and town planning schemes as long as they relate to the object of the <i>ODA Act</i> , which is to provide for the proper development of development areas. ³⁴⁶
C. Land tenure			
133. Is there a national system of land title registration established under	Constitution of India 1949	Seventh Schedule,	The <i>Constitution of India 1949</i> grants concurrent powers to State and Central governments to legislate in respect of the transfer of

³⁴⁴ *OMC Act* s 383(2)

³⁴⁵ See eg, Bhubaneswar Municipal Corporation <<http://bmc.gov.in/>> Accessed on 25 October 2012

³⁴⁶ *ODA Act* s 7

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>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 system require computerisation and/central record at national level? If not, how and where does it require records to be kept?</p>	Registration Act 1908	<p>List III, Item 6</p> <p>Sections 1(2),17, 18, Part II</p>	<p>property other than agricultural land, and the registration of deeds and documents.³⁴⁷</p> <p>Under this head of power the Central government has enacted the <i>Registration Act 1908</i> which extends throughout the whole of India except Jammu and Kashmir.³⁴⁸ It sets out how registration establishments shall be created in each State³⁴⁹ and the type of property documents which need to be registered.³⁵⁰</p> <p>Odisha has pursuant to this statute created its own land registration system which is managed by the Registration Department of Orissa.³⁵¹ While there is no compulsory requirement for electronic registration systems to be in place, the Odisha government as part of its commitment to e-governance launched such a system on 5 January 2010 and phased out manual land registration.³⁵²</p>
134. Are there institutions mandated to survey land and/or register title?	Constitution of India 1949	Seventh Schedule,	In addition to registration powers, the <i>Constitution of India 1949</i> grants States legislative powers over land, that is, land rights, land

³⁴⁷ *Constitution of India 1949* Seventh Schedule, List III, Item 6

³⁴⁸ *Registration Act 1908* s 1(2)

³⁴⁹ *Registration Act 1908* Part II

³⁵⁰ *Registration Act 1908* ss 17, 18

³⁵¹ See Registration Department of Odisha, Government of Odisha, <<http://igrorissa.gov.in/>> Accessed on 25 October 2012

³⁵² See Registration Department of Odisha, Government of Odisha, <<http://igrorissa.gov.in/>> Accessed on 25 October 2012; Nageshwar Patnaik, 'e-Registration of land records launched in Orissa, stamp duty reduced to 5%', *The Economic Times*, Available at:

< http://articles.economictimes.indiatimes.com/2010-01-04/news/27593700_1_e-governance-services-national-e-governance-plan-orissa-government> Accessed on 25 October 2012

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>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>	Orissa Survey and Settlement Act 1958	List II, Item 18 Sections 3(1)	<p>tenures including the relation of landlord and tenant, the collection of rents, the transfer and alienation of agricultural land, land improvement, agricultural loans and colonisation.³⁵³</p> <p>Odisha's <i>Orissa Survey and Settlement Act 1958</i> sets out the laws relating to survey, record-of-rights and settlement operations in the State. Section 3(1) allows the State government, or any officer or authority so empowered to, at any time, by notification, order a survey to be made of any land in the state. Neither this statute nor its regulations mention community participation for land mapping, timeframes or resources for conducting this activity.³⁵⁴ The latter, it is suggested, is obtained through departmental and state budgetary policies and processes.</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>Landlessness in Odisha has a long past, stemming from the British colonial administration's implementation of various land revenue assessment systems throughout the State. The two most common ones were the <i>Zamindari</i> and <i>Ryotwari</i> systems which generally denied all land rights to tenants. Although the princely states had their own land settlement and revenue regulations pursuant to the <i>Government of India Act 1935</i>, they too did not offer legal protection for tenants' interests.³⁵⁵ Small marginal farmers, women, forest dwellers and persons from Scheduled Castes/Tribes were particularly affected.</p>

³⁵³ *Constitution of India 1949* Seventh Schedule, List II, Item 18

³⁵⁴ See *Orissa Survey and Settlement Rules 1962; Orissa Survey and Settlement Act 1958*

³⁵⁵ Sanjoy Patnaik (2008) *Status Report: Land Rights and Ownership in Orissa*, United Nations Development Programme, India pp. 10-11

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	<p>Orissa Land Reforms Act 1960</p> <p>Orissa Land Ceiling Act 1974</p> <p>Orissa Estate Abolition Act 1952</p> <p>Orissa Land and Survey Settlement Act 1958</p> <p>Orissa Consolidation of Land Holdings and Prevention of Fragmentation of Land Act 1972</p>		<p>Rather than exclude persons from owning land, land legislation in Odisha is geared towards addressing inequalities in land ownership and distribution, and providing secure land tenure. The relevant statutes are:</p> <ul style="list-style-type: none"> • <i>Orissa Land Reforms Act 1960</i>: Grants permanent, heritable and transferrable land rights to tenants.³⁵⁶ • <i>Orissa Land Ceiling Act 1974</i>:³⁵⁷ Enabled the Odisha government to acquire surplus land and redistribute it among the landless to improve the economy and living standards in the weaker sections of society. • <i>Orissa Estate Abolition Act 1952</i>: Abolishes all intermediary land interests and vests all land in the State • <i>Orissa Land and Survey Settlement Act 1958</i>: Allows the State government to make records of proprietary interests in land and other rent-receiving interests.³⁵⁸ • <i>Orissa Consolidation of Land Holdings and Prevention of Fragmentation of Land Act 1972</i>: Consolidates scattered and fragmented farmlands to make them more compact and improve agricultural productivity. <p>The State government has also established a number of land</p>

³⁵⁶ *Orissa Land Reforms Act 1960* s 6(1)

³⁵⁷ Statute not available online

³⁵⁸ *Orissa Land and Survey Settlement Act 1958* ss 11(1), 11(5)

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	Hindu Succession Act 1956 Indian Succession Act 1925 Muslim Personal Law (Shariat) Application Act 1937 <i>Foreign Exchange</i>	Sections	redistribution schemes e.g. Project Vasundhara(2006) which provides land to homestead-less families, ³⁵⁹ <i>Bhoodan Yagna Samiti</i> which redistributes land to landless persons, ³⁶⁰ and the <i>Mo Jami Mo Diha</i> campaign (2007) which aims to verify and affirm all land claims. ³⁶¹ <i>Women and Religious Groups</i> Women's land interests have usually been subsumed under those of her husband's and they are not regarded as landholders in their own right. However some legislative measures exist at the national level to address this situation, for instance the <i>Hindu Succession Act 1956</i> , which recognises women's ownership over land and gives them a share in family property. ³⁶² Similar legislative enactments exist for Christian women, ³⁶³ while for Muslim women land rights would be governed through Sharia law. ³⁶⁴ <i>Non-Nationals</i>

³⁵⁹ See eg 'Orissa Govt Launches Project Vasundhara for Houses to Poor', *Odisha Diary*, 7 December 2006. Available at:

< <http://orissadiary.com/Shownews.asp?id=3486>> Accessed on 25 October 2012; Orissa Tribal Empowerment and Livelihoods Programme, Scheduled Tribes and Scheduled Castes Department, Government of Odisha, 'Partnership with Vasundhara', Available at: <http://www.otelp.org/MOU_Vasundhara.htm> Accessed on 25 October 2012

³⁶⁰ See Revenue and Disaster Management Department, Government of Odisha, 'Bhoodan', Available at:

< <http://orissa.gov.in/revenue/bhoodan/bhoodan.html>> Accessed on 25 October 2012; Sarat Parida (2010), 'Twenty-Five Years of Bhoodan Movement in Orissa (1951-76)' *Orissa Review*, May-June pp. 70-72. Available at:< <http://orissa.gov.in/e-magazine/Orissareview/2010/May-June/engpdf/70-72.pdf>> Accessed on 25 October 2012

³⁶¹ Revenue and Disaster Management Department, Government of Orissa, 'Mo Jami – Mo Diha' (My land – My homestead) campaign' Letter to all Collectors, No.34502/R&DM Dated 28.08.2007. Available at:< http://www.odisha.gov.in/revenue/mo_jami_mo_diha/34502Dt.28-08-07.pdf> Accessed on 25 October 2012.

