BLOXHUB Summer School on Urban Resilience

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Tools and methods for making cities sustainable and resilient

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UN Office for Disaster Risk Reduction

What is Resilience?

In the Context of Cities:

> "the ability to withstand and bounce back from both acute shocks (natural and manmade) such as floods, earthquakes, hurricanes, wild-fires, chemical spills, power outages, as well as chronic stresses occurring over longer time scales, such as groundwater depletion or deforestation, or socio-economic issues such as homelessness and unemployment."

What is a Disaster Resilient City?

- There is **strong leadership** and **responsibilities** in DRM are clearly delineated.
- The city is **up-to-date on knowledge about hazards.**
- There is an **adequate financial plan** that complements and promotes mechanisms to support resilience activities.
- **Urban planning** is carried out based on up-to-date risk information with a focus on the most vulnerable groups.
- **Natural ecosystems** within and around the city's territory are identified, protected and monitored.
- All **institutions** relevant to a city's resilience are **strengthened** to have the capabilities they need to execute their roles.
- There is a strategy to protect, update and **maintain critical infrastructure** to increase resilience against hazards.
- **Effective disaster response** is ensured by creating and regularly updating preparedness plans, connecting to early warning systems and increasing emergency and management capacities
- **Post-disaster recovery, rehabilitation, and reconstruction strategies** are aligned with long term planning.

Moving towards becoming disaster resilient cities

DRR Strategy

Local DRR strategy

- Planning tool developed with a long-term perspective
- Providing common vision, guiding principles and priority areas
- incorporate certain flexibility and periodic evaluation mechanisms to adjust course, evolve and adapt to changing

Local DRR Plan

-Provides the operational orientation for implementing the strategy
-Defines specific goals to reduce risk & priority actions to achieve these goals
-Contains details on roles and responsibility, resource mobilization and allocated budget
-Contains timelines, indicators and mechanisms for monitoring progress

Steps towards disaster resilience building at the local level

Understand the **10 Essentials for Making Cities Resilient**

Understand & use the **Scorecard (Indicator)** to assess the progress and status of resilience building

Identify gaps that need to be addressed & **prioritize actions** to increase resilience

Develop the DRR Strategy & Action Plan

Implement the plan & reduce disaster risks

Making Cities Resilient Campaign

https://www.unisdr.org/campaign/resilientcities/

[Spanish | Portuguese]

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Making Cities Resilient:
My City is Getting Ready

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4,324 cities
are getting ready, what about yours?

SIGN UP

THE TEN ESSENTIALS FOR MAKING CITIES RESILIENT

The TEN Essentials for Making Cities Resilient

An operational framework of Sendai Framework at local level.

The TEN Essentials for Making Cities Resilient

...Read More

: Expedite Recovery and Build Back

; ensure that the needs of the survivors are
re of reconstruction with support for them and
organizations to design and help implement

Essential One

Put in place orgar
reduce disaster ri
civil society. Build
understand their

Ten Essentials for Making Cities Resilient

Enabling Essentials

1. Organize for disaster resilience
2. Identify, understand and use current and future risk scenarios
3. Strengthen financial capacity for resilience

Build back better Essentials

9. Ensure effective preparedness and disaster response
10. Expedite recovery and build back better

Operational Essentials

4. Pursue resilient urban development and design
5. Safeguard natural buffers to enhance the protective functions offered by natural ecosystems
6. Strengthen institutional capacity for resilience
7. Understand and strengthen societal capacity for resilience
8. Increase infrastructure resilience

Introduction to the Scorecard

❖ 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**
- **Enable the development of local DRR strategies**

❖ Developed by IBM, AECOM, and UNDRR and launched in May 2017

❖ The scorecard is the predominant tool of the Making Cities Resilient Campaign covering 4,272 cities

Disaster Resilience Scorecard for Cities

Preliminary Assessment

Detailed Assessment

- Provides a set of **indicators** that allows cities to assess their disaster resilience.
- **Preliminary** has just **47 criteria** and simpler scoring. (Scoring between 0-3)
- **Detailed** assessment includes **117 criteria**. (Scoring between 0-5)

Sample Indicator and Scoring

Essential 1. Plan making

Does the city master plan (or relevant strategy/plan) include and implement disaster risk reduction approaches in line with Sendai Framework?

