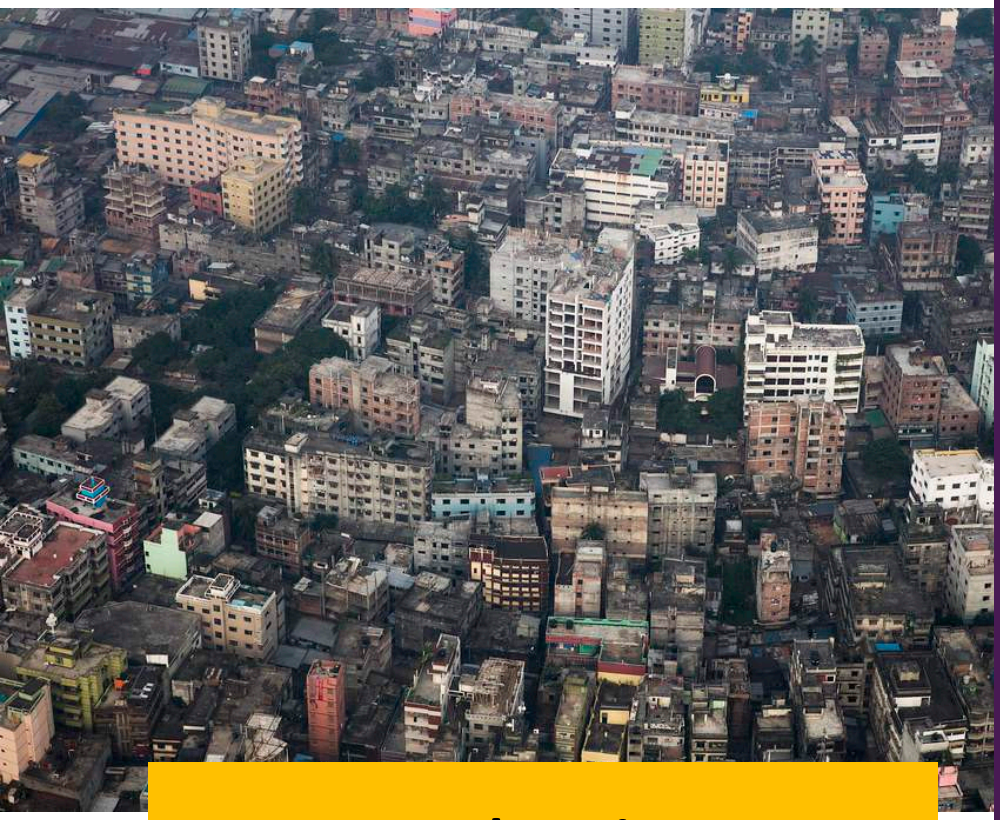
UNDRR
UN Office for Disaster Risk Reduction

SAARC
Disaster Management Centre (IU)

Regional Workshop on Urban Resilience & Making Cities Resilient

5th to 8th December 2022



A Comprehensive Report

MCR 2030
Making Cities Resilient

UNDRR
UN Office for Disaster Risk Reduction

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Urban Resilience & Making Cities Resilient

Background

Urbanization provides South Asian countries the potential to transform into being more sustainably resilient, liveable and prosperous. South Asia's urban population grew by 130 million between 2001 and 2011 and is poised to rise by almost 250 million by 2030. The opportunity posed by the magnificent demographic dividend, however, remains under-leveraged due to various reasons, disasters being one of the primary ones. As per EM-DAT's Disasters in Numbers, 2021 saw 174 disasters in Asia with India contributing 19. Disasters differentially impact urban and rural areas; while urbanisation exudes the essence of innate resilience, exposure of assets of higher value, acute and chronic vulnerabilities due to urbanization being messy and hidden, put urban areas at substantial risk.

Positively, however, urban local governments are on the '**frontline of opportunity**' to foster transformation, reduce effect & impact of disasters, reduce chronic vulnerabilities like keeping people out of poverty and protect hard-earned local development gains, enabling urban areas, commonly acknowledged as municipalities, to become more inclusive, safe, resilient, and sustainable. Challenged by climate emergency, pandemic, and other such seen and unforeseen shocks and stresses, resilience building can no longer be a stand-alone issue and must take into consideration the inter-dependencies between sectors, the interconnectedness of socio-economic factors, the complexity of hazards and the systemicity of disaster risk.

Therefore, cities must take a long-term approach to reduce risks and must make resilience building an integral part of sustainable urban development.

Introduction to the Making Cities Resilient (MCR) Campaign

The Making Cities Resilient 2030 (MCR2030)[1], a 10-year global partnership accelerating local resilience, provides a clear 3-stage Resilience Roadmap guiding cities and municipalities towards taking a long-term and continuous approach to resilience investments, from awareness raising to enhanced strategic planning and taking a whole-of-society approach to implementation. Founded on the fact that disaster prevention is an investment and not a cost, MCR2030 aims to Leave No Municipality Behind in this ambition. MCR2030 prioritizes strengthening of the local resilience agenda and the link between national and sub-national in terms of coordination, planning and implementation of resilience actions as well as across city actors. MCR2030 offers a platform for cities to access knowledge, experience, networks, tools, resources and services in support of their resilience journey to ensure cities become inclusive, safe, resilient, and sustainable by 2030, contributing directly to the achievement of Sustainable Development Goal 11 (SDG11) "Make cities and human settlements inclusive, safe, resilient and sustainable",

[1] https://mcr2030.undrr.org

and other global frameworks including the Sendai Framework for Disaster Risk Reduction, the Paris Agreement, and the New Urban Agenda.

Objectives of the workshop

This workshop served as a fundamental training on urban disaster and climate resilience. It aimed to -

a) Increase the knowledge and capacities on disaster risk reduction and climate resilience
b) Introduce the Resilience Roadmap, the normative framework guiding cities towards a long-term resilience investment and other offers by MCR2030 partners
c) Provide approaches and tools to further support resilience building at the local level
d) Strengthen national and local government linkage and support on disaster and climate risk reduction
e) Foster city-to-city exchange and learning of good practices

Course pedagogy

The training was an in-person engagement, facilitated by trainers from UNDRR Global Education and Training Institute (GETI) and SAARC Disaster Management Centre (IU), joined by guest speakers from partner institutes. The training included presentations, group exercises, discussions, and field visits.

Targeted participants

The workshop invited participation from the SAARC Member States of -

- **1 official** from the national ministry of urban development, and,
- **2 officials** from urban local bodies.

Agenda

Day 1: Monday 5 December 2022

Time	Session	Speaker / Facilitator
09:15-09:30	Registration	SDMC (IU)
09:30-09:50	**Welcome Session** • Welcome and participant introduction • Introduction to the workshop	SDMC (IU)
09:50-10:20	**Opening Session** • Introductory Remarks by UNDRR	**Mr. Sanjaya Bhatia**, Head of UNDRR GETI
	• Special Address by Mr. Emani Kumar	**Mr. Emani Kumar**, Dy. Secretary General, ICLEI South Asia
	• Inaugural Address by Director – SDMC (IU)	**Mr. P. K. Taneja**, Director-SDMC(IU)
	• Group Photo	
10:20-10:30	Health Break	
10:30-11:25	**Concepts and trends**: urban resilience and disaster risk reduction (Presentation & discussion) • Concept, terminologies, and trends • Linkage between DRR and climate change and sustainable development • Global frameworks: Sendai, Paris, SDG, New Urban Agenda	UNDRR
11:25-12:30	**MCR2030 overview** (Presentation & discussion) • Introduction of Making Cities Resilient 2030 (MCR2030) & Ten Essentials for Making Cities Resilient • Resilience Roadmap • MCR2030 in action: good practices • Accessing service via MCR2030 dashboard	UNDRR
12:30-13:30	Lunch Break	

Time	Session	Speaker / Facilitator
13:30-14:30	**Urban resilience in the SAARC region**	Mr. Emani Kumar, ICLEI South Asia
14:30-15:15	**Assessing gaps and needs using Disaster Resilience Scorecard for Cities** (Presentation & discussion) • Disaster Resilience Scorecard for Cities – a tool for disaster resilience planning (Column one of template)	UNDRR
15:15-15:30	Health Break	
15:30-16:30	**Group exercise**: Disaster Resilience Scorecard for Cities -preliminary version (Scoring and baseline assessment) • Group breakout (6-7 participants/group) • Group work	UNDRR & SDMC (IU)
16:30-16:45	Wrap-up Day 1	SDMC (IU)

Day 2: Tuesday 6 December 2022

Time	Programme	Speaker/ Facilitator
09:30-09:40	Recap from Day 1	SDMC (IU)
09:40-10.45	**Group exercise**: Disaster Resilience Scorecard for Cities preliminary version (Scoring and baseline assessment finalization)	UNDRR & SDMC (IU)
10:45-11:00	Health Break	
11.00–11.30	Group Exercise – cont.	
11:30-12:30	**Developing local disaster risk reduction plans** (Presentation & discussion) • How to integrate DRR into urban planning using template and scorecard assessment • Examples of local DRR strategies and action plans • Examples on mainstreaming DRR into sectoral programmes for risk-informed socio-economic development	UNDRR
12:30-13:30	Lunch Break	
13:30-15:55	**Group exercise**: Developing local disaster risk reduction strategies • Group Work: Developing DRR action plan	UNDRR & SDMC (IU)
15:55-16:00	Wrap-up Day 2	SDMC (IU)
16.00-16:10	Health Break	
City Visit (Dandi Kutir)		

