



Building Bridge Between Science and Policy for Effective DRR

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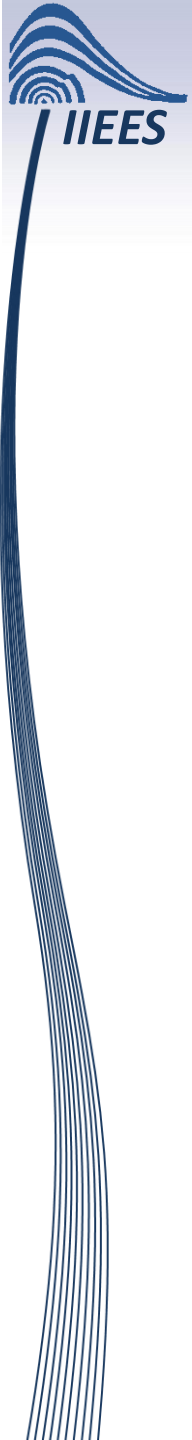
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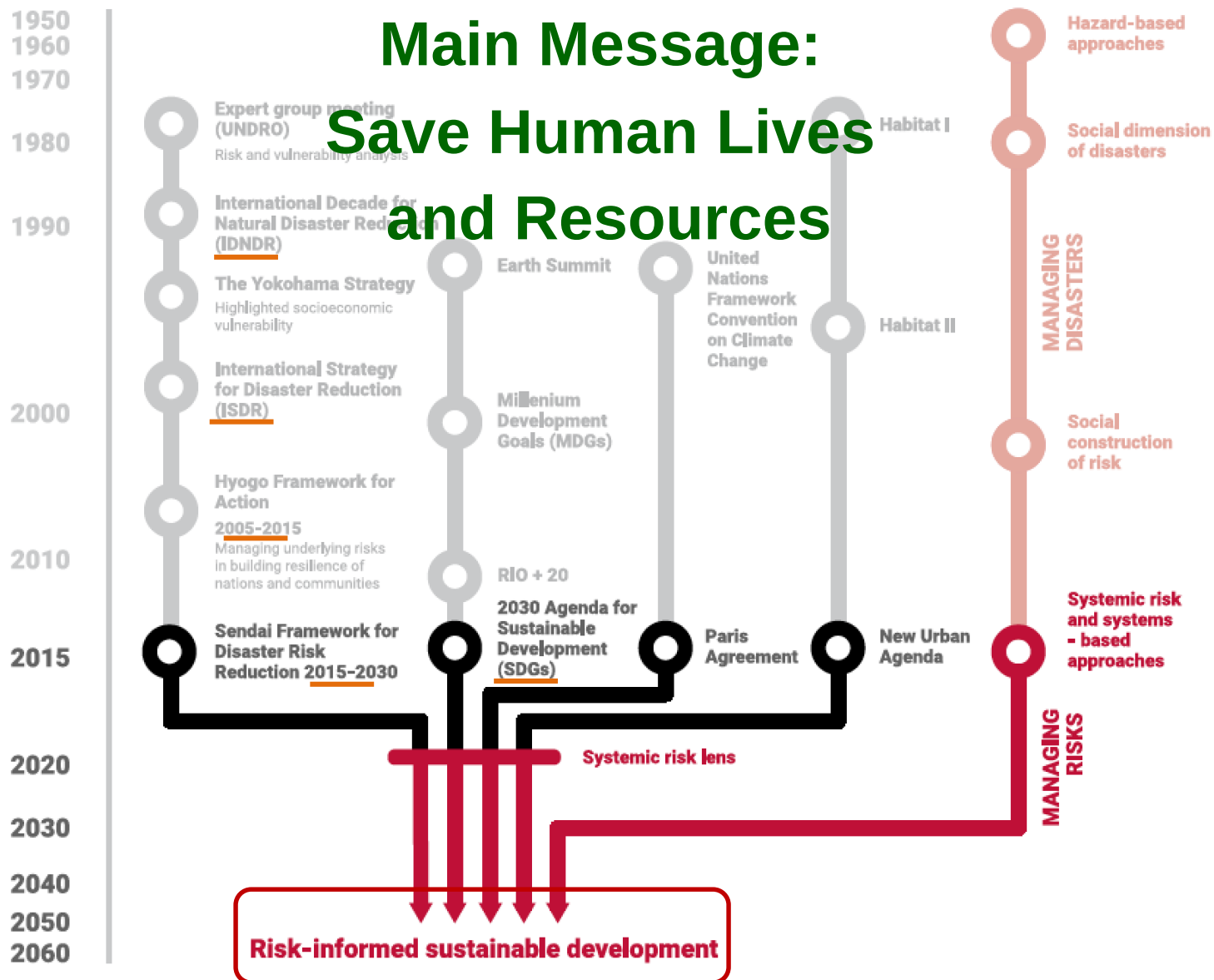


