



2021-22

ANNUAL REPORT

DRI Solutions for A Resilient World



Contents

Section 1: About CDRI

- CDRI: For A Resilient World
- CDRI Members
- CDRI Governance and Secretariat
- From the Desk of President, CDRI

Section 2: CDRI Strategic Initiatives

- Biennial Report on Global Infrastructure Resilience
- Infrastructure for Resilient Island States
- DRI Connect

Section 3: CDRI Resilience Programmes

- Power Sector Infrastructure Resilience Programme
- Transport Sector Infrastructure Resilience Programme
- Telecommunications Sector Infrastructure Resilience Programme
- Health Sector Infrastructure Resilience Programme
- Urban Sector Infrastructure Resilience Programme
- Finance for Resilient Infrastructure Programme
- Infrastructure Governance Programme
- Technical Standards for Disaster Resilient Infrastructure
- Capacity Development for Disaster Resilient Infrastructure
- Youth for Resilient Infrastructure (Y4RI)
- CDRI Fellowship

Section 4: CDRI Engagements

Section 5: Advocacy and Events

- COP26
- Third Disaster Resilience Week
- Paris Peace Forum 2021
- ICDRI
- DRI Deliberations

Section 6: Financial Statement

Section 7: Looking Ahead

- CDRI: Towards A Resilient World

08

16

22

36

40

48

52



CLIMATE



“What we need is a global people’s movement to bring about behavioural change...therefore India is here today to present a practical approach and roadmap. In order to make our infrastructure resilient in the face of disasters, India is launching a Coalition for Disaster Resilient Infrastructure. I invite all member states to join this Coalition.”

— Hon. Prime Minister of India, Shri Narendra Modi
launching the Coalition for Disaster Resilient Infrastructure
at the 2019 UN Climate Action Summit





Section 1

About CDRI

CDRI: For a Resilient World



We are living in times of overlapping crises and cascading challenges that are threatening development gains and derailing global goals of providing just and equitable systems to people and communities. Many of these crises emanate from physical hazards, whose risks are being compounded by climate change and particularly increasing the exposure of communities. In the recent past, the increasing intensity and frequency of extreme weather-induced events including heat waves, storms and cyclones, cold waves, and floods have led to devastating effects on lives and economies. A large proportion of direct damage from disasters – sometimes up to two-thirds of the total – are related to infrastructure. Notwithstanding the risks from extreme events, infrastructure and societies also need to be built with consideration to primary and secondary geophysical hazards.

For the next two decades, it is estimated that US\$3.7 trillion will be invested annually in infrastructure. With over half of the infrastructure required by 2050 yet to be built, the world is presented with both a challenge and an opportunity - to build better infrastructure - for now and tomorrow. It is time to come together and ensure that we get to build this infrastructure right and lock in resilience rather than risk.

CDRI's infrastructure resilience programming is underpinned by a risk-informed approach from the local to the global scale to make resilience integral

to infrastructure development.

The Coalition enables members to upgrade their systems and focus on transforming new and existing infrastructure systems to mitigate climate and disaster risks by sharing knowledge, best practices, innovations, proven tools, strategic support, and solutions across the infrastructure life cycle. Both CDRI and its members are committed to promoting climate and disaster-resilient infrastructure around the world, which will in turn advance progress to meet the objectives of the Paris Accord, Sendai Framework, and the Sustainable Development Goals.

Since its inception, the Coalition has grown to a partnership of 31 national governments, five international organisations and financial institutions, and two private sector organisations.

Come join us in shaping a resilient tomorrow!

With over half of the infrastructure required by 2050 yet to be built, the world is presented with both a challenge and an opportunity - to build better infrastructure - for now and tomorrow.

CDRI Members

AS OF 31 MARCH 2022

Member Countries

	Afghanistan		France		Mauritius
	Argentina		Germany		Mongolia
	Australia		Haiti		Nepal
	Bangladesh		India		Netherlands
	Bhutan		Italy		Peru
	Brazil		Jamaica		Sri Lanka
	Canada		Japan		Tajikistan
	Chile		Madagascar		Turkey
	Dominican Republic		Maldives		United Kingdom
	Fiji				United States of America

Member Organizations

 Asian Development Bank	 Coalition for Climate Resilient Investment	 European Union
 The Private Sector Alliance for Disaster Resilient Societies	 United Nations Development Programme	 United Nations Office for Disaster Risk Reduction
	 World Bank Group	

CDRI Governance and Secretariat

The governance arrangement of the Coalition comprises of three principal bodies, namely: the Governing Council, the Executive Committee, and the Secretariat.

The Governing Council

The Governing Council is the highest policy-making body of CDRI and comprises of all members of the Coalition. India is a permanent Co-chair of CDRI's Governing Council.

During the Financial Year 2021-2022, the CDRI Governing Council meeting was held in March 2022.

In March 2022, the Coalition for Disaster Resilient Infrastructure (CDRI) announced Samantha Power, Administrator of the United States Agency for International Development (USAID), United States of America, as the new Co-chair of its Governing Council. Administrator Power took over from the outgoing Co-chair, The Rt. Hon. Alok Sharma, President for COP 26, United Kingdom.

The Executive Committee

The Executive Committee is the managerial body of

CDRI that oversees the implementation of the decisions of the Governing Council.

10 members constitute the Executive Committee including the two Co-chairs, representatives of different notional constituencies - Asia and Africa, Europe and Oceania, Landlocked Countries, North and South Americas and, Small Island Countries, nominees of multilateral development banks and UN Agencies, and the Secretariat (ex-officio member).

During the Financial Year 2021-2022, the CDRI Executive Committee meeting was held thrice - July 2021, October 2021, and January 2022.

CDRI Secretariat

Located in New Delhi, the CDRI Secretariat is headed by a Director-General and has four divisions: Technical Support and Capacity Development; Research and Knowledge Management; Advocacy, Communications and Partnerships; and the Secretariat Operations. CDRI currently has a total workforce of 48, including three personnel on secondment from the United Nations Development Programme (UNDP) and four from Miyamoto International.



The Governing Council Meeting, March 2022



(From L to R) Administrator Samantha Power, United States Agency for International Development; The Rt Hon Alok Sharma, President for COP 26, United Kingdom; H.E. Mr. Alex Ellis, British High Commissioner, New Delhi; Dr. P.K. Mishra, Principal Secretary to Prime Minister and India Co-chair of CDRI Governing Council; Mr. Kamal Kishore, Member Secretary, National Disaster Management Authority (NDMA) and India Co-chair of CDRI Executive Committee.