Day 3: Wednesday 7 December 2022

Time	Programme	Speaker/ Facilitator
09:30-09:40	Recap from Day 2	SDMC (IU)
09:40-10:00	**Monitoring and Evaluation of DRR plan** (Presentation & discussion) • Monitoring & Evaluation, SMART indicators	UNDRR
10:00-11.15	**Group exercise**: Developing DRR action plan • Group Work: Developing DRR action plan	UNDRR & SDMC (IU)
11.15-11.30	Health Break	
11.30-12.30	**Group exercise – Cont.**	
12:30-13:30	Lunch Break	
13:30-14:30	**Group exercise**: Developing local disaster risk reduction strategies – cont. • Group Ppts: Developing DRR action plan	UNDRR & SDMC (IU)
14:45-15.45	Visit to GIFT City	
City Visit for Shopping (Alpha One Mall)		

Day 4: Thursday 8 October 2022

Time	Programme	Speaker/ Facilitator
9:45-10:15	Recap from Day 3	SDMC (IU)
10:15-10:55	**Financing for disaster and climate resilience actions** (Presentation & discussion) Project preparation and options for financing	Ms. Kathleen Geslani-Jovellanos, ADB
10:55-11:10	Health Break	
11:10-12:20	**Country Presentations (8 minutes for each ppt.)**	Director-SDMC(IU)
12:20-13:00	**SAARC Charter Day Celebration** • Introduction & theme – **Director SDMC (IU)** (5 mnts)	UNDRR & SDMC (IU)
	• Presentation by GIFT City- **Mr. Rajeev Sharma** (10 mnts)	
	• Presentation by CII- **Mr. Sameer Sinha** (10 mnts)	
	• Presentation by CRO-SMC – **Mr. Kamlesh Yagnik** (10 mnts)	
	• Way forward to build resilience – **Mr. Sanjaya Bhatia**(5 mnts)	
13:00-13:45	Lunch Break	
13:45-14:15	Wrap-up & **Training evaluation**	SDMC (IU)

Regional Workshop on
Urban Resilience and Making Cities Resilient

Day 1: 5th December 2022
Opening Session

Welcome and Participants Introduction

On behalf of SDMC(IU), Mr. Ankur Srivastava welcomed and introduced all the dignitaries on the dais, participants from respective SAARC Member States and resource persons for the Regional Workshop on Urban Resilience and Making Cities Resilient.

Course Introduction

Mr. Sanjaya Bhatia, Head UNDRR-Global Education and Training Institute (GETI), gave a brief introduction about the course, explaining the importance of risk information in the field of urban planning. He explained the need of such a hands-on workshop, its objectives and how it will be useful for the participants.

Mr. Emani Kumar, Deputy Secretary General at ICLEI - Local Governments for Sustainability, also addressed the occasion.

Keynote Address by Mr. P.K. Taneja, Director General, GIDM

Mr. P.K. Taneja welcomed all the delegates from SAARC Member Countries and resource persons. He highlighted the fact that cities generate over 80% of global GDP and hence, if managed well, urbanization can contribute to sustainable growth through increased productivity and innovation. He mentioned that the growing rate of urbanization and the increase in population density in cities can lead to creation of risk, especially when urbanization is rapid, poorly planned and occurring in a context of widespread poverty and therefore, it is absolutely necessary to build cities green, resilient and inclusive as once a city is built, its physical form and land use patterns get locked in for generations, leading to unsustainable sprawl. Drawing references to one of the UNDRR reports, he urged to emphasise on smaller and medium sized cities as disaster risks are known to be increasing faster in rapidly growing small and medium-sized urban centres than in either rural areas or larger cities. Because a new wave of urbanisation increase disaster risk, it also brings new opportunities for building resilience.

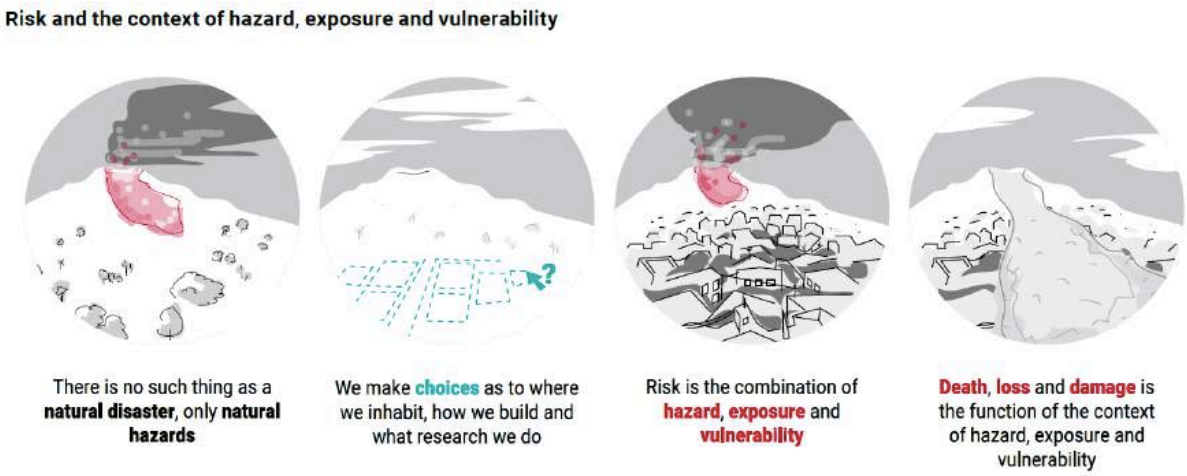
Finally, he highlighted the need of resilience building to be not worked upon as a stand-alone issue, rather the focus should be on the inter-dependencies of sectors, the inter-connectedness of socio-economic factors, the complexity of hazards and the systemicity of disaster risk.

He closed by highlighting the process of Making Cities Resilient (MCR) campaign and how the workshop has been planned to benefit the Member States and encourage the participants to join the global drive to make cities resilient. He requested all the participants to share their experiences, thoughts and inputs throughout the workshop.

Session 1: Concepts and trends: urban resilience and disaster risk reduction

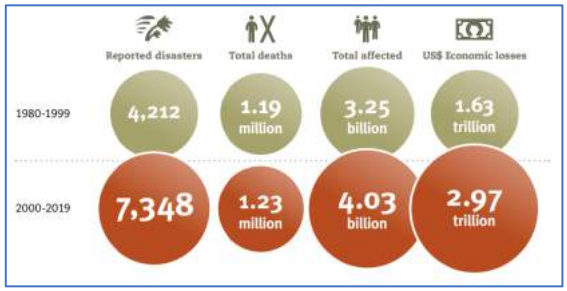
By Mr. Sanjaya Bhatia, Head UNDRR- GETI

Mr. Sanjaya explained the basic concept of hazard, exposure, vulnerability, risk and resilience and emphasised on the fact that 'Disasters are not natural'.



The participants were explained how our choices steer the consequences of a hazard into a disaster by disregarding the increasing exposure coupled with vulnerabilities and lack of coping capacity. He placed focus on the fact that hazards, climate change do not affect everyone equally.

He explained the human cost of disasters in terms of the losses recorded.



Citing the World Economic Forum's The Global Risk Report of 2021, he illustrated the perceptions of various risks in terms of likelihood and impact to urge the participants to look at risks in a comprehensive manner listing some of the key issues of resource scarcity, unchecked urbanisation coupled with high exposure, governance challenges, crippling issues if equity, poverty and inclusion etc.

He used these to explain how they are contributing to building of stressors up till 'tipping points', post which we would encounter systemic failure, often referred to as the multiple breadbasket failure.

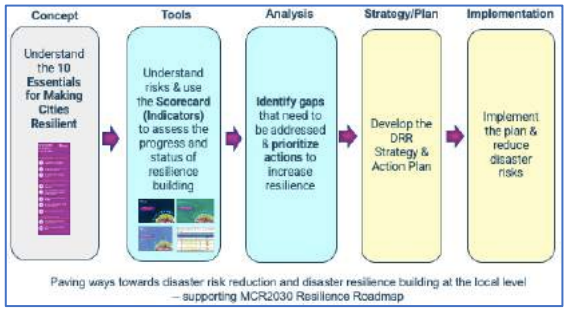
(Source: UNDRR 2019)

Driving home the concept of 'risk management' rather than 'disaster management' and the idea of disaster risk being systemic in nature, he explained the 'innovation curve' - from destructive to regenerative approaches towards Systemic Risk Governance.

Having said that, he put forth certain recommendations to integrate climate change adaptation, sustainable development and disaster risk reduction like promoting joint decision-making processes, tools, metrics, ensuring the use of relevant data, science and knowledge and taking a systems approach.