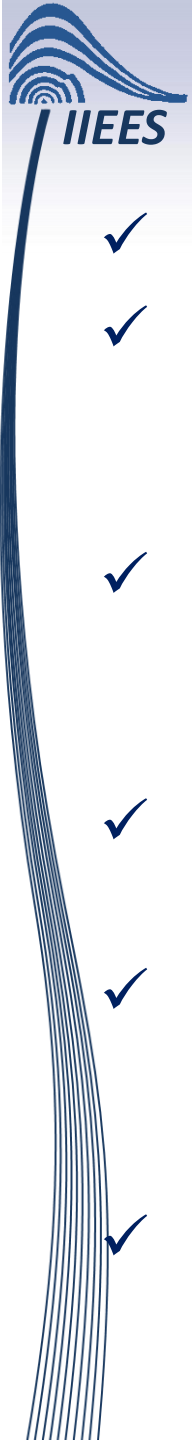
IDRiM Virtual Workshop
for Interactive Discussions between
Senior and Early-Career Scientists

23-24 September 2020 | Online Workshop

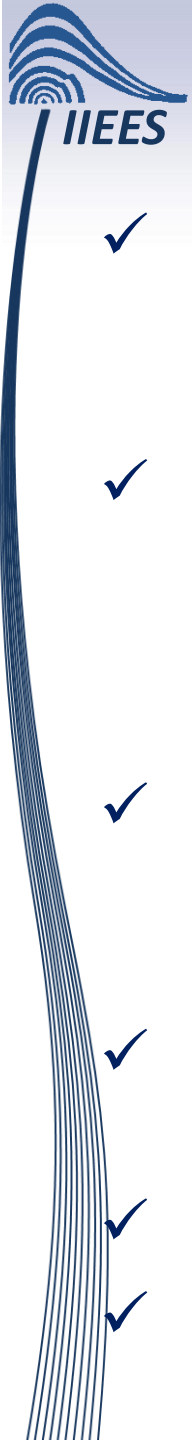


History of Disaster Risk Reduction, a journey through time and space

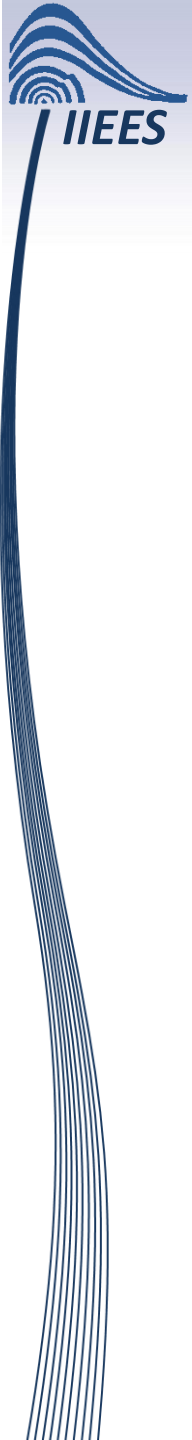




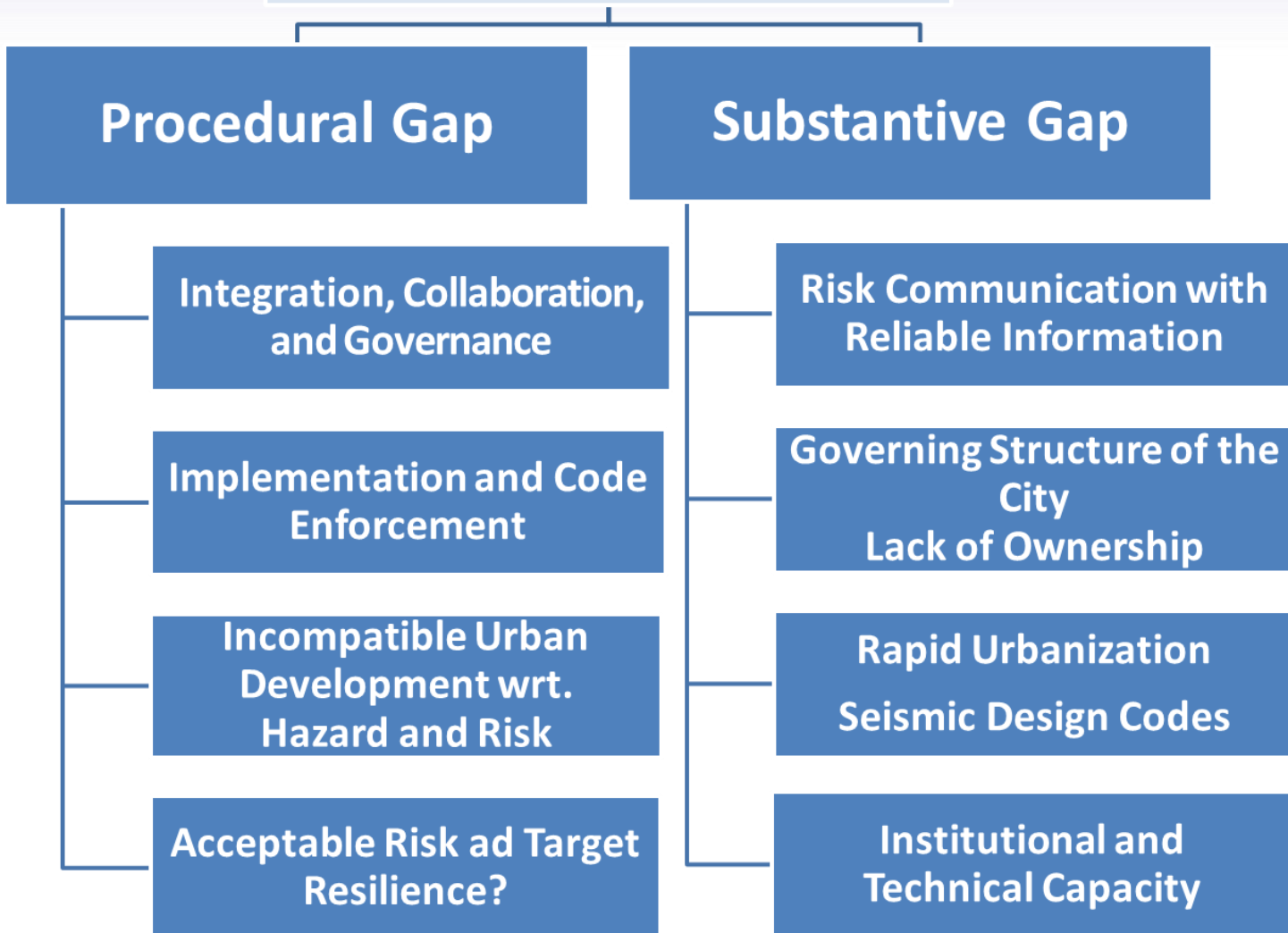
- ✓ We are still at High Risk of all types of Disasters.
- ✓ High Risk are due to incompatible development of cities with respect to expected hazards. Results: Large number of human and economic loss is expected.
- ✓ Low capacity and preparedness to cope with disaster for effective and on-time response, restoration recovery and reconstruction that would not affect the ongoing economic growth.
- ✓ Strong will and High Incentive of the Governments to cope with disasters and risk reduction. But they do not know How?
- ✓ Most Governments have many policies, orders, guidelines, organizational and institutional arrangement. All of these need to integrated, harmonized and become specific object oriented.