3 - Fully integrated DRR plan, full Sendai Framework compliance and coverage across all the Ten Essentials.

2 - Stand-alone DRR plan complying with Sendai Framework and addressing all of the Ten Essentials.

1 - Plans offering partial compliance with Sendai Framework and covering some of the Ten Essentials.

0 - No plans.

Using the Scorecard Excel Tool

https://www.unisdr.org/campaign/resilientcities/toolkit/article/disaster-resilience-scorecard-for-cities

LOCAL DISASTER RISK REDUCTION ACTION PLAN
towards risk-informed urban development, sectoral, and climate change strategies

Action Plan for Calendar Year/s (_____- _____)

NOTE:
1) This plan is intended to be integrated into urban or sectoral development plans. The actions may be funded from the development plan budget. It is not a standalone plan.
2) Budget Estimate and Budget Source columns are recommended for inclusion in your final Action Plan to be included in Annex to your Strategy.

City/ Local Government Name	
Country Name	
Focal Point Details	**Name:** **Contact Details:**
Title of Existing Local Disaster Risk Reduction Strategy or Plan	
Time frame of Existing Strategy or Plan	

Breakdown of Objectives, Activities and Indicators for Each of the 10 Essentials for Making Cities Resilient

Essential 1: Organise for disaster resilience

Put in place an organizational structure and identify the necessary processes to understand and act on reducing exposure, its impact and vulnerability to natural hazards. Recognizing that the exact format/structure will vary within and between countries.

#	OBJECTIVE(S)	PLANNED ACTION(S)	INDICATORS (specific, measurable, attainable, realistic)	TIMEFRAME (timebound)	RESPONSIBLE (+Support) AGENCIES assignable

Example

Strategic Outcome Target/Goal: Strengthen Disaster Risk Governance in Municipality of Curepipe			
Objective(s)	**Planned Actions:**	**Timeframe**	**Responsible (+Support Agencies)**
1.Develop and adopt the local DRR strategy for implementation	• Organize an awareness raising workshop on DRR with XXX	July 2020	Local DRRM Committee (+NDRRMC)
	• Organize a 2-day scorecard assessment workshop with XXX	Aug 2020	XXX
	• Organize consultation and write-shop of the local DRR strategy with participation of XXX	Sep-Dec 2020	XXX
	• Present to local government council for adoption	Jan 2020	XXX

Benefits

The benefits extend far beyond reporting – the conversations the process can generate are more important than the score. If completed in a collaborative way, cities can:

- 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**
- Enable the **development of a city DRR strategy** / action plan
- Ultimately **lead to actions** and implementable projects that will deliver increased resilience for the city over time.

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Disaster Resilience Scorecard for Cities

A tool for disaster resilience planning

United Nations Office for Disaster Risk Reduction with the support of European Commission, IBM, AECOM and other partners and cities participating in the Making Cities Resilient Campaign have updated **the Disaster Resilience Scorecard for Cities** .

The Scorecard provides a set of assessments that allow local governments to assess their disaster resilience, structuring around UNDRR's Ten Essentials for Making Cities Resilient. It also helps to monitor and review progress and challenges in the implementation of the Sendai Framework for Disaster Risk Reduction: 2015-2030 and supports the baseline analysis for preparation of the disaster risk reduction and resilience strategies.

