Resilient Cities 2014 - 5th Global Forum on Urban Resilience and Adaptation¹
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Abstract – Resilient Cities 2014, the 5th Global Forum on Urban Resilience and Adaptation was held from May 29-31 2014 in Bonn, Germany. The aim of the congress is to equip local government leaders with the tools and knowledge needed to tackle climate adaptation and disaster risk reduction in their own cities, and to facilitate peer learning and city-to-city cooperation, by providing a platform for inspiration, feedback and the sharing of experiences.

Keywords – Resilience, Climate adaptation, Local governments, Disaster risk management, Resilient Cities congress

1. Introduction & Context

ICLEI – Local Governments for Sustainability, as the world’s leading network of 12 mega-cities, 100 super-cities and urban regions, 450 large cities, and 450 small and medium-sized cities and towns in 84 countries has been working on the urban dimension of climate change adaptation and mitigation for the past two decades. ICLEI was founded in 1990 by 200 local governments from 43 countries to address wider sustainability issues from the urban perspective. However, the widespread focus on climate action planning in urban and peri-urban areas is a relatively new phenomenon, catalyzed in part by the Fourth Assessment report of the Intergovernmental Panel on Climate Change (IPCC) in 2007.

Since 2007 there has been a growing demand from local governments to connect with experts in the field of resilience and climate adaptation in order to ensure the identification and implementation of effective and sustainable solutions for cities. In response to this, ICLEI launched a series of annual global forums, the Resilient Cities series, in 2010, with the goal of bridging the gap between research and practice on climate change adaptation to inform policy at the local level. In addition to sharing knowledge about the urban dimension of resilience and adaptation, Resilient Cities also facilitates local level action and fosters close dialogue between local and global leaders through the exclusive leadership segment of the congress, the Mayor’s Adaptation Forum, which backs congress discussions with concrete political commitments.

2. Conference Aims & Objectives

2.1. Profile of participants

Resilient Cities 2014, the 5th Global Forum on Urban Resilience and Adaptation was held from May 29-31 2014 in Bonn, Germany and attracted over 400 participants from 51 countries. Diversity - of experience, backgrounds and approaches - is at the very core of the Resilient Cities congresses. While the major target group are local governments, sustainable and effective urban adaptation necessitates a multi-disciplinary approach and broad stakeholder engagement. As such, we are proud that our participants represent a community of practice comprising of experts and practitioners from local governments, research institutions, academia, international and non-governmental organizations, and the private sector (Figure 1). Thus, congress attendants, and local government leaders in particular, are exposed to a diverse cross-section of the urban climate change adaptation community. This allows

¹This article is a summary of the above mentioned conference with a special focus on proposed elements for consideration in the Post-2015 Framework for Disaster Risk Reduction.
the congress to apply a multi-disciplinary approach to stakeholder cooperation, capacity building, and knowledge sharing.

Figure 1: Participants by sector, Resilient Cities 2014

Additionally, Resilient Cities also aims to have a regionally diverse participant base, in order to address climate adaptation both in the developed and the developing world. This international approach allows the congress to focus on the local dimension, while maintaining its scope as a global platform for adaptation. As such, Resilient Cities provides a forum for local government leaders to learn about, be inspired by and feedback on adaptation measures being implemented in other parts of the world.

2.2. Major aims and objectives

The first major aim of the Resilient Cities congress is to equip local government leaders with the tools and knowledge needed to tackle climate adaptation and disaster risk reduction in their own cities.

In order to do this, the congress provides a forum for local government leaders to connect with global experts in the field, through a mix of sessions and themes that encompass a wide range of urban resilience aspects. The general program includes presentation sessions, workshops, and panel discussions, where over 200 leading experts every year present on established and emergent practices in urban resilience.

Figure 2: Session at Resilient Cities 2014 © ICLEI e.V./2014

These parallel sessions focus on a variety of topics including finance, multi-stakeholder collaboration, planning and policy-making, and ecosystem based adaptation. This specialization on one particular aspect of urban resilience within each session, allows local government leaders to choose the sessions they feel are most helpful and relevant to them and the needs and challenges of their specific urban region.

In addition to addressing a broad variety of subjects, Resilient Cities incorporates ideas and approaches for cities in all phases of adaptation planning. The objective is to create an environment in which all local governments can profit from the broad array of knowledge and experience on offer at the congress - whether they’re just starting out in resilience planning, or are fine-tuning established climate action plans.

Alongside the parallel sessions, the Resilient Cities series has also highlighted specific aspects of adaptation in thematic forums, such as the Resilient Urban Logistics Forum (2012), the Resilient Urban Food Systems Forum (2013) and the Resilient Building and Construction Forum (2012, 2013, and 2014). Additionally, the past few Resilient Cities congresses have hosted the immensely popular Finance Plenary, which is meant to assist local government leaders in tackling the key challenge of identifying, and successfully applying for various funding streams, in order to financially underpin climate action planning.