Session 2: MCR2030 Overview and Assessing gaps and needs using the Disaster Resilience Scorecard By Ms. Daria Mokhnacheva, UNDRR

Ms. Daria introduced the participants to the overall approach of the Making Cities Resilient (MCR) Campaign.



The Disaster Resilience Scorecard for cities was also introduced in this session – which is a tool to support disaster risk reduction and resilience planning – to understand

the cities' status on resilience building (baseline snapshot), to identify priority areas and actions for DRR and to creare dialogue and help to engage multi-stakeholders in the process.

She explained that every city is made up of 'system of systems' and each system has different owners and stakeholders thus working towards 'resilience' is a multi-organizational & multi-stakeholder endeavour.

She described the **Ten Essentials for making cities resilient**- the guiding principles and how each of the essential can be achieved.

1. Organize for disaster resilience
2. Identify, Understand and Use Current and Future Risk Scenarios
3. Strengthen Financial Capacity for Resilience
4. Pursue Resilient Urban Development and Design
5. Safeguard Natural Buffers to Enhance Ecosystems' Protective Functions
6. Strengthen Institutional Capacity for Resilience
7. Understand and Strengthen Societal Capacity for Resilience
8. Increase Infrastructure Resilience
9. Ensure Effective Disaster Response
10. Expedite Recovery and Build Back Better

It was highlighted how different essentials circumscribed different dimensions of disaster resilience; Essential 1, 2, 3 are **enabling essentials** which cover governance and financial capacity.
Essential 4 to 8 are **operational essentials** that cover many dimensions of planning and disaster preparation.
Essential 9, 10 are essentials that ensure pre-emptive response and building back better & smarter.

Ms. Daria further explained the linkages of agendas of DRR, climate change adaptation and mitigation & sustainable development at the national and local levels. The rationale behind the 10 Essentials was illustrated lucidly.

1. To begin with the local level institutional and coordination capacity needs to be strengthened or established, if such an institutional mechanism does not exist. This is the initiation of a local ecosystem that is conducive to the pursuit of disaster resilience.

2. Once such an institutional system is in place, a concerted effort is to be made to identify and understand disaster risks, not only in the present scenario but also in the future scenarios and disaster risk is to be perceived through a systemic lens.

3. The third Essential talks about developing a practice of understanding the economic impact of disasters and the need for investment in resilience. Until and unless there is an inherent want of investing in disaster risk reduction, financial arrangements would always favour management of disasters.

4. The fourth Essential talks about resilient urban development and design. This essential is fed by the implementation of Essential 2.

5. Often the mad rush of urbanisation takes a toll on what the natural ecosystem has to offer. The fifth essential is about safeguarding natural buffers to enhance the protective functions offered by natural ecosystems. Efforts are to be made to identify, protect and monitor critical ecosystems services that confer a disaster resilience benefit.

6. Understanding a city's institutional background regarding risk reduction / management and building resilience can help in detecting current gaps in local capacity to coordinate and act towards prevention, mitigation, response and recovery in the case of disasters, as well as identifying the best and most-effective approaches to strengthen relevant institutions for managing disaster risk. Compliance to the sixth Essential ensures that all institutions relevant to a city's resilience have the capabilities they need to discharge their roles.

7. Every effort made towards disaster risk reduction must ensure that a culture of disaster resilience is cultivated within the community or communities. The seventh essential moves beyond the traditional approach of training and awareness and proposes the understanding and strengthening of societal capacity for resilience.

8. Disasters risks manifest not in silos but in a systemic manner affecting multiple sectors; transport (roads, rail, airports and other ports), vehicle and heating fuel suppliers, telecommunication systems, utilities systems, hospitals and healthcare facilities, educational institutes and school facilities, food supply chain, police and fire services, etc. Thus, the compliance to essential 2 should also lead to assessment of the capacity and adequacy of, as well as linkages between, critical infrastructure systems and upgrade them as per the risks identified.

9. While all measures are taken to address the acceptable disaster risks, often times, residual disaster risks wreak havoc and thus the ninth Essential talks about ensuring the creation and updating of disaster response plans as per risks identified in essential 2 and communicated to all stakeholders through use of organizational structure as per essential 1.

This is a perfect example of how one Essential leverages the successful compliance of other Essentials; the Essentials are to be achieved not individually but comprehensively.

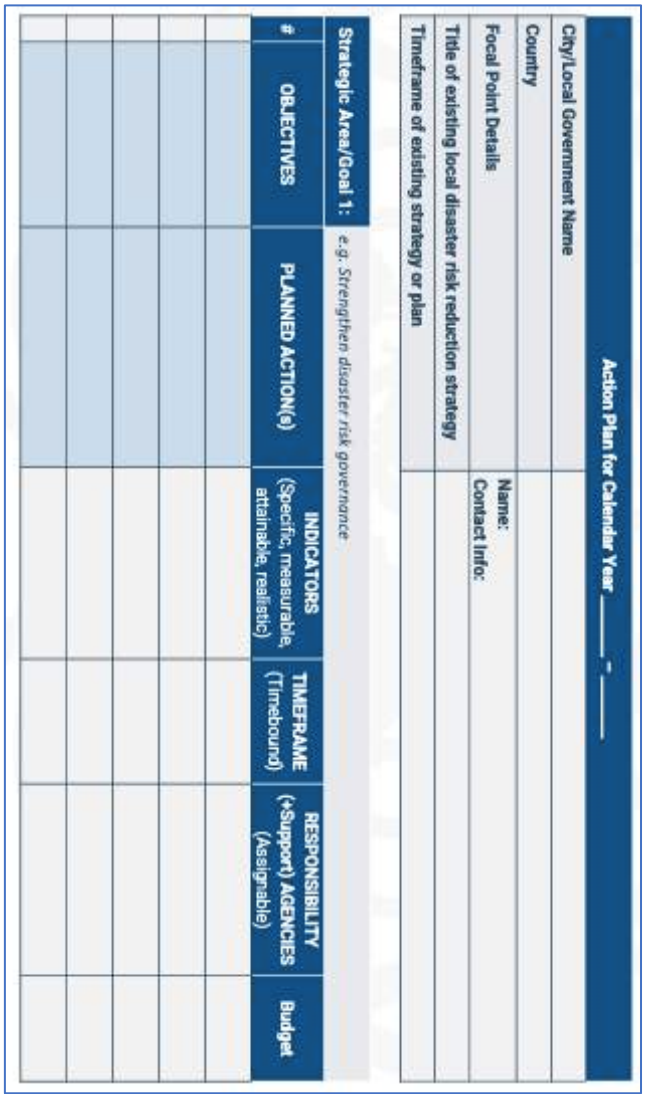
10. The last Essential talks about building back better, smarter and for that to happen there is a need to ensure sufficient pre-disaster plans according to risks identified and that after any disaster, the needs of the affected are at the centre of recovery and reconstruction, with their support to design and implement rebuilding.

In addition to the Essentials, the participants were introduced to the series of Words into Actions (WiA). The WiA guidelines are pragmatic roadmaps to programming an effective implementation strategy. This is facilitated by promoting a good understanding of the main issues, obstacles, solution finding strategies, resourcing and aspects for efficient planning.

The guidelines can be valuable resources for national and local capacity building through workshops and training in academic and professional settings. They can also serve as a reference for policy and technical discussions. Emphasis was laid on the WiA instalment on '**Implementation guide for land use and urban planning**', developed by UNDRR and available freely on preventionweb.net

Ms. Daria reinforced the idea that every effort towards disaster risk reduction must percolate down to the last mile of social structure and thus building of capacities at all levels, depending on the context, is an immediate and utmost necessity.

Having explained the Scorecard and how to use it and read reports generated using it, the participants were brought to a stage where they were ready to use it in their own contexts.
The first exercise was to use the preliminary scorecard to identify gaps in a city of the participants'' choice and convert those gaps into objectives and actions for the DRR Action Plan as per the format shown below –



"What is MCR2030?"

The Making Cities Resilient (MCR) Campaign was first launched from 2010 to 2020 with an objective to ensure cities around the world develop and grow sustainably and resiliently. Looking at the success of the 1st instalment of the campaign, it was relaunched again, from 2021 and would run its course till 2030.

The campaign provides a clear 3-stage **Resilience Roadmap** guiding cities and municipalities towards taking a long-term and continuous approach to resilience investments, from awareness raising to enhanced strategic planning and taking a whole-of-society approach to implementation. Th campaign connects cities with expert organizations, pool of resource and knowledge through online dashboard and is an excellent platform to support national urban resilience programme.

The process moves through 3 stages –

Stage A – Know Better
Stage B – Plan Better
Stage C – Implement Better

MCR2030 in Action

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MCR2030 – A Snapshot

Highlights from Countries

- Maldives' National Disaster Management Authority (NDMA) restarted their support to sub-national authorities on resilience through MCR2030, with active engagement of Local Government Authority (LGA).
- The Technical Training on Urban Risk Reduction and MCR2030 for the Maldives in May 2022 led Kulhudhuffushi City to be the first Maldivian city to join MCR2030 and commit to resilience building.
- In 2022, the national DRR strategy is revised to include a focus on local resilience
- Another technical training is planned for the Southern Maldivian City in January 2023

Initiatives

- Strong coordination between Association of Municipalities and cities
- 264 municipalities in Bangladesh joined MCR2030
- 54 municipalities completed Resilience Scorecard


Municipal Association of Bangladesh-MAB
April 1 ·

MCR2030 workshop held in Faridpur region.

