

National Institute of Disaster Management Insurance Institute of India

**Collaborative Workshop
(13th February 2020)**



Venue
Insurance Institute of India, Mumbai

Theme
Disaster Risk Financing, Insurance and Risk Transfer

Organized By
National Institute of Disaster Management
Insurance Institute of India



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One Day Workshop on Disaster Risk Financing, Insurance and Risk Transfer

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Session	Rapporteur
<i>Inaugural Session</i>	Ms. Mohanna Manna Ms. Aradhana Moktan
<i>Session 1: Disaster Risk Finance and Insurance for the option of Risk Transfer</i>	Mr. Tanmay Uttam Gound
<i>Session 2: Challenges in implementing insurance in DRR by state government</i>	Ms. Mohanna Manna
<i>Session 3: Designing Action Plan for the future</i>	Mr. Tanmay Uttam Gound Ms. Aradhana Moktan
<i>Valedictory Session</i>	Ms. Mohanna Manna



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Context

Disaster Risk Finance is a growing discipline that addresses fiscal impacts and economic losses caused by natural hazards (e.g. cyclones, droughts, earthquakes, floods) and supports countries to increase their financial resilience to natural disasters. Disaster management, across the globe, is facing a serious issue of the funding gaps. Pre, During and Post-disaster requirements of funds are different. In the pre-disaster scenario, most countries are engaged in risk reduction. The process of risk reduction is a challenge and hence disaster risk reduction has been adopted as part of development investment.

Mainstreaming Disaster Risk Reduction (DRR) has been the catchword for funding such activity. Many countries have implemented it differently. In India too, a different mechanism was adopted. There has been a provision in the National Act of Disaster Management 2005 for the creation of a disaster mitigation fund. This fund has been created by 15th Finance Commission as National Disaster Risk Management Fund & State Disaster Risk Management Fund. On the other hand, the government also created a concept of the Flexi fund. The Flexi fund is a part of the allocated development fund of each sector. Every sector will have to spend 25 percent of their total budget allocation (centrally sponsored scheme) on risk reduction in their sector. So far, this has not been utilized appropriately and optimally by state governments. Also, the government may take specific disaster risk mitigation projects depending on the national requirements.

To bring insurance companies, policymakers, and thought leaders to consider potential solutions to the problem, NIDM in collaboration with the Insurance Institute of India conducted a one-day workshop on “Disaster Risk Financing, Insurance, and Risk Transfer” on 13th February 2020, Mumbai. The workshop aimed at bringing together various insurance organizations and innovative initiatives in a collective effort to address Disaster Risk and build a resilient society. To manage risks through tools and platforms, we intended to bring together the ideas of the experts as well as ambitious thinking and action.

Objectives:

- Understanding Disaster Risk Financing and Insurance; and creating an action plan
- Identifying priority areas and recommending sector-specific solutions
- Exploring the benefits of having specific regulations for Disaster Risk Financing
- Supporting States to develop and implement Disaster Risk Insurance
- Examining Disaster Risk Financing solutions in other markets and translating them to suit Indian conditions.



Inaugural Session

The inaugural ceremony for the **National Workshop on “Disaster Risk Financing, Insurance, and Risk Transfer”** was graced with the presence of **Mr. Deepak Godbole**, *the Hon’ble Secretary-General of Insurance Institute of India (I.I.I)*; **Major General Manoj Kumar Bindal**, *VSM, Executive Director, National Institute of Disaster Management (NIDM)*; **Prof. Santosh Kumar**, *Head of Governance & Inclusive Disaster Risk Reduction (G&IDRR) Division, NIDM*; **Mr. Devesh Srivastava**, *the Hon’ble Chairman and Managing Director of GIC Re* and **Mr. G.V.V. Sarma**, *the Hon’ble Member Secretary of National Disaster Management Authority (NDMA)*.

Presiding the inaugural of the workshop, **Hon’ble Secretary General, Insurance Institute of India Mr. Deepak Godbole**, welcomed the dignitaries on the dais by greeting them and by stating that the disasters and emergencies have been on the rise all over the world which is the reason why there is a pressing need to share information related to disasters and documentation of the steps taken by a various stakeholder to the losses among the stakeholders. In his speech, he addressed the steps taken by the various institution to spread awareness, sensitization, education for Disaster Risk Reduction, and praised NIDM for working on its toes as it is the apex body dedicatedly focusing on the above-mentioned areas.



He stressed that there should be strict and mandatory rules made for construction sites, safety measures helping in decreasing the human, economic and environmental losses in the society. He emphasized that the government and the local authorities bear a huge amount of responsibility regarding the funding and reconstruction of the sites which will be at the cost of development and thus the fund has to be diverted from the fund allotted for building roads, dams and bridges. Thus, the insurance can play a vital and important role in addressing such issues by providing financial protection, limiting the economic hardships faced during disasters both to the victims affected by a disaster as well as the government authorities.

Insurance and Re-insurance should be effectively used in disaster financing and beyond the



facilitation for the post-disaster funding. The Insurance companies can also incentivize risk reduction by offering benefits in the cost to the buyer of the insurance by offering the good risk featured discounts. This clearly shows that insurance company is in the business of risk and risk management and they have a huge platform to perform and facilitate in disaster risk reduction and post-disaster funding. He elaborated that education on disaster management is a cost-effective risk management tool in the scenario of pre or post-disaster. Effective and efficient teaching and learning strategies are necessary to increase the effectiveness of preparedness of post-disaster activities and different levels of the community. Academia and educationalist are supposed to make educational resources available by co-operating and co-ordinating with various stakeholders involved in case of emergency.

The above-mentioned points were the background of the workshop that laid the milestone and helped in the merging of other institutes and agencies who put efforts into the subject matter of disaster risk management. However, the major challenge faced is bringing all the agencies together on a common platform. Thus, this workshop served that major purpose, by exchanging knowledge and ideas and the progress and steps taken by various other institutions. Then he gave a brief intro of the Insurance Institute of India, its history and background, and spoke about the seminar, workshops, and awareness programs initiated by them and connecting with the community. The message from the I.I.I was reached in the corner of the country by highlighting the possibility of hardships that they faced due to unforeseen events leading to loss of livelihood and property. So the role of insurance comes forwards which is reflected by the institute.

He illustrated about the workshop held at I.I.I regarding “Deposit Insurance” as to what would happen to people’s money if the bank doesn’t continue for a long time? NIDM has been doing an excellent job in planning and execution of disaster relief related activities and I.I.I proudly support these activities and gives assurance of full support and guidance by sensitizing risk owners and risk managers i.e. insurance and re-insurance industries and also ensure that the participants understand their role of insurance in disaster mitigation. Enriched by a good amount of new learning, I.I.I promised to connect with the stakeholders and ministries working hard to provide support especially to the vulnerable section of society who are devastated by disasters.



