



भारत 2023 INDIA

**DISASTER RISK
REDUCTION
WORKING GROUP**
Issue Note

वसुधैव कुटुम्बकम्

ONE EARTH • ONE FAMILY
ONE FUTURE

I. BACKGROUND

In March 2015, 187 nations adopted the Sendai Framework for Disaster Risk Reduction (SFDRR 2015-2030). For the first time, under the SFDRR, the global discourse on disaster risk reduction focused on achieving specific targets, with four targets related to reduction in disaster losses and three targets related to increase in capacities. Recognising the need for pursuing disaster risk reduction as integral to sustainable development and not merely as a stand-alone emergency management issue, the Sendai targets were aligned with specific Sustainable Development Goals (SDGs) and related targets.

At the mid-point of the SFDRR, progress against all the targets, particularly the four loss reduction targets, is slow or even negative:

Targets A: Reduction in disaster related deaths and number of missing persons per 100,000 people: After some initial success in the first five years of SFDRR, the COVID-19 pandemic has not only halted the declining trend but reversed it. Disaster-related mortality and the number of missing persons per 100,000 people increased from 1.08 between 2005 and 2014 to 1.88 between 2012 and 2021. COVID-19 has led to a stark jump in this tally by 440.5% between the years 2020 and 2021.¹

Target B: Reduction in the number of persons affected by disasters per 100,000 people: There has been a 1.46% increase in this number between the base decade of 2005-14 and 2012-21.²

Target C: Reduction in economic losses: The average annual direct economic loss from disasters has more than doubled over the past three decades, from an average of around \$70 billion in the 1990s to over \$170 billion in the 2010s.³

Target D: Reduction in losses to critical infrastructure: The number of critical infrastructure units and facilities destroyed or damaged by disasters averaged 142,582 per year between 2015 and 2021.⁴

Similarly, the progress against the three capacity enhancement targets – **Target E:** plans and strategies; **Target F:** Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions; and **Target G:** Access to Early Warning - remains bleak.

Although **Target G** has seen marginal improvements in terms of population that has access to early warning, only 23 out of 195 countries, had reported having multi-hazard early warning systems in 2021.⁵ While, **Target E** that relates to substantial increase in

¹ <https://sendaimonitor.undrr.org>

² <https://sendaimonitor.undrr.org>

³ <https://www.munichre.com/en/risks/natural-disasters-losses-are-trending-upwards.html>

⁴ <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N22/462/76/PDF/N2246276.pdf?OpenElement>

⁵ <https://sendaimonitor.undrr.org>

the number of countries with national and local disaster risk reduction plans & strategies seems to have seen marginal improvement as well, where between 2015 and 2020, only three more countries out of 195 have adopted these strategies, raising the total tally to 53.⁶


The slow progress on achieving the SFDRR targets is underpinned by following trends:

- Although some progress has been made in reducing disaster risk, it is outpaced by the rate at which exposure and vulnerability to hazards is being increased, and therefore the rate at which disaster risks are getting created.
- Successive global assessments of disaster risk have underlined that disaster risks are increasing at a higher rate compared to the rate at which the economies are growing. For smaller economies such as the Small Island Developing Nations, disaster losses are already eroding a significant proportion of their GDP making it increasingly difficult to sustain a sustainable economic growth trajectory.
- Lack of progress on disaster risk reduction not only threatens the achievement of SFDRR but also the SDGs.
- While there has been much discussion on increasing intensity and frequency of weather and climate related events, the disaster risk emanating from geophysical events such as earthquakes and tsunamis in rapidly growing urban and coastal regions is also growing rapidly.
- In an increasingly interconnected world, the effects of major disasters can ripple across multiple sectors and geographies. The 21st century approach to disaster risk reduction must follow a systems approach as opposed to only location, event centric or asset specific efforts.
- Concerted efforts by G20 nations can infuse a sense of urgency to global disaster risk reduction. It can not only help the G20 nations achieve the SFDRR targets for themselves but also for the world.

INDIA'S PRESIDENCY 2023 – PRIORITY AREAS FOR DISASTER RISK REDUCTION

India is faced with high disaster risk emanating from exposure to a range of natural and manmade hazards combined with the country's socio-economic profile. Climate change has increased the intensity of extreme weather and climate events. Combined with rapid urbanisation, growth in economic activity, and capital assets that are exposed to multiple hazards, this is likely to increase disaster risk for the country. The COVID-19 pandemic has further shown that we are living in an era of uncertainty without knowing how the

⁶ <https://sendaimonitor.undrr.org>



hazard patterns might change over a period. COVID-19 has resulted in far-reaching economic and social costs and has clearly shown that risks are cascading, uncertain and do not respect geographical boundaries. But every hazard has not turned into a disaster. Significant reductions in losses can be achieved in such events through careful planning, capacity building, early warning, community participation, procurement and prepositioning of necessary equipment and resources, participation of civil society, assignment of a clear role to the private sector, involvement of Panchayati Raj Institutions and Urban Local Bodies, strict enforcement of techno-legal regime on land use and building regulations, etc.