- ✓ Gov. Do not build enough national technical capacity required for risk avoidance and risk reduction.



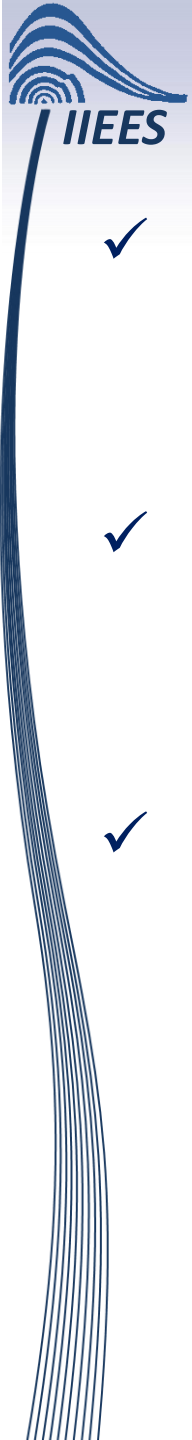
- ✓ Governments have long wish (promise) lists for resilient without considering its doability, affordability, technical capacity and resources.
- ✓ Considering the existence of all of the Strategies, Acts, Policies, Studies, Knowledge, Technology, Standards, Guidelines, etc.; one would expect that at least the new developments would at least meet the minimum safety and quality standards.
- ✓ Results of the most of the risk related studies (done and are being done) are not getting used, implemented and getting built-on and create capacities; or the results are not available.
- ✓ Low level of implementation of rules and regulations related to earthquake risk reduction and preparedness.
- ✓ Lack of monitoring for the implementation of existing program.
- ✓ Lack of effective and operational risk governance.