Major General Manoj Kumar Bindal, VSM (ED, NIDM) welcomed everyone on and off the dice. He started his speech by addressing the financial losses that continue to rise. He stated that developing countries have negative impacts on their GDP when a disaster strikes, it also sets back plan for future by a great amount of time. Thus it is necessary to prepare for the future while continuing battling the present, he stressed that even those countries who have robust disaster plan continue to face this problem as to how to deal with the cash currency? and how to ensure that person who is affected can get back on his/her feet in a much better way?. He spoke about the concept of build back better is given in Sendai Framework with Sustainable Development Goals as one of the target areas.



The major challenge faced in Disaster Risk Reduction is on the financial aspect, meanwhile, there have been changes in our policies in Disaster Management Act (2005) which spoke about Mitigation Fund but somehow that could not be a success. He highlighted the 15th finance commission report, where the funds allocated will be 80 percent of the budget to SDRF and 20 percent to the SDMA.

He talked about the issue that if someone has to spend or divert finances towards Disaster Risk Reduction, it might be under the cost of development. In case the diversion is for construction, then it can still be counted as a part of the development sector. But when it goes in paying some amount or some money to start the livelihood, then it is over and above the plan estimated by the state.

Hence, there is a need to bring the state governments, the private collaborators, and the insurance companies together to discuss how the risk can be shared and transferred. He finally stated an example regarding how a poor man who has been affected can get back on his / her feet. He reflected on the fact that the workshop's agenda should be on how to help the poor man, what amount is going to help, and in what capacity it is going to help?

He elaborated that NIDM has conducted similar workshops in 2013, 2015, and 2017 as part of the National Platform for Disaster Risk Reduction. He insisted to move from a joint state to an execution state where impact should be more on a practical level rather than only in books and policies. Lastly, he ended his speech by saying the basic question boils down to

- Who pays the premium and?
- Who pays the cost?

He highlighted that such questions should be addressed in the workshop.



Prof. Santosh Kumar (*Head-Governance and Inclusive DRR, NIDM*)

He acknowledged all the dignitaries on and off the stage. He continued his speech by saying that country is struggling for building financial resilience. Many times it is found that in disaster management system over the years since 2005 onwards have been able to put up a system for disaster management like setting up institutions like National Disaster Response Force (NDRF), National Disaster Management Authority (NDMA) and State/District Disaster Management Authorities under National Act of



Disaster Management (2005) and their main objective is to build resilience. He further stated that on the contrary wherein one part the Act was able to take forward building the institution system but when it comes to financial losses, we were unable to address this issue so far. So, while working with World Bank in 2001 Prof. Santosh Kumar had submitted a report where it was evident that India is losing 2 percent GDP per annum due to disasters and since then the percentage has increased and has been very high, yet there has been no intervention to address those issues and it remains uncovered. Now the major concern of the government is how to build back better and how to bridge the gap where the Executive Director of NIDM has clearly stated in his speech.

He also talked about the huge amount of financial reforms in the post-disaster scenario; as one for the relief and also addressed Post Disaster Long Term Recovery. Thus, he focused on the stakeholders who can help us and how collaboration can be done, as well as learning from the experiences of other countries. He stressed that such learning needs to be highlighted in this workshop and also gave certain recommendations so that it can go to the policy level. He also spoke about the flyer that was distributed during the workshop where the particular issue had been discussed. He highlighted best practices taken at national catastrophic related issues, now the focus should be on paving the way forward and coming up with innovative ideas. He appreciated the efforts taken by I.I.I and NIDM as well as other insurance partners who came under one platform.



The major highlights of his speech were:

1. Importance of “event hazard model-specific undertaking inputs” with different government departments and other organizations, such undertaking can be done based on the basis of geographic location, vulnerability, and climate, etc.
2. The value of “claim settlement” which could be done basis on any following proof/evidence like ration, car, mobile bill, and electricity bill. So, the insurance company should make use of technology and satellite imagery to access the hazard arising out of natural catastrophic, so that “claim settlement” is smooth for both parties.
3. He said that the output from the workshop should be a clear cut draft and action plan which shall be distributed among the policy from NDMA, I.I.I and SDMA. Thus, this workshop focusses on being a collaborative effort of various institutions and taking this forward at the National Platform for Disaster Risk Reduction scheduled to be held in May 2020.

Mr. Devesh Srivastava, *Chairman and Managing Director of GIC Re*, acknowledged the previous gathering of the stakeholders of various fields in the conference. While addressing the conference, he defined the scope of risk insurance in managing disaster risks and stressed the vitality of reinsurance in disaster management. He appreciated the efforts of NIDM and I.I.I in bringing the DRR practitioners and the Insurance industries together with an aim to mainstream risk insurance in disaster management. He further said that the disaster management authorities were willing for risk transferring and the insurance companies were ready to share their knowledge and competencies with the government. He emphasized that this conference would act as a bridge between these two parties. He also threw light on the current practices ongoing in the insurance sector for development and disaster management strengthened by related statistics.

The Managing Director of GIC Re points out that the major challenge is the penetration of non-life insurance which is reported to be less than 1 percent due to which most of the disaster losses are not covered under insurance. The losses covered under insurance are minuscule in comparison to the huge disaster losses. He shared the fact that every 1 percent increase of non-life insurance penetration in India is estimated to an increased Gross Domestic Product (GDP) by 0.2-0.3 percent increase. He concluded his address by stressing on the objective of the conference of charting a definitive action plan for insuring of disaster risks. He also expressed his willingness to collaborate with government agencies like the **National Disaster Management Authority (NDMA)** and the **National Institute for Disaster Management (NIDM)** to work in the field of disaster risk financing and insurance.

Mr. G.V.V. Sarma, *Member Secretary of National Disaster Management Authority (NDMA)*, appreciated the conference for taking a pro-active initiative for bringing together disaster management professionals and stakeholders from the insurance industry on a single platform. He mentioned about the previous two workshops held in this regard and pointed out the challenges in implementing their



deliberations. While delivering the keynote address, he further emphasized the need for collaboration of disaster risk management domain and the insurance industries by pointing out that critical public infrastructure also needs to be insured along with the personal belongings. He explained that it is very important to build back the infrastructure better along with the population as the ability of any urban system depends on this infrastructure. He also urged the State Disaster Management Authorities (SDMAs) and other Urban Local Bodies (ULBs) to actively work in the field of disaster risk insurance.

