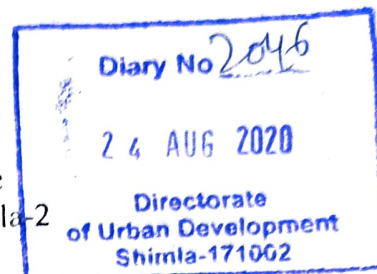


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No. Rev (DMC) (F) -4-2/2019-Flood  
Department of Revenue (DM Cell)  
Government of Himachal Pradesh.

From

The Principal Secretary (Rev-DM) to the  
Government of Himachal Pradesh, Shimla-2



To

1. The DGP, HP, Police HQ, Nigam Vihar, Shimla-02
2. The Principal Chief Conservator of Forest, Forest Department, Talland, Shimla-2
3. The Engineer in Chief, PWD Nigam Vihar, Shimla-02
4. The Engineer in Chief, I&PH, Tuttikandi Shimla-4
5. The Managing Director, STPI Building Block-24 SDA Complex, Kusampti, Shimla-9
6. The Director, Energy, Shanti Bhawan, Sector-5, Shimla-2
7. The Director of Env, Science and Technology, Shimla-1
- ✓ 8. The Director of Urban Development, Shimla-1
9. The Director of Social Welfare, SDA Complex, Shimla-9
10. The Director of HIPA, Fairlawns, Shimla-12
11. The Director of IPR, Information Bhawan, Shimla-2.
12. The Director of Health, SDA Complex Kusampti, Shimla-9
13. The Director of Rural Development & Panchayati Raj, SDA Complex, Kusampti, Shimla-9
14. The Deputy Commissioner-cum-Chairperson, DDMA (All District in the Himachal Pradesh)
15. The Secretary, HPBOSE, Dharmshala, District Kangra
16. The Scientist In-Charge, G.B. Pant National Institute of Himalayan Environment, Mohal, Kullu - 175126
17. The Registrar, National Institute of Technology Hamirpur, Himachal Pradesh, Pin No. 177005,

Dated Shimla-2, the 20<sup>th</sup> August, 2020

**Subject: Implementation of National Guidelines for Flood Management, 2008**

Sir,

I am directed to refer to the subject cited above and to say that the flash floods are another form of disaster which the State experiences every year. Due to the diverse topography of the area, the flood problem in the state is largely isolated in nature. High monsoon rains in the area of the Shiwalik and lower and mid Himalayan ranges cause extensive floods during rainy seasons. Often the flash floods caused due to cloudbursts,

glacial lake outbursts and temporary blockade of the river channels have been also observed in the State.

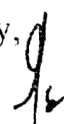
Floods cause huge losses to lives, properties, livelihood systems, infrastructure and public utilities which can be minimized through Flood Risk Management. It is necessary to undertake measures for the evolution of a holistic and integrated strategy to address the critical factors that accentuate flood risk through multi-sectoral and multi-dimensional administrative approach involving activities such as Institutional Framework and Financial Arrangements; Flood Prevention, Preparedness and Mitigation; Flood Forecasting and Warning; Dams and Reservoirs Regulations; Capacity Development; Response and so on.

To enable effective mitigation and management of Flood Management, NDMA has released the **National Disaster Management Guidelines for Management of Flood 2008** after intensive deliberations by the Expert Committee. These Guidelines provide a framework for implementation, coordination and evaluation of activities undertaken by the authorities concerned in their respective area of jurisdiction to reduce the negative impact of floods.

A table containing roles and responsibilities of different stakeholders is enclosed for your reference. For more details, you may download soft copy from the Guidelines for Flood Management 2008 from NDMA website on URI: <https://ndma.gov.in/images/guidelines/flood.pdf>

You are therefore, requested to go through these SOPs and prepare point-wise action plan and implement the same for Prevention and Management of flash flood with respect to your Department/Organization and share action taken to this department at the earliest, please.