English Version

- Preliminary Assessment
- Detailed Assessment
- Preliminary Assessment Excel Tool
- Detailed Assessment Excel Tool
- Reference Note - Preliminary Assessment
- Reference Note - Preliminary & Detailed Assessment

Arabic Version

- Preliminary Assessment
- Preliminary Assessment Excel Tool
- Detailed Assessment
- Detailed Assessment Excel Tool

Download the Scorecard 14 languages

hhttps://www.unisdr.org/campaign/resilientcities/toolkit/article/disaster-resilience-scorecard-for-cities

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Public Health System Resilience Scorecard

An Addendum to the Disaster Resilience Scorecard for Cities

"Disaster Resilience Scorecard for Cities: Public Health System

English

Public Health Scorecard Addendum v2.0 (English), Apr 2020

Public Health Scorecard Addendum v2.0 Excel Tool (English)

Arabic

Public Health Scorecard Addendum v2.0 (Arabic) - updated

Spanish

Public Health Scorecard Addendum v2.0 (Spanish)

Webinar on Resilience of local

Public Health

https://www.unisdr.org/campaign/resilientcities/toolkit/article/public-health-system-resilience-scorecard

Set up the workshop – typical agenda

Day 1 ("What?")	
8.00 am	Introduction from Mayor or senior city executive.
8.15 am	Introductions by participants
8.30 am	Purpose of the exercise, overview of resilience and overview of scorecard plus Public Health Addendum (PHA)
9.45 am	Break
11.00 am	Plenary consideration of Essential 1 plus PHA Essential 1 – agree scores
12.30	Lunch
1.15 pm	Breakout groups' consideration of Essentials 2 & 3 plus PHA 2 & 3, and agree scores with report back to plenary**
2.45 pm	Break
3.00 pm	Breakout groups' consideration of Essentials 4 & 5, plus PHA 4 & 5, and agree scores with report back to plenary**
4.30 pm	Plenary discussion of trends and issues so far.
5.15 pm	Close of Day 1
Day 2 ("What?")	
9.00 am	Recap from Day 1
9.30 am	Breakout groups' consideration of Essentials 6 & 7, plus PHA 6 & 7, and agree scores with report back to plenary**
11.00 am	Break
11.15 am	Breakout groups' consideration of Essential 8 (this is split as it is a very large essential) plus PHA 8, and agree scores, with report back to plenary**
12.45 pm	Lunch
1.30 pm	Breakout groups' consideration of Essentials 9 & 10, plus PHA 9 & 10, and agree scores with report back to plenary**
3.00 pm	Break
3.15 pm	Plenary discussion of trends and issues. Preliminary discussion of ideas regarding "How?"
4.45 pm	Close of Day 2

Set up the workshop – typical agenda

Day 3 (“How?” and “When?”)	
8.30 am	Recap from Day 2
8.45 am	Plenary consideration of actions required for Essential 1, and location on “impact vs difficulty” grid.
9.30 am	Break
9.45 am	Breakout groups’ consideration of actions required for Essentials 2 & 3, location on grid and report back to plenary
10.45 am	Breakout groups’ consideration of actions required for Essentials 4 & 5, location on grid and report back to plenary
12.00 pm	Lunch
12.45 pm	Breakout groups’ consideration of actions required for Essentials 6 & 7, location on grid and report back to plenary
1.45 pm	Breakout groups’ consideration of actions required for Essential 8, location on grid and report back to plenary
2.45 pm	Break
3.00 pm	Breakout groups’ consideration of actions required for Essentials 9 & 10, location on grid and report back to plenary
4.00 pm	Consolidation of grids, discussion, actions…
5.15 pm	Close of workshop.

The core process

Making Cities Resilient Campaign

My City is Getting Ready

United Nations

Examples from Cities

Example of the use cases of the Scorecard

DRR strategy and plan formulation

Source: Lisbon's Resilience Action Plan

Source: Lisbon's Resilience Action Plan

Ulaanbaatar, Mongolia

Process:

- Translation of Scorecard into Mongolian language
- Orientation
- Detailed Scorecard workshop (2-day): Group breakout - 9 districts of Ulaanbaatar, led by the head of department of all government units
- Consolidating of scorecard assessment: Merging of 9 districts scorecard assessment to UB city assessment
- Action planning workshop
- Validation of action plans
- Final endorsement

Benefits:

- The linkage between the local and national implementation of the Sendai Framework is strengthened
- Ulaanbaatar has inspired all 21 other cities to sign-up to the MCR Campaign and conduct the self-assessment for DRR.
- Ulaanbaatar has aligned the DRR action planning process with urban development and budgeting process.