He also emphasized like others that insurance penetration especially for non-life objects is very less as Indians are not habituated with the culture of insurance. The insurance companies in India thus fail to deliver their best possible services because of this challenge. Due to the lack of proper service delivery, people also become unwilling in buying insurance, hindering the growth of the insurance sector in the country, thus continuing the vicious circle. He further emphasized that disaster management has been recognized now at all levels in India and the authorities have been allocated funds for the same making it a perfect opportunity for mainstreaming risk financing and insurance in the field. He further said that the need of the moment is to bring the insurance industries at the forefront and create awareness about risk insurance and finance. Insurance companies should come forward and suggest in what manner specific packages or plans should be made for infrastructure, housing, etc. The terms and conditions of premium for the insurance also needs to be made specific by the insurance industries. He also suggested a provision of risk pooling as a way forward.

Followed by the address of the Hon'ble Member Secretary of NDMA, a book published by the Insurance Institute of India (I.I.I) on “**Challenges in insuring flood-prone areas of Mumbai**” was released by the dignitaries of the inaugural session. **Dr. George E. Thomas**, *Professor, College of Insurance, III* and **Dr. Archana Vaze**, *Assistant Professor, College of Insurance, III* had carried out a study on Mumbai floods to determine the scope of risk insurance. The findings of the study resonate with **Mr. G.V.V. Sarma's** thought of the need of insuring critical infrastructure. The book also depicts the scope of natural – catastrophic insurance (NAT-CATS). The authors further encourage the stakeholders to not work in silos but to develop a nexus involving all the stakeholders.

While concluding the inaugural session, **Dr. Archana Vaze** also proposed the vote of thanks to the dignitaries of the inaugural session of the conference. **Mr. Deepak Godwale**, *the Secretary-General of the Insurance Institute of India* presented with the token of appreciation to the guests on behalf of the organizing team of the conference.



Technical Session I: Disaster Risk Finance and Insurance for the option of Risk Transfer



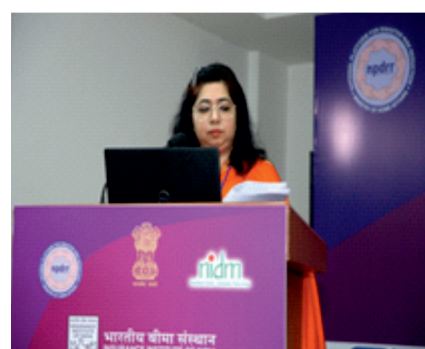
Panel (Left to Right) : Mr. Satish Raju, Mr. J Augustine, Major General Manoj Kumar Bindal, VSM, Mr. Devesh Srivastava, Mr. Vijaykumar Kalavakonda, Mrs. Shefali Sehwni.

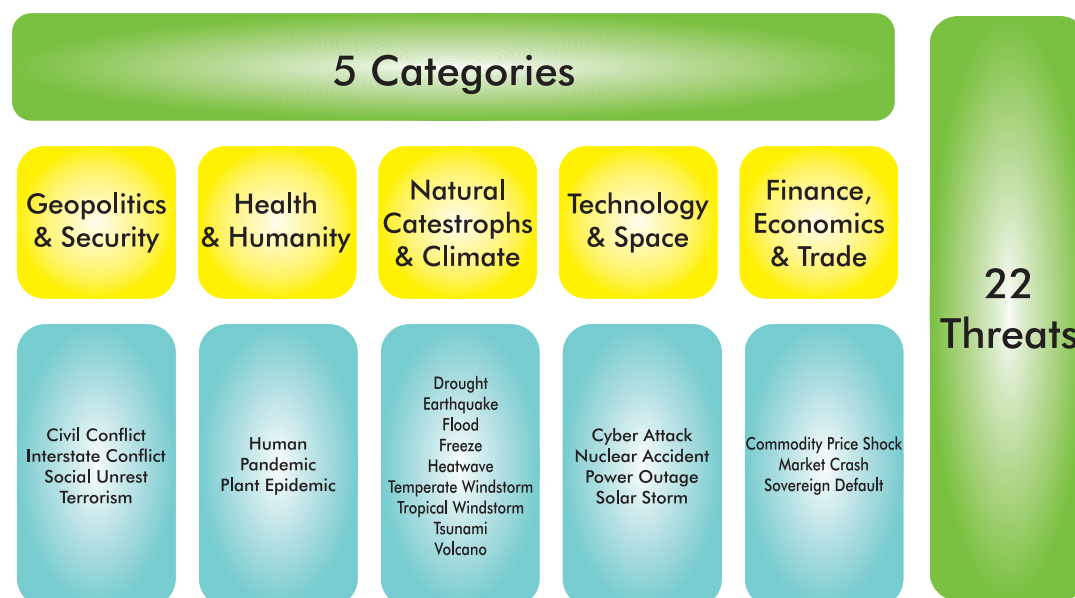
Chair: Mr. Devesh Srivastava, CMD, GIC Re

Remarks from Chair: Mr. Devesh Srivastava, CMD, GIC Re, welcomed all the panelists and set the tone for the first technical session of the workshop.

Co-Chair: Major General Manoj Kumar Bindal, ED NIDM

Mrs. Shefali Sehwni, CFO, Lloyds India, who was the first panelist to start the session, brought some interesting points to the table. She presented the work on City Risk Index (CRI) and the Global rankings of India's prominent cities to CRI. The study analyzed **279 cities** across the world, analyzed with over **22 threats** within 5 distinguished categories.





The key takeaways she highlighted during the presentation was, particularly in the Indian context:

- **Geopolitical and security threats** such as civil conflict, interstate conflict, terrorism, and social unrest, account for almost 60 percent of Indian cities' risk.
- The third-largest threat in India is **human pandemic**.
- **Floods and other natural catastrophes** were also featured quite significantly.

One of the key findings of the study was 'Civil conflict' which is the biggest threat to GDP across all cities in India, except for Kolkata which faces extensive tropical windstorm risk. The following table shows the top 10 cities across India which are at high stake concerning GDP at risk.

Sr. No	Indian City Ranking	GDP at Risk	Global Rank	Biggest Threat
1	Delhi	3.52	42	Civil Conflict
2	Mumbai	3.14	50	Civil Conflict
3	Bangalore	2.53	62	Civil Conflict
4	Kolkata	1.72	86	Tropical Windstorm
5	Chennai	0.91	100+	Civil Conflict
6	Hyderabad	0.9	100+	Civil Conflict
7	Ahmedabad	0.9	100+	Civil Conflict
8	Pune	0.86	100+	Civil Conflict
9	Surat	0.79	100+	Civil Conflict
10	Kanpur	0.14	100+	Civil Conflict



She also mentioned that “Insurance is currently an underused resource in disaster relief financing, hence recognizing the need for a specialist product that re-addresses this balance, Lloyd’s launched the Disaster Risk Facility (DRF) in 2015.” A joint project between the Insurance Industry, the United Nations, and the World Bank -which aims to give 400 million people in 52 countries access to direct or indirect insurance by 2020.