Yours faithfully,



(D.C. Rana)

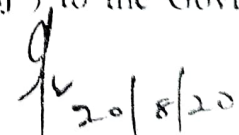
Director-Special Secretary (Rev-DM) to the  
Government of Himachal Pradesh

Dated, Shimla-2 the, 20<sup>th</sup> August, 2020

Enst. No: As above

Copy for information to:

The Addl. Chief Secretary, Principal Secretary/Secretary (Health, Finance, Forest, Home, I&PH, PWD, MPP & Power, Science & Tech, IPR, Education, Social Welfare, UD, RD & Panchayat Raj ) to the Govt. of Himachal Pradesh, Shimla-2.



Director-Special Secretary (Rev-DM) to the  
Government of Himachal Pradesh



# Flood Management Action Plan

## Understanding Disaster Risk

Part 0

## Understanding Disaster Risk

Central/State Agencies and their Responsibility		Understanding Disaster Risk	
Sub-Function Area for DRR	Centre	Responsibility - Centre	Responsibility - State
Observation Networks, Information Systems, Monitoring, Research, Forecasting & Early Warning	MOES*, MOJSCWC *, MAFW, DOS, METV, NLRTI	<p><b>Recurring/Regular (RR)</b> Assessment, Monitoring, and Scientific studies</p> <p><b>Short Term (T1)</b></p> <ul style="list-style-type: none"> <li>Preparation of close contour and flood vulnerability maps</li> <li>Modernization of flood forecasting and warning systems on a river basin basis</li> <li>Assist states/UTs in the identification of priority flood protection and drainage improvement works</li> <li>Monitoring of flood preparedness, river basin and reservoir management plans</li> </ul> <p><b>Medium Term (T2)</b></p> <ul style="list-style-type: none"> <li>Studies and monitoring of rivers flowing from neighboring countries</li> <li>Studies involving international cooperation for forecasting and cross border issues</li> <li>Implementation of the schemes for real-time collection of hydro-meteorological data on important rivers including the relevant rivers flowing from Nepal, Bhutan and China</li> <li>Specialized efforts for different types of floods and causes of flooding, including confluence</li> </ul> <p><b>Long Term (T3)</b></p> <ul style="list-style-type: none"> <li>Developing/improving/ updating forecasting methods and models for quantification of inflows and storage of dams</li> </ul>	<p>HP State Disaster Management Authority (HPSDMA)/ District Disaster Management Authority (DDMA)</p> <p>Revenue and Irrigation and Public Health, Directorate of Energy (DOE)</p> <p>Urban Development (UD)</p> <p>State Council of Science Environment of Tech (HIMCOST)</p> <p>NIT-Hamirpur</p> <p>CB Institute of Himalayan Studies-Kullu</p>
Zoning, mapping, and classification flood prone areas	MOJIS*, DOS, NLRTI	<p><b>Short Term (T1)</b></p> <p>Preparation of large-scale hazard maps of flood prone areas identifying areas of high vulnerability</p>	<p><b>Recurring/Regular (RR)</b></p> <ul style="list-style-type: none"> <li>Support and cooperate with central agencies</li> <li>Sponsor state-specific efforts: support local efforts for flood management</li> <li>Support local information systems and update data for better flood management</li> </ul> <p><b>Short Term (T1)</b></p> <ul style="list-style-type: none"> <li>Implementing and monitoring of flood preparedness, river basin and reservoir management plans including updating rule curves, improve system of water release from reservoirs</li> <li>Identification of priority flood protection and drainage improvement</li> </ul> <p><b>Medium Term (T2)</b></p> <p>Studies on land use and hydrological changes relevant to flood management in river basins and reservoir command areas</p> <p><b>Long Term (T3)</b></p> <p>Execution of flood protection and drainage improvement schemes</p>