Dhaka North, Bangladesh

Orientation: 10 Essential (10-11 Jan 2018 & 15 May 2018)

Scorecard Assessment (20-21 Jun 2018)

Essential 01: Organize for Resilience

1.1.1	Risk consideration in plan making.	1
1.1.2	Consultation in plan making.	0
1.1.3	Review of strategic plans.	1
1.2.1	Pre-event planning and preparation.	4
1.2.2	Co-ordination of event response.	3
1.2.3	City resources for managing organisation, co-ordination and participation.	2
1.2.4	Identification of physical contributions.	2
1.3.1	Integration of disaster resilience with other initiatives.	3
1.4.1	Extent to which data on the city's resilience position is shared with other organizations involved with the city's resilience.	2

Essential 02: Identify, Understand and Use Current and Future Risk Scenarios

2.1.1	Knowledge of hazards (also called perils, or shocks and stresses) that the city faces, and their likelihood.	2
2.2.1	Knowledge of exposure and vulnerability.	4
2.2.2	Damage and loss estimation.	0
2.3.1	Understanding of critical assets and the linkages between these.	2
2.4.1	Hazard maps.	2
2.5.1	Update process.	0

- ***Dhaka North City Corporation*** is using the results of the self-assessment in developing a project proposal to obtain external funding to DRR. Some of the identified DRR actions will be implemented through projects with secured budget from JICA.

Lessons learned

- **The Scorecard ...**
  - is user-friendly, flexible and adaptable.
  - is a good entry point to start engaging with cities and various stakeholders on DRR.
  - has a strong convening power can help to engage non-traditional DRR actors.
  - provides immediate results to understand the baselines which allowed identification of actions and coordination of DRR efforts among stakeholders to be simplified.
- **The workshop approach ...**
  - increases participants, awareness and shared understanding of disaster resilience to agree to multi-sector actions for mainstreaming into city budgets and plans.
  - allows for multi stakeholders' discussion around DRR and resilience.
  - ... but limits discussions to the experience and resources in the room

https://www.unisdr.org/campaign/resilientcities/toolkit/article/lessons-learned-from-the-disaster-resilience-scorecard-assessment-and-disaster-risk-reduction-drr-action-planning

More reflections from cities: https://www.unisdr.org/campaign/resilientcities/home/article/reflections-and-experience-sharing-from-cities

Recommendations

- Need to **ensure representation of 'systems of systems' in the process** with **Mayor or local government leaders' engagement and commitment**.
- **Localize & contextualize the scorecard** → translation ++
  - Public Health Scorecard Addendum is now available in English, Arabic, and Spanish (Russian, French and Turkish are soon to come – thanks to many participants here!! More languages still welcome!
- **Familiarize stakeholders with terminologies** → Orientation is useful.
- Some governments may have limited experience engaging with NGOs or private sector → **engage academia as a bridge**.
- Remember to be a **'facilitator'** when facilitating the scorecard process!

Larger cities with capacity can benefit from increased ownership of the process.
Smaller cities may require more external and continuous support in the process to plan, communicate and take actions.

- Once the plan is developed, **it must be presented to the governing authority** *(e.g. the Disaster Risk Management Committee or Municipality/City Council)* **for adoption** and formal authorization to implement the plan.

- A stand-alone DRR Action Plan and strategy does not guarantee budget for implementation. Local governments should **integrate the DRR Action Plan and strategy with the urban development plan**, sectoral development plans, climate change adaptation plan, or any other relevant plans to ensure adequate resources for implementation.

SUSTAINABLE DEVELOPMENT GOALS

Thank You

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SENDAI FRAMEWORK
FOR DISASTER RISK REDUCTION 2015-2030

With the support of

Ministry of the Interior and Safety

Incheon Metropolitan City