³⁶² *Hindu Succession Act 1956*

³⁶³ See *Indian Succession Act 1925*

³⁶⁴ See *Muslim Personal Law (Shariat) Application Act 1937*

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	<i>Management Act 1999 s 2 (v)(1)(B)</i>	2 (v)(i), 6(5)	<p>The acquisition and ownership of lands by foreign nationals is regulated by the Central Government through its <i>Foreign Exchange Management Act 1999</i>. Section 6(5) provides that persons outside India may hold, won, transfer or invest in any immovable property which was acquired, held or owned by the person when he or she was resident in India or inherited from a person who was resident in India. The definition of ‘person who was resident in India’ is such that persons who stay in India for a definite period of time, or who are in India for employment, business or a vocation, can own property.³⁶⁵</p> <p><i>Scheduled Tribes, Castes and Indigenous Groups</i> See below</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.			The land title system applies uniformly throughout Odisha. Nonetheless, with the Central Government’s enactment of the <i>Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006</i> , there now exists a special regime for recognising indigenous land interests in forests (see below).
137. Is there any legal recognition of traditional or customary law and practice regarding land occupation or	Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest	Sections 1(2), 2(d),	The Central Government’s <i>Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006</i> is applicable to Odisha. ³⁶⁶ The statute recognises and vests forest

³⁶⁵ *Foreign Exchange Management Act 1999 s 2 (v)(i)*

³⁶⁶ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006 s 1(2)*

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
ownership, or community or collective management of land? If so, describe the relevant legislation or case law.	Rights) Act 2006	3(1)(a), 3(1)(b), 3(1)(c), 3(1)(d), 3(1)(e), 3(1)(f), 3(1)(g), 3(1)(h), 3(1)(i), 3(1)(k), 4(3), 4(4), 4(8) 6(1), 6(5), 6(6), 6(8)	<p>rights and occupation over forest land by forest-dwelling Scheduled Tribes and other traditional forest dwellers who have been dwelling in the forests for at least three generations (75 years), but whose rights have not been recorded. The enactment allows rights to be recorded by the Gram Sabha, who then forwards the land records to the District Level Committee for final approval.³⁶⁷ The District Level Committee consists of officers from the Revenue and Disaster Management Department, the Forests and Tribal Affairs Department, and members of the relevant Panchayati Raj Institution.³⁶⁸</p> <p>Forest rights can extend to ‘land of any description falling within any forest’, and includes unclassified forests, demarcated forests, existing or deemed forest-protected forests, reserved forests, Sanctuaries and National Parks.³⁶⁹ The forests rights vested, listed below, go towards securing individual or community tenure:</p> <ul style="list-style-type: none"> • Right to hold and live in the forest land under the individual or common occupation for habitation or for self-cultivation for livelihood by a member or members of a forest-dwelling Schedule Tribe or other traditional forest dweller³⁷⁰ • Community rights³⁷¹

³⁶⁷ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* ss 6(1), 6(5), 6(6). For a brief overview of some of the problems with implementing this Act, see Sanjoy Patnaik (2008) *Status Report: Land Rights and Ownership in Orissa*, United Nations Development Programme, India pp.23- 24

³⁶⁸ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 6(8)

³⁶⁹ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 2(d)

³⁷⁰ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 3(1)(a)

³⁷¹ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 3(1)(b)

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			<ul style="list-style-type: none"> • Rights of ownership, access to collect, use and dispose of minor forest produce which has been traditionally collected within or outside village boundaries.³⁷² • Other community rights of uses or entitlements such as fish and other products of water bodies, grazing (both settled or transhumant) and traditional seasonal resource access of nomadic or pastoralist communities.³⁷³ • Rights including community tenures of habitat and habitation of primitive tribal groups and pre-agricultural communities³⁷⁴ • Rights in or over disputed land³⁷⁵ • Rights to convert <i>pattas</i>, leases or grants issued by local authorities or State governments on forest lands to titles³⁷⁶ • Rights of settlement and conversion of all forest villages, old habitation, unsurveyed villages and other villages in forests, whether recorded, notified or not, into revenue villages³⁷⁷ • Rights to protect, regenerate, conserve or manage any community forest resource which they have been traditionally protecting and conserving for sustainable use³⁷⁸ • Rights of access to biodiversity and community right to intellectual property and traditional knowledge related to

³⁷² *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 3(1)(c)

³⁷³ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 3(1)(d)

³⁷⁴ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 3(1)(e)

³⁷⁵ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 3(1)(f)

³⁷⁶ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 3(1)(g)

³⁷⁷ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 3(1)(h)

³⁷⁸ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 3(1)(i)

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>biodiversity and cultural diversity.³⁷⁹</p> <ul style="list-style-type: none"> • Rights to <i>in situ</i> rehabilitation including alternative land in cases where they have been illegally displaced from forest land without receiving their legal entitlement to compensation prior to 13 December 2005³⁸⁰ <p>The maximum land size forest rights can be granted over is 4 hectares.³⁸¹ Subject to certain conditions, forest rights can be vested in National Parks. Scheduled Tribes and other traditional forest dwellers must show that they have occupied forest land before 13 December 2005.³⁸² Forest rights are heritable but not alienable or transferable and shall be registered jointly in the name of both the spouses in the case of married persons and in the name of the single head in the case of households headed by single persons.³⁸³</p> <p>Scheduled Tribes and other traditional forest dwellers will also be granted forest rights if they can establish that they were displaced from their dwelling and cultivation without land compensation due to State development activities, and where the land has not been</p>

³⁷⁹ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 3(1)(k)

³⁸⁰ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 3(1)(m)

³⁸¹ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 4(6)

³⁸² *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 4(3)

³⁸³ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 4(4)

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>used for the purpose for which it was acquired within the five years of acquisition.³⁸⁴</p> <p>The holders of forests rights can carry out the following activities:</p> <ul style="list-style-type: none"> • Protect the wild life, forest and biodiversity³⁸⁵ • Ensure that adjoining catchment areas, water sources and other ecological sensitive areas are adequately protected³⁸⁶ • Ensure that their habitats are preserved from any form of destructive practices affecting their cultural and natural heritage³⁸⁷ • Ensure that the Gram Sabha's measures to regulate access to community forest resources is complied with and stop any activity which adversely affects wild animals, forest and biodiversity.³⁸⁸
<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</p>	Orissa Prevention of Land Encroachment Act 1972	Section 7(2)	<p>a. Odisha's case law on land rights recognises the doctrine of adverse possession. In <i>Nitei Rajan Swain and Ors vs Krushna Swain</i> 105 (2008) CLT 734, the Orissa High Court stated that mere occupation of immovable property for a long period cannot create title by adverse possession in favour of the occupier. The element of hostile intent to claim title is required. Adverse possession claims can only</p>

³⁸⁴ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 4(8)

³⁸⁵ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 5(a)

³⁸⁶ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 5(b)

³⁸⁷ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 5(c)

³⁸⁸ *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* s 5(d)

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
<p>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>			<p>succeed if the owner knew that the occupant was asserting his or her own title and yet omitted to enforce the remedies open to him, or if the owner voluntarily abandons possession.³⁸⁹ In a later case the Orissa High Court, relying on earlier judgments by the Supreme Court, held that persons in possession of land in the assumed character of the owner and exercising the ordinary rights of ownership has perfectly good title against all the world but the rightful owner.³⁹⁰</p> <p>b. The <i>Orissa Government Land Settlement Act 1962</i> and the <i>Orissa Prevention of Land Encroachment Act 1972</i> both provide for the settlement of government lands under illegal occupation. The former establishes a priority order for settlement, starting with cooperative farming societies formed by landless agricultural labourers, landless agricultural labourers of the village in which the land is situated or of any neighbouring village, ex-servicemen or members of the Armed Forces of the Union, and peasants who personally cultivate not more than one standard acre of land.³⁹¹ While the purpose of the <i>Orissa Prevention of Land Encroachment Act 1972</i> is primarily to evict illegal encroachers on government land, the statute also allows</p>

³⁸⁹ *Nitei Rajan Swain and Ors vs Krushna Swain* 105 (2008) CLT 734 at [12]

³⁹⁰ *Gunjar Bewa vs Nakula Lenka and Ors*, S.A. No. 79 of 1986 (Dt. 17 May 2011) at [13]-[17]

³⁹¹ *Orissa Government Land Settlement Act 1962* s 3

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			revenue inspectors to settle 'unobjectionable' land with landless encroachers for agricultural purposes. ³⁹²
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?	Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006		The <i>Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006</i> and other land legislation do not contain any provisions on which kind of land tenure takes precedence over the other. The <i>Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006</i> is extremely ambiguous on the type of tenure that is granted (freehold or leasehold), but the author suggests that as the statute does not mention full proprietary ownership, only recognises traditional rights to use and occupy land, and enables government authorities to resettle rights holders, the tenure granted is an extremely weak one and can easily be overridden by other types of land interests.
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: a. risk reduction from natural disasters? b. land to be kept for evacuation or	Land Acquisition Act 1894 Land Acquisition, Rehabilitation and	Sections 3(f),6 Clauses 4-	The Central Government's <i>Land Acquisition Act 1894</i> applies throughout the country and allows both Central and State governments to acquire land for any public purpose. ³⁹³ 'Public purpose' is left undefined, save that it includes the provision of village-sites in declared districts. ³⁹⁴ The breadth of this provision would allow land to be acquired for disaster risk reduction or relief purposes for these are in the public interest. It should be noted that this statute may eventually be replaced by the Land Acquisition, Rehabilitation and Settlement Bill 2011,