Flood		Understanding Disaster Risk		
Sub-Thematic Areas for DRR	Centre	Central/ State Agencies and their Responsibility		Responsibility – State
		Responsibility – Centre	State	
5 <b>Research and Development</b>	MOIS, DOS, MOST, NLRTI, Brahmaputra Board, Ganga Flood Control Commission	<u>Short Term (T1)</u> <ul style="list-style-type: none"> <li>Studies on support systems for people living in flood prone areas</li> <li>Evolving designs of shelters in flood prone areas</li> <li>Socio-economic impacts of flood</li> </ul> <u>Medium Term (T2)</u> <ul style="list-style-type: none"> <li>River basin studies</li> <li>Studies on flood related problems such as soil losses caused by flooding of rivers, sediment transport, river course changes, and appropriate use of embankments</li> <li>Promote research and studies – both in-house and extra-mural by providing research grants to researchers and institutions</li> </ul> <u>Long Term (T3)</u> <ul style="list-style-type: none"> <li>Hydrological and morphological studies before undertaking major flood control or prevention measures</li> <li>Developing/ updating forecasting methods and models for quantification of inflows and storage of dams</li> </ul>	<ul style="list-style-type: none"> <li>HP SDMA, DDMA's, I&amp;PH, HIMCOST</li> <li>NIT-Hamirpur</li> <li>GB Pant Institute of Himalayan Studies-Kullu.</li> <li>Other Technical Institutions</li> </ul>	<u>Recurring/ Regular (RR)</u> <ul style="list-style-type: none"> <li>Support and cooperate with central agencies</li> <li>Sponsor/ carry out state-specific efforts in all these areas; support local efforts</li> </ul>
4 <b>Hazard Risk Vulnerability and Capacity Assessment (HRVCA)</b>	NDMA, NIDM, MOIS, MOST, MSJE, NLRTI	<u>Recurring/ Regular (RR)</u> <ul style="list-style-type: none"> <li>Promote studies, documentation and research</li> <li>Studies on vulnerabilities and capacities covering social, physical, economic, ecological, gender, social inclusion and equity aspects</li> <li>Provide technical support and guidance for comprehensive HRVCA</li> </ul>	HP SDMA, DDMA's, Revenue I&PH Social Justice and Empowerment Department (DSJE)	<u>Recurring/ Regular (RR)</u> <ul style="list-style-type: none"> <li>Undertake HRVCA as part of preparing and periodic revision of DM plans</li> </ul> <u>Short Term (T1)</u> <ul style="list-style-type: none"> <li>Constitute/ strengthen the mechanisms for consultation with experts and stakeholders</li> </ul>



Flood		Central/ State Agencies and their Responsibility			Understanding Disaster Risk
Sub-Thematic Area for PMR	Centre	Responsibility - Centre	State	Responsibility - State	
5  Dissemination of warnings, data, and information	MOES, MOIS MEITY, MCOM, MOIB, MEA NDMA, DOS	<p>Quick, clear, effective dissemination among central and state agencies</p> <p><b>Recurring/ Regular (RR)</b></p> <p><b>Short Term (TI)</b></p> <ul style="list-style-type: none"><li>Facilitate the distribution of necessary communication equipment, last-mile connectivity and access to disaster risk information</li><li>International cooperation to share warnings about rivers flowing from neighbouring countries</li><li>Promoting reliable networking systems for data and information sharing among central and state agencies</li><li>Monitoring of landslides and blockages in rivers</li><li>Warning systems</li><li>Providing information in all possible ways and using all types of media</li><li>Interface with mobile network service providers for warnings</li></ul>	HPSDMA/ DDMAs, Public Information Dept. (IPR) I&PH RD & PRI, UD	<p><b>Recurring/ Regular (RR)</b></p> <ul style="list-style-type: none"><li>Inter-state data and information sharing where applicable</li><li>Coordination and cooperation with the central agencies</li><li>Ensure facilities and infrastructure for the implementation of adequate access to communities at risk</li><li>Dissemination of warnings to all, down to the last mile – remote, rural or urban; Regular updates to people in areas at risk</li><li>Warnings using all types of options, types of technologies, and media</li><li>Monitoring compliance by various network operators and service providers</li></ul>	
6  Disaster Data Collection and Management	MHA, MOSPI, all ministries/ depts.	<p>Systematic data management of data on disaster damage and loss assessments</p> <p><b>Recurring/ Regular (RR)</b></p> <p><b>Short Term (TI)</b></p> <p>Disaster Damage and Losses 2005-2015 baseline</p>	HPSDMA/ DDMAs, All depts.	<p><b>Recurring/ Regular (RR)</b></p> <p>Systematic data management of data on disaster damage and loss assessments</p> <p><b>Short Term (TI)</b></p> <p>Disaster Damage and Losses 2005-2015 baseline</p>	

