

NATIONAL PLATFORM FOR DISASTER RISK REDUCTION : MAINSTREAMING DISASTER RISK REDUCTION IN DEVELOPMENT-FROM RISK TO RESILIENCE

RISK FINANCING MECHANISMS- INDIAN CONTEXT

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SIGNIFICANCE

- **Financial impact of disasters:**
 - Debilitating & cascading
 - Affecting individuals, businesses and economy
- **Achieving Financial Resilience is critical component of effective DM**
- **Aim is ensuring availability of resources**
 - response, recovery & reconstruction
- **Combination of risk financing and risk transfer (& DRR)**

PRESENT SCENARIO

- In the event of a disaster, relief expenditure met from Calamity Relief Fund /State Disaster Response Fund(SDRF)
- In case of severe calamities, National Calamity Contingency Fund/National Disaster Response Fund (NDRF) supplements funding available from SDRF These funds can only be used for relief & immediate rehabilitation
- Funding reconstruction/restoration activities necessitates reallocation of plan funds/external aid
 - Diversion of funds from developmental activities
 - Lack of liquid funds; longer time lag for complete recovery
 - Cascading effect on economy of disaster affected area
 - Mitigation awareness will always fall short when cost of reconstruction not borne by affected party

GAPS

- **Adequacy of relief funds:**
 - Actual relief expenditure of states far more than releases from SDRF & NDRF
 - Gap significant in wake of major disasters
 - NDRF releases higher than National Calamity Contingent Duty (NCCD) collections
 - Certain disasters not covered by SDRF/NDRF
- **No Specific Fund/Financing Mechanism for Reconstruction**
 - Adequacy of funding
 - Immediate availability of reconstruction funds

RELIEF EXPENDITURE OF STATES AS PERCENTAGE OF SDRF PLUS NDRF RELEASES

| State | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | Total |
|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| Andhra Pradesh | 252 | 131 | 190 | 154 | 132 | 123 | 128 | 130 | 144 |
| Arunachal Pradesh | 69 | 130 | 117 | 108 | 110 | 131 | 111 | 111 | 111 |
| Assam | 183 | 265 | 123 | 1 | 87 | 196 | 45 | 382 | 131 |
| Bihar | 138 | 327 | 54 | 804 | 91 | 515 | 102 | 4 | 136 |
| Chhattisgarh | 70 | 184 | 7 | 271 | 135 | 61 | 263 | 141 | 120 |
| Goa | 138 | 144 | 159 | 194 | 153 | 149 | 132 | 43 | 113 |
| Gujarat | 204 | 203 | 126 | 114 | 146 | 606 | 137 | 138 | 153 |
| Haryana | 139 | 132 | 137 | 184 | 202 | 257 | 209 | 125 | 171 |
| Himachal Pradesh | 126 | 132 | 133 | 113 | 125 | 126 | 119 | 177 | 127 |
| Jammu & Kashmir | 69 | 134 | 52 | 172 | 560 | 128 | 267 | 134 | 178 |
| Jharkhand | 0 | 120 | 273 | 85 | 468 | 194 | 406 | 381 | 287 |
| Karnataka | 74 | 95 | 183 | 107 | 123 | 123 | 111 | 110 | 110 |
| Kerala | 133 | 133 | 108 | 124 | 133 | 162 | 130 | 133 | 128 |
| Madhya Pradesh | 159 | 278 | 172 | 221 | 124 | 145 | 134 | 135 | 159 |

Note: Actual releases of CRF/NCCF from Ministry of Finance data; Expenditure from Reserve Bank of India a Bulletin on State Finances