The Indian government has changed the way disaster risk reduction is thought about during the last few years. The new strategy is based on the conviction that disaster risk reduction must be incorporated into the development process for development to be sustainable. The requirement that disaster risk reduction be multidisciplinary and encompass all development sectors is another tenet of the strategy.

India has a strong institutional, legislative, and financial mechanism for disaster risk reduction at national, state, and local level. The National Disaster Management Plan, 2019 outlines the country's strategy for achievement of targets set under Sendai Framework for Disaster Risk Reduction - SFDRR (2015 -2030) and build coherence with other international agreements such as SDGs and the Paris Agreement on Climate Change (COP 21). At the state level, disaster management plans are prepared till the district, block, panchayat, and city level. India has also made progress in early warning dissemination and last mile communication. This has resulted in steep decline in mortality from some hazards such as cyclones and heatwaves.

India's 15th Finance Commission Report has recommended a new methodology for all allocating resources for disaster risk management to the Indian states. This methodology takes into account hazard prevalence, exposure (area and population), vulnerability, and capacity for determining state-wise allocation for the period of 2020-26. The allocation provides specific windows for the entire spectrum of disaster risk management needs: disaster response; recovery and reconstruction; preparedness and capacity building; and disaster mitigation. Indian states now have USD 6 billion earmarked for disaster mitigation alone. These developments in the financial architecture for disaster risk management in the country reflect the country's commitment to make a paradigm shift towards anticipatory risk management as opposed to only focusing on post disaster response. At the first Asian Ministerial Conference on Disaster Risk Reduction (AMCDRR) after the adoption of SFDRR, the Indian Prime Minister outlined a ten-point agenda to pursue the implementation of SFDRR with a sense of urgency.

India has also engaged with the global efforts on all aspects of disaster risk management. During the United Nations Climate Action Summit on the 23rd of September 2019, at New York, India launched the CDRI to promote the resilience of new and existing infrastructure systems to climate and disaster risks in support of sustainable development. CDRI is the

second major global initiative launched by the Government of India and two-third of the G20 members are a part of CDRI. This is a demonstration of India's leadership role in climate change and disaster resilience matters, globally.

India has also supported major disaster response, reconstruction, and recovery programs internationally. When a devastating 7.8 magnitude earthquake struck Nepal on 25 April 2015 (followed by a powerful aftershock of 7.4 magnitude on 12 May 2015), the Government of India swiftly dispatched National Disaster Response Force (NDRF) teams and special aircrafts with rescue and relief materials to Nepal. India helped in restoring 3 power sub-stations in Kathmandu valley. The total Indian relief assistance to Nepal amounted to over US\$ 67 million. The Government of India announced a post-earthquake reconstruction package of US\$ 1 billion (which comprises US\$ 250 million grant and US\$ 750 million concessional Line of Credit) during the International Conference on Nepal's Reconstruction held in Kathmandu on 25 June 2015.⁷

India plans to do a mid-term review of implementation of SFDRR to understand how far the country has been able to achieve the priorities of Sendai and highlight the trends, successes, opportunities, challenges, and emerging issues. The lessons learnt through this review process may chart out future course of actions till 2030 to address the gaps and challenges and accelerate the implementation of various priorities and targets in a post-COVID era.

PRIORITIES & EXPECTED OUTCOMES

Within the overall framework provided by the SFDRR, it is proposed that the G20 group of countries work towards following priorities:

1. Global coverage of Early Warning Systems for all hydro-meteorological disasters
2. Increased commitment towards making infrastructure systems disaster and climate resilient
3. Stronger national financial frameworks for disaster risk reduction
4. Strengthened national and global disaster response system to address the consequences of increasing frequency and intensity of disasters.
5. Increased application of ecosystems-based approaches to disaster risk reduction