Mr. Vijay Kalavakonda, World Bank in his presentation titled “**Disaster Risk Finance and Insurance Risk Transfer Options – International Experience**”

Deliberated the participants on the following:

- There is a huge gap in uninsured losses, resulting in a burden to the government,
- Nat-Cat Protection Gap in India – nearly 90 percent of disaster losses are uninsured losses,
- Dealing with uninsured losses becomes a shared responsibility between the central and the state, and a significant burden is on the States particularly for recovery & reconstruction.



He shared three levels of solutions – **1. MACRO: Risk transfer solutions for (sub)sovereigns to cover their direct & indirect costs. 2. POOLING: (Re)Insurance pools such as the Turkish Catastrophe Insurance Pool (TCIP) to protect homeowners, or the Caribbean Catastrophe Risk Insurance Fund (CCRIF) to protect the small island countries in the Caribbean’s, or the Local Government Pool (LGU Pool) in the Philippines which insures local governments through a pooling mechanism 3. MICRO: Including market-based disaster-linked safety nets/social assistance programs etc.** He briefed about the history of schemes from around 1940 to 2020 from different countries across the world. He also mentioned examples of recent innovative Public-Private-Partnership (PPP) risk transfer solutions covering mostly agriculture and property Cat risks. The presentation concluded with a couple of examples of insurance pooling from different countries with different types of disasters.



Mr. Satish Raju, *Chief Executive Officer, Swiss Re India*, briefly talked about Rebuild Kerala, a document prepared by Kerala State Government and highlighted the role of state government, further stressing upon the insurances and documenting the necessity of it. Every state has a disaster management plan and inclusion of relief and mitigation funds, but none of them has mentioned insurance so far.

Further, he reiterated the 15th financial commission's mitigation fund provision and appreciated the move.



For instance, the 15th Finance Commission has allotted approximately INR 419 crs towards DRM for 2020-21 to the State of Kerala. Compare this to more than INR 20,000 crs of estimated losses incurred by the 2018 Floods. State Disaster Relief Funds never cater to permanent reconstruction, which creates a huge gap, and insurance can fulfill this critical gap. Mr. Raju suggested, that States be provided some flexibility in using the funds for the purchase of insurance/other types of financial protections, particularly the 10 percent provision in the 15th Finance Commission report for capacity building. These investments will help during the need after a catastrophe; since NDRF and SDRF usually take significant time to reach. He also recommended providing flexibility to the state for using this provision to up to 5 percent according to state exposure to the disaster.

He also cited an example of North America as an interesting solution, where insurance companies partnered with the city and infrastructure utility service providers and had a pre-agreed rate contract. This helps in funding availability after disaster and reconstruction could start immediately. This can be seen as one of the best practices. Another best practice is city air pollution in Italy. City pollution can also be catered in insurance through free public transport vouchers, where citizens of the city get vouchers after AQI exceeds a certain limit.

He appreciated and mentioned that the conference is a very good opportunity where different stakeholders can come together on one platform, and available pre-existing solutions can be brought on board which can be useful in bringing better outputs.



Addressing the audience, **Mr. Joseph Augustine**, CEO, Axa XL India talked about the transfer of risk. He stressed upon, “In India, we always talk about the transfer of goods, transfer of services but we never talk about the transfer of risk out of India. And that’s where the reinsurance comes in”. Further, he explained the different parametric solutions offered by Axa XL which is a subsidiary of global insurance and reinsurance company of Axa.



He mentioned, a product like ‘Axa Climate’ which is exclusively working on natural catastrophe and it is an adjustable and transparent way to manage the climate risks they pose to businesses and public sector institutions. It’s called parametric insurance. These insurances have a separate product for tropical cyclones as well as pandemic covers. He underlined the importance of reinsurance when the natural catastrophe strikes and state or individual is in dire need of the monetary contributions.

Mr. Hitesh Kotak, Chief Executive Officer, Munich Re particularly talked on the Indian context. According to him, India has following two trends which needs to be addressed and incorporated while designing the solutions

Because of the wide-area and diversity of the country, some-how we move on from the event very quickly and always wait for one large trigger to happen to take necessary measures.



He also shared an example of the Sri Lankan government where a huge flood event took place in May 2016. Fortunately, the insured loss and economic loss is much better as compared to India. The learnings from this can be incorporated in the Indian context. Although the scheme was well designed, the claim pay-out process was cumbersome and took a long time. The identified problems like; the assessment of *kirana* house, every household



needed to be assessed, which stretched the process. He suggested these gaps can be well addressed and incorporated into our schemes for better functionality.

He also suggested that our schemes need to work at two levels thus making it more relevant. The first level, to ensure public assets like bridges, roads, ports-airports, dams, etc. The second level is the large mass of people; more vulnerable people e.g. Fisherman etc. and then gradually roll up the scheme to cover more and more country.

We can work in small samples and try to bring some experience, more pay-outs can build-up trust and that will help in eventually not only getting more allocations but also willingness to rely on the risk transfer mechanism.

Points discussed during Open House:

Mr. Devesh Srivastava, CMD, GIC Re, while discussing the need for a catastrophic pool mentioned that Reinsurance itself is a pooling mechanism. Since all the stakeholders from the different organizations came together, a solution could be chalked out for the betterment of the country.

It was also discussed that a center for financial resilience can be established which can bridge the knowledge gap between government stakeholders and the insurers and re-insurers.

Concluding Remarks:

A large amount of contour mapping has been already done. Since, every agency is doing in xylose, hence the parameters varies. One is with Risk Index but that may not bring out the exact risk due to variation of parameters. Hence, commonality and coherence of parameters are needed. As findings of Lloyd's study on the city risk index need to be revisited, different parameters can deviate the result, which can be the case in the mentioned study.

After the following session, a message from Dr. P. K. Mishra, Principal Secretary to Hon'ble Prime Minister was delivered by Major General Manoj Kumar Bindal,VSM, ED NIDM in his absence. The message highlighted:

- Prime Ministers 10-point agenda on DRR.
- 15th Finance Commission Report which is submitted recently.
- Importance of insurance not only for financial resilience but also as a tool for mitigating the impact of a disaster.



- He also congratulated NIDM and I.I.I for their collaborative effort for taking up the initiative and creating a milestone for Disaster Risk Financing.