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| State | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | Total |
|---------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Maharashtra | 124 | 199 | 147 | 185 | 203 | 363 | 0 | 82 | 209 |
| Manipur | 11 | 0 | 0 | 0 | 0 | 141 | 121 | 137 | 131 |
| Meghalaya | 133 | 133 | 112 | 266 | 90 | 133 | 133 | 134 | 130 |
| Mizoram | 94 | 134 | 79 | 150 | 273 | 95 | 114 | 68 | 110 |
| Nagaland | 440 | -14 | 19 | 321 | 696 | 79 | 263 | 37 | 104 |
| Orissa | 184 | 173 | 198 | 175 | 145 | 136 | 126 | 133 | 152 |
| Punjab | 11 | 127 | 260 | 133 | 133 | 140 | 261 | 144 | 155 |
| Rajasthan | 72 | 147 | 116 | 136 | 141 | 152 | 139 | 128 | 125 |
| Sikkim | 136 | 124 | 114 | 117 | 189 | 126 | 122 | 135 | 126 |
| Tamil Nadu | 125 | 108 | 115 | 130 | -9 | 247 | 184 | 46 | 128 |
| Tripura | 276 | 0 | 152 | 0 | 150 | 113 | 119 | 103 | 164 |
| Uttar Pradesh | 102 | 61 | 121 | 168 | 56 | 235 | 138 | 84 | 118 |