Members of CDRI Executive Committee during 2021-2022	
Notional Constituency	EC Member Representation
Co-Chairs	Mr. Kamal Kishore Member Secretary, National Disaster Management Authority (NDMA), India
	H.E. Mr. Alex Ellis British High Commissioner, New Delhi
Asia and Africa	Mr. Shingo Miyamoto Minister (Economic and Development), Embassy of Japan, New Delhi
Europe and Oceania	Mr. Andrew Egan Assistant Secretary, Climate Financing and Programming Branch, Australian High Commission, New Delhi
Landlocked Countries:
North and South America	Ms. Veena Reddy Mission Director, United States Agency for International Development (USAID), India
Small Island Countries	Ms. Vasiti Soko Director – National Disaster Management Office, Fiji
Multilateral Development Banks	Mr. Deepak Singh Lead, Disaster Risk Management Specialist, The World Bank
UN Agencies / Other Institutions	Ms. Mami Mizutori Special Representative of the UN Secretary-General for Disaster Risk Reduction, UNDRR
Ex-Officio

From the Desk of President, CDRI

Investments in infrastructure are ultimately about providing high quality and dependable services to communities. People must be at the heart of any public discourse on infrastructure development. Households, businesses, communities, cities, and countries must be able to function without or with minimal disruptions, despite frequent and high intensity natural hazards, and extreme weather and climate events.

Infrastructure that is not resilient can exacerbate the impacts of disaster events. As the world is building and developing most of its infrastructure in the coming decades, it is critical that this investment is risk informed at all stages of the infrastructure life cycle. The benefits of investing in resilient infrastructure far outweigh the costs incurred due to disruptions. Investing in resilient infrastructure is essential to achieving the Sustainable Development Goals.

During 2021-22, CDRI has continued its engagements with stakeholders in promoting the resilience of infrastructure systems to climate and disaster risks. CDRI conceptualized and initiated key projects and programmes aiming to facilitate resilient infrastructure and provide resilience solutions.

CDRI held extensive stakeholder consultations with the Small Island Developing States (SIDS) in all the three major SIDS regions – the Caribbean, the Indian Ocean, and the Pacific. This led to the launch of CDRI's initiative, Infrastructure for Resilient Island States (IRIS) at a high-level event at COP26, Glasgow, in November 2021. Co-created with SIDS and other partners, IRIS promotes resilient, sustainable, and inclusive infrastructure development in small island countries.



The benefits of investing in resilient infrastructure far outweigh the costs incurred due to disruptions. Investing in resilient infrastructure is essential to achieving the Sustainable Development Goals.



Mr. Kamal Kishore
Member Secretary,
National Disaster Management Authority (NDMA) and
India Co-chair of CDRI Executive Committee

The Coalition's flagship initiative, the Biennial Report on the state of the world's infrastructure, is undertaking an in-depth technical study and analysis of global infrastructure from a risk and resilience perspective, particularly in the context of a changing climate. In addition, CDRI rolled out resilience studies in three main infrastructure sectors - Power, Transport, and Telecom.

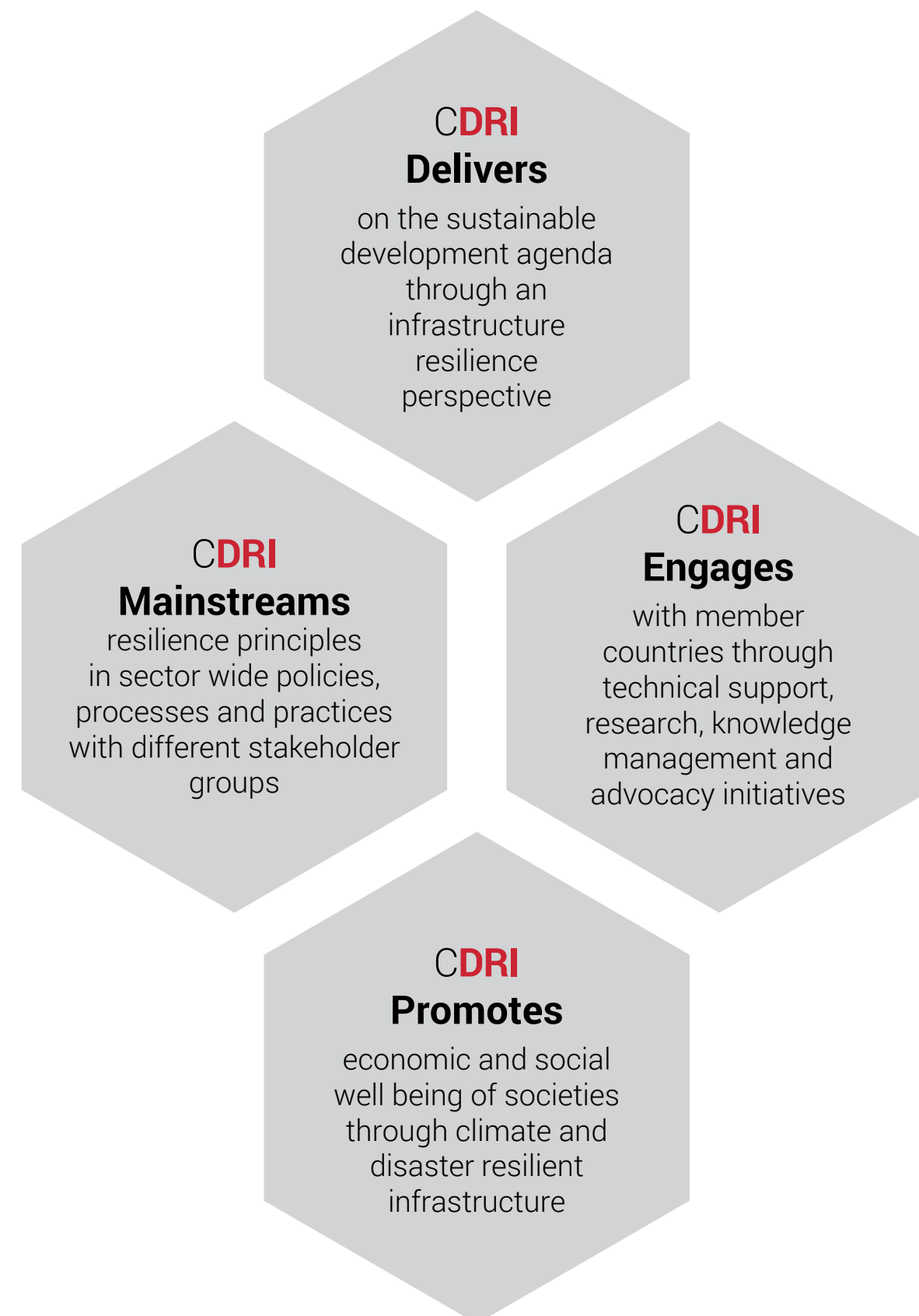
Work is progressing on Disaster Resilient Infrastructure (DRI) Connect, CDRI's digital stakeholder learning, engagement, and co-creating platform. With DRI Lexicon, CDRI is working on creating a knowledge product offering a common vocabulary in the DRI ecosystem.

