

Tools of the Making Cities Resilient Campaign for Resilience

By Ragy Saro and Biljana Markova

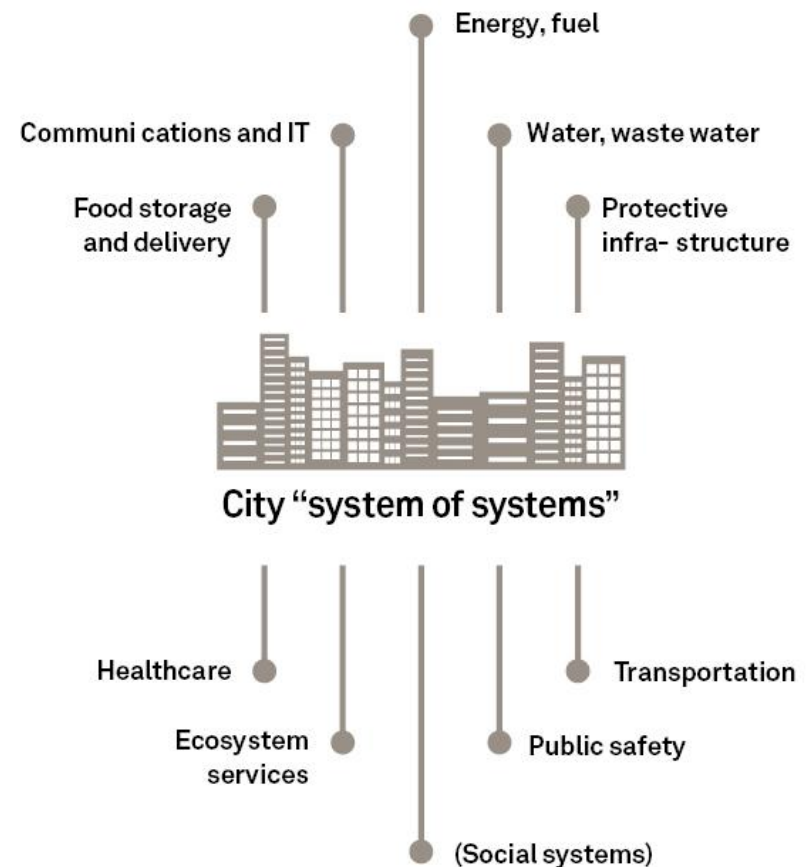
2 June 2015

Exchange between Dutch, Lebanese and Tunisian cities in the MCR campaign
UNESCO-IHE

Resilience has to address the “system of systems” that makes up a city

For example:

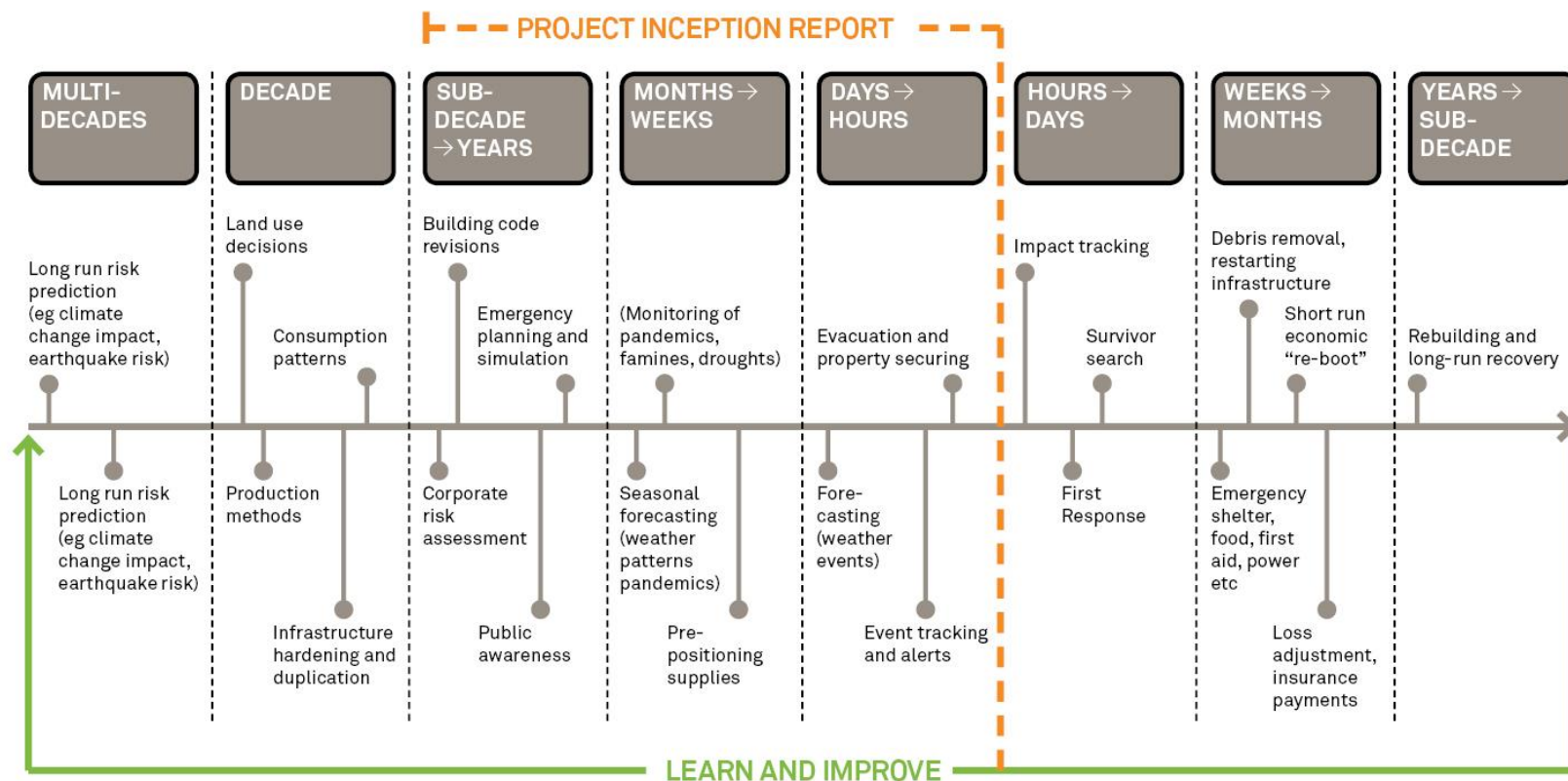
- Multiple connections and interactions:
 - Causal
 - Resources, data
- Because each system will have different owners and stakeholders, resilience is a multi-organizational endeavor.





UN World Conference on
Disaster Risk Reduction
2015 Sendai Japan

Achieving resilience is a process, spanning over multiple activities and time-scales



If we could measure resilience across all of the systems involved...



The city could:

- Identify exposures and vulnerabilities in the population, infrastructure, economy and environment.
- Track citizens' awareness of hazards and required responses.
- Target investment of money and effort, and track progress over time.
- Justify that investment to the public and to taxpayers.
- Integrate the contributions of the multiple agencies and stakeholders involved.
- Model the impact of land use or infrastructure decisions on future resilience.

If we could measure resilience across all of the systems involved...



Citizens could:

- Understand the risks they face.
- Understand their role in achieving a level of resilience.



Private sector companies could:

- Assess risks to their operations and supply chains
- Understand where they need to engage with cities to protect their operations – so helping to safeguard the local economy.



Insurers could, if the scorecard was audited:

- Better assess risk and adjust premiums for highly resilient cities
- Or perhaps, write policies where none exist today.