³⁹² Orissa Prevention of Land Encroachment Act 1972 s 7(2)

³⁹³ Land Acquisition Act 1894 s 6

³⁹⁴ Land Acquisition Act 1894 s 3(f)

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
emergency or transitional shelter?	Settlement Bill	6, Preamble	which is presently pending in Parliament. The Bill introduces measures, such as social impact assessments, ³⁹⁵ to ensure a 'humane, participatory, informed consultative and transparent process' for acquiring land for industrialisation, development of essential infrastructural facilities and urbanisation. ³⁹⁶ It also sets out a legislative process for rehabilitating and resettling affected families and ensuring that just and fair compensation is paid to them. ³⁹⁷ The definition of 'public purpose', kept just as broad as the present statute, specifically states that such a purpose includes providing land for residential purposes to the poor, landless or persons residing in areas affected by natural calamities, or to persons displaced or affected by any schemes undertaken by government, local authorities or state-owned corporations. ³⁹⁸
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? a. Can people without financial means access this system? E.g. are there fees, or requirements to engage lawyers?	Orissa Legal Services Authorities Act 1987		No special land tribunal has been established. Disputes over land tenure would go to the usual court processes. As discussed previously (see Question 22), the Odisha and Central governments have made the courts accessible to the poor by enacting schemes which provide free legal aid to them. ³⁹⁹

³⁹⁵ Land Acquisition, Rehabilitation and Settlement Bill 2011 cls 4-6

³⁹⁶ Land Acquisition, Rehabilitation and Settlement Bill 2011 Preamble

³⁹⁷ Land Acquisition, Rehabilitation and Settlement Bill 2011 Preamble

³⁹⁸ Land Acquisition, Rehabilitation and Settlement Bill 2011 cl 3 (za)(v)

³⁹⁹ *Orissa Legal Services Authorities Act 1987*

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
b. Are such tribunals or mechanisms available throughout the territory, including in rural areas?			
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</p>			<p><i>Right to Shelter</i></p> <p>The <i>Constitution of India 1949's</i> guarantee of the right to life, read by the Supreme Court of India to include the right to shelter and livelihood,⁴⁰⁰ prevents the clearance of slums and forcible eviction of residents without alternative living arrangements being made, or if such deprivation is not carried out in accordance with procedures established by the law. In the foundational case of <i>Oleg Tellis v Bombay Municipal Corporation</i> [1985] 2 Supp SCR 51, while the Supreme Court accepted the proposition that forcible eviction from pavements could result in the loss of livelihood, it ultimately allowed the Bombay Municipal Corporation to clear the</p>

⁴⁰⁰ *Oleg Tellis v Bombay Municipal Corporation* [1985] 2 Supp SCR 51 at [79]-[81]

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<p>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 residents who are evicted or relocated?</p>			<p>slums because the public legally had a right of passage or access over the pavements on which they were built.⁴⁰¹ Subsequently in <i>Ahmedabad Municipal Corporation v Nawab Khan Gulab Khan</i>, the Supreme Court stated that although no person has the right to encroach and erect structures on footpaths, pavements or public streets or any other place reserved or earmarked for a public purpose, the State has the constitutional duty to provide facilities and opportunities for the settlement of life and erecting shelter over their heads to make the right to life meaningful, effective and fruitful. The State has the duty to provide shelter to the poor and weaker sections of society. This has been followed in recent cases like <i>Sudama Singh & Others vs Government Of Delhi & Anors (2010)</i>.</p> <p><i>Slum Policies and Regulations</i></p> <p>Numerous schemes have been launched at the national and state level to create a 'slum-free' India. For example the Central Government's Rajiv Awas Yojana Scheme (2010) aims to provide property rights and shelter to slum-dwellers and rid the nation of its slums within five years,⁴⁰² while the Odisha government developed the Slum Rehabilitation and Development Policy (2011)⁴⁰³ and the Scheme for Affordable Housing (2012).⁴⁰⁴ Both</p>

⁴⁰¹ *Oleg Tellis v Bombay Municipal Corporation* [1985] 2 Supp SCR 51 at [85]

⁴⁰² See Ministry of Housing and Urban Poverty Alleviation, Government of India, 'Status Note on Rajiv Awas Yojana' Available at: < http://mhupa.gov.in/W_new/NOTE_RAJIV_AWAS_YOJANA.pdf > Accessed on 26 October 2012

⁴⁰³ Housing and Urban Development Department, Government of Odisha, 'Housing for All: Slum Rehabilitation and Development Policy for Orissa' Notification No. 5058 60/2011 21 February 2011

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	OMC Act	Sections 482, 483, 485, 486, 497(2), 501-504, 488,489,497, 498	<p>aim to ensure that all slum residents will have access to decent and affordable housing with proper municipal services, and that cities are as a whole developed in a holistic and sustainable manner.</p> <p>The <i>Constitution of India 1949</i> also entrusts municipalities with regulatory powers over slum improvement, upgrading, and urban poverty alleviation. Under the <i>Orissa Municipal Corporation Act 2003</i> ('OMC Act'), municipal corporations can make lists of slums and its residents,⁴⁰⁵ provide basic services and welfare assistance to listed individuals and the poor,⁴⁰⁶ classify land as tenable or non-tenable (tenability ensures upgrading),⁴⁰⁷ grant tenure and full property rights for tenable land,⁴⁰⁸ and properly rehabilitate and resettle residents of untenable land.⁴⁰⁹ Existing urban planning instruments are to be modified so that slums or informal settlements are properly integrated into urban areas.⁴¹⁰ The statute does not contain an outright prohibition against eviction, but it is presumed that this is only to occur if proper rehabilitation and resettlement arrangements have been made; such arrangements are to ensure that the impacts on livelihoods are minimised and sufficiently compensated, minimise relocation</p>

⁴⁰⁴ Housing and Urban Development Department, Government of Odisha 'Scheme for Affordable Urban Housing, Odisha' Notification No. HUD-HU-POLICY-XH-82-2012 31 August 2012

⁴⁰⁵ *OMC Act* ss 482,483

⁴⁰⁶ *OMC Act* ss 485,486, 501-504

⁴⁰⁷ *OMC Act* s 488

⁴⁰⁸ *OMC Act* s 489

⁴⁰⁹ *OMC Act* s 497

⁴¹⁰ *OMC Act* s 498

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	Odisha Property Rights to Slum Dwellers and Prevention of New Slums Bill	Clauses 3, 3(4),11	<p>distances, consultations are carried out with affected individuals, and address women’s needs and constraints.⁴¹¹</p> <p><i>Funding and Dispute Resolution</i></p> <p>Funding for rehabilitation and resettlement schemes, and dispute resolution processes are not clearly specified in the statute. It is suggested that funding would be sourced from various central and state government schemes,⁴¹² the shelter fund (fund created by municipal corporations using finances provided through the National Slum Development Programme⁴¹³), and private sources. The <i>OMC Act</i> provides that where land belonging to the Central Government, State Government or other government bodies is occupied by a slum dweller, the municipal corporation shall act as the nodal agency for initiating the process of dispute resolution.⁴¹⁴ It is assumed that if the municipal corporation is unable to resolve this dispute, it will be referred to the state or central judicial system.</p> <p><i>Property Rights for Slum Dwellers</i></p> <p>The Odisha State government has just introduced the Odisha Property Rights to Slum Dwellers and Prevention of New Slums Bill 2012 into Parliament. This enables every landless person living in a slum area to be entitled to a dwelling space at an affordable cost</p>

⁴¹¹ See *OMC Act* s 497(2)

⁴¹² See eg Housing for All: Slum Rehabilitation and Resettlement Policy 2011 p. 14