# Inter-Agency Coordination

Flood		Central/ State Agencies and their Responsibility		Inter-Agency Coordination
Sub-Thematic Area for DRR	Centre	Responsibility – Centre	State	Responsibility – State
1 Overall disaster governance	MOJS	<u>Recurring/ Regular (RR)</u> Providing coordination, technical inputs, and support	HP SDMA/ DDMAs I&PH/DOE RD&PRI, UD	<ul style="list-style-type: none"> <li>• Preparation and implementation of DM plans and ensure the functioning of agencies with DM tasks</li> <li>• All aspects of disaster risk management and mainstreaming DRR</li> <li>• Ensuring coherence and mutual reinforcement of DRR, CCA and development</li> </ul>
2 Response	MHA	<u>Recurring/ Regular (RR)</u> Organizing and coordinating central assistance	HP SDMA/ DDMAs I&PH/DOE RD&PRI, UD	<u>Recurring/ Regular (RR)</u> <ul style="list-style-type: none"> <li>• Organizing and coordinating the immediate response</li> <li>• Coordinate with central agencies</li> </ul>
3 Warnings, Information, Data	MOJS, IMD, DOS, MEITY, NDMA	<u>Recurring/ Regular (RR)</u> Effective coordination and seamless communication among central and state agencies to ensure quick, clear, effective dissemination of warnings, information and data	HPSDMA/ DDMAs, IPR RD & PRIs, UD	<u>Recurring/ Regular (RR)</u> Coordinating the dissemination of warnings to all, down to the last mile— remote, rural or urban; Regular updates to people in areas at risk
4 Non-structural measures	MHA, BIS, NDMA	<u>Recurring/ Regular (RR)</u> Coordination among central and state agencies for a) revised/ updated rules, norms b) adoption of new/updated standards, c) enact/amend laws, regulations and d) adopt/ review policies	HP SDMA/ DDMAs, Revenue RD& PRIs, UD	<u>Recurring/ Regular (RR)</u> Coordination among state agencies for ensuring updated norms/ codes and their implementation, enforcement and monitoring