Measuring resilience: LGSAT and Resilient Cities Scorecard

- The LGSAT and Disaster Resilience Scorecard go hand in hand.
- **The LGSAT** enables cities to create a rapid high-level overview of their level of disaster resilience, while building awareness of needs, initiating discussion on risk reduction and supporting local governments in engaging with different stakeholders. *(1-2 Days Workshop)*
- If your city has already completed the LG-SAT, then the **Disaster Resilience Scorecard** should be seen as providing a greater level of detail (and quantification), while also fleshing out the many less obvious factors that may need to be considered under each of the Ten Essentials. It will therefore provide a more concrete or quantitative baseline than the LG-SAT was intended to, while building on the work already carried out. *(from 1-2 weeks to 1-2 months-for detailed one)*

Examples of stakeholders to involve in conducting the Scorecard

- City Government – Mayor's office, Office of Emergency Management, Police, Fire, Housing, Planning, IT
- Education
- Water, sanitation
- Phone and cell-phone companies
- Energy utilities
- Transportation agencies
- Ports: sea, airports
- Trash collection
- Fuel suppliers
- Food and staple goods suppliers
- Neighboring cities
- Higher levels of government
- Chamber of Commerce
- Healthcare agencies
- Civil society, community organizations, the public
- Academia

What is the Scorecard?

- The Disaster Resilience Scorecard provides a mechanism to measure a city's progress in identifying, understanding and managing disaster risks it faces and to allow the city to develop a prioritized list of actions to be taken to improve resilience.
- IBM and AECOM have developed the Disaster Resilience Scorecard for the Making Cities Resilient Campaign, to enable it to assess cities resilience to natural hazards.



"Well he certainly does a very thorough risk analysis."

What is the Scorecard?

- **The purpose** of the Scorecard is to enable cities
 - **to establish a baseline measurement** of their current level of disaster resilience,
 - **to identify priorities for investment and action**, and
 - **to track their progress** in improving their disaster resilience over time.
- It consists of 85 disaster resilience evaluation criteria and focuses on the following aspects:
 - **Research**, including evidence-based compilation and communication of threats and needed responses
 - **Organization**, including policy, planning, coordination and financing
 - **Infrastructure**, including critical and social infrastructure and systems and appropriate development
 - **Response capability**, including information provision and enhancing capacity
 - **Environment**, including maintaining and enhancing ecosystem services
 - **Recovery**, including triage, support services and scenario planning.

What is the Scorecard?

- The Disaster Resilience Scorecard is based upon the UNISDR Making My City Resilient Campaign “Ten Essentials”.
- The Disaster Resilience Scorecard consists of some 85 separate assessments (questions),
- Each question designed to be rated on a scale of 0 to 5 (*where 5 is best practice*) an aspect of a city’s preparedness for, and ability to recover from, natural hazards.
- Assessments with higher ratings (4 & 5) will indicate the strengths that the city will wish to maintain; those with lower ratings (0,1,2,& 3) will indicate weaknesses or areas for improvement, where the city will need to invest time and perhaps funds to improve.

What is the Scorecard?

- *The Disaster Resilience Scorecard* is deliberately designed to be a “counsel of perfection” – no city in the world will achieve maximum score.
- The idea is to allow cities to establish a baseline and a set of priorities for moving forward, probably over a period of years.



- The scorecard is a tool to be used by the city; it is not intended to publish a city's scores unless the city wishes it.



UNISDR

The United Nations Office for Disaster Risk Reduction

IBM

City Disaster Resilience Scorecard



UNISDR

The United Nations Office for Disaster Risk Reduction

LOGIN

CITIES

ABOUT

LOGIN or REGISTER

LOGIN NAME

PASSWORD

Login Name

Password

The scorecard is based on the "Ten Essentials" that identify risk and provide a basis for future investments.

Login

Register

Please note that the Resilience Scorecard does not support Internet Explorer versions 7 or 8.

We recommend upgrading to the latest [Internet Explorer](#), [Google Chrome](#), or [Firefox](#).

If you are using IE 9 or later, make sure you [turn off "Compatibility View"](#).