A day-long workshop on MCR2030 sign up and access the dashboard was organized by Madaripur Municipality with the participation of representatives of 23 Municipalities in the greater Faridpur region as part of the program adopted by the UN Disaster Risk Reduction Department.

Mayor of Madaripur Municipality Mr. Md. Khalid Hossain yead, Secretary General, Municipal Association of Bangladesh-MAB was present as the chief guest in the workshop.

The meeting was presided over by Mr. KH Ahammad Firoz, Secretary, Madaripur Municipality, President, BAPS, Faridpur Region.

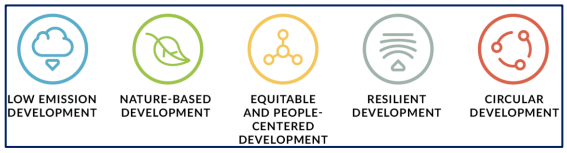
Mr. Md. Shafiqul Islam, Mr. Arafat Zaman and Mr. Sohail Sardar were present as Master Trainers.

Secretary, Executive Engineer, Assistant Engineer, Councilor of Madaripur Municipality, Officers-Employees and representatives of various professions from 23 Municipalities were present.

S M Abdur Rauf, Consultant of MCR2030 Bangladesh conducted the training session of the workshop with the aim of building disaster risk reduction management framework in all cities of the world by 2030 at the initiative of UN.

Session 3: Urban Resilience in the SAARC Region
By Mr. Emani Kumar, ICLEI

Mr. Emani Kumar, Deputy Secretary General of ICLEI – Local Governments for Sustainability, introduced his organisation to the participants, which is an international city network established in 1990 that advances local sustainability. ICLEI is the leading global network. He went on to introduce the five ICLEI pathways –

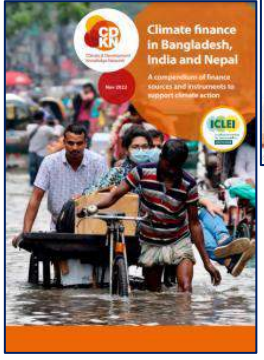


The participants were briefed about the various interventions of ICLEI South Asia.

1. City Profile and **Baseline** Assessment (Energy Use and Greenhouse Gas Emission Inventories)
2. Systematic and Integrated **Climate Action Planning** Processes and **Tools** (ClimateResilientCITIES)
3. **Climate Action Plans** and City Resilience Strategies (CRS)
4. Urban **Low Emission Development Strategies** (URBAN-LEDS)
5. Holistic Solid Waste Management (SUNYA)
6. Promoting **Climate Knowledge Brokering** (CDKN-Knowledge Accelerator)
7. Greener and **Resilient Recovery Solutions** in Post Covid Economy (ReCAP21)
8. Urban Food Systems To Promote **Nutritional and Food Security**
9. Technical Support by Global Climate Action Partnership (GCAP) to Asian Countries *(formerly Asia LEDS Partnership)*
10. Open and Green Spaces, **Nature Based Solutions, Urban Biodiversity**
11. Transition Towards Sustainable **Electric-Mobility**

A brief discussion was also held on Climate Resilience Action Plans of South Asian Cities.

Examples from India, Nepal and Bangladesh were also cited on capacity building on climate resilience, urban heat resilience and development of knowledge products and about platforms like



Global Covenant of Mayors for Climate and Energy (GCoM).

Session 4: Group Exercise

The participants, in this session, moved into the first group exercise where they used the Scorecard to identify gaps and turn into objectives and Action Plans using the template handed out to them.

Day 2: 6th December 2022

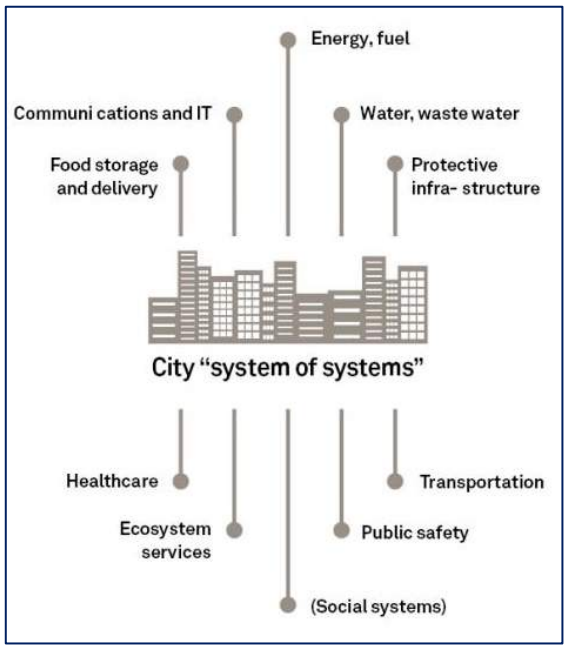
The day started with a brief recap by Mr. Shubham Daberao, from the Gujarat Institute of Disaster Management (GIDM).

After a brief continuation of the group exercise from the previous day, the first technical session was delivered.

Session 1: Developing local disaster risk reduction plans
By Mr. Sanjaya Bhatia, UNDRR

The session opened by introducing the participants to the concept of the fictional city of Drecca-Susdev, where, ideally, various issues are understood and dealt through a systems approach and in a coherent manner.

For this to be translated into reality, one needs to understand cities as a system of system, with multiple connections and interactions.



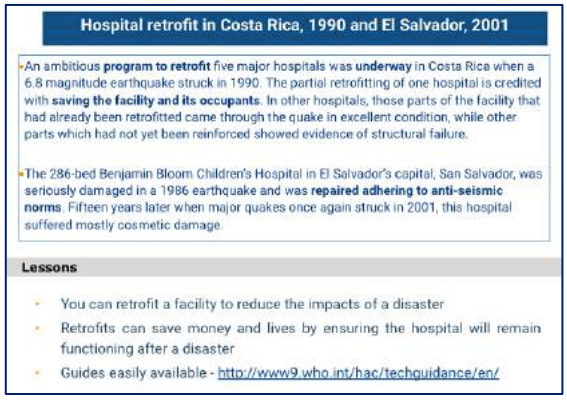
Mr. Bhatia used the process of MCR to explain how a city can become resilient in an organised and systematic fashion, starting from organising and preparing for disaster risk reduction, then moving onto disaster risk and resilience assessment, developing DRR strategies and Action Plans and implementing them and finally, through monitoring and evaluating the progress.

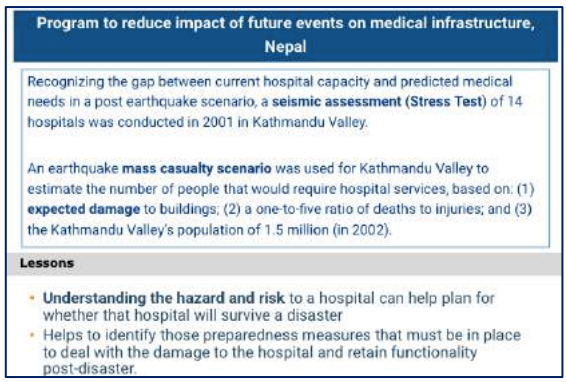
He also introduced the participants to the 'Table of Contents' of a DRR Strategy.

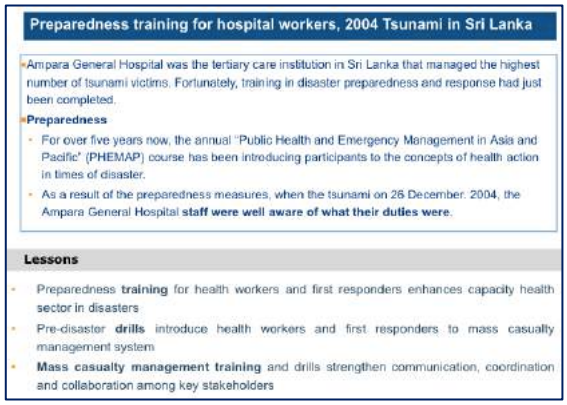
- Preface, including adoption decision
- Executive Summary
- Introduction Why and how are we doing this? *(e.g. local context of why DRR strategy is needed, scope and structure of the strategy, linkage with the national DRR strategy, legal framework and process of development)*
- Current situation and trends: challenges Where are we now? *(e.g. results of risk assessment, quick risk estimation, scorecard assessment, etc.)*
- Mission, vision and objectives
  Where do we want to be?
- Overview of action plan: rationale for proposed risk reduction measures
  What are we going to do to get there?
- Implementation Strategy
  How do we ensure we can get there?
- Monitoring, evaluation and reporting

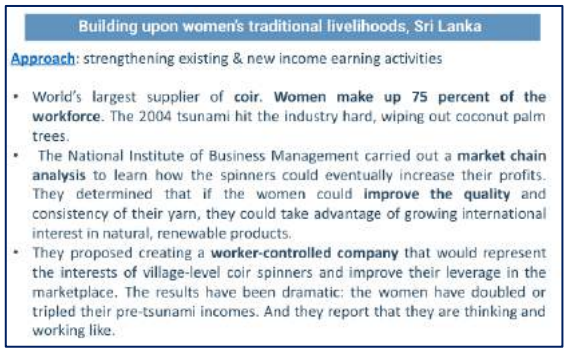
Mr. Bhatia cited examples of this has been done in cities like Lisbon, where some of the Action Plans have been converted into 'bankable projects'.