## Investing in DRR – Structural Measures

Flood		Structural Measures		
Sub-Thematic Area for DRR	Centre	Central/ State Agencies and their Responsibility		Responsibility – State
		Responsibility – Centre	State	
1 Establishment/ strengthening of Emergency Operation Centers	Relevant Central Ministries, MHA	<u>Recurring/ Regular (RR)</u> Ensure round the clock operations of EOCs during the Flood season with adequate manpower/resources	HPSDMA/ DDMA's	<u>Recurring/ Regular (RR)</u> Ensure round the clock operations of EOCs during the flood season with adequate human resources to respond to flash flood
2 Flood control measures such as construction of embankments and levees	MOJ, NWDA, CWPRS, CBRI, SERC, IE(I)	<u>Recurring/ Regular (RR)</u> Technical support and studies	HP SDMA/ DDMA's, RD& PRLs, UD	<ul style="list-style-type: none"> <li>• Identification suitable sites for temporary shelters for people and livestock evacuated from localities at risk</li> </ul> <u>Medium Term (T2)</u> <ul style="list-style-type: none"> <li>• Construction of multi-purpose shelters in villages/ habitations prone to floods</li> <li>• Proper monitoring and maintenance of river embankments</li> </ul>
3 Social Housing Schemes	Relevant Central Government Ministries, MORD, MHUA	<u>Recurring/ Regular (RR)</u> Ensure that flood-resistant features are incorporated in planning and execution of social housing schemes	HP SDMA/ DDMA's, RD & PRL, UD,	<u>Medium Term (T2)</u> Ensure that flood -resistant features are incorporated in the planning and execution of social housing schemes in flood prone areas
4 Multi-purpose Flood Shelters	NDMA, MOJ, NBCC, BMTPC, CBRI, SERC, IE(I)	<u>Recurring/ Regular (RR)</u> Advisory	HP SDMA, DDMA, RD&PRLs, UD	<u>Medium Term (T2)</u> Ensure availability of shelters, undertake proper maintenance, and make arrangements to support the people shifted to temporary shelters

Flood					Structural Measures	
Central/ State Agencies and their Responsibility						
Sub-Thematic Area for DRR	Centre	Responsibility – Centre	State	Responsibility -- State		
5 Waterways and drainage systems for roads, highways, and expressways	MORTH, MOD, NHAI, BRO	<u>Recurring/ Regular (RR)</u> Proper alignment and design	HPSDMA/ DDMAs, PWD, PRIs, UD	<u>Recurring/ Regular (RR)</u> Coordination and cooperation with the central agencies and ensure proper alignment and design in all state projects		
6 Enhancing the safety of dams and reservoirs	MOIS	<u>Recurring/ Regular (RR)</u> Advisories and guidance	HPSDMA, DDMAs, I&PH DOE	<u>Recurring/ Regular (RR)</u> • Carry out measures to increase safety, reduce risks from flooding • Undertake pre- and post-monsoon inspections of dams and reservoirs • Monitor the implementation of safety enhancements in accordance with norms		
7 Desilting/ dredging of rivers to improve flow; drainage improvement; flood water diversion through existing or new channels	MOIS	<u>Recurring/ Regular (RR)</u> Advisories and guidance	HPSDMA, DDMAs, I&PH RD&PRs, UD	<u>Recurring/ Regular (RR)</u> Implementation as per norms		
8 Hazard resistant construction, strengthening, and retrofitting of all lifeline structures and critical infrastructure	NDMA, NBCC, BMTPC, CBRI, SERC, IE(1), all relevant Ministries/ Departments	<u>Recurring/ Regular (RR)</u> Guidance and implementation	HPSDMA DDMA, PWD RD&PRI, UD	<u>Recurring/ Regular (RR)</u> Collaboration with technical agencies and implementation		