Followed by the message, there was a release of a report on **“Property Insurance in New and Existing Housing”** a study of Insurance Institute of India for National Housing Bank (NHB) which was released by **Mr. Devesh Srivastava**, GIC Re in the presence of **Mr. Kishore Kumbhare**, Deputy General Manager, National Housing Bank and **Mr. Sidharth Mohanty**, CEO, LIC Housing Finance, Co. Ltd.





Dr. Archana Vaze from *Insurance Institute of India* talked about some of the key findings as follows:

- Individual houses have no cover which makes them more vulnerable during the catastrophe,
- Lack of understanding in a loan-insurance relationship, and,
- Double collateral securitization of the property is difficult to address.

She also recommended that, instead of having compulsory insurance, we can have a stick or carrot approach like providing tax benefits, etc. However, there is a necessity of providing a legal framework for such initiatives to support any decisions we make.



Technical Session II: Challenges in Implementing Insurance for Building Disaster Risk Resilience – State Government Perspectives

Chair: Mr. P. N. Rai, IPS (Rtd.), Member, Bihar State Disaster Management Authority (BSDMA).

Remarks from Chair: Dr. P. N. Rai suggested that this is a platform for the insurance industries to gaze at the requirement of the DRR sector and come up with effective solutions. He also mentioned that presently state governments are mostly concerned with giving compensation like ex-gratia, crop assistance, restoration, recovery, etc. However, there has been little risk insurance especially if the disaster victims belong to rural areas. He further conveyed that the solutions need to be drafted in such a manner that state governments can easily implement them.

Co-chair: Dr. George E. Thomas, Professor, College of Insurance (I.I.I)

Speakers: Smt. Usha Rani, IAS, Principal Secretary, Andhra Pradesh; Mr. Pradeep Jena, Principal Secretary, and CEO, Odisha State Disaster Management Authority (OSDMA); Mr. Ramachandradu, IAS, Additional Secretary, Bihar; Mr. Thiru A.B. Rafiulla, Deputy Director of Agriculture (Crop Insurance), Chennai, Tamil Nadu.

Mr. Thiru A.B. Rafiulla, Deputy Director of Agriculture (Crop Insurance), Chennai, Tamil Nadu, shared the success story of the implementation of the Pradhan Mantri Fasal Bima Yojana in Tamil Nadu. He highlighted the best practices and challenges faced during the implementation of this program. He also talked about the existing framework of the state dealing with crop insurance. He also mentioned that the state government of Tamil Nadu is focusing on Disaster Risk Insurance and 2,794 crores have been paid as a premium to the insurance companies which also constitutes around 6 percent of the state budget. Some of the major findings pointed out by him were as follows:

- The Pradhan Mantri Fasal Bima Yojana witnessed an increase in the enrolment of farmers in comparison to its previous schemes. In three years, the number of enrolled farmers had increased from 18.73 lakhs to 20.11 lakhs, which is around 78 percent of the total farmers in the state.
- The area insured under insurance has also maintained a steady-state from 2016-17 constituting more than one-third of the farmers.
- Around 13.01 lakhs farmers have been benefited in the year of 2018-19 under the provision of this scheme.
- Tamil Nadu had paid the highest claim amount among all the states in the year 2016-17 and 2017-18, while the premium claim ratio in the state was 1:2.8 in 2016-17 and 1:1.3 in 2017-18.



- The challenges identified in the implementation of this scheme were as follows:
 - Non-establishment of functional offices by Insurance companies,
 - A dearth of funds - publicity campaigns & other contingencies,
 - Non- functioning of CSCs during a crucial period of enrolment,
 - Issues in the portal and CCE Mobile App,
 - Yield conversion factor in the calculation of claims,
 - Inadvertent error in posting yield / sown area data,
 - Delay in Sorting out Issues- belated payment of claims.
- The following were the best practices adopted in the state that had been highlighted:
 - Forming an exclusive administrative body supervising risk insurance by reorganizing staff at headquarters and district level,
 - Publicity, awareness campaigns & facilitation centers,
 - Digitization through apps,
 - Conduct of crop cutting experiments (CCES),
 - Application of remote sensing technology,
 - Continuous monitoring with Financial Institutions & Insurance companies,
 - Timely sanction of the state share of premium subsidy,
 - Increasing clusters from 3 to 6 numbers,
 - Adoption of a multi-year contract,

Mr. P. N. Rai concluded that any risk insurance scheme would only get successful if the government plays a pro-active role in its implementation.

Mr. Pradeep Jena, *Additional Chief Secretary, and CEO, Odisha State Disaster Management Authority (OSDMA)* shared how the state of Odisha is lagging in the risk insurance sector despite an exemplary success of disaster risk management in the state. He also pointed out the gap in the risk transfer scenario in India. He further highlighted the vulnerability of the state of Odisha and the major losses caused by cyclones such as Fani, Hudhud, Aila, super cyclone 1999, etc. He also stated that being one of the most vulnerable states and being frequently affected by cyclones, lightening, risk insurance schemes for the state would have a great prospect. He also stated that Odisha has already reduced the casualties and are presently aiming to reduce the infrastructural losses as well. He suggested that pilot projects should be initiated for implementing risk insurance schemes.

He also stated that the Post Disaster Needs Assessment (PDNA) after Fani cyclone had pointed out that INR



28,000 crores have been damaged in the state, which has been recovered from the State Disaster Response Fund and National Disaster Response Fund. He also shared the assistance provided by the government during the aftermath of a disaster for recovery purposes. He pointed out that these assistances do not cover many infrastructural losses and hence the need for disaster risk insurance. He also requested the insurance companies to design packages that gave more clarity to the terms and conditions. He also urged the National Disaster Management Authority (NDMA) and the National Institute of Disaster Management (NIDM) to ensure the mainstreaming of risk insurance.

The next speaker of the session was, **Mr. Ramachandradu, IAS, Additional Secretary, Bihar**, who discussed the challenges identified from the perspective of the state government of Bihar. The major challenges identified by him were as follows:

- Creating awareness regarding disaster risk insurance as a big obstacle in the present Indian scenario.
- Lack of comprehensive data regarding the disasters, typical losses occurred, etc.
- He also stated that lack of awareness of rural people, especially the illiterates among them,
- He also pointed out there should be a simple and comprehensible implementation procedure for disaster risk insurance. He also like Mr. Pradeep Jena urged the Insurance sector and governments to build more comprehensive packages of disaster risk insurance.

He concluded his speech by requesting the apex authorities like NDMA and NIDM to think about how the premium amount for insurance can be fitted in the existing state budget framework.

The chair also agreed with the opinion of **Mr. Ramahandradu** and emphasized the need for annual events like floods and cyclones to be covered in the disaster-prone states.