This report provides key highlights and strategic milestones for the Coalition for the Financial Year, 1 April 2021 - 31 March 2022 (FY 2021-22).

I thank our Co-chairs, members of the Governing Council and the Executive Committee, partner countries, and private organizations for supporting the Coalition in its endeavor to support countries in building capacities for disaster and climate resilient infrastructure.

Together, we can build a better and a more resilient world.

CDRI was launched at the UN Climate Action Summit in New York in 2019, with an aim to address the challenges of building resilience into infrastructure systems and associated development





Section 2

CDRI Strategic Initiatives

Biennial Report on Global Infrastructure Resilience

CDRI’s flagship initiative, The Biennial Report on Global Infrastructure Resilience, aims to prioritize and focus attention on the criticality of infrastructure resilience for the well-being of societies.

A dedicated and unique technical study on global infrastructure resilience, the Report is CDRI’s principal vehicle for engaging global stakeholders (political leaders, policy makers, practitioners, and researchers) and focusing their attention on the resilience of infrastructure.

The Report, structured along five pillars, is CDRI’s contribution towards monitoring of the Sustainable Development Goals, Paris Agreement and the Sendai Framework targets.

CDRI commenced work on the Report in 2021-22. A peer review workshop for Pillar 1 and Pillar 2 was organized for review of the Global Infrastructure Risk Model. United Nations Development Programme (UNDP) has been engaged as the coordinating agency for developing the biennial Report and the report will be released in 2023.

Infrastructure Sectors


Drinking Water


Waste Water


Electricity


Road


Oceans and River ports


Airport


Mobile Communication


Fixed-line Communication

Key Components and Outputs of Biennial Report

Pillar 1	Pillar 2	Pillar 3	Pillar 4	Pillar 5
Global Infrastructure Risk Model	Global Infrastructure Resilience Index	Nature-based Solutions	Progress Monitoring	Financing Infrastructure Resilience
Global Infrastructure Risk Model	Infrastructure Resilience Index	Thematic focus on Nature-based Solutions in First Edition	Baseline of infrastructure risk and resilience metrics	Focus on building the financial case for resilience in infrastructure
Vulnerability Functions	Open-source data platform for resilience assessment by countries		Progress monitoring towards meeting global goals	
Update of GAR buildings exposure model	Global Infrastructure Resilience Survey (GIRS)			
Landslide hazard model				
Flood and hydrological drought hazard Model				
Tropical cyclone hazard model				
Multi-hazard risk modelling				
National Resilience Studies				



Infrastructure for Resilient Island States (IRIS)

The 58 Small Island Developing States (SIDS), located across the Caribbean, Pacific, Atlantic and the Indian Ocean, face unique social, economic, and environmental vulnerabilities due to their geography, and changing risk profiles accelerated by climate change.

Infrastructure for Resilient Island States (IRIS) is a dedicated strategic initiative of CDRI to support SIDS in achieving sustainable development through a systematic approach to resilient, sustainable, and inclusive infrastructure.

IRIS was launched in November 2021 at the World

Leaders Summit of COP26, by the Prime Ministers of India, Australia, Fiji, Jamaica, Mauritius, and the United Kingdom. It directly contributes to the SAMOA Pathway (SIDS Accelerated Modalities of Action).

Post its launch, IRIS started a one-year inception period during which it plans to:

- constitute a Steering Committee (SC), Project Management Unit (PMU) and regional hubs
- develop a programme strategy and a monitoring, evaluation, and learning (MEL) framework.

The initial phase of IRIS will last until 2030 with a mid-term review proposed for 2026.

Priority Sectors



Technical Support

IRIS will provide technical support on multifaceted issues posed by infrastructure systems and promote disaster and climate resilience of infrastructure assets in SIDS. The goal of IRIS will directly contribute to the SAMOA Pathway (SIDS Accelerated Modalities of Action), and target to deliver the following three outcomes:



DRI Connect

CDRI has conceptualized a digital stakeholder engagement, learning and co-creation platform, which aims to:

- Provide a unified learning and co-creating environment for knowledge generation and exchange targeted at enhancing capacities of DRI stakeholders
- Promote action-based learning and innovation on disaster resilient infrastructure

CDRI visualizes the DRI Connect Platform as:

- **An Aggregator:** curating knowledge, innovations, and solutions
- **A Matchmaker:** connecting solution seekers and providers
- **A Convener:** providing spaces and opportunities for e-learning & connecting and collaborating

Work is ongoing to operationalize the Platform in FY 2022-2023.





Section 3

CDRI Resilience Programmes

Power Sector Infrastructure Resilience Programme

Power sector resilience refers to the ability of systems to anticipate, prepare, absorb, recover, learn, and adapt to disruptions, shocks, and stresses while ensuring uninterrupted functionality. Building the resilience of power systems is critical to providing reliable and sustainable services, energy security, economic well-being, and quality of life.

CDRI's Power Sector Infrastructure Resilience Programme seeks to raise awareness and enhance the capacity of power sector stakeholders in managing risks and taking adaptive actions for risk mitigation through holistic planning and technical solutions.

The three-phase Odisha Power Sector Resilience Study, launched in 2020 by CDRI, progressed significantly in the current fiscal year.

Phase 1 of the study assesses disaster preparedness and management of the power sector across multiple stages involving preparedness, survival, recovery

and restoration, reconstruction, and social and community resilience. The findings and recommendations have been shared with the Honourable Minister of State for Power, Government of India, the Odisha State Government, and relevant stakeholders across coastal states of India. The final report of the Phase 1 study is being drafted.

In 2021, Phase 2 and 3 of the study, was initiated with a focus on developing a roadmap for the improvement of standards and technology selection based on a multi-hazard risk assessment.

CDRI aims to publish the full report and consolidated learnings in 2023.

As part of its engagement with member countries, CDRI has initiated power sector resilience study with Chile and Brazil on systemic resilience and redundancy, and hydel power respectively.

Transport Sector Infrastructure Resilience Programme

Transport sector resilience refers to the ability of road, railway, airport, and seaport systems and sub-systems to remain functional with uninterrupted mobility of people and supply chains even in conditions of stress caused by extreme events.

CDRI's Sector transport Infrastructure Resilience Programme seeks to build and integrate resilience into transport management processes through studies and projects focusing on risk-based infrastructure planning and investment, improvement in standards and governance, leveraging technology, and capacity building across different modes of transportation.

The Programme currently focuses on the resilience of airports and seaports.