# Investing in DRR – Non-Structural Measures

-9-

Flood		Central/State Agencies and their Responsibility		Non-Structural Measures
Sub-Thematic Area for DRR	Centre	Responsibility – Centre	State	Responsibility – State
<ul style="list-style-type: none"> <li>• Regulation and enforcement of laws, norms, regulations, guidelines including</li> <li>• Regulation for reservoir management</li> <li>• Integrated Water Resources Management (IWRM)</li> </ul>	IMD, DOS, MOIS, NWDA, DOS, MFIN	<u>Recurring/Regular (RR)</u> <ul style="list-style-type: none"> <li>• Guidance and Support</li> <li>• Oversight and monitoring of compliance with coastal zone laws</li> <li>• Promote institutional mechanisms for sharing forecasts, warnings, data, and information</li> </ul>	HPSDMA DDMAs I&PH Department of Finance	<u>Recurring/Regular (RR)</u> <ul style="list-style-type: none"> <li>• Implementing land-use regulation for low lying areas as per flood control norms</li> <li>• Regulation of inhabitation of low-lying areas along the rivers, nallas and drains</li> <li>• Implementing flood management action plan</li> </ul>
		<u>Short Term (T1)</u> <ul style="list-style-type: none"> <li>• Adoption of revised reservoir operation manuals</li> <li>• Regulatory framework for flood plain zoning</li> </ul>		<u>Short Term (T1)</u> <ul style="list-style-type: none"> <li>• Support and cooperate with central agencies; Sponsor state-specific efforts; support local efforts; Cooperate with central efforts</li> </ul>
		<u>Medium Term (T2)</u> <ul style="list-style-type: none"> <li>• Scheme of incentives and disincentives with respect to the central assistance to encourage the states for implementing flood plain zoning regulations</li> </ul>		<u>Medium Term (T2)</u> <ul style="list-style-type: none"> <li>• Enforcing building codes and regulations</li> <li>• Review and modification of operation manuals for all major dams/ reservoirs</li> </ul>
		<u>Long Term (T3)</u> <ul style="list-style-type: none"> <li>• Norms/ regulations applicable to buildings in flood-prone areas</li> <li>• Facilitate the implementation of IWRM in major river basins and their sub-basins</li> </ul>		<u>Long Term (T3)</u> <ul style="list-style-type: none"> <li>• Prevention and removal of encroachment into the waterways and natural drainage systems</li> <li>• Implementing regulatory framework for flood plain zoning and flood inundation management</li> <li>• Implementing flood plain zoning regulations</li> </ul>
				<u>Long Term (T3)</u> <ul style="list-style-type: none"> <li>• Implementation of IWRM in major river basins and their sub-basins within each state/UT</li> </ul>

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Flood		Non-Structural Measures		
Sub-Thematic Area for DRR		Central/ State Agencies and their Responsibility		
		Responsibility – Centre	State	Responsibility -- State
2	Regulations to promote flood resilient buildings and infrastructure	NDMA, MOJS, MHUA, BIS  <u>Recurring/ Regular (RR)</u> Guidance and Support	HPSDMA, DDMA's, Local bodies	<u>Medium Term (T2)</u> Revise and implement the relevant rules in flood prone areas
3	• Wetland conservation and restoration • Catchment Area Treatment/Afforestation	MOEFCC  <u>Recurring/ Regular (RR)</u> Guidance and Support	HPSDMA, DDMA's, Forest Dept. Local bodies	<u>Short Term (T1)</u> Discourage reclamation of wetlands, natural depressions <u>Medium Term (T2)</u> Action plan managing wetlands and natural drainage systems for flood moderation <u>Long Term (T3)</u> Implementation of watershed management including catchment area treatment and afforestation programmes
4	Public Private Partnerships	NDMA, MOJS, MCA*, MCF, MOCI, MPFI, MHPE, MFIN  <u>Recurring/ Regular (RR)</u> Guidance	HPSDMA, DDMA's,	<u>Recurring/ Regular (RR)</u> Promote private participation in disaster management facilities
5	Risk Transfer	MFIN*, NDMA, MHA, MAFW  <u>Recurring/ Regular (RR)</u> Implementation of Risk Transfer Arrangements including multi-hazard insurance for life and property <u>Short Term (T1)</u> Policy Framework	HPSDMA/ DDMA's Finance Department	<u>Recurring/ Regular (RR)</u> Implementation of Risk Transfer Arrangements including multi-hazard insurance for life and property <u>Short Term (T1)</u> Policy Framework