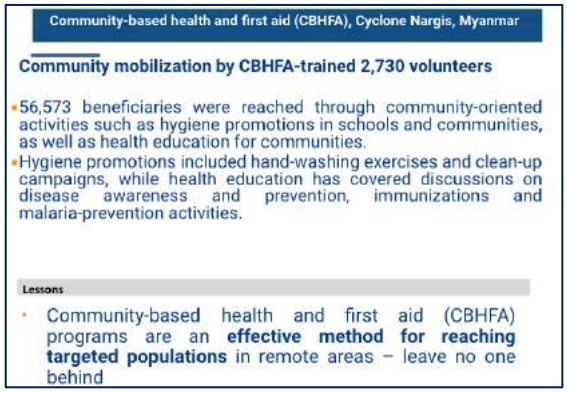
Different cases of how DRR issues have been mainstreamed into various sectors were alco exemplified.

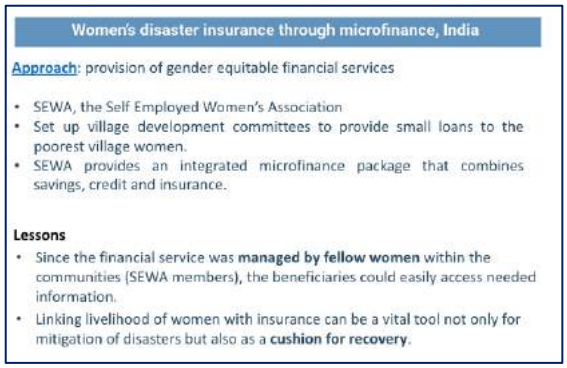












The exemplary **School Safety Programme – Towards a Culture of Disaster Prevention in Korea** – was also discussed. The programme was developed by UNDRR Incheon office, Ministry of the Interior and Safety and Incheon City in 2016 to complement South Korea's disaster safety training for youth. The main point of School Safety Programme is based on Sendai Framework for Children.

It encompasses -

- Prevention-focused training: Focuses on providing students with information regarding what to be known and done prior to disasters
- Discussion-and participation-focused training: Utilizes diverse training materials such as RISKLAND and HAZARD Bingo games to promote better engagement.

The objectives are –

The composition of the programme is –

Time	Training Materials	Learning Objectives
30 mins	Power Point, Video	To promote better understanding on the concept of Disaster Risk Reduction
10 mins	Film on Tilly Smith	To realize the importance of disaster prevention training
30 mins	Riskland (Primary School) Natural vs Man-made (Middle School) Natural vs Man-made (High School)	To advance the knowledge on DRR and disaster prevention measures
20 mins	Hazard Bingo (Primary School) Hazard Hunt (Middle School) Non-structural Risk Assessment (High School)	To review the overall training contents

Day 3: 7th December 2022

The day started with a brief recap by the UNDRR team and after a brief continuation of the group exercise from the previous day, the first technical session was delivered.

Session 1: Monitoring and Evaluation of DRR plan
By Ms. Daria Mokhnacheva, UNDRR

Ms. Daria explained the terminologies of monitoring and evaluation and that the Monitoring & Evaluation (M&E) information is useful only if it is used. She also explained about indicators and their characteristics like what is to be measured, unit of measurement, quality to be achieved, time frame, target population, etc. She also elaborated the SMART indicators as specific, measurable, assignable, realistic, and time related. She gave example of indicators of DRR strategy and the process of monitoring and evaluating the DRR strategy.

Following Sessions on Group Exercises with the Disaster Resilience Scorecard for Cities:
By UNDRR & SDMC (IU)

The continued group exercise interspersed with technical sessions helped the participants to understand each and every nuance of the Ten Essentials in great details. The participants had the opportunity to analyse their city using the Scorecard and understand how gaps in DRR & Climate Action can be turned into objectives of a larger strategy which can then be converted into projects.

Day 4: 8th December 2022

The day started with a brief recap of the previous days, which set the tone for the next sessions as well as for the 'Special Session' organised to observe the SAARC Charter Day.

Session 1: Financing for disaster and climate resilience actions
By Ms. Ms. Kathleen Geslani-Jovellanos, CDIA-Asian Development Bank

Ms. Kathleen opened the session by introducing the participants to the Cities Development Inititaive for Asia (CDIA) of the Asian Development Bank (ADB).

- Founded in 2007 and became an **ADB-managed** multi-donor trust fund in 2018
- CDIA works closely with **Secondary Asian Cities** to develop project preparation studies (PPS) and link these to implementation financing
- CDIA provides **grants** for PPS ($500,000 average cost), with cities contributing in-kind
- CDIA **disbursement rate** is around $5 million per year

Ms. Kathleen introduced the participants to the different infrastructure financing options within the broad scope of public, public-private and private financing. She discussed some Critical Elements in attracting funds for urban infrastructure projects:

1. Capacity as a viable investment partner— Creating an enabling environment, i.e. policies on ease of doing business, credit worthiness of the city, presence of framework for aligned and smoother infrastructure implementation, clear direction of where the city wants to go.

2. The feasibility of the investment project(s), and

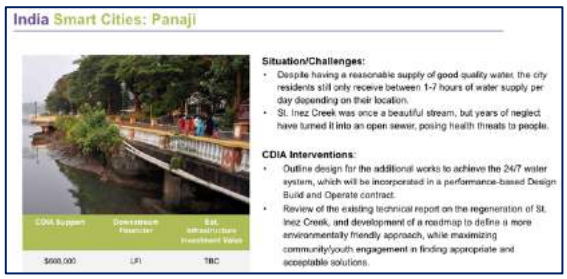
3. Alignment to financiers' priorities

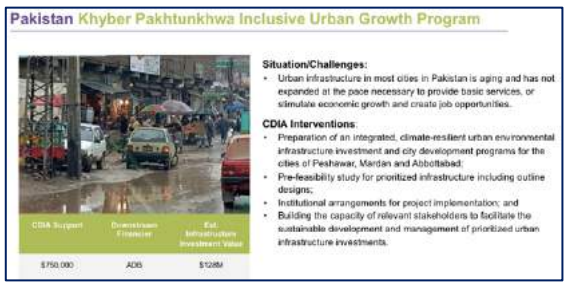
She went on to explain what bankable projects are –

A project is bankable, whether from public or private sources, **when its risk-return profile meets investors' criteria and can secure financing to implement the project.**

Key criteria for bankability include the probability of meeting the project's financial, environmental, and social goals, sufficient estimated cash flows to cover costs and produce returns that meet investor expectations.

Ms. Kathleen cited some examples of projects that CDIA has taken up to encourage participants to prepare bankable projects for disaster risk reduction.





Finally, the session closed with the following remarks –

1. Bankable projects undergo rigorous technical preparation to take it up to investment-ready levels.
2. Required levels of details in the project preparation stage may vary depending on the funder, the project nature and the project size.
3. Each Project Preparation Facility (PPF) has criteria used to select projects that it will support. Thus, eligibility of a project will differ for each

PPF, making the selection of PPFs to apply to is an important consideration for cities seeking support.

Session 2: Country Presentations Moderated by Mr. P. K. Taneja, SDMC (IU)

Mr. P. K. Taneja, Director SDMC (IU) moderated the country presentations in this session.

Bangladesh

The current population of Bangladesh is 168,641,063 as of Thursday, December 1, 2022, based on Worldometer elaboration of the latest United Nations data, which is equivalent to 2.11% of the total world population and it ranks number 8 in the list of countries (and dependencies) by population. The population density in Bangladesh is 1265 per sq.km and the total land area is 130,170 sq.km. 39.4 % of the population is urban (64,814,953 people in 2020). The median age in Bangladesh is 27.6 years.

Bangladesh faces issues of waste management, lack of public health facilities, scarcity of skilled workforce, and inadequate finance resource allocation. Under land use and planning, they face pricing issues, lack of master plans, inadequate monitoring, lack of skilled manpower, slow planning process and poor public participation. This will be worsened by climate change as it is estimated that average tropical cyclones cost around $ 1 billion annually.

Bhutan

Considering the state of urbanization, the land area is 38, 3394 sq.km with forest cover and arable land comprises of 71%, 8% respectively with just 1% of human settlements. The projected population in 2022 is 763, 249 and projected urban population is nearly 50%.

They face sector specific challenges e.g. transportation is difficult due to difficult terrain and frequent landslides. Waste management is poor state due to rapid increase in population, pressure on landfills and no recycling plants. Lack of medical staff puts burden on National Referral Hospital. Under land use and land planning, they lack comprehensive hazard mapping in governance planning. However, the land use planning is confined to planned localized areas. Though building codes are in place, but the resource constraint hinders the overall process. Apart from this there is communication gap between various agencies and stakeholders implementing DRM. Bhutan is also tackling disparity in development where the western part is more developed, resulting in high rural urban migration from

east to west. It eventually increases population density in western urban centers.