⁷ <https://www.indembkathmandu.gov.in/page/about-india-nepal-relations/>

II. PRIORITY ISSUES

PRIORITY ISSUE 1: GLOBAL COVERAGE OF EARLY WARNING SYSTEMS FOR ALL HYDRO-METEOROLOGICAL DISASTERS

Although over the last decade, the world has significant progress in improving early warning systems and its constituent subsystems -- hazard detection, monitoring and forecasting; risk analysis and incorporation of risk information in emergency planning and warnings; dissemination of timely and authoritative warnings; digital disruption; and community planning and preparedness – communities in many hazards prone areas of the world do not yet have reliable access to early warning. Several global initiatives are underway. For example, Climate Risk and Early Warning Systems is a mechanism that funds Least Developed Countries (LDC) and Small Island Developing States (SIDS) for risk informed early warning systems. Similarly, the Risk-informed Early Action Partnership (REAP) aims to make one billion people safer from disasters by creating a new partnership to greatly expand early action financing. Despite these efforts almost one third of the world's population exposed to hydro-meteorological disasters is not covered by early warning systems. The G20 can pursue this agenda with a sense of urgency and support and supplement ongoing initiatives to achieve 100% coverage of early warning systems across the world.

Digital disruption during the pandemic and the use of innovation within this context have been one of the success stories among states. Innovation came from various sources, notably from the private sector, volunteers, government, and the UN system. Innovation in DRR is also considerable in the last few years driven by both supply and demand. On the supply side, the use of satellite imagery and other remote sensing capacities have improved the ability for risk assessments and post disaster damage and needs reporting. Cloud technology is driving improved risk modeling including the emerging use of machine learning. On the demand side, there is an ever-increasing need for innovation due to increasing complexities and interconnectedness of vulnerabilities amplified by ease of digitally enabled communications among policy makers, practitioners, science and academia, and several private sectors. But there are also downsides that policy makers need to be aware of. These include the decline of values of some technologies as the workforce returns to offices. Policies on data privacy and security are uneven and posed risks that are still not well understood. Many countries have haphazard ways of framing their application of digital technology to DRR and Recovery. Their constituents among the private sector will also benefit from partnerships with G20 and developing countries on innovation and technology.

QUESTIONS FOR DISCUSSION

1. How to accelerate capacity building initiatives in various countries so that we achieve 100% coverage of early warning systems?

2. How do we ease and ensure knowledge sharing among member countries and beyond to achieve these goals?
3. How can G20 facilitate and increase dissemination of this knowledge to the last mile for citizens to remain prepared in the events of disasters?

KEY OUTCOMES AND DELIVERABLES

1. Evolve a coordinated framework for deeper engagements among G20 countries to promote Early Warning Systems in member countries, LDCs and SIDS.
2. Evolve Common Principles on facilitating early action financing, to gain greater access to financing for reducing disaster risks at sub-national levels, and to promote early action at the local, subnational, and national levels.
3. Compendium of innovative technological solutions to address disaster risk and recovery.

PRIORITY ISSUE 2: INCREASED COMMITMENT TOWARDS MAKING INFRASTRUCTURE SYSTEMS DISASTER AND CLIMATE RESILIENT

Infrastructure resilience is the cornerstone of sustainable development. Understanding of risk to infrastructure as well as to the services it provides, together with land-use planning, should be a key consideration. Industry-specific tools, such as rating standards to guide investment decisions in infrastructure, including in real estate, are useful towards the development of sector-specific standards. The WG could address the need for principles and standards for resilient infrastructure to safeguard global infrastructure investments.

QUESTIONS FOR DISCUSSION

1. What kind of tools, methodologies and metrics can be made available to infrastructure planners to assess the disaster risks over the lifecycle of the infrastructure systems?
2. How can we encourage financiers of infrastructure to take into account the lifecycle cost of infrastructure as opposed to the upfront costs, while undertaking the cost benefit analysis of their investments?
3. How can we include disaster resilience as a component of ESG norms?
4. How can we further build upon the Principles of Quality Infrastructure Investment Indicators that G20 members have adopted?

KEY OUTCOMES AND DELIVERABLES

1. A global assessment of disaster and climate risk to major infrastructure systems accompanied by common metrics and tools for assessing disaster and climate risk to infrastructure at the national and local levels.
2. Common understanding on rating standards for development of disaster and climate resilient infrastructure.

PRIORITY ISSUE 3: STRONGER NATIONAL FINANCIAL FRAMEWORKS FOR DISASTER RISK REDUCTION

The G20 WG could advance developing disaster risk reduction financing strategies and alignment of integrated national financing frameworks to these strategies, as well spur the development of new and innovative market-based tools. It could support a better integration of disaster risk reduction into the work of development banks, including lending, debt support and blended finance instruments, as well as the prioritization of financing to high-risk, and low-capacity countries. With support from international organizations, the G20 working group could further improve the understanding of the cost-benefit of investing in risk reduction and prevention, including accurately pricing disaster risk in investment decisions.