⁴¹³ *Orissa Municipal Corporation Act 2003* s 509

⁴¹⁴ *Orissa Municipal Corporation Act 2003* s 491

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			(affirmed by a legal document of entitlement made in the name of the female head of the household). ⁴¹⁵ Until the dwelling space is identified or developed, persons holding this document cannot be evicted unless for slum redevelopment, relocation or public safety and health reasons. ⁴¹⁶ The Bill also requires that the State Government, to prevent the growth of new slums and to ensure the adequate supply of land to meet the housing needs of the urban poor, reserves a minimum of 10% land in an urban area which has been earmarked for residential purposes. ⁴¹⁷
<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</p>	OMC Act	Sections 482, 483, 484, 485, 489, 490 501, 502, 503, 504	<p>Hereon the discussion will focus solely on the <i>OMC Act</i>. Slums/informal settlements are recognised through identification and demarcation powers vested with municipal corporations;⁴¹⁸ its residents are also recognised through registration processes and identity cards.⁴¹⁹ There is no mention of building codes being applicable to slums.</p> <p><i>Basic Services</i></p> <p>No reference to disaster risk reduction is made at all. As registered slum dwellers are entitled to receive basic minimum services and amenities from municipal corporations,⁴²⁰ this creates an expectation that municipal corporations would construct public</p>

⁴¹⁵ Odisha Property Rights to Slum Dwellers and Prevention of New Slums Bill 2012 cl 3

⁴¹⁶ Odisha Property Rights to Slum Dwellers and Prevention of New Slums Bill 2012 cl 3(4)

⁴¹⁷ Odisha Property Rights to Slum Dwellers and Prevention of New Slums Bill 2012 11

⁴¹⁸ *OMC Act* s 482

⁴¹⁹ *OMC Act* ss 483, 484

⁴²⁰ *OMC Act* s 485

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<p>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>			<p>infrastructure to provide such services and amenities.</p> <p>In addition to providing basic minimum services and amenities,⁴²¹ municipal corporations are required to build health facilities,⁴²² establish measures against alcoholism and violence,⁴²³ establish networks of community health workers and volunteers to promote health,⁴²⁴ encourage the take-up of health insurance,⁴²⁵ assist slum children with entering the formal education system,⁴²⁶ introduce measures to prevent child labour,⁴²⁷ and identify organisations which can assist slum communities with financial services.⁴²⁸</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>No, there are no such provisions.</p>
<p>145. Does any law provide a mechanism for recognition of tenure for residents of informal</p>			<p>For slums on government land and which have been deemed as tenable, the <i>OMC Act</i> states that all residents shall be granted full tenure. Full property rights shall also to be granted on</p>

⁴²¹ *OMC Act* s 501(1)

⁴²² *OMC Act* s 501(1)

⁴²³ *OMC Act* s 501(1)

⁴²⁴ *OMC Act* s 501(1)

⁴²⁵ *OMC Act* s 501(2)

⁴²⁶ *OMC Act* s 502

⁴²⁷ *OMC Act* s 503

⁴²⁸ *OMC Act* s 504

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<p>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>			<p>resettlement or rehabilitation sites. Tenure is allotted in the joint names of the head of the household and spouse, and single women and men are not to be precluded from having full tenure rights.⁴²⁹ The Corporation, with the sanction of the previous sanction of the government, can consider other forms of tenure like group tenure, collective tenure and co-operative tenure.⁴³⁰</p> <p>For tenable settlements on private land, the municipal corporation can acquire the land and use its funds to pay compensation for doing so.⁴³¹</p>
E. Urban Water and Flood Management			
<p>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?</p>	<p>Constitution of India 1949</p> <p>OMC Act</p>	<p>Seventh Schedule, List II, Item 17;</p> <p>Twelfth Schedule, Item 5</p>	<p>Water, that is water supplies, irrigation, canals, drainage, embankments, water storage and water power are State matters as long as they do not involve inter-State rivers and river valleys.⁴³² Municipalities also can make provisions on matters relating to water supply for domestic, industrial and commercial purposes.⁴³³</p> <p>Urban water management is governed by the <i>OMC Act</i>. Under the</p>

⁴²⁹ *OMC Act* ss 489(1),489(2)

⁴³⁰ *OMC Act* s 489(3)

⁴³¹ *OMC Act* s 490

⁴³² *Constitution of India 1949* Seventh Schedule, List II, Item 17

⁴³³ *Constitution of India 1949*, Twelfth Schedule, Item 5

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
		Sections 2, 347, 3348	<p>statute municipal commissioners are, for the purposes of providing cities with supplying water which is proper and sufficient for public and private purposes, empowered to:</p> <ul style="list-style-type: none"> • Construct and maintain water works either within or outside the city and do any other necessary acts⁴³⁴ • Purchase or lease any water work or any water right to store, take and convey water either within or outside the city⁴³⁵ • Enter into an arrangement with any person to supply water.⁴³⁶ • Manage water works and maintain them in good repair and efficient condition.⁴³⁷ <p>As the phrase ‘proper and sufficient’ is not defined, this creates some ambiguity over the standard of water quality.⁴³⁸</p>
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?			<p>For a discussion of water authorities at the national level, refer to the national-level study of India’s laws.</p> <p>The Water Resources Board is the peak body for water resource management matters in Odisha. Consisting of ten members from different government departments, the Board’s role is to:</p>

⁴³⁴ OMC Act s 347(a)

⁴³⁵ OMC Act s 347(b)

⁴³⁶ OMC Act s 347(c)

⁴³⁷ OMC Act s 348

⁴³⁸ OMC Act s 2

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			<ul style="list-style-type: none"> • Prepare the Orissa State Water Policy • Plan the State's water resources in an integrated manner • Allocate water resources among user sectors • Prioritise Water Resources Development Schemes • Enforce the Environmental Management Plan • Look into the Acts and Rules regarding the Water Resources Department⁴³⁹ <p>While its mandate does not include risk reduction or preparedness for safeguarding water supplies in the face of natural disasters, the Water Resources Board in its <i>State Water Policy 2007</i> has devised some disaster management measures. These consist mainly of undertaking flood and cyclone hazard mapping activities, developing land use zoning, designing and implementing a comprehensive set of emergency preparedness and response measures for each threatened area, public awareness campaigns, developing groundwater resources, and promoting water harvesting and conservation techniques.⁴⁴⁰</p>

⁴³⁹ See Department of Water Resources, Government of Orissa, *Resolution: Constitution of Water Resources Development Board*, Resolution No Irr-IIPL-22496 Dated 21/8/93 Available at: < <http://www.dowrorissa.gov.in/WRB/WRB%20Resolution.pdf>> Accessed on 25 October 2012

⁴⁴⁰ Department of Water Resources, Government of Orissa, *State Water Policy 2007* at [9]-[11]. Available at: < http://www.orissa.gov.in/waterresources/policy/State_Water_Policy_2007.pdf> Accessed on 26 October 2012. See also Orissa Water Planning Organisation, Department of Water Resources, Government of Orissa, *Orissa State Water Plan 2004* p. 112. Available at: < <http://www.dowrorissa.gov.in/SWPlan2004/SWPlan2004.htm>> Accessed on 26 October 2012

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			The <i>OMC Act</i> does not make any reference to disaster preparation either.
148. Does a national law allocate responsibility for flood mitigation construction and other management against urban flooding (if relevant to the subject country)? If so, what authority is responsible?	OMC Act	Chapter XV	Responsibility for flood mitigation and management rests, as a matter of policy, with the OSDMA, Odisha's Department of Water Resources, and the Central government. Flood control works tend to focus more on controlling river and catchment flooding in non-urban areas, ⁴⁴¹ though in the <i>State Water Policy 2007</i> it was stated that 'control of urban flooding would be given due consideration.' ⁴⁴² The <i>OMC Act</i> makes no mention of flood management, but by granting municipal corporations the powers over drains and drainage works, this could go towards addressing urban flooding. ⁴⁴³
149. If flood mitigation and water management against urban flooding is regulated at the sub-national level, at what level of government does this occur? Can you find an example			There are no laws specifically addressing urban flooding, see above discussion (question 142)

⁴⁴¹ See eg Department of Water Resources, Government of Orissa (2010) 'Flood Control and Drainage' Available at: < <http://www.dowrorissa.gov.in/FloodControlInDrainage/FloodControl&Drainage.pdf>> Accessed on 27 October 2012; Department of Water Resources, Government of Orissa, *Orissa State Water Plan 2004* p. 112.