The second major aim of the Resilient Cities Congress is to facilitate peer learning and city-to-city cooperation, by providing a platform for inspiration, feedback and the sharing of experiences. As such, the congress hosts the annual Mayors Adaptation Forum, and also allows local city champions to present and receive feedback on their city’s local action plans in signature Reality Check Workshops.

The annual Mayors Adaptation Forum, hosted in cooperation with the World Mayors Council on Climate Change, is the leadership segment of the congress. By allowing mayors and municipal leaders to discuss how to advance local adaptation and resilience agendas and commit to these ideas, the forum backs up the ideas developed during the congress with political commitments. Additionally, it fosters close dialogue between local and global leaders and links into global climate decisions through campaigns and commitments like the Durban Adaptation
Charter for Local Governments.

Alongside the Mayor’s Adaptation Forum, Reality Check Workshops provide a unique opportunity for local governments to showcase their work on adaptation and resilience. Participants engage with cities and project stakeholders in interactive workshops on adaptation action in a specific city. City delegates both share lessons learned and receive feedback from peer cities and global experts. Reality Check Workshops have so far featured Dhaka, Bangladesh; Durban, South Africa; Miami, USA; Quito, Equador (2010); Ho Chi Minh City, Vietnam; Lagos, Nigeria; London, UK; Semarang, Indonesia (2011); Sorsogon, Philippines; Copenhagen, Denmark; La Paz, Mexico; Ancona, Italy (2012); Vancouver, Canada; Dar es Salaam, Tanzania (2013); Bologna, Italy; and Santiago, Chile (2014).

3. Outcomes & Contribution towards the Post 2015 Framework for Disaster Risk Reduction


The Hyogo Framework for Action 2005-2015 has been occasionally addressed at the Resilient Cities congress. However, many cities are already looking ahead to the Post 2015 Framework for Disaster Risk Reduction, which is expected to provide local governments with measures to achieve sustainability and resilience. It has frequently being stressed that despite the key role of local governments in disaster risk reduction and climate adaptation, their voice has only partly been heard by national governments and in international negotiations.

As to the achievements of the Hyogo Framework for Action, the congress highlighted that the past years have seen the development of a common understanding of resilience and the respective mechanisms for disaster risk reduction. Based on past experiences, several key principles have been identified that should be incorporated in the Post 2015 Framework. These are: the need for an inclusive and participatory approach, the necessity of sustained financial and technical support for local governments, effective multi-level governance structures, and the importance of developing common instruments in collaboration.

3.2. Research in the Post 2015 Framework for Disaster Risk Reduction

Data for resilience was a core theme at this year’s Resilient Cities congress. The discussions confirmed that while a large amount of data has already been generated to assess vulnerabilities and risks, the methods and institutional arrangements being used to process the available data require further improvement. Numerous gaps have been identified in this regard, including the need for downscaling data to the local level, standardizing indicators for comparability, making indexes more user-friendly, sharing data across agencies and departments, and generating the data needed by practitioners.

- **Downscaling data to the local level** Though there is a growing amount of information and data on national vulnerability and resilience, less information is available for the local level. In order to allow for comprehensive and tailored local assessments, it is crucial to downscale data from the national to the city-level. This is currently being done with the Notre Dame Global Adaptation Index (ND-GAIN), for example, which ranks more than 175 countries based on their vulnerability to climate change and their ability to adapt.

- **Usability of indexes and standardization of indicators** Indexes detailing resilience have multiple benefits: they offer a holistic overview of a city’s performance while enabling knowledge sharing and transparency. However, the index’s indicators need to be standardized in order to allow for comparability between cities. Currently, this is often not the case, as cities use indicators which partly differ from those being used in other cities. This inconsistency impedes learning and development processes, as comparisons becomes more difficult. Additionally, there is a demand for more user-friendly and comprehensive indexes that are more accessible to a greater variety of actors (e.g. local government).

- **Sharing data across departmental boundaries** Spatial data tools and Geographic Information Systems (GIS) support the analysis of complex urban resilience and risk information, by processing multiple scenarios and datasets from various sources. The integration and visualization of data ensures on the one hand, a holistic assessment of risks and vulnerabilities, and on the other hand, facilitates informed, transparent decision-making. In order to tap the full potential of GIS and spatial data technologies, relevant stakeholders (e.g. the private sector), departments and agencies should be mobilized to share their data, and make it publicly available (open data).

- **Generating usable data and information** It needs to be ensured that the types of data and information gen-
erated by scientists are in line with those needed by practitioners and policy makers to develop evidence-based plans. A number of case studies have revealed that scientists often focus on investigating the physical causes of natural hazards and climate change rather than on the actual risks and impacts. Bringing scientists and practitioner together early on in the process would aid in preventing these unnecessary discrepancies.