Investment, ranging from renewable energy to preparedness for pandemics and extreme natural hazards, will ease planetary pressures and prepare societies to better cope with global shocks. For example, in the Asia Pacific region, consider the advances in seismology, tsunami sciences, early warning systems and disaster risk reduction following the 2004 Indian Ocean tsunami, which was a global effort at scale to support multiple countries. In major disasters requiring massive recovery and rehabilitation investments, Post Disaster Needs Assessments can inform the economic priorities of member countries including protection of future investments to escalating levels of risks. Similarly, knowledge sharing on practical investments in focus areas can be informed by UN system synthesis of Member States Sendai Framework for disaster risk reduction reports, priorities from the Nationally Determined Contributions and post crisis recovery (such as from multiple countries affected by COVID) as well as provide analysis to aid efforts towards achieving SDGs. These investments can also be in critical sectors or territorial areas of common interest such as in resilient infrastructure and human security in SIDS and LDCs.

QUESTIONS FOR DISCUSSION

1. How must we identify the biggest risks to the country's ability to finance sustainable development, including systemic risks and related cascading effects; Identifying the drivers of risk can help prioritise measures and resources to address them.

2. How can G20 countries understand the transmission channels through which disaster risks can impact the country's ability to finance sustainable development, including the differentiated impacts they may have on different segments of the population (e.g., given existing vulnerability and structural inequalities) and financing implications?
3. How can we ensure that financing policies, instruments, and regulatory frameworks from across different areas are coherent, sustainable, and risk-informed?

KEY OUTCOMES AND DELIVERABLES

1. Identify opportunities to access technical assistance and capacity building support from development partners, as well as highlighting areas for peer-to-peer exchanges and learning.
2. Assess existing capacity to manage identified risks and identify opportunities for risk reduction policies and investments, enable innovation to prevent and reduce risks, enhance resilience, and minimise the impact of shocks on the country's ability to finance sustainable development in the future.

PRIORITY ISSUE 4: STRENGTHENED NATIONAL AND GLOBAL DISASTER RESPONSE SYSTEM TO ADDRESS THE CONSEQUENCES OF INCREASING FREQUENCY AND INTENSITY OF DISASTERS

The increased frequency and intensity of weather and climate related extreme events is already causing unprecedented disasters requiring national and global disaster response at an unprecedented scale. The existing disaster response mechanisms – both at the national and international levels will be inadequate to address the growing disaster needs of the affected communities. There is a need to reimagine this response architecture at all levels to maximise the efficiency of the response system and to ensure that each post-disaster response and recovery investments not only helps alleviate the immediate impacts of the disasters but also helps build resilience for the future.

QUESTIONS FOR DISCUSSION

1. What can we learn from the best practices in response systems from across the world to be better prepared for disasters?
2. How can we make the livelihoods of people more resilient?
3. What are the ways in which G20 can collaborate and contribute to enable a cost-efficient and time-efficient response to disasters?

KEY OUTCOMES AND DELIVERABLES

1. G20 countries may adopt High Level Principles on disaster response mechanisms.
2. Collaborative mechanisms to promote provision of resilience in livelihoods

PRIORITY ISSUE 5: INCREASED APPLICATION OF ECOSYSTEM-BASED APPROACHES TO DISASTER RISK REDUCTION

In the age of the Anthropocene, it is becoming clear that hard structural measures such as seawalls, embankments etc. will no longer be enough to manage disaster risk. Ecosystem based approaches such as conservation of mangroves, forests, wetlands, and coral reefs can help communities prepare for, cope with, and recover from disasters, including both rapid onset events such as cyclones and slow-onset events such as drought. These measures can also reduce the secondary impacts from geo-physical events and disasters such as landslides following an earthquake.

Public policies of G20 countries are crucial to how future risks will be configured. It is desirable that these are guided by discussions on anticipatory and desirable futures through dynamic risk monitoring, fore sighting, and sense making within uncertainties and volatility. Policy discussions will be an iterative, trial-and-error process in which G20 countries must all learn from each other. Recognizing that there are no policy panaceas, no one-size-fits-all approaches, some policies that are deemed to work among member economies can form the building blocks for countries as they navigate today's uncertainty and complex risk landscape as we move towards a more hopeful future.

Many member economies act as major development partners in the disaster risk reduction agenda of developing countries, each are guided by their own policy and competitive advantage. Whilst the G20 has limited influence on the priorities of downstream member economies they can bring visibility and advocacy to some of the major systemic risk challenges of our time. Challenges that if not well understood and carefully managed will exacerbate existing and future disasters. For example, there is a need to examine the risk to and from the triple nexus of water, food, and energy and how this will likely shape vulnerabilities to future hazard events.