| Uttarakhand | 249 | 84 | 156 | 79 | 214 | 134 | 73 | 195 | 132 |
| West Bengal | 133 | 133 | 138 | 133 | 133 | 133 | 133 | 72 | 118 |
| TOTAL | 124 | 143 | 125 | 151 | 143 | 207 | 151 | 119 | 143 |

Note: Actual releases of CRF/NCCF from MoF data; Expenditure from RBI Bulletin on State Finances

Archana.G.Gulati, NDMA



NDRF RELEASES VIS-À-VIS NCCD COLLECTIONS

| Year | NCCD Collection (Rs Crore) | NCCF/NDRF Release (Rs Crore) |
|--------------|-------------------------------|---------------------------------|
| 2002-03 | 1648.45 | 1600.00 |
| 2003-04 | 1740.13 | 1587.42 |
| 2004-05 | 1484.44 | 2583.12 |
| 2005-06 | 1274.67 | 3061.44 |
| 2006-07 | 1727.88 | 1962.05 |
| 2007-08 | 2268.36 | 373.38 |
| 2008-09 | 2319.73 | 2279.92 |
| 2009-10 | 2619.56 | 3261.52 |
| 2010-11 | 2966.51 | 4179.25 |
| Total | 18,049.73 | 20,888.1 |

Source: Finance Accounts, Govt. of India

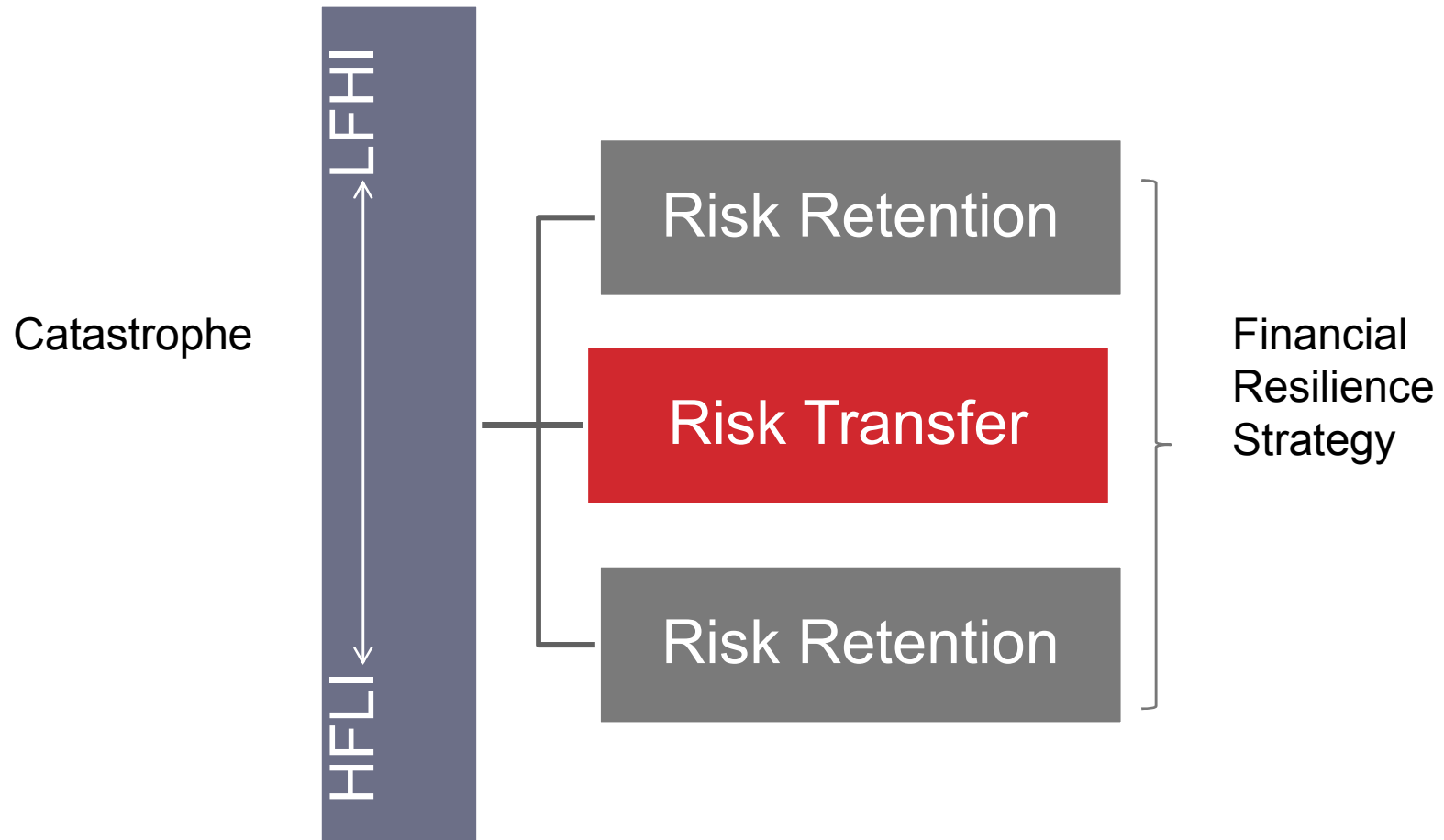
13TH FINANCE COMMISSION (FC) ON ROLE OF INSURANCE