3.3. Education and training in the Post 2015 Framework for Disaster Risk Reduction

Disseminating relevant information and knowledge on hazards, risks and vulnerabilities has rightly been defined as a priority for action in the Hyogo Framework for Action 2005-2015. Several sessions at Resilient Cities have dealt with the question of how to inform and assure people, and in particular local governments, of the importance of adaptation planning and disaster risk reduction in enhancing resilience, and how best to facilitate the exchange of this information. The discussions indicate a need for re-framing the issue of resilience in a more attractive way and using mobile technologies and social media to reach out to a broader audience, as well as providing special platforms for city-to-city dialogue.

- **Precautionary planning and framing resilience** One of the main problems identified during the congress, is that people tend to wait until disasters occur before they are willing to invest in disaster prevention and resilience action. If natural hazards have not yet hit a city and climate change impacts are not immediately noticeable, it becomes difficult to mainstream adaptation planning and disaster risk reduction, and to obtain active citizen participation. Overcoming this barrier requires a shift of attitudes and behaviors in the long run. This can be done by increasing understanding of climate change impacts and disaster risks and promoting precautionary planning as both necessary and advantageous. Yet, it is not only a matter of raising awareness but also of re-framing the issue in a way that makes it more appealing and accessible to a broader audience.

- **Social media and mobile technologies** ‘Traditional’ media still play a crucial role in information dissemination, but social media and mobile technologies can now aid with reaching out to a broader audience. Additionally, these technologies can help ensure the speedy dissemination of information and have the potential to involve citizens in adaptation planning and disaster risk reduction through their interactive approaches. The city of Bologna, Italy, for instance, has developed a smartphone application, called Blue AP(P), to inform citizens and stakeholders about adaptation and resilience and to actively engage them in the data collection process and future actions of the city.

- **Platforms for local governments** Local governments have continuously expressed their need and desire to share experiences with peer-cities around the world, in order to learn from each other’s challenges and responses to climate change and other disasters. Policy makers are often not fully aware of the disaster and climate-related risks in their city, nor are they informed about measures being tested elsewhere to cope with similar challenges. For this reason, it is important to provide platforms for local governments that facilitate joint dialogue and discussions. The Resilient Cities congress, including special program elements such as the two-hour Reality Check Workshop sessions, does just that. The opportunity for open exchange provided by the workshops has proven very successful and more of these kinds of facilitated dialogues should be arranged.

3.4. Implementation and practice in the Post 2015 Framework for Disaster Risk Reduction

While states, regional and international organizations play an important role in implementing disaster risk reduction and climate adaptation measures, it is on the part of local governments to take action and join forces to become more resilient. A close investigation of various aspects of urban resilience at Resilient Cities revealed numerous practice gaps, areas for improvement, and steps to be taken. These included collaboration and cooperation processes, financing mechanisms, and ecosystem-based adaptation.

- **Researcher-practitioner collaboration** Although efforts have been made to involve the scientific community in planning processes, there is still a long way to go to achieve continuous, fruitful collaborations. Policy making is not always informed by the latest scientific information and researchers often struggle to communicate information in a way that it is applicable to urban planners and policymakers. Time and a common language are two crucial factors for improving the collaboration process. Time aids in building trust and capacity through an ongoing exchange of information and expertise, and a common language ensures that all of the involved actors understand what is being discussed and can actively contribute. As cities are the end-user of scientific work it should be clearly communicated what exactly needs to be researched to supply the information necessary for developing effective disaster risk reduction strategies and climate adaptation plans, and to ensure results are delivered in a timely manner.

- **City-to-city cooperation** Active partnerships and city-to-city cooperation are key for enhancing the capacity of cities in the field of disaster risk management and climate change adaptation. Particularly cities that have already experienced disasters will be able to advise other cities on disaster prevention and recovery measures. To ensure mutual learning processes and the building of local capacity in the long run, systematic, long-term bilateral cooperation should be established for an ongoing exchange of information, know-
how and technology. As many cities do not have the resources to set-up and maintain a partnership on their own, the private sector and other relevant stakeholders should be involved from early on, to transcend siloed-thinking and adopt an integrated perspective.

• **Integrated planning and cross-sectoral coordination**
  Despite attempts to facilitate coordination across sectors, siloed institutional arrangements are still prevalent in many cities. Institutionalizing a holistic approach by reintegrating city departments is therefore crucial for developing future-oriented policies in disaster risk management and climate adaptation. Instead of focusing on solving only one problem at a time, municipalities should encourage communication and institutional coordination in order to fundamentally redesign and optimize systems, which can then deal with unpredictable events.