Smt. Usha Rani, IAS, Principal Secretary, Andhra Pradesh, shared how the state is aiming to transform the state into disaster-resilient through techno-centric, inclusive, innovative, and multi-hazard risk reduction strategies. She highlighted the vulnerabilities of the states and declared that loss of around Rs 42,670.65 crores due to natural calamities has been reported from 2014 to 2019. She shared some of the best practices of disaster risk insurance that have been implemented in the state which are as follows:

- **SHG – Bank linkage insurance** - actual cost of group insurance for life, health, and livestock for borrower and spouse can be recovered; administrative charges may be recovered as per IRDA guidelines.
- **Abhaya Hastham Velugu co-contributory insurance and pension scheme** was introduced on 6th February 2009, - The scheme primarily acts as a social insurance program for the women as well as the



family by providing social protection, against conditions including old age, disability, death, and others.

- **Community Managed Micro-insurance - Indira Jeevitha Bima Pathakam – AABY:** At State level, the Society for Elimination of Rural Poverty, SERP, an autonomous body chaired by the Chief Minister of Andhra Pradesh, under the Department of Rural Development for overall facilitation, monitoring and evaluation of the scheme. And at the district level, Zilla Samakhya at each district shall function as an implementation agency for the overall management of the scheme.
- The following are the proposed stages of **Disaster Risk Management Plan** for implementing disaster risk insurance schemes:
 - Micro planning in the Village Secretariat,
 - Mapping and Database creation of entire vulnerable areas and population segments,
 - Identification & Classification based on Risk & Economical Categories,
 - 100 percent truthing of the created database.
 - Introduce the insurance provider to the scheme.
 - Mutual benchmarking and assessment by the government & insurer.
 - Launch of the scheme.
 - Annual updation of a database by an insurer.
 - Annual validation of the database by government & insurer.

She also stated that the Andhra Pradesh state government along with SDMA envisions to take-up the entire responsibility of premium payments and claim disbursement within the affected parties and to eliminate budgetary imbalances resulting from calamities & relief operations.

Points discussed During Open House

Mr. Ashok from the *Department of Science and Technology* come together and build a consortium to share expertise. He told that several technological Institutes like IITs are already equipped with many advanced data collection and mapping techniques but the benefits are not been shared with the Government Authorities.

Concluding Remarks

The co-chair of the session **Dr. George E. Thomas**, *Professor, College of Insurance (I.I.I)*, recommended the Self-Help Groups (SHGs) as implemented in the state of Tamil Nadu and micro-insurance. He also strongly agreed on the suggestion of a common platform for data sharing.



Technical Session III: Designing Action Plan for the Future



Panel (left to right): **Mrs. Usha Girish**, (Deputy General Manager, United India Insurance), **Mr. Ankur Gupta**, (Head of Business, Munich Re), **Mr. Deepak Singh**, (World Bank), **Mr. G. V. V. Sarma**, (Member Secretary of National Disaster Management Authority) (NDMA) **Ms. Madhulika Bhaskar**, (G.M GIC Re), **Mrs. S. N. Rajeshwari**, (General Manager, New India Assurance Co. Ltd) and **Dr. George E Thomas**, (Professor, College of Insurance I.I.I)

Chair: **Mr. G. V. V. Sarma**, Member Secretary of National Disaster Management Authority (NDMA)

Remarks from Chair

He spoke about enhancing a workable action plan which should not be general but rather it should bring down to brass tax, kind of policy/prices/package, and some kind of indicative price of different products. Such terminology should be discussed by the representatives of the state governments to relate to the various options available.



Co-Chair: Mr. Deepak Singh, World Bank

Remarks from Co-Chair

Mr. Deepak Singh, World Bank gave a presentation regarding the discussion with the Finance Commission. He elaborated on the importance and need for certain instruments and mechanisms of risk transfer and it is very clear that the state government is not able to absorb the kind of fiscal shocks when a disaster strikes. However, he said that insurance should not or could not be the only solution but instead, it should be part of an umbrella coverage embracing all the aspects including the funding of resilience/mitigation and risk transfer. The risk transfer mechanism needs to be used as a kind of tool to incentivize risk reduction if we all look at the cycle he stated that there is an amount of risk like pro-active risk reduction measures by way of trying to reduce the risk and still there is a residual risk and part of that risk should be transferred to the market. While the other part of the risk has to be absorbed by the government and the institutions on their own.



Thus, first and foremost we all need to come to a certain understanding of the various products available and how it can be done in a structured manner for different states. Thus, the need for understanding what kind of risk profiles, vulnerabilities, past events, and basic database provided on one platform. He praised NDMA who is working on such issues.

- Firstly, he reflected that the SDRF and NDRF norms do not permit the state to spend on the insurance premium or investment in such kind of activities.
- Secondly, many discussions had been carried out on the damage and loss that the disaster-prone states (Bihar & Odisha) face and the possibility of funds that can be pooled out from other unaffected disaster states and invested further. Thus, the states have a major role in building capacity for example Odisha has developed huge response mechanisms, yet they are still lacking in addressing the losses.
- Thirdly, how the losses can be minimized in the productive sectors and the infrastructural sector while focusing on the risk transfer mechanism.



The next speaker was **Ms. Madhulika Bhaskar**, *G.M, GIC Re*, who illustrated the role of re-insurance and gave her key insights as follows:

- Acting as a backup for an insurance company by bringing about geographical diversification,
- A major job of re-insurance is bringing in new products, some kind of knowledge sharing from the international market to our country. One cut exploration was bringing catastrophic bonds where it is feasible for a diverse country like India. However, it was seen that it was not a feasible move since India has a high saving interest rate.
- India is not considered as a catastrophic country due to its huge size since disaster takes place differently so overall if the entire premium is taken from the country, it sets offset against the claims of few states.
- The other issue she highlighted was on the claim size. India has paid the highest claim for Mumbai Floods but when we buy cover we buy more on earthquake because the probable maximum loss for an earthquake is perceived as 100 percent. So even if the buyer is from an earthquake zone, the re-insurance has seen more claims coming from the flood perils.
- The other role that re-insurance plays is data sharing, the partner companies are responsible for capturing data from India and building the models but when the primary data source lies with the companies, the majority of valuable data is lost. Their major involvement includes backing up prices in the market, creating a database, being the mediator between the regulator and the public.