Available at: < <http://www.dowrorissa.gov.in/SWPlan2004/SWPlan2004.htm>> Accessed on 26 October 2012. See also OSDMA's activities on flood control, at: < <http://www.osdma.org>>

⁴⁴² Department of Water Resources, Government of Orissa, *State Water Policy 2007* at [10.4]. Available at: < http://www.orissa.gov.in/waterresources/policy/State_Water_Policy_2007.pdf> Accessed on 26 October 2012

⁴⁴³ *OMC Act* Ch XV

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
of such a law?			
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?	Constitution of India 1949	Seventh Schedule, List 1, List II Arts 48A, 51A(g)	<i>Constitutional Division of Powers over Environmental Matters</i> The <i>Constitution of India 1949</i> contains a policy directive that the State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country. ⁴⁴⁴ It also makes it a fundamental duty of every citizen to protect and improve the natural environment, including forests, lakes, rivers and wildlife, and to have compassion for living creatures. ⁴⁴⁵ The Constitution grants to State and Central governments concurrent legislative powers over animal cruelty, ⁴⁴⁶ adulteration of food stuffs and other goods, ⁴⁴⁷ drugs and poisons, ⁴⁴⁸ economic and

⁴⁴⁴ *Constitution of India 1949* Art 48A

⁴⁴⁵ *Constitution of India 1949* Art 51A(g)

⁴⁴⁶ *Constitution of India 1949* Seventh Schedule, List III, Item 17

⁴⁴⁷ *Constitution of India 1949* Seventh Schedule, List III, Item 18

⁴⁴⁸ *Constitution of India 1949* Seventh Schedule, List III, Item 19

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			social planning, ⁴⁴⁹ population control and family planning, ⁴⁵⁰ prevention of the extension from one state to another of infectious or contagious diseases, ⁴⁵¹ shipping and navigation on inland waterways, ⁴⁵² factories, ⁴⁵³ and boilers. ⁴⁵⁴ States have legislative powers on public health and sanitation, ⁴⁵⁵ intra-state water resources, ⁴⁵⁶ agriculture, ⁴⁵⁷ prevention of animal diseases, ⁴⁵⁸ land, ⁴⁵⁹ and fisheries. ⁴⁶⁰ At the Central government level, legislative powers are held over shipping and navigation on inland waterways, ⁴⁶¹ maritime shipping and navigation, ⁴⁶² oil and mineral oil fields, ⁴⁶³ industries, ⁴⁶⁴ airways, ⁴⁶⁵ mines and mineral

⁴⁴⁹ *Constitution of India 1949* Seventh Schedule, List III, Item 20

⁴⁵⁰ *Constitution of India 1949* Seventh Schedule, List III, Item 20A

⁴⁵¹ *Constitution of India 1949* Seventh Schedule, List III, Item 29

⁴⁵² *Constitution of India 1949* Seventh Schedule, List III, Item 32

⁴⁵³ *Constitution of India 1949* Seventh Schedule, List III, Item 36

⁴⁵⁴ *Constitution of India 1949* Seventh Schedule, List III, Item 37

⁴⁵⁵ *Constitution of India 1949* Seventh Schedule, List II, Item 6

⁴⁵⁶ *Constitution of India 1949* Seventh Schedule, List II, Item 17

⁴⁵⁷ *Constitution of India 1949* Seventh Schedule, List II, Item 14

⁴⁵⁸ *Constitution of India 1949* Seventh Schedule, List II, Item 15

⁴⁵⁹ *Constitution of India 1949* Seventh Schedule, List II, Item 18

⁴⁶⁰ *Constitution of India 1949* Seventh Schedule, List II, Item 21

⁴⁶¹ *Constitution of India 1949* Seventh Schedule, List I, Item 24

⁴⁶² *Constitution of India 1949* Seventh Schedule, List I, Item 25

⁴⁶³ *Constitution of India 1949* Seventh Schedule, List I, Item 53

⁴⁶⁴ *Constitution of India 1949* Seventh Schedule, List I, Item 52

⁴⁶⁵ *Constitution of India 1949* Seventh Schedule, List I, Item 29

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			<p>development,⁴⁶⁶ and fishing and fisheries beyond territorial waters.⁴⁶⁷</p> <p><i>Legislative Enactments</i></p> <p>Under these legislative heads of power, numerous statutes relating to pollution (air, water, land, noise),⁴⁶⁸ water, conservation,⁴⁶⁹ forest protection,⁴⁷⁰ wildlife,⁴⁷¹ rivers,⁴⁷² hazardous waste,⁴⁷³ battery disposal,⁴⁷⁴ and solid waste management have been enacted.⁴⁷⁵ Usually the Central government enacts the principal statute which is applicable throughout India. This will then be supplemented by individual State governments passing their own legislation. Such is the case with Odisha. For instance, for forests the government has adopted the Central government's principal statute for forests and has supplemented this with its own legislation, examples being the <i>Orissa Communal Forest and Private Lands (Prohibition of Alienation) Act 1948</i>, the <i>Orissa Forest Produce (Control of Trade) Act 1981</i> and the <i>Orissa Saw Mills and</i></p>

⁴⁶⁶ *Constitution of India 1949* Seventh Schedule, List I, Item 54

⁴⁶⁷ *Constitution of India 1949* Seventh Schedule, List I, Item 57

⁴⁶⁸ *Environment (Protection) Act 1986; Air (Prevention and Control of Pollution) Act 1981; Water (Prevention and Control of Pollution) Act 1974; Noise Pollution (Regulation and Control) Rules 2000*

⁴⁶⁹ *Forests (Conservation) Act 1980*

⁴⁷⁰ *Indian Forests Act 1927*

⁴⁷¹ *Wildlife (Protection) Act 1972; Biological Diversity Act 2002*

⁴⁷² *Inter-State River Water Disputes Act 1982*

⁴⁷³ *Hazardous Wastes (Management and Handling) Rules 1989*

⁴⁷⁴ *Battery (Management and Handling) Rules 2000*

⁴⁷⁵ *Municipal Solid Wastes (Management and Handling) Rules 2000*

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			<p><i>Saw Pits (Control) Act 1991.</i></p> <p><i>Institutional Responsibility</i></p> <p>Institutional responsibility for environment protection varies according to the environment issue at hand and rests across various state and central government departments. For instance, the Department of Water Resources in Odisha is responsible for irrigation works and river management,⁴⁷⁶ while the Forests and Environment Department, Odisha, manages the State's forests.⁴⁷⁷ Responsibility for environment protection could also be vested with specially-created statutory bodies with environment regulation functions, the Orissa State Pollution Control Board being one example.⁴⁷⁸</p>
<p>151. Does the above mandate include environmental management from the perspective of:</p> <p>a. human safety?</p> <p>b. preservation of livelihoods?</p> <p>c. food security, especially concerning protection of crops and livestock?</p>	<p>Environment (Protection) Act 1986</p> <p>Orissa Irrigation Act 1959</p> <p>Scheduled Tribes and Other Traditional Forests Dwellers</p>	Preamble	<p>Environmental management in Odisha generally focuses on protecting human health and safety, conserving the environment, and controlling resource exploitation. Preserving livelihoods and ensuring food security are not contemplated as objectives. The preamble of the <i>Environment (Protection) Act 1986</i> for instance, states that the statute was enacted so as to protect and improve the environment and prevent hazards to human beings, other living creatures, plants and property. Its provisions have accordingly been pinned upon preventing harm from pollutants. Water on the other hand, is managed principally from an <i>extractive</i></p>

⁴⁷⁶ See Department of Water Resources, Government of Odisha, 'About the Department' Available at: <<http://www.dowrorissa.gov.in/AboutDoWR/AboutDoWR.pdf>> Accessed on 27 October 2012

⁴⁷⁷ See Forests and Environment Department, Government of Odisha <<http://www.odisha.gov.in/forest&environment/index.htm>> Accessed on 27 October 2012

⁴⁷⁸ See generally, Orissa State Pollution Control Board <<http://www.orissapcb.nic.in/>>

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	(Recognition of Forests Rights) Act 2006	Sections 3 (1)(d), 3(1)(i)	<p>point of view, that is, ensuring that there is adequate water for present and future irrigation purposes. This is indicated through having the <i>Orissa Irrigation Act 1959</i> as the main statute for water management.</p> <p><i>Indigenous Environment Management</i></p> <p>In contrast to the main environment statutes, the <i>Scheduled Tribes and Other Traditional Forests Dwellers (Recognition of Forests Rights) Act 2006</i> allows rights holders to manage forests with the objectives of conserving the environment and protecting traditional food sources and livelihoods.⁴⁷⁹</p>
152. Does this law provide for environmental impact assessments (EIAs) of any proposed new private and public industrial developments?	Environment (Protection) Act 1986	Section 3	<p>National-level legislation governs the undertaking of EIAs in Odisha. Section 3 of the <i>Environment (Protection) Act 1986</i> enables the Central government to take all the measures it deems necessary or expedient for the purposes of protecting and improving the quality of the environment and preventing, controlling and abating environmental pollution. Under this provision the Ministry of Environment and Forests, Government of India, passed a Notification directing that any person who desires to undertake any project in any part of India, or expand or modernise any existing project, will require environmental clearance from either the Ministry of Environment and Forests or the relevant State Environment Impact Assessment Authority.⁴⁸⁰</p> <p>The Schedule in the Notification sets out which types of projects</p>