Development on Environment Sensitive Areas

India

India's urban population is around 377.1 MN (2011) and per citizen urban land has decreased from 0.03ha (2001) to 0.02ha (2011). The following graph shows the evident increase in number of metropolitan cities and the share of urban population. If the pace of urbanization continues in such rapid manner, then in just one decade the population can touch up to 600 million by 2030.

India's present day challenge in transportation is road congestion, air pollution and deteriorating road safety. Waste management could not unleash its full potential as waste power plants do not really help generate energy when the energy giving waste is only 13% of total of metro city waste.

Apart from this, municipalities do not consider all areas for waste collection and they lack holistic planning. Climate change has impacted urban flooding, air pollution, water scarcity and other hazards. More than 40% of India's population may face water scarcity by 2050 and at the same time the country's coastal areas, including big cities like Mumbai, will be affected by rising sea levels. Severe landslides and floods are projected to become increasingly common in such states as Assam.

Maldives

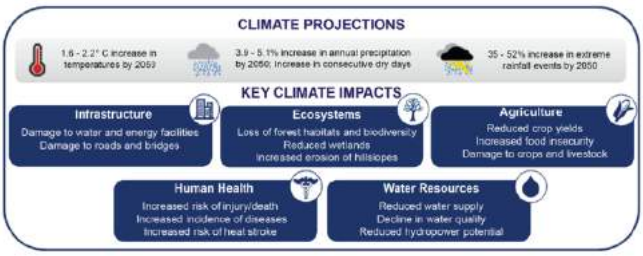
Maldives is an island country with Male as the capital which is also heavily urbanized with 48.7% of total population living in cities. This resulted in disparity between Male and other regions. The facilities and

infrastructure is improving with 100% telecommunication, uninterrupted electricity supply and the government is working for

road development, harbors, etc.
Maldives being an island nation is at vulnerable state due to floods, heavy rains, sea level rise, coastal erosion and sea surges. Future climate projections indicate that extreme flooding events are likely to become more frequent. This increase the vulnerability of the Maldives' economy as its major dependency on tourism. As the natural ecosystem and the coral reefs is at a greater risks from climate change, it has cascading effect on fisheries sector and ultimately food security and livelihoods.

Nepal

Nepal is a landlocked sovereign country, strategically located between China in north and India in south. It is extensively diverse in terms of topography, flora and fauna, where mountains and rugged hills cover almost 75% of Nepal's land area. As seen the figure, Nepal is the hotspot of natural disasters. In 2015, 7.6 magnitude earthquake strike killing over 8000 people, injuring 21,000 people and displaced 2 million people.
As other countries, Nepal faces present day challenge in various sectors like transportation, health sector, waste management, land use and land planning. As per Climate Risk Profile, Nepal the average annual temperature is projected to increase by between 1.6 and 2.2 degree Celsius. The frequency of hot days and nights is increased but decrease in cold days and nights. It is important to note that the average annual rainfall is projected to increase 3.9 to 5.1% in July-



September. And the dry season is projected to be drier and monsoon season is wetter. Lastly, the glacial melt and incidences of Glacial Lake Outburst Floods (GLOFs) is projected to increase.

Source: Climate Risk Profile, Nepal, USAID 2017

Pakistan

The current metro area population of Islamabad in 2022 is 22 million a 2% increase in each year. The total population is more than 23.12 Crores living in total area of area 7,96,095 Sq.km). Islamabad is a developed city having all type of facilities and modern infrastructure to facilitate the citizen of Islamabad. There are many welfare

and development schemes are in progress and also in future plan to upgrade the living standard of the citizens e.g. metro project, residential towers, flyovers, under

passes, hospitals, educations institutes, solid waste management, sectors development, construction commercial high rise buildings, water treatment plant, emergency services.

Floods in Pakistan in 2021 (Source: The Diplomat)

Transportation is a big challenge for the managers of capital city as the city is expanding and population is increasing Government is trying to provide public transport and to enhance metro system for the transportation also constructing of paved roads and interchanges to maintain the flow of traffic. Health sector is also progressing in capital city, many Govt & Private sector Hospitals equipped with latest machinery and diagnostic systems are available. Capital city was divided in 5 zones and with proper planning land was utilized with the help of private public partnership. A separate Directorate is responsible to implement the building codes especially after 8th October 2005 earthquake amendments was made in building codes and implemented accordingly. Due to rapid population growth rate it consumes most of financial and natural resources and leaves little for development.

Sri Lanka

There are 6 districts which are highly vulnerable to climate change scenarios. Sri Lanka faces urban flooding, heat island effect, issues in implementation of the DRR and Climate Policy due to following reasons:

1. Lack of early warning dissemination at local levels.
2. Slow response.
3. Lack of community preparedness
4. Lack of coordination and information management between stakeholders.
5. Lack of capacities for enforcement.
6. The number of policies and overlapping responsibilities between organizations.

Session 3: Special Session to Observe SAARC Charter Day Moderated by Mr. P. K. Taneja, SDMC (IU)

On 8th of December in 1985, the leader of the Seven South Asian Countries (Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka) had signed the Charter in order to set up the South Asian Association for Regional Cooperation (SAARC). SAARC was joined by the Afghanistan as a Member in the month of April, 2007.

Accordingly, 8th December is observed as the **SAARC Charter Day**.

Mr. P. K. Taneja opened the session by speaking about the history of SAARC and the work that has been done by the SAARC Disaster Management Centre (IU).

This was followed by three presentations –

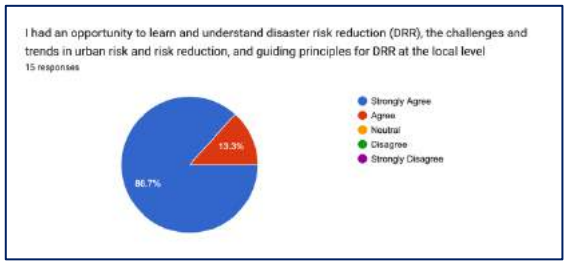
- The first presentation was delivered by the Chief Resilience Officer (CRO) of the Surat Municipal Corporation, Mr. Kamlesh Yagnik, who narrated the journey of the city of Surat under the 100 Resilient Cities Initiative.
- The second presentation was of Mr. Sameer Sinha who factually established how the pursuit of sustainability in the sector of building construction is profitable.
- Finally, the third presentation was delivered by Mr. Rajeev Sharma, Vice President (Mechanical) of GIFT City, who encourage the participants to join the MCR2030 campaign by narrating GIFT City's journey through the different stages of the campaign.

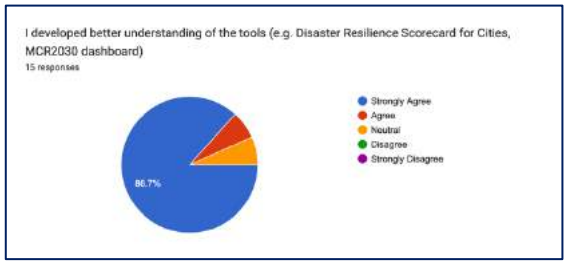
With the final words of Mr Bhatia from UNDRR, the workshop was declared closed.

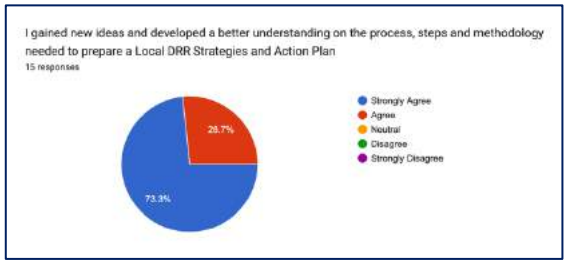
Overall evaluation of the program

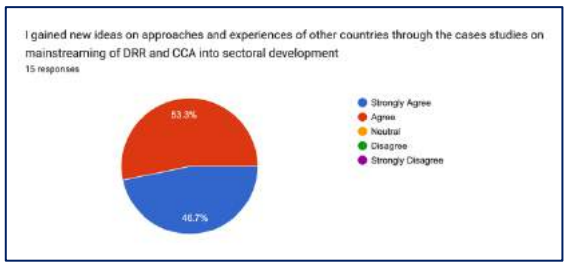
At the end of all the sessions, the participants were asked to give feedbacks on various aspects of the program.

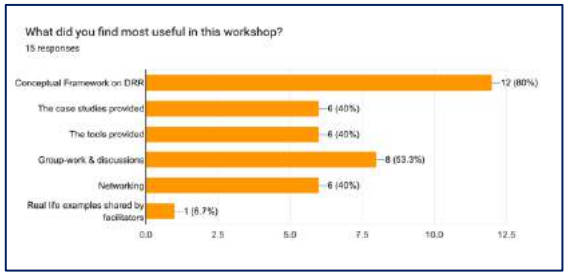
Some of the feedbacks are illustrated in the following section.