Mrs. S. N. Rajeshwari, *General Manager, New India Assurance* started her speech by giving a brief introduction about New India Assurance Co.Ltd and talked about the intervention and collaboration with different government schemes. She said that insurance companies should increase the penetration, insurance is a law of large numbers and the premium should be made affordable. When there is a continuous catastrophic loss, the insurance company cannot afford the reinsurance rate, then in such cases, the customers also opt-out of insurance. Currently, the GIC has increased the IIB rates which will be helpful for the market also. She also emphasized on the awareness of insurance that should be created. It should be included in the education system, should be imbibed in the subject and the importance and relevance of insurance should be taught. Moreover, when a person can contribute to Kerala flood and gets ATG donation while getting an income tax release of 30 percent, probably such social welfare schemes where such income tax benefits exist should continue and be encouraged.



She recalled the meeting with the General Insurance council where she made a point regarding deducting the home insurance in income tax benefits. Such benefits will help more people to opt for insurance. She elaborated on one more risk regarding CSR companies and public sector companies who can re-allocate the funds they receive.

Mr. Ankur Gupta, *Head of Business, Munich Re*, clearly stated that research-related activities going on in bits and pieces in various departments. He iterated that the companies are trying their best by putting their efforts and coming up with solutions, addressing concerns on disaster management sites but such solutions are not necessary and cannot be implemented across the country. He discussed the key challenges and problems mainly the data reach and implementation and if these issues are resolved, then shall be a plus point for the insurance companies, and the insurance schemes can be appreciated and reached out to the real beneficiaries.



- On the other hand, if we see that finding the right data would be time-consuming and costly, then the outcome of data will be critical. This is something



that we have to build over a while, thus the immediate action is to make use of the data available by developing various solutions. We can initially take pocket regions with parametric solutions as well as indemnity benefits with it. He explained that such schemes are for high severity losses. Such schemes should not be expected to pay out every year just because the beneficiary has paid a premium. So, to tackle such situations, the premiums will be made reasonable when the motivation is to pay for disasters rather than additional normal losses which can be taken care through normal risk mitigation activity, e.g. Odisha's preparedness for disaster can help reduce a lot of risks yet a parametric scheme could have support in post-disaster mitigation by supporting their livelihood. He also focused on three options available as follows:

- For people below the poverty line, their livelihood should be supported. If these people are not able to pay a premium on their own, so a certain subsidy or help should be provided. They should be provided not just the cover but also the swiftness of the payment on a timely basis.
- The other option would be leverage on the existing scheme and the concept of geo-tagging them and linking with their bank account. Direct payout should reach these beneficiaries in case of disasters.
- He emphasized government infrastructure to support the immediate initiation of the infrastructure rehabilitation supported by immediate contingency funds helping the government to start with debris removal or clearance of roads or flood-affected areas.

Mrs. Usha Girish, Deputy General Manager, United India Insurance started with the briefing about the United India Insurance. She explained how insurance works with risk transfer and the relation of transfer and price is related to each other. She stressed that if the price becomes identical to the sum insured, then people usually do not buy the policy. To capture that the premium remains valid, one should ponder upon the preparedness to combat the disaster because preparedness brings in more resilience, and resilience is embraced by all insurance companies.



- She explained how we should be looking at the coverage or the number of people coming in.
- She said that in the workshop, they were able to identify the stakeholders, with a common intent wanting to take part in the nation-building especially when it struck with a heavy disaster.
- She also suggested that a member committee should be formed with perseverance with an ultimate



goal and who would work in accomplishing that goal as well as sorting out the differences.

- She also recommended that insurance companies can come up with micro-insurance products e.g. Andhra Pradesh was suggesting small insurance product paying a small portion of it towards premium
- She requested that the insurance companies can look at other international models like the Caribbean model, and customize it to suit the insurance companies keeping in mind our country requirement.

Inhouse speaker, **Dr. George E Thomas**, *Professor, College of Insurance, I.I.I* collated his thoughts in 5 major points. The very first question he raised was on the government as to the initiation process of disaster insurance as it cannot bear all the costs. While on the other hand, the insurance companies need premiums and since the people are not aware they don't have the willingness to pay or the ability to pay. Another point that he highlighted was that the subsidy should be provided to those who can pay the premium by the government, but the government can provide subsidy only for a certain period. Subsidizing funds should be different for different disasters or for initial stages some states can pay more in terms of the risk assessment while some can pay less.



- He raised the question of how do we pass the risk entirely to an insurance scenario, whereby we should work on data
- He highlighted the issue of junk data and work on correct data so that the prediction is correct and also formulating pricing. The insurance companies should have reliant re-insurance companies that shall serve as a backbone.
- Point of convergence should be made, a point where the IRDA & NDMA have to talk and come up with insurance policies e.g. there have to be strict norms about construction buildings or fines that could be charged by the insurance companies. The insurance companies should be monitored and evaluated by the government so that they work effectively.

Mr. Deepak Singh, *World Bank* explained that the role of NDMA is critical and crucial. He suggested that NDMA can play a major role in any kind of risk transfer mechanism working between state governments and the retail end. The pooling of risk needs to be taken forward by convincing different states e.g. what if Odisha collaborates with Uttarakhand pooling the risk from the earthquake vs. cyclone on the east and west coast?



- He also stated that risk has to be minimized whereby he emphasized the housing scheme in the Central Government Funds, in collaboration with several state governments, whereby certain kinds of mechanisms can be tagged along. He spoke about reconstruction projects in Bihar, Odisha, or Tamil Nadu and whenever the government is funding the post-disaster reconstruction of houses there is a necessary insurance component that is attached to it. He was astonished to know about the housing rate and the premium which was not feasible for the current market. Thus, he stressed that the central government should come up with a balanced rate and pay the premium that shall be easily affordable.
- Similar, he conveyed that housing is an easy infrastructure to tackle because formal houses at urban areas have a mechanism for approval at various stages by providing free license, free building permission to the municipality and the local body and make it mandatory that every house constructed in a vulnerable area should be under insurance. He suggested that every house coming under property tax assessment and property tax payment has leverage on the insurance and gets insurance premium with an interest. The existing scheme should be modified to increase the coverage in certain sectors very rapidly.

Mr. G. V. V. Sarma, *Member Secretary of National Disaster Management Authority (NDMA)* suggested that the insurance companies can have their deliberations and identify how they would like the package. He also proposed if the insurance institute can design proper disaster damage related insurance products. For designing, the gaps and challenges faced should also be analyzed by them.

He mainly stressed on these key points as follows:

- The gaps should be identified by the insurance companies and later brought to NDMA for cross-checking the gaps, the hazard scientific data from different institutions or any other specific data from the government. NDMA can help in preparing the data, but NDMA should not be accountable to design the product of insurance companies.
- Secondly, since a representative from financial services was present then the discussion regarding the fund support matter can be cleared out and partial subsidy should be funded by the government. The state should take authority on a case to case basis analysis starting the risk transfer mechanism from one or more districts. Also if the insurance company would be ready with the draft package or proposal and with clear cut pricing, then it would be possible for NDMA to support.
- He suggested for the formation of a small working group consisting of three members so that something concrete can be worked out. Further, support from IRDI and the department of finance should be taken. The working group should be brief and proper with a clear focus and time limit of one month.