Work on Phase 1 of the three-phase 'Global Study on Disaster Resilience of Airports' commenced in 2021. Covering 111 airports in 57 countries, Phase 1 maps

the perception of airport managers on the impact of the increasing frequency of extreme weather events and on the built environment around the airports. The project's Appraisal and Steering Committee has representation from Japan, Italy, Australia, India, the United Kingdom as well as Airports Council International.

Phase 2 of the study is planned for 2022-23 and focuses on 12 selected airports across geographies covering various hazards, examining financing mechanisms of airports and investments towards risk and resilience.

In 2022, CDRI also initiated dialogue with stakeholders focusing on Seaport resilience.



Telecommunications Sector Infrastructure Resilience Programme

Telecommunications sector resilience refers to the ability of services to sustain without interruption during a crisis while keeping people, communities, governments, and businesses safe, connected, coordinated, and informed.

CDRI's Telecommunications Infrastructure Resilience Programme seeks to mainstream resilience principles in telecom infrastructure at the policy and planning level, develop a business case for investment, develop standardized approaches for risk estimation at asset-scale, network-scale, and system-scale levels, and promote cross-sectoral collaboration and coordination.

CDRI has conceptualized a study on National and Subnational Disaster Risk and Resilience Assessment and Roadmap for Telecommunications Sector. A Technical Advisory Committee with members from Japan, Italy, India, and the Telecommunication Development Bureau (of the International Telecommunication Union) was formulated.

The study is being initiated in the Indian states of Assam, Odisha, Himachal Pradesh, Gujarat, and Tamil Nadu in 2022-23.

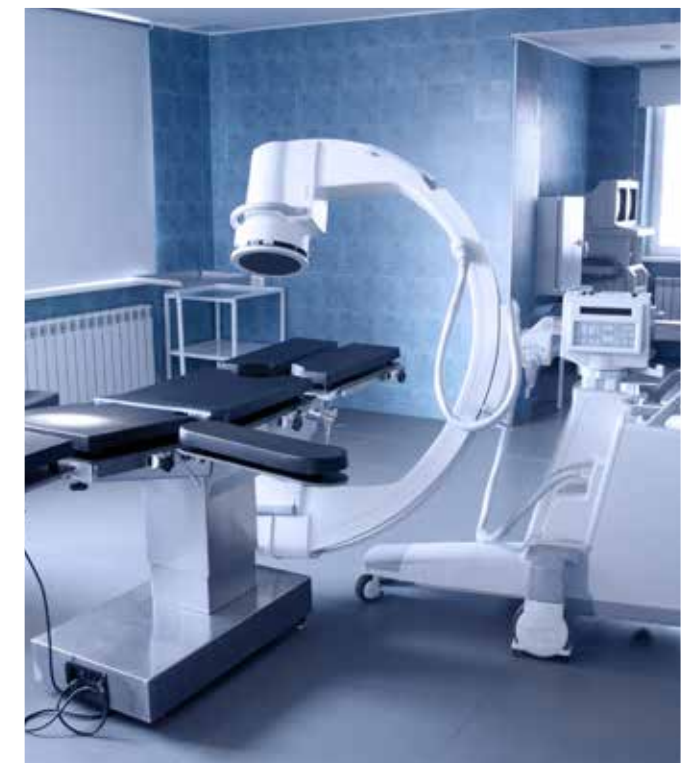


Health Sector Infrastructure Resilience Programme

Health Sector Resilience refers to an efficient health infrastructure system where communities, institutions, and governments can cope with, respond, and adapt to health emergencies, while ensuring the continuity of core medical functions and saving human lives.

CDRI's Health Sector Infrastructure Resilience Programme seeks to promote systemic preparedness, response, and recovery capabilities for enabling the continuity of health care services during disasters. A risk and resilience framework for the assessment of health and associated infrastructure is being formulated.

Working Paper Series: As part of the Working Paper Series, a paper on "Preparing for Surge of Medical Oxygen and Hospital Beds for Management of COVID-19" was published in 2021.



Urban Sector Infrastructure Resilience Programme

Urban Infrastructure Resilience refers to the state of preparedness of a city's infrastructure system to effectively withstand disruptions, ensure the functionality of civic amenities, and expeditiously recover from the impact of physical hazards with minimal loss of lives and livelihoods.

CDRI's Urban Infrastructure Resilience Programme seeks to mainstream the resilience of infrastructure in urban planning and development, strengthen research for informed decision-making and governance, and curate and share knowledge through collaboration and capacity building.

CDRI has conceptualized a global study on urban infrastructure resilience in 20 cities.

CDRI has designed and developed a study on urban disaster resilience for Cuttack, Odisha on a request from the Indian State Government of Odisha, and plans to initiate the study in 2022.



Finance for Resilient Infrastructure Programme

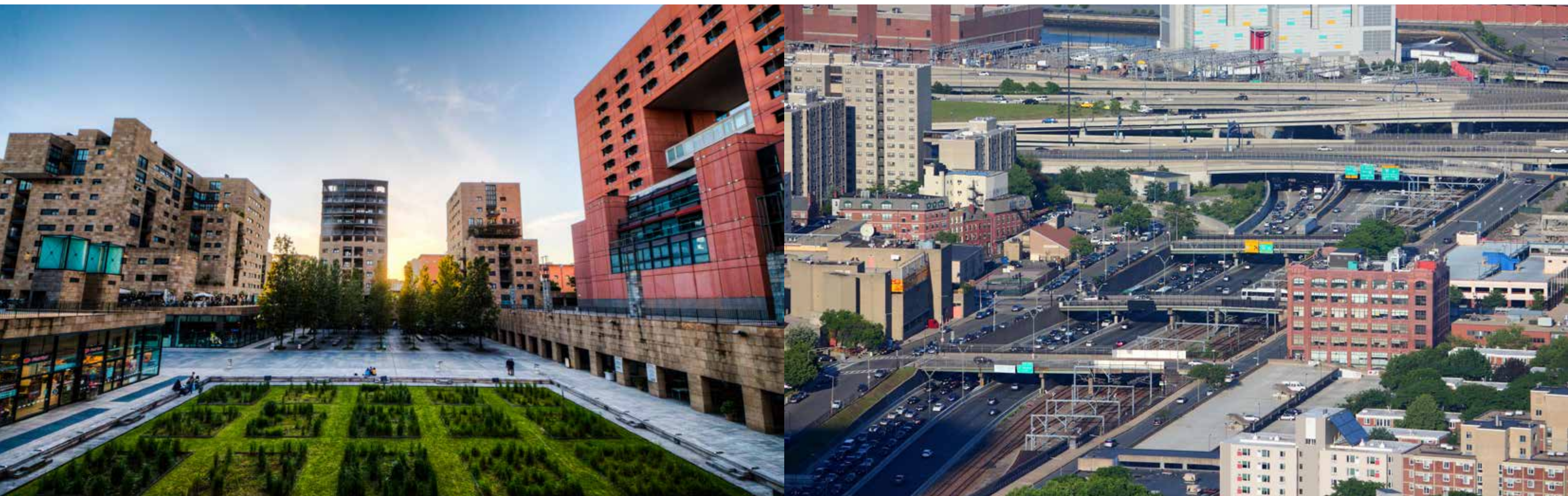
Finance is a crucial factor in the creation and retrofitting of resilient infrastructure. A strategic and planned financial mechanism ensures both pre-disaster mitigation and post-disaster recovery.