QUESTIONS FOR DISCUSSION

1. How can we promote the discourse around the need for integration of the Global Development Agenda (Climate Change, DRR and SDGs) with risk becoming the cross-cutting issue to be managed in order to prevent shocks serving as a means of recurrent slowdown of sustainable development or sustainable growth and development of emerging and traditional economies?
2. How can we focus on the findings of the Mid Term Review for the SFDRR?
3. What complementary policies should G20 members formulate to develop a holistic ecosystems-based approach to disaster risk reduction?

KEY OUTCOMES AND DELIVERABLES

1. Facilitate sharing of good practices on policy intervention for capacity building of institutions to make disaster risk reduction more comprehensive.

III. WAY FORWARD

S. No.	Meeting	Date	Location
1.	DRR WG - I	30 Mar - 1 Apr 2023	Gandhinagar
2.	DRR Consultative Meeting	23 - 25 May 2023	Mumbai
3.	DRR WG - 2	24 - 26 Jul 2023	Chennai

SIDE EVENTS

There will be several side events which will take place along with working group meetings that will improve and add value to the G20 discussions. The themes, dates and locations of the side events will be confirmed shortly.

IV. TERMS OF REFERENCE OF THE G20 DISASTER RISK REDUCTION WORKING GROUP

OBJECTIVE

Over the years, the G20 Leaders have recognised the importance of comprehensive strategies that make the countries resilient to extreme weather events and disasters. Disaster risk reduction is a key enabler for making progress towards the UN Sustainable Development Goals (SDGs) in its three economic, social, and environmental dimensions, in line with the G20 priorities. Under India's Presidency, the G20 members will work towards sharing knowledge and furthering a common understanding to harness the benefits from disaster risk reduction and address the challenges arising from disaster risk.

The DRR Working Group will enrich and reinvigorate the progress on implementation of Sendai Framework for Disaster Risk Reduction through discussions and consultations with G20 member countries, engagement groups and relevant stakeholders. It will be an opportunity to go more in depth into the specific priorities, to exchange views, and share knowledge and practices.

At this juncture, the formation of the DRR WG reflects a reality whereby disaster risk reduction accelerates our stride into an inclusive socio-economic sustainable growth and risk resilient economy.

SCOPE

The mandate of the DRR WG is to make our countries disaster risk resilient, through the sharing of knowledge and views, and seeking an understanding on policies, to make mechanisms for resilient, sustainable, and inclusive growth and development, with a special focus on vulnerable sections of the society while mitigating the risks for investment in the economies.

To this end, the DRRWG should work on the following directions, including, but not limited to:

- Honoring commitments and mandates from previous Leaders' Summits, and Sherpa Meetings.
- Recognising the cross-cutting nature of disaster risk reduction and acknowledging that other G20 bodies already discuss various aspects of DRR within their respective mandates, the DRRWG will focus on disaster risk topics.
- Cooperating and working with engagement groups, international organizations and other G20 work streams, while avoiding duplication of work in other G20 bodies, to advance the DRR agenda considering the priorities of G20 Presidencies.

AGENDA

The incumbent G20 Presidency, at its discretion, will develop each year's agenda in consultation with the Troika members, and with the consensus of DRRWG members.

International organisations and engagement groups may be consulted as well. The G20 Presidency may decide to focus on issues of specific importance, within the disaster risk reduction, based on consensus reached within the DRRWG members.

MEMBERSHIP

Membership in the DRRWG is composed of delegates from G20 members and guest countries.

GOVERNANCE AND FUNCTIONING

The DRRWG will be chaired by the incumbent G20 Presidency, in close collaboration with the previous and following year's presidencies, which together will compose the Troika. Reflecting the G20 as a member-driven organization, discussions will take place among members by consensus and be consistent with other G20 working arrangements. Guest countries may be invited to provide inputs to the outcome documents of DRRWG.

Representatives from G20 engagement groups, notably the Women20, Youth20, Business20, Startup20 and Think20, may be invited to express their views as well. The DRRWG work will be enriched by a multistakeholder approach, through discussions and consultations with G20 engagement groups and relevant stakeholders.

In consultation with the Troika, the DRRWG will meet at least two times each year, at the discretion of the Presidency.

The DRRWG will annually report its work to G20 Leaders, Ministers, and Sherpas, as appropriate.

These Terms of Reference, including modalities, may be reviewed, and updated annually at the discretion of the Presidency and with the Membership's consensus. Every three years, there will a stock take of the progress made by DRRWG.