• **Financing resilience**
  Although the understanding of barriers, challenges and solutions related to financing resilience has been improved and respective networks and partnerships are being developed, there is still slow progress in terms of actual implementation on the ground. As local governments frequently rely on external financial sources, it has been argued that the lack of funding options impedes the implementation process. While this is partly true, local governments also need support in building sufficient institutional capacities to absorb available funds, and marketing their own projects. The latter could be done by varying the framing of projects depending on the different investors or by bundling projects (within cities and with other cities) in order to access larger funds. Additionally, cities can use existing assets, local revenue streams and financial mechanisms to leverage other funding sources.

• **Ecosystem-based adaptation, green infrastructure and biodiversity**
  Investing in and incorporating ecosystem-based adaptation (EBA), green infrastructure, and biodiversity into flood management mitigates disasters while also offering numerous monetary and non-monetary co-benefits. These alternative approaches should be considered on a par with traditional gray infrastructure as clean water and clean air are fundamental to quality of life, and help minimize risks such as flooding. As ecosystem-based adaptation requires a cross-sectoral approach, creating partnerships and finding synergies between different sectors and scales is important for effective implementation.

3.5. **Policy improvement for the Post 2015 Framework for Disaster Risk Reduction**

• **Creating synergies between disaster risk reduction and climate change adaptation**
  Currently, disaster risk reduction and climate change adaptation are typically managed as two separate processes, particularly at the intergovernmental level. Creating synergies between these two policy areas and acknowledging their interrelation in the Post 2015 Framework for Disaster Risk Reduction would help to overcome this artificial differentiation. A respective proposal in this direction has already been developed by numerous mayors and municipal leaders during the Mayors Adaptation Forum at Resilient Cities. This proposal suggests that the Durban Adaptation Charter, the global guideline for climate adaptation at the local level, should officially recognize disaster preparation as first step of any adaptation strategy. In return, the Making My Cities Resilient Campaign of UNISDR, the core tool to promote the HFA at the city-level, should suggest supplementing disaster risk reduction with ecosystem- and community-based adaptation to ensure additional development benefits.

• **Support local governments in financing resilience**
  Many cities are not sufficiently prepared and lack the capacity to accept and absorb available funds. States, regional and international organizations should assist to build local capacity, and provide cities with information about funding opportunities and where/how these can be accessed. However, it is not only a matter of providing assistance to local governments but also of developing new models and mechanisms for financing resilience at the local level. One of the opportunities discussed at Resilient Cities was to test the possibility of using un-earmarked discretionary grants. These would allow local governments greater control over the money and how best to spend it to meet their specific needs.

4. **Conclusions**

Comparing the discussions, outcomes and results of the Resilient Cities 2010 congress with those from this year, confirm that progress has been made in numerous aspects of resilience planning. The challenge is now to move beyond the actual planning phase and start implementing the strategies and mechanisms that have been developed.

Although the Hyogo Framework for Action 2005-2015 touches upon many relevant aspects to be considered and improved, the Resilient Cities 2014 congress identified numerous gaps in various stages, ranging from research to implementation, that should be respectively addressed in the Post 2015 Framework for Disaster Risk Reduction.

The discussions focusing on the research stage revealed that in addition to generating data and information to assess vulnerabilities and risks, it is also important to develop effective methods and institutional arrangements to process and communicate the available data so it can be widely used and compared between cities.

Raising awareness, and informing the public, private and civil sector should remain a core priority of action. Framing resilience in a more accessible or appealing way might aid in popularizing precautionary planning, while social media and mobile technology can help in reaching a broader audience. Particularly local governments need increased opportunities to share experiences and challenges with peer cities and these occasions should be arranged and facilitated.

Many cities face numerous challenges in moving from planning to implementation. This is often due to a lack
of local capacity, know-how and technology; institutional barriers; ineffective collaborations; and the lack of funding available. In addition, disaster risk reduction often neglects the relevance of ecosystem-based adaptation and its additional development benefits. Suggestions and guidelines for how to advance in these areas need to be developed.

Looking ahead to the Post 2015 Framework for Disaster Risk Reduction two aspects require special consideration and incorporation; Firstly, separating disaster risk reduction and climate change adaptation is no longer suitable. It is time to start creating synergies between these two policy areas and acknowledging their benefits for each other. Secondly, local government should receive assistance and support in building local capacity and structures to access and effectively utilize available funds, while simultaneously there should be a development of new mechanisms for financing resilience.

Conference Documentation

Congress report to be published August 2014: http://resilient-cities.iclei.org/

Conference Live Blog reporting from sessions and panels including videos with participants and also providing blog entries from before and after the congress to related themes: http://resilientcitiesblog.iclei.org/


Resilient Cities Profile brochure: http://resilient-cities.iclei.org/resilient-cities-hub-site/home/

Citation


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