Gap Identification



Root Cause: Gap between science and Policy



Reason, Challenge and Solution

- ✓ **Possible Reason for Lack of Success:** We are not effectively using our know-hows in an integrated and system approach.
- ✓ **Main Challenge:** System and Nexus approach for Implementation of DRR know-how in the development process.
- ✓ **Solution:** Making the bridge between science and development policy fully operational, and mainstream the science into policy (we have built the bridge, but..).
In other words, we need to see and feel the foot print of science and technology in the decision making process and in our cities.

Who Should do What?

Scientists:

1. Translate safety into economic, social and human values; making safety as financial benefit; etc.
2. Advise and Guide the Decision Makers with patience.

Decision Makers:

1. Trust the scientist and scientific advise.
2. Make the best benefit from the science and scientist.

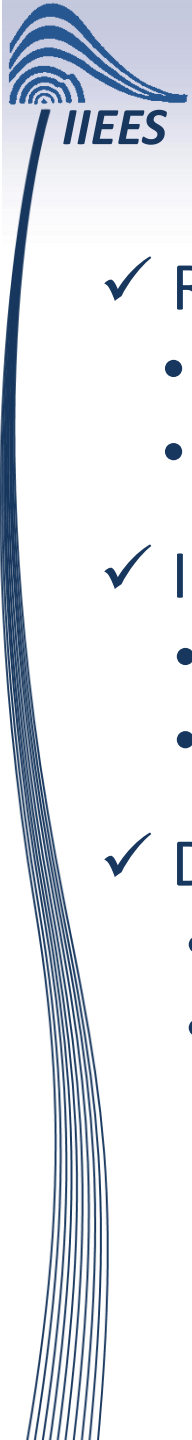
Engineers/Public/User/Stakeholders:

Trust the Scientist, Rules and Codes and accept that safety can be achieved cheaper than what they can imagine.



How? Creating Demand

- ✓ Demanding for this basic right require a risk aware society, and a risk aware society requires an effective “Risk Communication”.
- ✓ Public should demand for safe housing, safe city, safe infrastructure, reliable energy, good water management, clean air, correct usage of water and water resources, etc. from their governments.
- ✓ Instead of being only regulated by the government that you need to follow codes and standards; they should ask from government and their authorities to provide required infrastructures and system that building codes and standards could be easily implemented.



How? Learning How to Communicate with Policy Makers

- ✓ Research and Knowledge Development requires:
 - Modeling, Analysis,
 - 100s pages of report is needed to prove the concept
- ✓ Implementation Science requires:
 - Doable, Usable, Affordable, adoptable solutions
 - Simple codes and standards in what to do format.
- ✓ Decision Making Science requires:
 - Special framework and language: Safety is Human Right
 - 1-2 pages straight forward report including:
 - What needs to be done and not to be done,
 - The pro and con of the proposal
 - Cost-benefit analysis,
 - What are the risk?



How to Build the Bridge?

1. Investment policies and planning should be aligned with SFDRR.
2. Investment planning should be an integral part of into national plans for Disaster Risk Reduction (DRR).
3. Appropriate communication strategies should be considered an important element in creating awareness not only of risks themselves but also appropriate DRR measures.
4. Decision makers should cooperate closely with the science and technologies sectors in identifying and deploying cost effective methodologies and technologies for DRR.

For effective implementation of existing know-how into the development process and people's daily lives; we need create demand-driven science for safety, especially in developing countries where safety is not necessarily a top priority either for government or public



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5. If Real Science/Scientist take distance from the policy makers; the pseudo science/scientist are ready to benefit from policy makers for powers and money.
6. Paradigm shift in our existing approaches.