CDRI's Finance for Resilient Infrastructure Programme (FRIP) seeks to support Member Countries in developing a coherent disaster risk financing strategy to address the financing needs for (re)building resilient infrastructure. The Programme covers the pre-disaster mitigation and post-disaster recovery phases and augments stakeholder capacities to effectively drive the DRI agenda.

CDRI has conceptualized two Fiscal Risk Assessment Studies and a Policy Guideline Appraisal Project and aims to initiate work on the studies in 2022.

The first study undertakes a fiscal risk assessment of power and transport sectors in four member countries (India, Fiji, Mauritius, and Nepal). The second study undertakes state-level fiscal risk assessment of multiple infrastructure sectors i.e., power, road transport, housing, irrigation infrastructure, schools and hospital and other public buildings. The proposed states for this study include Himachal Pradesh, Odisha, Gujarat, and Tamil Nadu.

CDRI's Policy Guidelines Appraisal Project focuses on the policy guidance documents under India's National Infrastructure Pipeline (NIP). The study seeks to align the guidelines with Disaster Resilience Goals. CDRI has conceptualized this study in consultations with the Department of Economic Affairs (DEA), Government of India, key infrastructure ministries of Government of India, and NITI Aayog.



Technical Standards for Disaster Resilient Infrastructure

CDRI's Technical Standards for Disaster Resilient Infrastructure Programme seeks to develop a common technical vocabulary around DRI. These Standards aim to build, strengthen and promote performance-based standards and support certification systems across the lifecycle of priority infrastructure sectors.

Under this Programme, CDRI has conceptualized The DRI Lexicon, a knowledge product aiming to offer a common vocabulary for stakeholders in the DRI ecosystem and facilitate effective communication and collaboration.

The initiative engaged with an expert group of nine infrastructure and resilience specialists from different sectors, regions, and organizations to develop the methodology, identify key terms, and review their existing definitions.

The DRI Lexicon will be launched in 2023.



Infrastructure Governance Programme

A robust, efficient, and responsive infrastructure governance mechanism is a prerequisite for sustainable, resilient, and adaptable infrastructure systems.

CDRI's Infrastructure Governance Programme seeks to support member countries in identifying the benefits and co-benefits of investing in disaster and climate resilient infrastructure. The Programme aims to establish appropriate resilience targets and review mechanisms across member countries.

White Paper - CDRI published a white paper 'Governance of Infrastructure for Resilience' with Resilience Shift, highlighting the role of good governance in promoting resilient infrastructure



Capacity Development Programme for Disaster Resilient Infrastructure

Capacity Development refers to the ability to develop and strengthen the processes, resources and skills of organizations and communities enabling more effective and sustainable infrastructure systems and services.

CDRI endeavours intend to augment the capacity of the governments, private sector, and other organizations in ensuring resilient infrastructure by facilitating trainings and projects under its Capacity Development Programme.

Initiatives by CDRI in 2021-22 included:

- Development of outlines for two training courses on nature-based solutions for DRI and urban resilience for developing economies in collaboration with the Indian Institute of Technology, Roorkee and the School of Planning and Architecture, New Delhi.
- Workshop on Capacity Enhancement Initiatives and Interventions for Disaster Risk Reduction &

Resilience by the National Institute of Disaster Management and the Uttar Pradesh State Disaster Management Authority

- Learning Needs Assessment in power, telecom and transport sectors leading to the development of a customized training outline on disaster resilient power infrastructure in coastal areas and basics of disaster resilient transport infrastructure system.
- Recommendations on a proposal for capacity development of academic institutions and infrastructure professionals in Mauritius
- Rapid Learning Needs Assessment study for transport, telecom, and power sectors in Mauritius in association with National Disaster Risk Reduction and Management Centre, Mauritius.
- Development & sharing of a course description for a customized training course on disaster resilient infrastructure for Mauritius Road Development Authority (RDA), Mauritius

Youth for Resilient Infrastructure (Y4RI)

The engagement of youth is crucial for mobilizing and inducing transformative change on climate action for positive social and economic development. Under the Y4RI Programme, CDRI engages with the youth through Masterclass events, art and storytelling competitions and other innovative events for promoting the narrative and understanding of DRI amongst the youth.

CDRI ran a campaign "Imagining Disaster Resilient Infrastructure (IDRI) with Global Youth" in view of the preparatory ministerial meeting (Pre-COP) and 'Youth4Climate2021: Driving Ambition'.

The campaign focused on garnering youth awareness and engagement in disaster and climate resilient infrastructure.



CDRI Fellowship

CDRI invests in cutting-edge research and innovation through its knowledge initiatives to identify pathways for resilient infrastructure.

The CDRI Fellowship Programme, a 12-month seed grant, is one such initiative, providing financial support, peer learning, and capacity development opportunities for individuals designing transformative, actionable,

and scalable solutions for real-world problems related to infrastructure resilience.

First Cohort (2021-22): The first Cohort of CDRI Fellows was onboarded in June 2021 with 21 teams from nine Member Countries (Afghanistan, Australia, Bhutan, India, Nepal, Peru, Thailand, United Kingdom, and the United States of America) engaged in a variety

of research projects covering diverse hazard conditions.

CDRI will organize a convocation in 2022 to celebrate the completion of the 2021-22 Cohort's Fellowship journey.

Second Cohort (2022-23) (initiated in July 2021): Following a rigorous three-tiered review and selection process, a total of 15 teams from 11 Member Countries (Australia, Bangladesh, Bhutan, Canada, India, Chile, Japan, Peru, Sri Lanka, UK, and USA) have been selected and will be announced at ICDRI 2022.





Section 4

CDRI Engagements



CDRI Engagements with Member Countries & Multilateral Organizations

CDRI engages with its Member Countries, Multilateral and International Organizations through bilateral discussions, project engagement and participation in regional and global advocacy events.

CDRI Engagement with Member Countries

IRIS: CDRI was involved in initial consultations with 15 SIDS nations including Fiji, Mauritius, Mongolia, Dominican Republic etc. Australia, UK, EU, and France extending support to the countries through technical and financial commitment.