⁴⁷⁹ *Scheduled Tribes and Other Traditional Forests Dwellers (Recognition of Forests Rights) Act 2006* ss 3 (1)(d), 3(1)(i)

⁴⁸⁰ Ministry of Environment and Forests, Government of India, *Environmental Impact Assessment Notification 2006* S.O.1533(E) Dated 14/09/06. Accessible at: <
<http://envfor.nic.in/legis/eia/so1533.pdf>> cl 2

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>require Central or State government approval. Environmental assessments, evaluations, recommendations, public consultation, project screening and clearances are conducted by specially constituted Expert Appraisal Committees at the state and national level.⁴⁸¹</p> <p>In Odisha, a State Environmental Impact Assessment Authority was constituted in December 2009 to grant clearances to projects requiring State-level approval.⁴⁸²</p>
<p>153. If there are EIAs, do the criteria include:</p> <p>a. human risk factors from changes to the environment, including life and health as well as livelihoods and food security?</p> <p>b. assessment in light of the known natural hazards affecting the relevant locality, or downstream communities (where relevant)?</p>			<p>The criteria for EIAs and obtaining environmental clearances vary according to the type of project being conducted. Based on the nature of the questions asked in the application for environmental clearance, there is a clear focus on environmental protection (including assessing the level of environmental and disaster risk) and ensuring human health.⁴⁸³ Cumulative impacts have to be considered, as do socio-economic aspects – project proponents have to consider whether the project would result in any changes to the demographic structure of local populations, whether it would cause adverse effects on local communities, and whether it would disturb sacred sites and other cultural values.⁴⁸⁴ No specific</p>

⁴⁸¹ Ministry of Environment and Forests, Government of India, *Environmental Impact Assessment Notification 2006* S.O.1533(E), Dated 14/09/06. Accessible at:<
<http://envfor.nic.in/legis/eia/so1533.pdf>>, cls 5, 7

⁴⁸² Forest and Environment Department, Government of Orissa, Resolution No. 21048–ENV-I-21/2009-F. & E. Available at:
 < <http://orissa.gov.in/govtpress/pdf/2009/1850.pdf>> Accessed on 25 October 2012

⁴⁸³ See Ministry of Environment and Forests, Government of India, *Environmental Impact Assessment Notification 2006* S.O.1533(E) Dated 14/09/06. Accessible at:<
<http://envfor.nic.in/legis/eia/so1533.pdf>>, Appendix 1, Section 8

⁴⁸⁴ See Ministry of Environment and Forests, Government of India, *Environmental Impact Assessment Notification 2006* S.O.1533(E) Dated 14/09/06. Accessible at:<
<http://envfor.nic.in/legis/eia/so1533.pdf>>, Appendix 1 and Appendix 2, esp Question 7

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			<p>references are made to livelihoods and food security though they could fall under the scope of 'adverse effects on local communities.'</p> <p>The Ministry of Environment and Forests is in the midst of devising manuals for each type of project setting out the technical requirements for obtaining environmental clearances.⁴⁸⁵</p>
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, this issue does not seem to have been contemplated at all either at the national or state level.
B. Forests			
155. Is there legislation on forest management (if relevant to the subject country)? If so, what	Orissa Forests Act 1972	Sections 3, 30, 33, 34, 45,	The Forests and Environment Department in Odisha is responsible for managing the State's forests. ⁴⁸⁶ The principal statute for forest management is the <i>Orissa Forests Act 1972</i> and it allows the State

⁴⁸⁵ See eg, Ministry of Environment and Forests, Government of India, *Manual on Norms and Standards for Environment Clearance of Large Construction Projects*, Available at: <http://envfor.nic.in/divisions/iass/Construction_Manual.pdf> Annexure 1. Accessed on 27 October 2012, Other draft manuals are available at: Ministry of Environment of Environment and Forests, Government of India, 'Environment Clearance' <<http://environmentclearance.nic.in/writereaddata/Form-1A/HomeLinks/ommodel3.html>>

⁴⁸⁶ See Forests and Environment Department, Government of Odisha, at <<http://www.odisha.gov.in/forest&environment/index.htm>>

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
institution has responsibility?	<p>Wild Birds & Animals Protection Act 1912 Wildlife (Protection) Act 1972</p> <p>Forest (Conservation) Act 1980</p> <p>Orissa Forest Produce (Control of Trade) Act 1981</p> <p>Wild Birds and Animals Protection Act 1912</p> <p>Orissa Saw Mills and Saw Pits (Control) Act 1991.</p>	49, 55A	<p>government to reserve forests for a variety of purposes including protection and conservation,⁴⁸⁷ establishing and regulating village forests,⁴⁸⁸ regulating the production and transit of timber and forest produce,⁴⁸⁹ and the collection of drift and stranded timber.⁴⁹⁰ The statute grants regulatory powers over both government and private forests.⁴⁹¹</p> <p>Other relevant statutes to forest management are the <i>Wild Birds & Animals Protection Act 1912</i>, the <i>Wildlife (Protection) Act 1972</i>, the <i>Forest (Conservation) Act 1980</i>, the <i>Orissa Forest Produce (Control of Trade) Act 1981</i>, the <i>Wild Birds and Animals Protection Act 1912</i> and the <i>Orissa Saw Mills and Saw Pits (Control) Act 1991</i>.</p>
156. Does the above mandate include forest management from the	Orissa Forests Act 1972	Sections 27(1)(b),	Odisha's forest management regime does not specifically call for a disaster risk reduction perspective to be taken. Nonetheless, by

⁴⁸⁷ *Orissa Forests Act 1972* ss 3, 33, 34

⁴⁸⁸ *Orissa Forests Act 1972* s 30

⁴⁸⁹ *Orissa Forests Act 1972* s 45

⁴⁹⁰ *Orissa Forests Act 1972* s 49

⁴⁹¹ *Orissa Forests Act 1972* s 39

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<p>perspective of natural disaster risk reduction, such as:</p> <ol style="list-style-type: none"> prevention of wildfires? deforestation and erosion relevant to prevention of landslides and floods? other hazards, (such as encroachment by wildlife into agricultural land or villages)? <p>Describe the scope.</p>	Forests (Conservation) Act 1980	<p>27(1)(c), 28(a), 37(1)(d), 37(1)(h), 39(1)(c)</p> <p>Section 2</p>	<p>proceeding on the principle that forests should be managed such that forest planning and operations are sustainable and that forest resources are protected and conserved, this would go towards minimising disaster risks.⁴⁹²</p> <p><i>Fires</i></p> <p>The <i>Orissa Forests Act 1972</i> is mainly concerned with preventing deliberate fires in forests - it has numerous provisions imposing strict penalties for persons who do so.⁴⁹³ Additional provisions against forest fire risks are s 37(h), which allows the State government to make rules to protect timber lying in protected and reserved forests from fires, and s 39 (1)(c) which enables the State government to regulate or prohibit fires from being started so that forests, soil, rivers and public health are protected, and also to guard against storms, winds, rolling stones, floods, landslides and avalanches.</p> <p><i>Deforestation</i></p> <p>Deforestation is prevented through the <i>Orissa Forests Act 1972's</i> prohibitions on persons from felling, damaging, cutting, sawing or</p>

⁴⁹² See Forests and Environment Department, Government of Orissa (2005), 'Orissa Forest Sector – Elements of a Vision' Available at: www.odisha.gov.in/forest&environment/vesion%202020_eng.pdf Accessed on 27 October 2012

⁴⁹³ *Orissa Forests Act 1972* ss 27(1)(b), 27(1)(c), 28(a), 37(1)(d)