- **View FC-IX onwards-insurance schemes not practical alternative to govt. relief**
 - Currently less than 1% insurance penetration in India
 - Micro insurance sector underdeveloped
 - Pooling of risk for high frequency-low intensity disasters not economical
 - Pointless if state must bear premium
- **“For low frequency-high impact disasters, financing through insurance mechanisms is certainly feasible option”**
- **“However, given the low level of insurance penetration in India, insurance products covering disaster events may only materialise sometime in the future.”**

INTERNATIONAL BEST PRACTICES

- **Compulsory earthquake insurance of residential buildings-Turkey, New Zealand, Taiwan**
 - Affordable insurance
 - Insurance becomes a vehicle for incentive to follow building codes
 - Create insurance consciousness in general public
 - Reduced reconstruction burden
 - Risk transfer
- **Reserve fund for relief and reconstruction-FONDEN, Mexico**
 - Purchase of risk transfer instruments e.g. insurance premiums/cat bonds
 - Graded approach combining risk retention and risk transfer
- **Parametric Insurance-Caribbean Catastrophe Risk Insurance Facility**

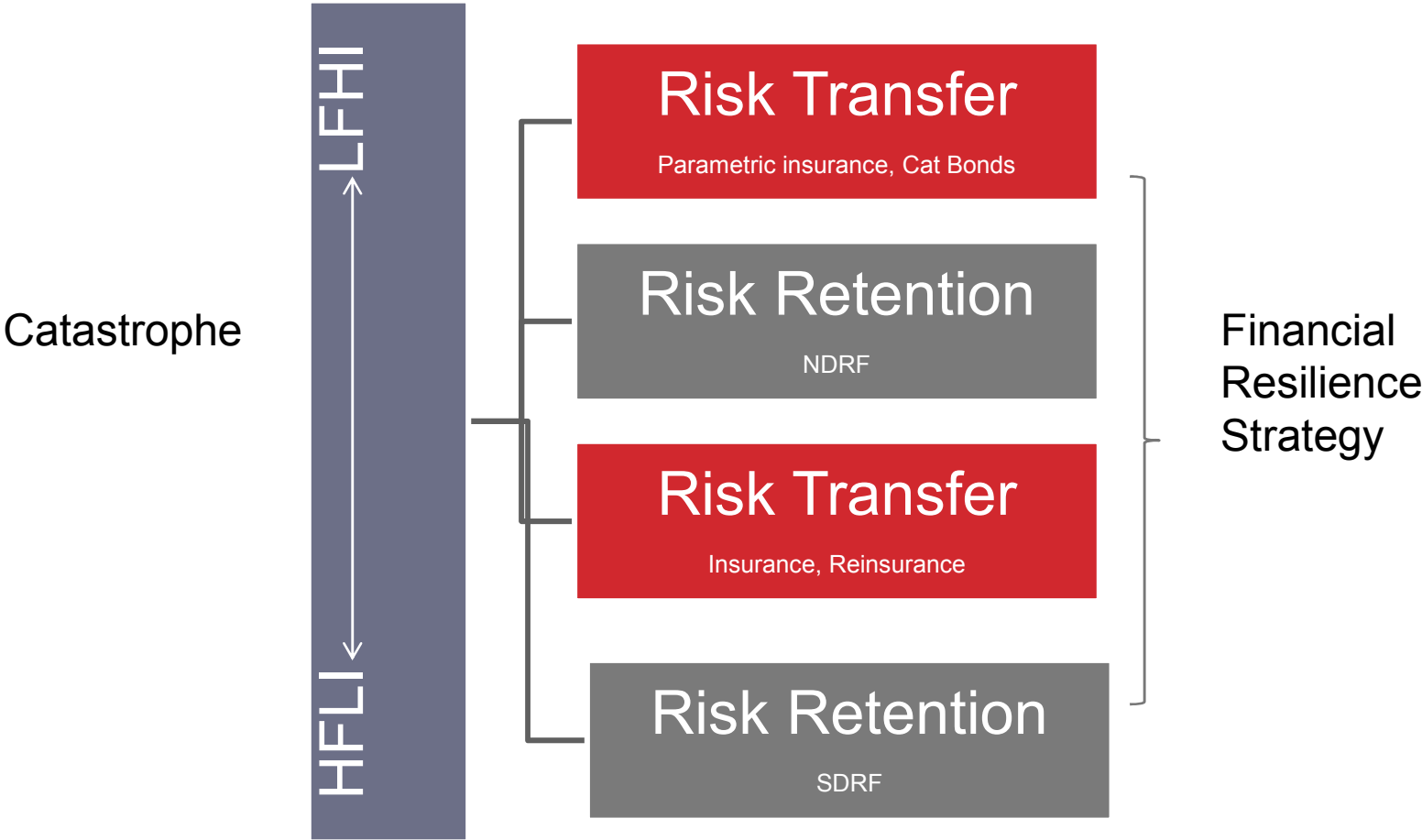
CATASTROPHE RISK LAYERING



NDMA-IRDA SUGGESTIONS

- **Purchase of insurance by States (% of SDRF?)**
- **Parametric insurance for NDRF for LFHI disasters**
- **Simple disaster insurance policy for individuals/families**
 - Innovative products
 - Govt. funding for BPL/continuation of present relief
- **Mandatory insurance of private homes**
- **Mandatory insurance coverage for Individuals visiting public places**
 - malls, theatres, hospitals, hotels, exhibition sites
 - Minimum compensation at par with SDRF norms
- **Insurance of public utilities**
 - water, energy, transport, telecommunications
- **Insurance of critical infrastructure**
 - schools, hospitals etc.

CATASTROPHE RISK LAYERING



POLICY AREAS

- **Insurance premiums as a risk transfer strategy (allocating part of reserves?)**
 - **As against the current norm of relying on reserves/contingency funding for relief and plan funding for reconstruction**
- **Insurance of Government property**
- **Mandating insurance towards reconstruction/relief related liability for**
 - **Utilities (including those in PPP)**
 - **Industry**
 - **Private individuals**

WAY FORWARD

- **Develop comprehensive risk financing strategy**
 - Appropriate balance of reserves/contingency funding & *ex ante* risk transfer.
- **Develop disaster insurance market (PPP)**
 - legislation, regulation, incentives, subsidies
 - Innovative, affordable products
- **Explore use of Insurance for Reconstruction**
 - **Encourages mitigation**
 - **Reduces burden on exchequer**
 - **Ensures liquid funds for reconstruction**
 - **Early economic recovery**

**A JOURNEY OF A THOUSAND MILES BEGINS WITH
A SINGLE STEP...**

THANK YOU