The Biennial Report on Global Infrastructure Resilience: For its flagship report, CDRI had engagements with USA, UK, Australia, Germany, and Canada making both technical and financial contributions.

COP 26: CDRI held consultations with representatives from Brazil and Netherlands, with the Government of Netherlands also extending financial support to CDRI's work.

Engagement with New Members: As part of its inception engagement, CDRI held bilateral meetings with Argentina, Peru, Madagascar, Turkey, Canada, Bhutan, and Italy.

Engagement with Non-Member Countries: CDRI also engaged with non-member countries such as South Korea, Egypt, Singapore, Rwanda, Philippines, Hungary, and Denmark to discuss potential collaboration on disaster resilient infrastructure projects.

CDRI Engagement with Multilateral and International Organizations

Advisory and Steering Committee: CDRI members nominated specialists from Asian Development Bank (ADB), United Nations Development Programme (UNDP), European Union, and the World Bank to serve on the CDRI Programme Advisory and Steering Committees.

Professional Secondments: Member Organizations supported the CDRI Secretariat with professional secondments.

Engagement with International Organisations and Development Agencies: CDRI engaged with international institutions and development agencies throughout the year including The Foreign, Commonwealth and Development Office (FCDO), United States Agency for International Development (USAID), Japan International Cooperation Agency (JICA) and German Federal Ministry of Economic Cooperation and Development (BMZ).

Other Engagements: CDRI also built engagements with the UN Secretary General's Executive Office, Green Climate Fund (GCF), Global Centre on Adaptation (GCA), InsuResilience Global Partnership (IGP), US Army Corps of Engineers (USACE), U.S. Department of State (USDS), and the Commonwealth Secretariat.



Memorandum of Understanding (MoU's)

MOU with Global Initiative on Disaster Risk Management (GIDRM) – 'All-inclusive Resilient Critical Infrastructure' MoU between CDRI and CIDRM focuses on health infrastructure systems. The partnership aims to enhance cooperation on disaster and climate resilient infrastructure and focus on risk-informed development considering context-specific fragility factors among CDRI and GIDRM partner countries.

Under Discussion

With **Indian Ocean Rim Association (IORA)** for cooperation and collaboration on disaster resilient infrastructure in the Indian Ocean Region.

With **Council on Energy, Environment and Water (CEEW)** for cooperation and collaboration on disaster resilient infrastructure in Energy Sector Resilience initiatives.

With **International Energy Agency (IEA)** and **World Meteorological Organization (WMO)** for technical and knowledge partnerships on energy sector resilience.





Section 5

Advocacy and Events



COP26

At the COP26, Glasgow, UK, CDRI emphasized positioning the resilience of infrastructure as instrumental in achieving climate mitigation and adaptation goals. CDRI was a thematic co-lead for Resilient Infrastructure at the Resilience Hub. CDRI participated as a speaker and moderator at dialogues and events of partners, collaborators, and stakeholders. The engagements also included bilateral meetings and deliberations with partners from the UK, USA, Australia, Germany, Netherlands, Fiji, and various organizations to promote action, policy, and dialogue on the resilience of infrastructure.



CDRI@COP26

1-12 November 2021

2 NOV 2021 0830-0900 GMT	LAUNCH OF INFRASTRUCTURE FOR RESILIENT ISLAND STATES (IRIS)	MEETING ROOM 4, AREA F – GROUND FLOOR
1 NOV 2021 1530-1645 GMT	POST-PANDEMIC RECOVERY: CAN THERE BE AN INFRASTRUCTURE RESILIENCE DIVIDEND?	GERMAN PAVILION
2 NOV 2021 1115-1230 GMT	INTEGRATING RESILIENCE INTO INVESTMENT DECISION-MAKING	RESILIENCE HUB
5 NOV 2021 1030-1130 GMT	PIONEERING NATURE-BASED SOLUTIONS FOR RESILIENT INFRASTRUCTURE	RESILIENCE HUB
8 NOV 2021 1000-1100 GMT	POWER-UP: FACTORING RESILIENCE INTO TRANSITIONING ENERGY INFRASTRUCTURE	USA PAVILION
8 NOV 2021 1400-1500 GMT	INFRASTRUCTURE FOR RESILIENT ISLAND STATES (IRIS): NAVIGATING PATHWAYS FOR SUSTAINABLE DEVELOPMENT IN SIDS	AOSIS PAVILION
9 NOV 2021 1000-1100 GMT	CLIMATE ADAPTATION: THROUGH INFRASTRUCTURE RISK RESILIENCE AND GOVERNANCE – A GLOBAL PERSPECTIVE	EU PAVILION (VIRTUAL)



IRIS launch at COP26, Glasgow, UK



Third Disaster Resilience Week

CDRI co-curated a session on 'Investing in Disaster and Climate Resilient Infrastructure for Better Preparedness' with UNESCAP at The Regional Learning Platform at Disaster Resilience Week 2021.

Mr. Sandeep Poundrik, former Director General, CDRI, reflected on the need to work together and promote a multi-sectoral and holistic approach.



Paris Peace Forum 2021

Responding to the Call for Projects by the Paris Peace Forum, CDRI submitted its Power Sector Resilience Study. CDRI participated in

the (virtual) Forum for a discussion on 'Be Prepared: Needs, Challenges and Solutions for Climate Change Adaptation.'



International Conference on Disaster Resilient Infrastructure



The International Conference on Disaster Resilient Infrastructure (ICDRI) is the annual flagship conference of CDRI. It brings together member countries, organizations, and institutions to strengthen the global discourse on disaster and climate resilient infrastructure.

CDRI is organizing the fourth edition of ICDRI in May 2022 in New Delhi, in partnership with the Government of the United States, and with the support of the Ministry of Infrastructure and Water Management, The Netherlands.

The theme of ICDRI 2022 is "Envisioning a People-Centered and Resilient Infrastructure Transition".

The conference will include multi-sectoral and multi-country discussions around infrastructure transitions, risk governance and finance, innovation and human-centered, ecologically sensitive design for building resilience. Led by global experts, there will be policy, regional, sectoral and thematic forums, with space for networking opportunities.

The Policy Forums will highlight the overarching risk governance perspectives critical for building resilient infrastructure.

The Regional Forums will explore various policy contexts in light of the transition and delve deeper into the key challenges for building resilient infrastructure.

The Sectoral and Thematic Forums will discuss solutions and success stories that have been identified as broad portfolios of action for CDRI.

Feature Events will bring together different US agencies and highlight their global contribution in building disaster resilient infrastructure.

Futures Sessions will focus around human-centered design.

Curtain-raisers: Leading up to ICDRI 2022, CDRI is organizing a series of dialogues on transitions associated with resilient infrastructure. Webinars cover subjects such as creating communities of practice on infrastructure resilience, resilient hydrogen energy infrastructure and peoples'-participation.