# Capacity Development

Flood		Central/ State Agencies and their Responsibility				Capacity Development
Sub-Thematic Area for DNN	Centre	Responsibility - Centre	State	Responsibility - State		
1 Training	NIDM, LBSNAA, NIRM, NIDMA, NDRF, NISA, and other training institutions for Indian Civil Services	<u>Recurring/ Regular (RR)</u> Training and orientation programs for central govt. staff, SDRF, CDEF, community, and volunteers	HP SDMA, DDMAs, SDRF, HIPA, NIT-Hamirpur and other Engineering Training Institutes, Police Training Academies	<u>Recurring/ Regular (RR)</u> • Training and orientation programs for state govt. staff, professionals for veterinary care and support to disaster-affected animals • Training for CDEF, community, and volunteers		
		<u>Recurring/ Regular (RR)</u> Incorporating disaster response, search and rescue in the training programs of youth such as NCC, NYKS, Scouts and Guides, NSS, SDRF, CDEF, Community, Volunteers	HP SDMA/DDMAs, HIPA Panchayati Raj Training Institute	<u>Recurring/ Regular (RR)</u> • Incorporating disaster response, search and rescue in the training programs of youth such as village volunteers, and for protection of disaster-affected animals • Training for CDEF, Community, Volunteers		
		<u>Recurring/ Regular (RR)</u> Strengthen coverage of flood damage mitigation, flood tolerant designs/ crops, and construction techniques	Professional Bodies/ Councils	<u>Medium Term (T2)</u> Update curriculum for undergraduate engineering courses to include topics relevant for flood Risk Management		
2 Curriculum Development	MHRD, AICTE, IITs, UGC, NIDM, Professional Bodies/ Councils	<u>Recurring/ Regular (RR)</u> Improve coverage of community health and epidemic management medical curriculum	Health Department	<u>Medium Term (T2)</u> Introduction of Crisis Management, emergency medical response/recovery and trauma management at Diploma /UG/ PG levels for Health Professionals		
	MHPW	<u>Recurring/ Regular (RR)</u> Include awareness about flood and some aspects of flood management in school and college teaching while reviewing the curriculum	State Boards of Education	<u>Recurring/ Regular (RR)</u> Improving curriculum periodically using new technologies		

## Capacity Development

Flood		Central/ State Agencies and their Responsibility			Capacity Development
Sub-Thematic Area for DRR	Centre	Responsibility – Centre	State	Responsibility – State	
1 Training	NIDM, LBSNAA, NIRM, NDMA, NDRF, NISA, and other training institutions for Indian Civil Services	<u>Recurring/ Regular (RR)</u> Training and orientation programs for central govt. staff, SDRF, CDEF, community, and volunteers	HP SDMA, DDMA's, SDRF, HIPA, NIT-Hamirpur and other Engineering Training Institutes, Police Training Academies	<ul style="list-style-type: none"> <li>• Training and orientation programs for state govt. staff, professionals for veterinary care and support to disaster-affected animals</li> <li>• Training for CDEF, community, and volunteers</li> </ul>	
	NDRF, CAPF, MYAS, MOD	<u>Recurring/ Regular (RR)</u> Incorporating disaster response, search and rescue in the training programs of youth such as NCC, NYKS, Scouts and Guides, NSS, SDRF, CDEF, Community, Volunteers	HP SDMA/DDMA's, HIPA Panchayati Raj Training Institute	<ul style="list-style-type: none"> <li>• Incorporating disaster response, search and rescue in the training programs of youth such as village volunteers, and for protection of disaster-affected animals</li> <li>• Training for CDEF, Community, Volunteers</li> </ul>	
2 Curriculum Development	MHRD, AICTE, IITs, UGC, NIDM, Professional Bodies/ Councils	<u>Recurring/ Regular (RR)</u> Strengthen coverage of flood damage mitigation, flood tolerant designs/ crops, and construction techniques	Professional Bodies/ Councils	<u>Medium Term (T2)</u> Update curriculum for undergraduate engineering courses to include topics relevant for flood Risk Management	
	MHPW	<u>Recurring/ Regular (RR)</u> Improve coverage of community health and epidemic management medical curriculum	Health Department	<u>Medium Term (T2)</u> Introduction of Crisis Management, emergency medical response/recovery and trauma management at Diploma /UG/ PG levels for Health Professionals	
		<u>Recurring/ Regular (RR)</u> Include awareness about flood and some aspects of flood management in school and college teaching while reviewing the curriculum	State Boards of Education	<u>Recurring/ Regular (RR)</u> Improving curriculum periodically using new technologies	