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
	Wildlife (Protection) Act 1972	Sections 28,33, 35(6)	<p>taking away trees, timber and forest produce without prior authorisation.⁴⁹⁴ The <i>Forests (Conservation) Act 1980</i> was specifically enacted by the Central government to prevent deforestation throughout India and prevents State governments from making orders to:</p> <ul style="list-style-type: none"> (a) Un-reserve reserved forests (b) Allow any forest land to be used for any non-forest purpose (c) Assigning forest land to private persons, or any private authority, corporation, agency or organisation (d) Clear forest land <p>without prior approval from the Central government. Non-forest purpose refers to the breaking or clearing of forests for purposes other than reforestation.⁴⁹⁵</p> <p><i>Wildlife</i></p> <p>For wildlife, If the forest area is a declared sanctuary, natural park or closed area, then all wildlife are protected pursuant to the <i>Wildlife (Protection) Act 1972</i>. There are no provisions that the wild animals should be managed such that they do not constitute a danger to public safety or agricultural lands. Wildlife can only be removed, destroyed or exploited if doing so would enable the</p>

⁴⁹⁴ Orissa Forests Act 1972 s 37

⁴⁹⁵ Forest (Conservation) Act 1980 s 2

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			authorities to better manage them, improve their habitat, ensure their security, or preserve the area. ⁴⁹⁶
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 Forests Dwellers (Recognition of Forest Rights) Act 2006	Section 3(1)(i)	Yes. As discussed previously, the <i>Scheduled Tribes and Other Traditional Forests Dwellers (Recognition of Forest Rights) Act 2006</i> recognises the right of forest rights holders to protect, regenerate, conserve or management any community forest resource which they have been traditionally protecting and conserving for sustainable use. ⁴⁹⁷ Customary rights and usage are also recognised in Odisha's forest management policies. ⁴⁹⁸
158. Does the law provide for use, conservation or management of forests and their resources by communities?	Orissa Village Forest Rules 1985	Rules 3, 5, 6	Yes. In 1985 the State government enacted the <i>Orissa Village Forest Rules 1985</i> which vested management powers in village forest committees. ⁴⁹⁹ No person can cut, lop, injure or remove any tree in declared village forests without first obtaining a permit from the village committee. ⁵⁰⁰ There is a general duty on every person in the community to protect and ensure the preservation of the forests. ⁵⁰¹ These rules have been supplemented by a string of resolutions by the State government which have expanded the opportunities for community management from just village forests to protected

⁴⁹⁶ *Wildlife (Protection) Act 1972* ss 28,33, 35(6)

⁴⁹⁷ *Scheduled Tribes and Other Traditional Forests Dwellers (Recognition of Forest Rights) Act 2006* s 3(1)(i)

⁴⁹⁸ See Forests and Environment Department, Government of Orissa (2005), 'Orissa Forest Sector – Elements of a Vision' Available at:

www.odisha.gov.in/forest&environment/vesion%202020_eng.pdf Accessed on 27 October 2012, p.1, Principle 3

⁴⁹⁹ *Orissa Village Forest Rules 1985* Rule 3

⁵⁰⁰ *Orissa Village Forest Rules 1985* Rule 5

⁵⁰¹ *Orissa Village Forest Rules 1985* Rule 6

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
			<p>forests, reserved forests, national parks, sanctuaries, mangrove wetlands, and protected areas. The latest resolution on Joint Forest Management (2008) allows Joint Forest Management Committees consisting of local villagers and forest department officials to be formed.⁵⁰² The committees have the following management functions:</p> <ul style="list-style-type: none"> • Individually and collectively ensure that forests are protected against fire, grazing, illicit felling, theft of forest produce, poaching of wildlife and encroachment of the forest land • Protect wildlife staying outside the assigned forests • Regulate entry to the forest by people and domestic cattle • Prevent forests and wildlife offences • Patrol forest areas • Help forest department officials to protect and maintain forest boundary pillars • Prepare micro-plans (joint management plans) and annual work plans for the integrated development of villages and the conservation, development and sustainable management of forests and its wildlife. • Ensure the gradual reduction of villagers' dependence on forests for sustenance.⁵⁰³

⁵⁰² Forest and Environment Department, Government of Orissa, *Joint Forest Management 2008*, Resolution No.IF-Affn.17/2008- 1 7 4 5 4 /F&E, Dated 22 October 2008, CI

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⁵⁰³ Forest and Environment Department, Government of Orissa, *Joint Forest Management 2008*, Resolution No.IF-Affn.17/2008- 1 7 4 5 4 /F&E, Dated 22 October 2008, CI

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Legal Research Questions	Short Title, no. & date of law / regulation	No.ss./ paras.	Answers, comments & extracts (please use quotation marks for all extracts)
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?	Constitution of India 1949 Environment (Protection) Act 1986 Water (Prevention and Control of Pollution) Act 1974	Seventh Schedule, List II, Item 17 Chapter III Chapter IV, V	State governments are responsible for managing rivers within their state boundaries. ⁵⁰⁴ The key pieces of legislation are the <i>Orissa Irrigation Act 1959</i> and the <i>Pani Panchayat Act 2002</i> , but they are directed more at regulating the construction of irrigation works and optimising farmers' use of water so that agricultural productivity can be improved. The Water Resource Department is the main body responsible for river management. ⁵⁰⁵ The <i>Environment (Protection) Act 1986</i> and the <i>Water (Prevention and Control of Pollution) Act 1974</i> controls pollution levels in rivers. ⁵⁰⁶
160. Does the above mandate include river management from the perspective of natural disaster risk reduction, such as:	Orissa Irrigation Act 1959	Section 20A(1)	<i>Flood Control</i> The Department of Water Resources in Odisha has the specific responsibility of carrying out flood control and river taming works. ⁵⁰⁷ How it should carry out these activities is provided for by

⁵⁰⁴ *Constitution of India 1949*, Seventh Schedule, List II, Item 17.

⁵⁰⁵ Department of Water Resources, Government of Orissa, *Orissa State Water Plan 2004*

Available at: < <http://www.dowrorissa.gov.in/SWPlan2004/SWPlan2004.htm> > Accessed on 26 October 2012 p. 20

⁵⁰⁶ See *Environment (Protection) Act 1986* Chapter III; *Water (Prevention and Control of Pollution) Act 1974* Chapters IV, V

⁵⁰⁷ Department of Water Resources, Government of Orissa, 'About the Department' Available at:

< <http://www.dowrorissa.gov.in/AboutDoWR/AboutDoWR.pdf> > p.1

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<p>a. Riverbed management relevant to flood prevention and mitigation?</p> <p>b. Water storage and distribution for human, agricultural and industrial consumption in rural areas?</p> <p>Describe the scope.</p>			<p>policy rather than legislation⁵⁰⁸ – the <i>Orissa State Water Policy 2007</i> for instance, states that a master plan for flood control and management for each flood-prone area of the river basins would be prepared and future investments in flood control measures would be guided by the master plans. River training programmes on protecting embankments and maintaining rivers would be provided. Adequate flood storage would be provided in water reservoir projects, in highly flood-prone areas flood control would be given overriding consideration in reservoir regulation policies even at the cost of sacrificing some irrigation or power benefits, and increased emphasis would be laid on non-structural flood control measures.⁵⁰⁹</p> <p>At present the department’s flood control activities consist of carrying out flood control projects (for example flood embankment construction) funded principally by the Central government.⁵¹⁰</p> <p><i>Water Storage and Distribution for Human, Agricultural and Industrial Consumption</i></p> <p>The <i>Orissa Irrigation Act 1959</i> is principally concerned with providing water supplies for firstly, agricultural purposes, then</p>

⁵⁰⁸ See the *Orissa Irrigation Act 1959*, in which there are no provisions relating to flood control as it is principally concerned with regulating the construction of irrigation works. No allusion is made to how rivers should be managed.