Masterclass: CDRI's Masterclass will provide conference participants with an opportunity learn critical aspects of disaster risk financing and certification systems for infrastructure resilience.

DRI Deliberations

Jul 14, 2021
DRI DIALOGUE

Disaster Risk Finance for Public Infrastructure Assets in the Developing World: Opportunities and Challenges



Sep 23, 2021
DRI DIALOGUE

The 'Financial Case' of Resilient Infrastructure: Integrating Disaster and Climate Risks into Infrastructure Investment Decisions



Sep 30, 2021
PRE-COP26 DRI DIALOGUE

Building Infrastructure Resilience Inclusively – Integrating Gender in Recovery and Reconstruction



Oct 14, 2021
DRI DIALOGUE

Strengthening Resilience of Data Centres to Disasters and Climate Change: Exploring the Role of Technical Standards

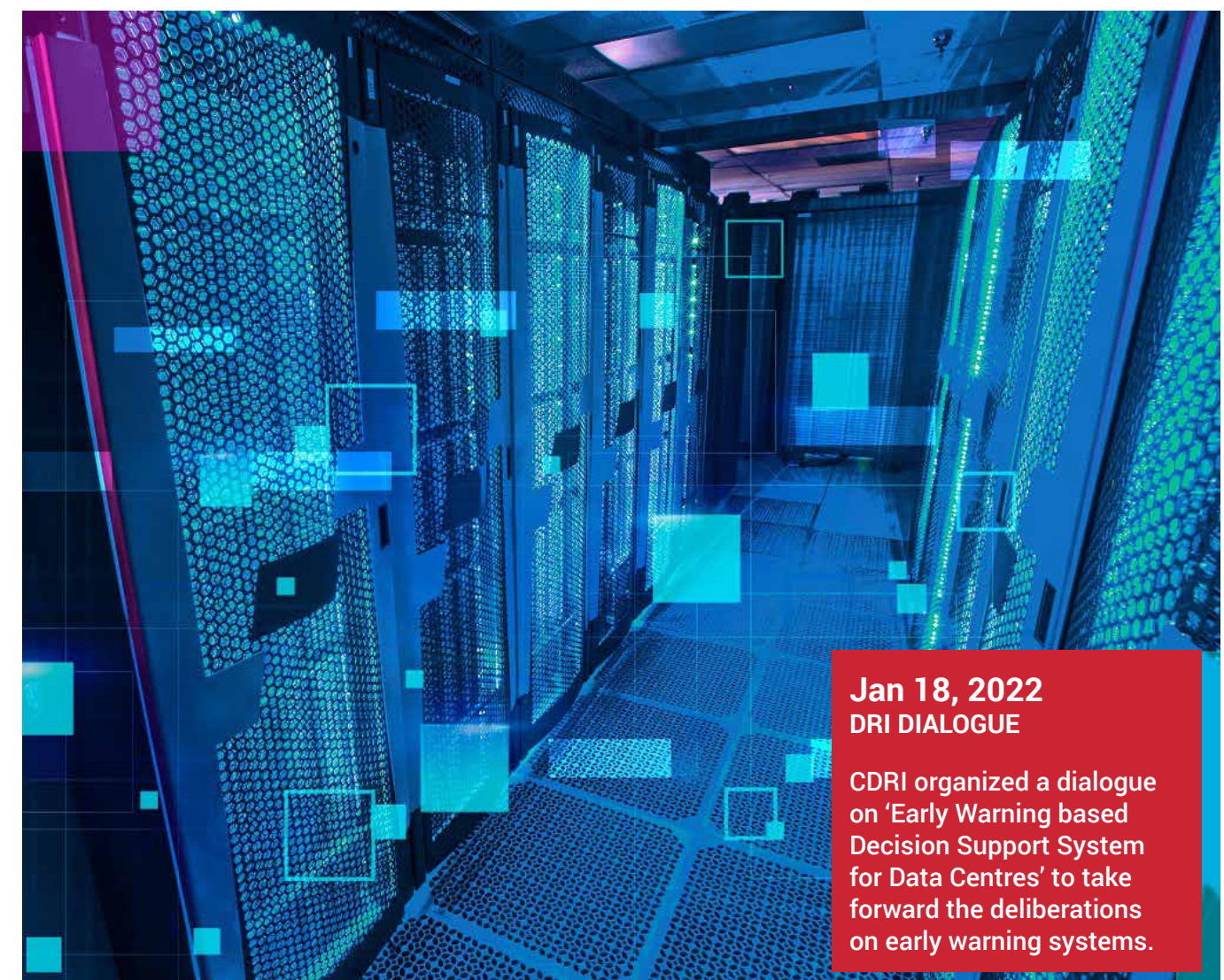
Dec 14, 2021
DRI DIALOGUE

Knowledge for Action: Joining Hands for Resilient Infrastructure



Jan 18, 2022
DRI DIALOGUE

Energy Transition Pillars: Disaster Resilience of Hydrogen Infrastructure



Jan 18, 2022
DRI DIALOGUE

CDRI organized a dialogue on 'Early Warning based Decision Support System for Data Centres' to take forward the deliberations on early warning systems.



Section 6

Financial Statement



Financial Statement

During the financial year 2021-22, CDRI has been supported mainly by the Governments of India, UK, and The Netherlands.

Government of India has sanctioned a grant of INR 480 crores (approx. US\$ 63.57 million) towards operational and programme activities of CDRI over a period of 5 years during 2019-24. The Ministry of Home Affairs, GOI is the main donor for the Financial Year 2021-22. For the FY 2021- 22, CDRI incurred a total expense of

INR 20,78,83,760 (approximately US\$ 2.75 million). 50% of the expenditure incurred, was towards the establishment of a fully functional Secretariat with key staff to drive operations and programmes with a futuristic outlook. Additionally, Government of UK has contributed GBP 165,000 towards the development of the Global Flagship Report on DRI and Ministry of Infrastructure and Water Management, Netherland has contributed EUR 100,000.

Statement of Receipts, Disbursements and Fund Balance

(01 US\$ = INR 75.51 as on 31 Mar 2022)

Particulars	Amount	
	(INR)	(US\$)
Opening Balance unutilized grant balance (As of 01st April 2021)	40,19,69,647	5,323,396
Receipts		
Grants Received	17,36,36,593	2,299,518
Bank Interest	1,16,70,478	154,555
Total Receipts (Opening Balance + Receipts)	58,72,76,718	7,777,469
Utilization		
Fund Utilized by CDRI during the year 2021-22	20,78,83,760	2,753,063
Total Fund Utilization	20,78,83,760	2,753,063
Closing unutilized grant balance with CDRI (As of 31st March 2022)	37,93,92,958	5,024,406





Section 7

Looking Ahead



CDRI: Towards A Resilient World

As we start to emerge from the pandemic, the next several years are crucial for CDRI to make its presence felt across the globe and become the international organization as has been envisioned by the founding and current Coalition Members and partners. Several activities and initiatives will support this ambition in the next year..