Flood		Central/ State Agencies and their Responsibility			Capacity Development
Sub-Thematic Area for DRR	Centre	Responsibility – Centre	State	Responsibility – State	
3 Awareness Generation	NDMA, NDRF, CAPF, NIDM, MOJS	<u>Recurring/ Regular (RR)</u> <ul style="list-style-type: none"><li>• Carry out mass media campaigns</li><li>• Promote culture of disaster risk prevention, mitigation, and better risk management</li><li>• Promote attitude and behaviour change in the awareness campaigns/ IEC</li><li>• Strengthening network of civil society organizations for awareness generation about DRR and DM</li></ul> <u>Medium Term (T2)</u> <ul style="list-style-type: none"><li>• Promote use of insurance/ risk transfer</li><li>• Promote Community Radio</li></ul>	HP SDMA, DDMA's Revenue I&PH, SDRF, Fire Services, Civil Defense, Police, RD & PRI	<u>Recurring/ Regular (RR)</u> <ul style="list-style-type: none"><li>• Carry out mass media campaigns</li><li>• Promote culture of disaster risk prevention, mitigation, and better risk management</li><li>• Promote attitude and behaviour change in the awareness campaigns/ IEC</li><li>• Strengthening network of civil society organizations for awareness generation about DRR and DM</li><li>• Information on care and protection of disaster-affected animals</li></ul> <u>Medium Term (T2)</u> <ul style="list-style-type: none"><li>• Promote use of insurance/ risk transfer</li><li>• Promote Community Radio</li></ul>	
4 Mock Drills/ Exercises	NDMA, NIDM, MOJS, Line Ministries, Govt. Agencies, NDRF, Armed Forces, CAPF	<u>Recurring/ Regular (RR)</u> Promoting the planning and execution of emergency drills by all ministries and in all States/UTs		<u>Recurring/ Regular (RR)</u> Joint planning and execution of emergency drills	
5 Vocational Training/ Skill Development	NDMA, NIDM, MSDE, NSDA, NSDC, IIE, NIESBUD, MMSME, NLSDA	<u>Recurring/ Regular (RR)</u> Promoting skill development for multi-hazard resistant construction in flood-prone areas for different types of housing and infrastructure	HP SDMA/DDMA's, Revenue Dept.(DM), State level skill development agencies	<u>Recurring/ Regular (RR)</u> <ul style="list-style-type: none"><li>• Conduct training programmes</li><li>• Develop a team of Trainer-of-Trainers for different trades relevant to flood-resistant construction</li></ul>	

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Flood		Central/State Agencies and their RESPONSIBILITIES			Capacity Development
Sub-Thematic Area for DRR	RESPONSIBILITIES				
	Centre	Responsibility – Centre	State	Responsibility – State	
Empowering women, marginalised, and persons with disabilities	MSJE, MWCD, NDMA, NIDM	<u>Recurring/ Regular (RR)</u> Incorporating gender sensitive and equitable approaches in capacity development covering all aspects of disaster management	HP SDMA/ DDMA's, Revenue, HIPA and other state-level institutions, PRIs, ULBs	<u>Recurring/ Regular (RR)</u> Incorporating gender sensitive and equitable approaches in capacity development covering all aspects of disaster management at the state, district, and local levels	
Community-Based Disaster Management	NDMA, NIDM, MORD, MHUA	<u>Recurring/ Regular (RR)</u> Promotion, Guidance, and Support	HP SDMA/ DDMA's, Revenue and other state-level institutions, PRIs, ULBs	<u>Recurring/ Regular (RR)</u> • Strengthen ability of communities to manage and cope with disasters based on a multi-hazard approach • Training for PRI, SHG, NCC, NSS, Youth, local community organizations	