City:Coimbatore(India) Score:3.05

*What's KPI: We define KPI as evaluation indicator for the scorecard essentials item. In this case, there are 92 KPI because there are altogether 92 sub items for ten essentials. City admin can configure every KPI in the system. As for KPI for each essential, it is an average value of all sub items under the essential.

KPI & Score



Essential	KPI	Score	Warning
Essential1	4.00	3.00	
Essential2	4.00	2.00	
Essential3	4.00	3.00	
Essential4	3.00	3.04	
Essential5	4.00	4.00	
Essential6	5.00	4.00	
Essential7	4.00	3.00	
Essential8	4.00	3.00	
Essential9	4.00	3.00	
Essential10	4.00	3.00	

save
submit
approve
No data

Current Status



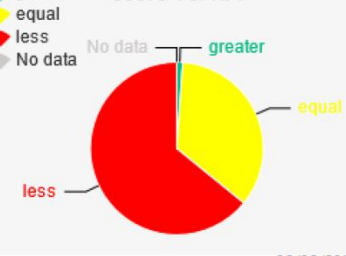
0
1
2
3
4
5
No data

Distribution of Score



greater
equal
less
No data

Score vs. KPI



Peer Reviews for Local Level



- How does a peer review work?
 - A group of “peers” visit the country to be reviewed and interview respective stakeholders on elements from the Self-Assessment tools (i.e. LGSAT or Scorecard)
 - The peer review serves to provide an objective review of the current state of “resilience”, hence it identifies gaps/challenges, good practices and makes recommendations for improvements
- Benefits of peer reviews
 - Voluntary, participatory and multi-stakeholder approach
 - Can play an instrumental role in the implementation the SFDRR and lead to improved policy making based on increased involvement of stakeholders
- Karlstad (Sweden), Viggiano (Italy) and Salford (UK) have already agreed to participate in pilot local peer reviews
- By the way: National peer reviews on the HFA Monitor and the implementation of the HFA were initiated in 2012 by the European Platform for Disaster Risk Reduction (EFDRR); UK was the pilot country, followed by Finland in 2014
 - Now there are plans to conduct national peer reviews with six other European countries (Bulgaria, Turkey, Estonia, etc) in collaboration with the European Commission (DG ECHO)

Training for Local Governments

- UNISDR is working towards expanding its training programs
 - UNISDR GETI (Global Education and Training Institute) works to develop a new cadre of professionals in DRR and CCA for disaster resilient societies
- New online training on “developing and implementing resilience action plans for cities” to boost the implementation of local strategies
- Within Europe, UNISDR is also starting to promote more and more training events on the ground where city and local government officials, disaster management professionals, and representatives from academic and training institutions working on DRR can come together and exchange on how to implement DRR on the local level
- FYI: We are also working on developing new training on DRR for media professionals C

City Resilience Action Plans

1. Conducting Self-assessments and using the scorecard provides a systematic assessment of resilience....Resilience Action Plans will be developed in cooperation with local stakeholders.
2. Resilience Action Plans will therefore assist cities in integrating climate and disaster risk reduction into local development planning that takes into account current and future risks.
3. These action plans will be comprehensive, measurable, and in-line with the long-term plan of the respective cities.
4. Stakeholders will use the *Resilient Cities Connect* to find technologies and services to implement the action plans.

City to City Exchanges

2012: Amadora (Portugal) along with Nice(France) conducted an exchange with several Lebanese and Jordanian cities that included major cities like Beirut, Byblos, Baalbeck, Tripoli, Saida from Lebanon, and Petra and Aqaba from Jordan.

2013: Byblos and Venice (culture heritage agreement)

2014: Potenza province(Italy) with Jarash, Irbid, Zarkaa, Madaba, and Salt from Jordan.

2015: Saida (Lebanon), and Ain Draham (Tunisia) with cities of Dordrecht and Delft (Netherlands)

Thank you