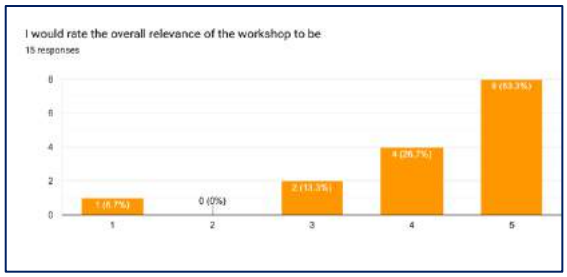


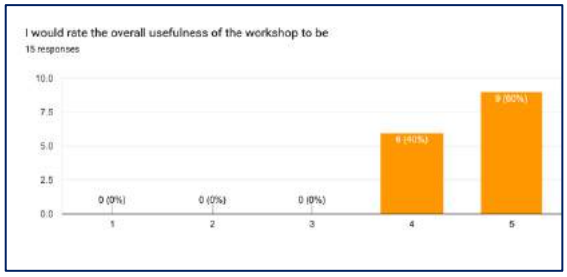


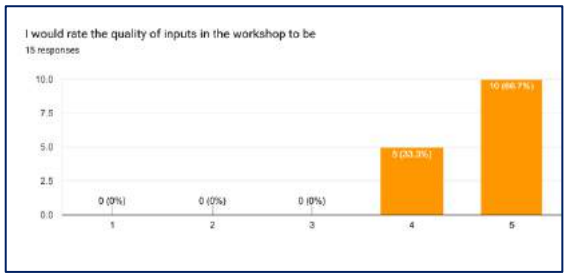


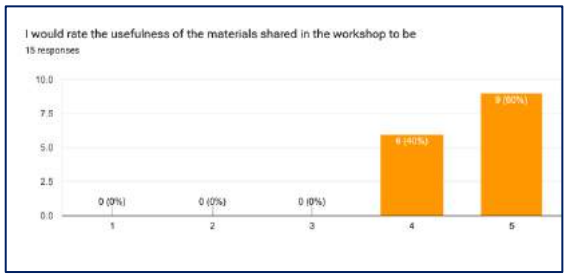
In addition to the above, the participants were also asked to share their evaluations on the relevance, usefulness and other such parameters of the workshop, based on which, an overall rating of the workshop was evaluated, which turned out to be 93%.

Some of the responses are as follows -









On being asked about the main takeaways from the workshop, the most useful thing about thee workshop and about the plans of the participants to use the learnings from the workshop, the followings answers were recorded –

What are **your main takeaways** from the workshop?
Systematic way how to make resilient cities
integration
Systematic method to address DRR activities.
I know the MCR2030 WELL And essential 1 to10.
Knowing thoroughly on how to do score card, knowing the tools and importance of resilience and DRR. Knew where my city stands knowing how much we have to work together to improve
Getting thorough to mcr2030 can help me prepare for the next city's MCR much better
Making our cities more Resilient with the help of tools such as score card and action plan we practically did
Indicators for the evaluation. Disaster are not natural but man made
Had got great idea of the way forward for our Country to access for the new development ideas from the other countries
MCR2030 - Disaster resilience scorecard assessment for cities and Climate Resilient City Tool (CRC Tool) - Previously, I had a workshop about CCAP, but DRRAP is new - Knowledge exchange among different countries, about Mahatma Gandhi, Father of Nation - Networking (ICLEI, GIDM, UNDRR) - PPP in disaster risk reduction
Duration is limited
DRR planning and Scorecard technique
New knowledge for me DRR
Disaster is not natural but man made. Importance of DRR and DRM.

What did you **find most useful** in this workshop?
Conceptual Framework on DRR, The tools provided, Group-work & discussions, Networking
Conceptual Framework on DRR, The case studies provided, The tools provided
Conceptual Framework on DRR, The case studies provided, Group-work & discussions
Conceptual Framework on DRR, The case studies provided, The tools provided, Networking, Real life examples shared by facilitators
The case studies provided, Group-work & discussions, Networking
Group-work & discussions
Conceptual Framework on DRR, The tools provided
Conceptual Framework on DRR, The case studies provided, The tools provided, Group-work & discussions, Networking
Group-work & discussions
Conceptual Framework on DRR, Group-work & discussions, Networking
Conceptual Framework on DRR, The case studies provided, The tools provided, Group-work & discussions, Networking

How do you **plan to use the learnings** from this workshop?
Amalgamated with development plans
implement at ULB related to prepare DRR and DP integration
DRR is path to sustainable development.
It's very usefully to our corporation and with the help of this course we strengthen our DPR.
Passing the information to my workplace and working with relevant authorities further on how to proceed with DRR
Prepare better for mcr2030 in fuvahmulah city. Help kulhudhuffushi city in making their planned actions and indicators. Support ndma in facilitating the initial talk with male' city council to join mcr2030.
- develop DRR plan for my city -Develop action plan and detailed scorecard for my city
To get CDIA support for disaster mitigation projects
Mostly will look for the further more workshops and advocate with our government and the stakeholder

How do you **plan to use the learnings** from this workshop?
Mostly will look for the further more workshops and advocate with our government and the stakeholder
Presentation to mayor and elected representatives and municipal colleague about understanding risk reduction and resilience and MCR2030 - Join MCR2030 - Collect and compile data needed for preliminary disaster resilience scorecard assessment for cities - Scorecard assessment which gives the status of disaster risk reduction and resilience (Preliminary and Detailed assessment) - Focus on budget allocation in disaster risk reduction rather than relief and rescue - Prepare plan and policies according to the objective of MCR2030 and Sendai Framework - Local Disaster and Climate Resilient Plan is being formulated which must be made SMART
I Will explain with my organization and superiors.
Will discuss and share in my office
Will make a plan DRR at local levels
Convince the Mayor to join MCR. Advocate DRR to my colleagues and superiors.

Annexure 1: Disaster Resilient Scorecard for Cities

The Disaster Resilient Scorecard for Cities (Scorecard) aims to assist local governments in monitoring and reviewing progress in the implementation of the Sendai Framework for DRR 2015-2030 and enable the development of a local DRR and resilience strategies.
The tool was developed by IBM, AECOM, and UNDRR with the support from the European Commission and USAID and launched in May 2017 at the Global Platform for DRR in Cancun.
The scorecard is now the predominant tool of the Making Cities Resilient Campaign. It provides a set of assessments that will allow local governments to assess their disaster resilience, structuring around UNDRR's Ten Essentials for Making Cities Resilient. The tool offers the potential for scoring at two levels:

- **Level 1: Preliminary level**, responding to key Sendai Framework targets and indicators, and with some critical sub-questions. This approach is suggested for use in a 1 to 2 day city multi-stakeholder workshop. In total there are 47 questions indicators, each with a 0 – 3 score
- **Level 2: Detailed assessment**, this approach is a multi-stakeholder exercise that may take 1 –4 months and can be a basis for a detailed city resilience action plan. The detailed assessment includes 117 indicator criteria, each with a score of 0 – 5.

The tool can be downloaded from here. Also, there is a Reference Note on required data/information to fill up the DRC Scorecard.
The scorecard can be used as a standalone tool, it does require to consider the city's hazards and risks. Specifically, the Scorecard prompts to identify "most probable" and "most severe" risk scenarios for each of the identified city hazards, or for a potential multi-hazard event. In considering risk, Quick Risk Estimation tool (QRE) developed by UNDRR and Deloitte may be helpful.

Benefits of using the scorecard:

The Scorecard can support cities to:

- Establish a baseline measurement of their current level of disaster resilience
- Increase awareness and understanding of resilience challenges
- Enable dialogue between key city stakeholders who may otherwise not collaborate regularly
- Enable discussion of priorities for investment and action, based on a shared understanding of the current situation
- Enable the development of a city resilience strategy / action plan
- Ultimately lead to actions and implementable projects that will deliver increased resilience for the city over time.

In the **preliminary assessment tool**, each of the 10 essentials is associated with a set of criteria with a total of 47 criteria, as shown below:

Essential 1: Organise for Disaster Resilience

1.1 Plan Making	1.2 Organization, coordination and participation	1.3 Integration
Does the city plan include disaster risk reduction approaches in line with Sendai Framework?	Is multi-agency teams established with authority and resources to address DRR?	Is there an integration of disaster resilience with other initiatives in the city?

Essential 2: Identify, Understand and Use Current and Future Risk Scenarios

2.1 Hazard Assessment	2.2 Shared understanding of infrastructure risk	2.3 Knowledge of Exposure and vulnerability	2.4 Cascading impacts	2.4 Risk Information
Knowledge of hazards, and likelihood of occurrence	Understanding of risk between the city and utility providers	Existence of scenarios from each hazard	Understanding of potentially cascading failures (city and infrastructure)	Availability of hazards maps and risk data

Essential 3: Strengthen Financial Capacity for Resilience

3.1 Attracting new investments	3.2 Resilience Budgets	3.3 Insurance	3.4 Incentives
Knowledge of all possible sources of funding	Presence of financial plan with a set of priorities	Level of insurance coverage in the city	Existence of incentives to support resilience building

Essential 4: Pursue Resilient Urban Development & Design

4.1 Land Use Zoning	4.2 New Urban Development	4.3 Building Codes and Standards	4.4 Application of zoning, building codes and standards
Is the city appropriately zoned (impact of key risk scenarios)?	Use of urban design solutions	Existence of building codes and regularly updated	land use zoning, building codes and standards applied and verified

Essential 5: Natural Ecosystems

5.1 Awareness of ecosystem services	5.2 Integration of green and blue infrastructure into city policy and projects	5.3 Transboundary environmental issues
Awareness of the role that ecosystem services may play in city's disaster resilience	Green and blue infrastructure is routinely embedded into city projects	Is the city aware of ecosystem services outside of the city boundaries. Are agreements and collaborations in place?