⁵⁰⁹ Department of Water Resources, Government of Odisha, *State Water Policy 2007* at [10]. Available at:

< http://www.orissa.gov.in/waterresources/policy/State_Water_Policy_2007.pdf > Accessed on 26 October 2012

⁵¹⁰ See Department of Water Resources, Government of Odisha (2012) *Activities Report (Activities of 2011-12 and Programme for 2012-13)* Available at:

<[http://www.dowrorissa.gov.in/Activities/ActivitiesReport11-12\(Eng\).PDF](http://www.dowrorissa.gov.in/Activities/ActivitiesReport11-12(Eng).PDF)> pp. 15-16

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>industrial and commercial purposes. In Section 20A(1) of the statute for example, it is stated that the State Government may, in the public interest regulate the use, diversion, collection or consumption of water from government water sources for industrial and commercial purposes other than agriculture. There are no legislative provisions at all for ensuring water supplies for human consumption purposes. Instead this is provided for through state water policies. The <i>State Water Plan 2004</i> and the <i>State Water Policy 2007</i> state that the citizens of Orissa have a right to access fresh water in sufficient quantities with acceptable quality, and that accordingly, the State should allocate water in the following priority order:</p> <ul style="list-style-type: none"> • Drinking water and domestic use (human and animal consumption) • Ecology • Irrigation, Agriculture and other related activities including fisheries • Hydro Power • Industries including Agro Industries. • Navigation and other uses such as tourism.⁵¹¹ <p>The <i>State Water Plan 2004</i> also specifies the per capita water requirements for persons in rural and urban areas, and livestock.⁵¹²</p>

⁵¹¹ Department of Water Resources, Government of Odisha, *State Water Policy 2007* at [1.1]. Available at: < http://www.orissa.gov.in/waterresources/policy/State_Water_Policy_2007.pdf > Accessed on 26 October 2012

⁵¹² Department of Water Resources, Government of Orissa, *Orissa State Water Plan 2004* Available at: < <http://www.dowrorissa.gov.in/SWPlan2004/SWPlan2004.htm> > Accessed on 26 October 2012 pp. 55-58

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)
161. Does the law recognize customary laws and practices as to the use and management of rivers and their resources?	Scheduled Tribes and Other Traditional Forests Dwellers (Recognition of Forest Rights) Act 2006	Section 3(1)(l)	<p>While Odisha's legislation and policies on water management do not recognise customary laws and practices relating to the use and management of rivers and their resources,⁵¹³ if the river or watercourse passes through a forest area the <i>Scheduled Tribes and Other Traditional Forests Dwellers (Recognition of Forest Rights) Act 2006</i> may allow such rights to be recognised. Section 3(1)(l) of this statute states that 'any other traditional right customarily enjoyed by the forest-dwelling Scheduled Tribes or other traditional forest dwellers' which have not been mentioned in the statute shall also be the forest rights of the tribes and forest dwellers on the land.</p> <p>Thus if the traditional forest dwellers can demonstrate that they occupied the forests and their use of the forests included managing rivers and utilising water resources under their traditional customs, they may be able to obtain the benefit of this provision.</p>
162. Does the law provide for use, conservation or management of rivers and their resources by communities?	Pani Panchayat Act 2002	Preamble Sections 3, 16, 17	The <i>Pani Panchayat Act 2002</i> was enacted by the Odisha Government so that farmers could play an effective role in the management and maintenance of irrigation systems, and in the equitable and dependable supply and distribution of water. It was also thought that farmers' participation would be the best way of

⁵¹³ See *Orissa Irrigation Act 1959*; *Pani Panchayat Act 2002*; Department of Water Resources, Government of Odisha, *State Water Policy 2007* Available at: < http://www.orissa.gov.in/waterresources/policy/State_Water_Policy_2007.pdf> Accessed on 26 October 2012; Department of Water Resources, Government of Orissa, *Orissa State Water Plan 2004* Available at: < <http://www.dowrorissa.gov.in/SWPlan2004/SWPlan2004.htm>> Accessed on 26 October 2012

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>enabling the scientific and systematic development and maintenance of irrigation infrastructure.⁵¹⁴ The statute allows Pani Panchayats (farmers' organisations) consisting of water users who are land holders and government officials to be formed over irrigation systems.⁵¹⁵ Pani Panchayats have the objects of promoting and securing the distribution of water among its users, ensuring the efficient and economical utilisation of water to optimise agricultural production, protecting the environment, and ensuring ecological balance.⁵¹⁶</p> <p>Their powers are generally to regulate agricultural water use and prepare plans for maintaining the irrigation system, not to conserve and manage rivers.⁵¹⁷</p>
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 responsibility to protect people, livestock or crops in the face of drought?	Orissa Relief Code 1996	Chapter 3	No, as discussed in the drought section under Section 3 'Early Warning and Reduction of Underlying Risk Factors through Regulation', in Odisha regulatory measures are predominantly directed towards providing relief. ⁵¹⁸

⁵¹⁴ *Pani Panchayat Act 2002* Preamble

⁵¹⁵ *Pani Panchayat Act 2002* s 3

⁵¹⁶ *Pani Panchayat Act 2002* s 16

⁵¹⁷ *Pani Panchayat Act 2002* s 17

⁵¹⁸ See eg, *Orissa Relief Code 1996* Chapter 3

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)
164. Does the above mandate include the construction and maintenance of water reserves, including against the risk of drought?			Odisha's water management legislation does not provide for the construction and maintenance of water reserves. ⁵¹⁹ However in the <i>Orissa Relief Code 1996</i> , it is stated that water tanks and wells should be constructed to provide reserves of drinking water during times of inadequate rainfall. ⁵²⁰
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)?			No such legislation exists.

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)

⁵¹⁹ See *Orissa Irrigation Act 1959*; *Pani Panchayat Act 2002*

⁵²⁰ *Orissa Relief Code 1996* cl 34

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>166. Is there a law that regulates the collection and publication of seismological, meteorological and climatic data relevant to natural disasters?</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>			No such law exists, refer to previous discussion under Section 3, Part Three ‘Early Warning, Hazard and Risk Information’ of this study.
<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 above discussion, Question 101 (Section 3 ‘Risk Identification, Assessment and Monitoring’)
<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</p>	Orissa Education Act 1969	Section 4(1)	The <i>Orissa Education Act 1969</i> enables the State government to regulate primary and other stages of education in government and private educational institutions. ⁵²¹ While the breadth of this provision allows it to develop school curriculums, ⁵²² there have

⁵²¹ *Orissa Education Act 1969* s 4(1)

⁵²² Section 29(1) of the Central government’s *Right of Children to Free and Compulsory Education 2009* also grants State governments the power to develop curriculums for elementary education (First Standard to 8th Standard)

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)
the DM law also require community DRR education?			been no moves made, either by way of law or policy, to include DRR topics. ⁵²³ National-level policies and curriculum frameworks also do not make provisions for DRR education. ⁵²⁴
<p>169. If there is a national disaster management policy, does this require any public authorities to conduct public education and awareness on DRR?</p> <p>a. If so, which authorities and what are they required to do?</p> <p>b. In particular does it require DRR education in schools?</p>			For a discussion about the <i>National Disaster Management Policy 2009</i> , refer to the national-level study. In Odisha, the <i>State Disaster Management Policy 2005</i> places a general responsibility on the entire government to ‘consciously’ promote programmes and projects to build the capacity of the State and the people to be better prepared to face disasters. It contemplates using community-based disaster management plans and mock drills to improve disaster preparedness. ⁵²⁵ The <i>State Disaster Management Policy 2005</i> also states that to build capacity in the State, emphasis should be given to conducting training at all levels. ⁵²⁶ These provisions would cover DRR public education and awareness activities.

⁵²³ See generally, Department of School and Mass Education, Government of Odisha at < <http://www.odisha.gov.in/schooleducation/index.html>> Accessed on 27 October 2012; Odisha Primary Education Programme Authority at: <<http://www.opepa.in/website/default.aspx>>

⁵²⁴ See National Council of Educational Research and Training (2005), *National Curriculum Framework 2005*. Available at: < <http://www.teindia.nic.in/Files/NCF-2005.pdf>> Accessed on 27 October 2012; Department of Education, Ministry of Human Resource Development, Government of India, *National Policy on Education 1986*, Available at: < http://mhrd.gov.in/sites/upload_files/mhrd/files/NPE86-mod92.pdf> Accessed on 27 October 2012

⁵²⁵ *Orissa State Disaster Management Policy 2005* at [3.2.2]

⁵²⁶ *Orissa State Disaster Management Policy 2005* at [3.2.12]

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>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 education and awareness campaigns?</p>			<p>There are no legislative provisions on community-level DRR awareness. Odisha's <i>State Disaster Management Policy 2005</i> does not make any reference to community participation in the development and delivery of public education and awareness campaigns.</p>
<p>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?</p>			<p>No such legislative provisions exist.</p>
<p>172. Does legislation provide for any designated role for Civil Society in DRR education and awareness at community level?</p>			<p>No such legislative provisions exist.</p>
<p>173. Does any law provide for community-level results in DRR, such as:</p> <ol style="list-style-type: none"> a. Natural disaster warnings that extend to community level? b. Implementation of incentives to carry out community based DRR, or disincentives to ignore or 			<p>No such legislative provisions exist.</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)
<p>increase risks from natural disasters?</p> <p>c. Community involvement in land-use and urban planning?</p> <p>d. Community involvement in and education concerning building codes?</p>			

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Orissa Irrigation Act 1959

Orissa Land and Survey Settlement Act 1958

Orissa Land Reforms Act 1960

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