Valediction

The valediction ceremony of the conference was addressed by **Major General Manoj Kumar Bindal**, VSM, *Executive Director, NIDM*; **Mr. Arindam Mukherjee**, *Director, College of Insurance, I.I.I*, and **Dr. Archana Vaze**, *Assistant Professor, College of Insurance, I.I.I*

Major General Manoj Kumar Bindal, VSM, *Executive Director, NIDM*, concluded that the need for disaster risk insurance has been realized. The way forward is to pave the way for implementation. He also stressed on the formation of a “Working Group” as suggested by the Member Secretary of NDMA. He suggested that the initial working group can consist of representatives from the Insurance sector, NIDM, and NDMA. He also talked about standardizing the parameters at a national level. He also said that the existing schemes need to be renovated accordingly to pay the premium of the insurance. He also suggested that the state governments have to be at the forefront with the support of the central government. The need for sensitization among the state authorities is also required.

Prof. Santosh Kumar, *NIDM*, requested the audience to come forward with the suggestions. The following were some of the major recommendations that had been pointed out by him:

- A suggestion of amending the Law for permission of utilization of Corporate Social responsibilities (CSR) & funds collected by NGOs for paying a premium of risk insurance.
- Incentivization of the government authorities has also been suggested.
- Nodal agencies for each type of disaster need to be identified and held accountable for authentic datasets.
- Distinct Datasets at the individual level, state level, and macro-level need to be worked upon.
- The provision of emergency supply material can reduce the cost of rebuilding helping the insurance companies to cover the risks.
- Inclusion of stakeholders from the insurance industry in the process of preparation of disaster risk mitigation plan.
- Suggestion for creating a consortium which shall act as a policy input and work as a national pool.
- The suggestion of tying up of agencies and authorities like Urban Local Bodies (ULBs) and Public Works Department (PWD) with the insurance sector.

Mr. Arindam Mukherjee, *Director, College of Insurance, I.I.I*, highlighted that the need of sensitizing the public regarding insurance and its benefits. He also pointed out that the low penetration level indicates that people do not appreciate the benefits of insurance. The compulsion of insurance has also been suggested for some major critical infrastructure. He also pointed out that the insurance coverage can act as an aid



for development as it shall not hamper the developmental funds in the aftermath of a disaster. The risks that need to be covered should be assessed and calculated by the disaster risk reduction stakeholders and accordingly, packages of insurance can be built upon.

Dr. Archana Vaze, *Assistant Professor, College of Insurance, I.I.I*, suggested that the culture of insurance need to be imbibed from the school curriculum itself. She also suggested for the conduction of awareness campaigns for promoting insurance needs. She also highlighted that the multi-year contract period for non-life insurance should be considered as it increased the number of enrollments in comparison to the annual renewal schemes.

Lt. Col. Dinesh Vashista, *Joint Director, NIDM*, proposed his vote of thanks to all the dignitaries and both the organizing teams of NIDM and I.I.I and thereby closing the event.



Major Takeaways

The workshop was significant as there was unanimous concurrence among all stakeholders in the following areas:

- a. State Disaster Management Authorities pointed out that ex-post measures are not comprehensive enough to finance the development/ mitigation work required after disasters. This makes disaster mitigation incomplete. This situation exists in respect of sovereign risk¹, sub-sovereign risk², losses to infrastructure, losses of public/ private industry, trade, private losses, loss of lives, loss of livelihoods and relief work; causing funds to be diverted from planned to unplanned expenditure.
- b. Insurance is a time-tested mechanism. Experiences shared by World Bank officials and reinsurers in multiple countries, show that insurance is a practical and effective solution for financing the costs of disasters. There is a clear case to use the insurance mechanism in India as an ex-ante measure to fund a major part of the gap.
- c. Experiences of individual states which have employed insurance in some way or other have been encouraging, though not comprehensive.
- d. Substantial technical expertise and financial capacity is available within the country with the reinsurers and insurers operating in India. This includes their experience of operating multiple insurance pools in the country and disaster specific insurance pools with multiple countries. The Indian insurance regulator is also well poised to regulate disaster risk insurance.
- e. The momentum created by the Fifteenth Finance Commission, the PMO, NDMA, Insurers and reinsurers and other stake-holders in this matter, as seen in this workshop should be used positively to benefit everyone in the country.

Action Points: The workshop flagged the following main areas for future action:

1. Experts need to study the gaps and recommend a few workable insurance solutions. Solutions should have clarity regarding coverage, exclusions, terms and conditions. Operational issues like providing access to insurance and systems to settle claims may be visualized and solutions suggested.
2. Optimal solutions for charging insurance premiums and sourcing adequate funds for settling claims may be suggested. Plans for subsidies, if warranted, may also be suggested.

¹ 'Sovereign risk' is the economic (or financial) impact a government would face in the event of a disaster. "Sovereign risk, in the context of disasters, is the economic impact a government would face in the case of a disaster which affects its citizens." Prevention Web, UNDRR - <https://www.preventionweb.net/risk/sovereign-risk>

² 'Sub-sovereign' refers to a particular level of regional or local government that is assigned the responsibility to provide a certain range of public services along with sources of revenue to fund these mandates. Public or private institutions (like hospitals, schools, universities or government-related entities) which undertake some responsibilities of the sub-sovereign government, are not generally regarded as sub-sovereign entities. Scope's Definition of Sub-sovereigns - <https://www.Scopeeratings.com/ScopeRatingsApi/api/downloadmethodology?Id=04da2501-7c0f-46a1-ba19-966a595e676b>



3. Insights from existing research may be used. If needed, additional research may be conducted.
4. Multiple risk management measures need to be in tandem with Disaster Risk Insurance. This would need active coordination with multiple government agencies like Ministry of Road Transport and Highways (MORTH), Ministry of Home Affairs (MHA), Ministry of Earth Sciences (MES), National Highways Authority of India (NHAI), India Meteorological Department, Council of Scientific and Industrial Research (CSIR), Geological Survey of India (GSI), Central Building Research Institute (CBRI) etc. Hence the entire efforts should be under one apex institution like the NDMA.
5. A Committee may be formed by this apex institution which would look into the above for this purpose including insurers, reinsurers and academic bodies like the Insurance Institute of India (III) and National Institute of Disaster Management (NIDM).
6. The apex institution should coordinate with all the stakeholders, to resolve communication gaps.



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