Essential 6: Institutional Capacity for Resilience

6.1 Skills and experience	6.2 Public education and awareness	6.3 Data sharing	6.4 Training delivery	6.5 Languages	6.6 Learning from others
Clear access to the Skills, knowledge and experience to respond to reduce risk and disasters	Coordinated public education campaigns (information made public)	Sharing data on city's resilience with other organizations	Training on risk resilience available to all sectors in the city (government officials, NGOS, community)	Availability of training materials in the language spoken in the city	City learning from other cities

Essential 7: Strengthen Societal Capacity for Resilience

7.1 Community organizations	7.2 Social networks	7.3 Private Sector	7.4 Citizen engagement
Is the community participating in pre event planning and post event response?	Regular training provided to the most vulnerable groups	Business Continuity Planning (BCPs)	Effective city and citizen engagement (through multiple media channels)

Essential 8: Increase Infrastructure Resilience

8.1 Critical Infrastructure overview	8.2 Protective Infrastructure	8.3 Water and Sanitation	8.4 Energy - Electricity
Is Critical Infrastructure resilience a city priority?	Protective infrastructure is well designed and based on risk information	Potential loss of services in case of disaster	Potential loss of services in case of disaster

8.5 Transportation	8.6 Communications	8.7 Healthcare	8.8 Education facilities	8.9 First Responders assets
Potential loss of services in case of disaster	Potential loss of services in case of disaster	Sufficient healthcare capabilities to deal with expected major injuries	% of education structures at risk	Sufficient first responder equipment

Essential 9: Ensure Effective Disaster Response

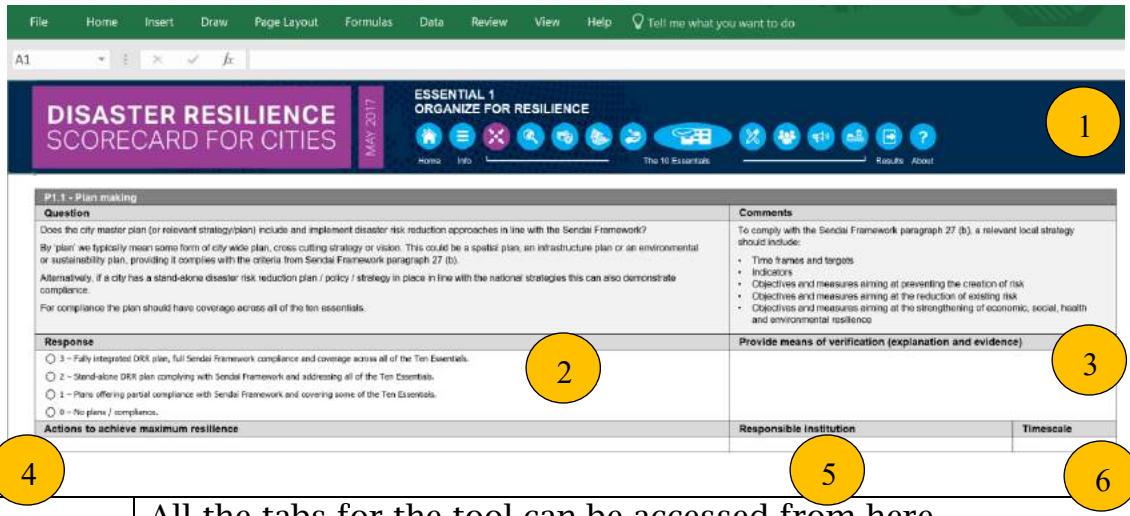
9.1 Early Warning	9.2 Response plans	9.3 Staffing responders needs	9.4 Equipment and relief supply needs
Existance of plan to act on early warning and forescast. What proportion of the population is reacheable?	Existence of emergency response plan	The disaster management authority have sufficient staffing capacity to support first responders in surge event	Equipment and supply needs are defined (police, fire, ambulance vehicles, rescue equipment, medical supplies etc)

9.5 Food Shelter	9.6 Interoperability	9.7 Drills
Ability to continue to feed population	Is there an emergency operation center?	Practices and drills involving the public and professionals

Essential 10: Recovery and Build Back Better

10.1 Post Disaster Recovery Planning	10.2 Lessons Learned and learning loops
Planning for post disaster recovery and reconstruction including economic reboost.	Does post-event assessment processes incorporate failure analysis and the ability to capture lessons learned?

The scorecard tool comes in different formats – pdf, excel and online dashboard.



1	All the tabs for the tool can be accessed from here. In the Home tab, the user needs to fill all the required information for the city like the city name, area, population, etc. Further each tab is for every essential, which user can open to access the criteria wise questionnaire. Post filling the response, the final tab is the Results tab where user can see the city score in a graphical representation/web chart. It can be easily comprehended from the chart that in which essential the city is doing good and where it needs to improve.
2	For each question, the user needs to fill a response by choosing between options 0 to 3, whichever comply from the city's aspect.
3	On marking any option, the user needs to mention source/evidence/explanation for the response as a means of verification and authenticity of the response.
4	If the response is between options 0 to 2, this means there is a scope of improvement or something can be done to better the score. Here user needs to fill, what action can be taken to achieve maximum resilience.
5 6	For the action to be taken, the user needs to mention the responsible institute and give a tentative timescale.

Regional Workshop on
Urban Resilience and Making Cities Resilient

5th to 8th December 2022

List of Participants

#	Country	Participant's Name	Designation
1	**Bangladesh**	Ms. Momena Khatun	Joint Secretary, Ministry of Disaster Management & Relief
2	**Bhutan**	Mr. Tenzin Rabgy	Sr. Architect, Thimphu Thromde
3	**Bhutan**	Mr. Sonam Dorji	Urban Planner, Ministry of Works and Human Settlement
4	**Bhutan**	Mr. Dorji Wangchuk	Sr. ICT Associate , Dept of Disaster Management, MoH&CA
5	**India**	Mr. Y. K. Goswami	City Engineer, Rajkot Municipal Corporation
6	**India**	Mr. Ambesh Dave	Dy. Executive Engineer, Rajkot Municipal Corporation
7	**India**	Mr. Alpesh Majmundar	i/c City Engineer, Vadodara Municipal Corporation
8	**India**	Mr. Rajesh Chauhan	Executive Engineer, Road Project/ Futuristic Planning cell,Vadodara Municipal Corporation
9	**India**	Mr. Piyush Gandhi	Sr. Vice President (Procurement & Contracts), GIFT City, Gandhinagar
10	**India**	Mr. Loveleen Garg	Chief Planner, GIFT City, Gandhinagar
11	**India**	Mr. Shubham Daberao	RAPC, Gujarat Institute of Disaster Management
12	**India**	Mr. Rajeev Sharma	VP, Engg, Gift City
13	**India**	Mr. Amar Pandey	Chief Fire Officer, Gift City
14	**India**	Mr. Rakesh Kumar Patra	Sr. Manager, GIFt City
15	**India**	Mr. A P Jacob Manohar	Associate Town and Country Planner, MoHUA
16	**Maldives**	Ms Sonath Abdul Sattar	Project Associate, National Disaster Management Authority
17	**Maldives**	Ms Hawwa Niswa	Assistant Architect, Ministry of National Planning, Housing and Infrastructure
18	**Maldives**	Mr Ali Ahmed	Deputy Mayor, Kulhuduffushi City Council
19	**Nepal**	Mr. Rabin Man Shrestha	Head, Disaster Management Department Kathmandu Metropolitan City, Kathmandu
20	**Nepal**	Mr. Yugdip Luitel	Section Officer, Itahari Sub Metropolitan City, Sunsari

#	Country	Participant's Name	Designation
21	**Nepal**	Mr. Jhapat Bahadur Thapa	Chief Divisional Engineer, Ministry of Urban Development
22	**Pakistan**	Mr. Zafar Iqbal	Additional Director (Operation/ Admin), Emergency & Disaster Management Directorate, Islamabad
23	**Pakistan**	Mr. Tariq Masood	Assistant Director Deputy Cmdr (USAR), Emergency & Disaster Management Directorate, Islamabad
24	**Sri Lanka**	Mr. Eng M.W.P. De Silva	Director General (Urban Development Division), Ministry of Urban Development and Housing
25	**Sri Lanka**	Mr. Y.A.G.K Gunathilake	Director (Uva Province), Urban Development Authority
26	**Sri Lanka**	Mr. M.P. Ranathunga	Deputy Director General, Urban Development Authority