First, formalizing the Headquarters Agreement with the Government of India will support CDRI's transition to become an international organization, with the Secretariat in New Delhi.

Second, CDRI will undertake a stock-take and work plan exercise to prepare the next Strategic Work Plan of CDRI (2023-2026) that will provide further guidance on the priorities that CDRI will focus on over the next four years.

Third, CDRI will continue to expand its membership particularly in regions and countries that are increasingly more vulnerable to disasters and climate change.

Fourth, CDRI will continue to build organizational capacity, through partnerships with global institutions and partners, to elevate its understanding of DRI, and to deliver solutions that support resilient infrastructure across diverse global contexts.

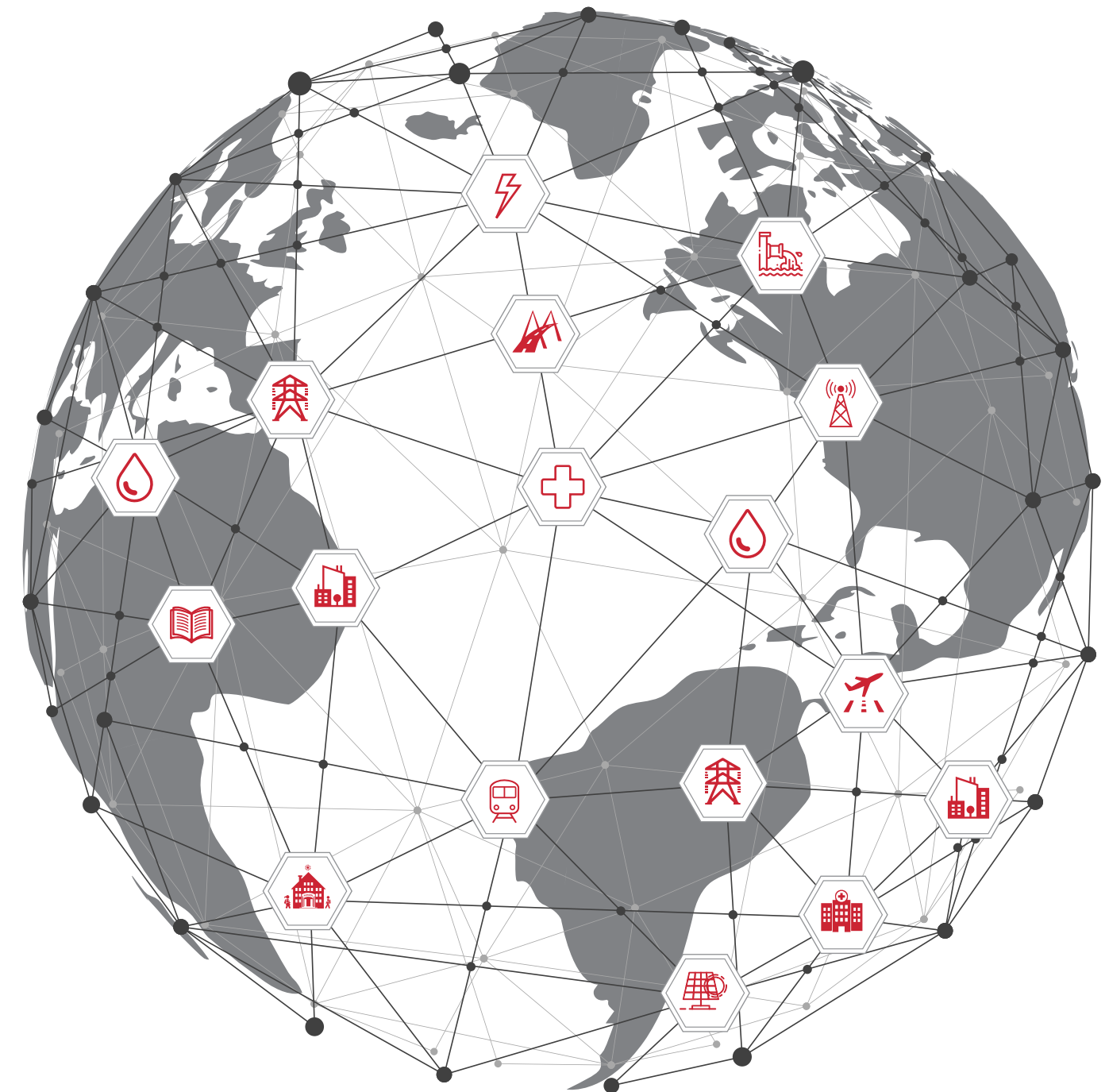
Fifth, in accordance with the current and next work plan, CDRI will continue to initiate and complete activities within and outside India, to build resilience to natural hazards and climate change, focusing specifically on critical infrastructure. Some of these include the following:

- **Infrastructure for Resilient Island States:** Conduct consultations with Small Island Developing States

(SIDS) in the Caribbean, Pacific and Indian Ocean and launch a programme to support SIDS with capacity development and technical assistance.


- **Sectoral and Thematic Resilience Programmes:** Continue to build a portfolio of technical studies in the power, telecommunications, and transportation sectors, and disaster risk financing. Additionally, explore establishing new programmes to address vulnerabilities in the health sector and water-related infrastructure.
- **Capacity Development, Research and Knowledge Management:** Continue to leverage the success of the first edition of the Fellowship Programme to expand capacity building initiatives including selecting and nurturing new Fellowship Cohorts; supporting research through special issue publications on topics related to DRI; and, establishing partnerships with global academic institutions to offer curriculum, research opportunities, and professional development on DRI.
- **Advocacy for DRI:** Continue to engage in global dialogues to promote DRI including through the annual International Conference for Disaster Resilient Infrastructure; continue to build evidence of risks to critical infrastructure by preparing a Flagship Report on the state of global resilient infrastructure; and participate in regional and global conferences such as APMCDRR and COP27.


Lastly, and importantly, CDRI will establish a Multi-Donor Trust Fund, as agreed to in the CDRI Charter, to receive contributions from multiple donors in support of CDRI programmes.






Coalition for Disaster Resilient Infrastructure

 4 & 5 Floor, Bharatiya Kala Kendra,
1, Copernicus Marg, New Delhi 110001, India

 info@cdri.world

 www.cdri.world

 [@cdri_world](https://twitter.com/cdri_world)

 [@coalition-for-disaster-resilient-infrastructure](https://www.linkedin.com/company/coalition-for-disaster-resilient-infrastructure)

