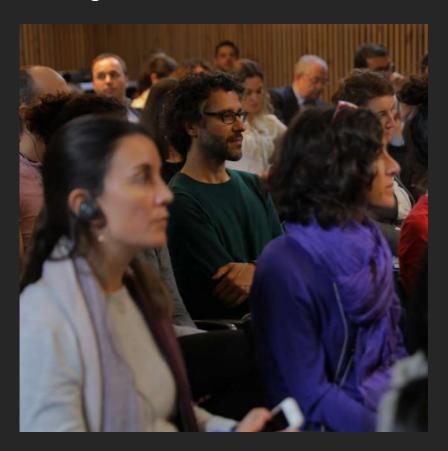


BARCELONA RESILIENCE WEEK

11—16 Nov 2018

Building Sustainable and Resilient Cities









UN HABITAT FOR A BETTER URBAN FUTURE

With the financial support of



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Introduction

Our world is changing faster than most of us could have predicted just a decade ago. The growth of urban centres in all continents are allowing many to climb out of poverty and access basic services, economic opportunities and increased security. However, the changing urban environment also brings challenges, especially for those on the front line of ensuring the functionality for their citizens, both newcomers and local residents, when faced with shocks or stresses.

All cities must strive to become as resilient as possible in order to respond to our changing world. Taking action is the standard of all main globally-agreed targets and goals (the Sustainable Development Goals, the New Urban Agenda, the Sendai Framework for Disaster Risk Reduction, and the Paris Agreement), but most importantly it is the only way to face the immediate and long-term future.

Resilience requires city stakeholders to look at the urban system with a critical eye, accept vulnerabilities and acknowledge capacity gaps, but this investment almost always pays off in the long-term. From averting disaster to increasing efficiency, improved governance and stakeholder participation, resilience-thinking can be a catalyst for the positive urban transformation our planet needs. Local, regional and national governments, the private sector, academia, and civil society each have a role to play in making cities more resilient as no one actor can tackle these issues alone.

The third edition of Barcelona Resilience Week was a unique opportunity to bring together many of these key actors from across the globe and take stock of our shared commitment, challenges, shortcomings and strengths and take a united step towards the vision set out in the Agenda 2030 for resilient cities.

The wealth of experiences shared during Barcelona Resilience Week showed us that while realities differ from city to city, partnerships are still our strongest tool. From UN-Habitat, we would like to congratulate all participants on their contribution to this event, and look forward to following the next steps resulting from the dialogues, workshops and sessions of Barcelona Resilience Week, particularly the Making Cities Sustainable and Resilient action and Making Cities Resilient Campaign.

Barcelona Resilience Week Secretariat UN-Habitat's Urban Resilience Programme



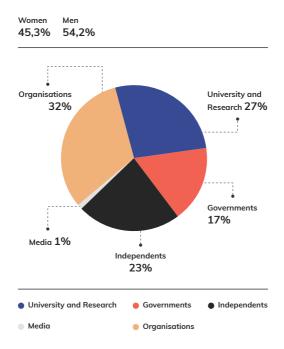
Barcelona Resilience Week in Numbers

Barcelona Resilience Week in Numbers

Participation Overview

Over 500 voices gathered.

60 expert speakers, practitioners, elected representatives, private sector and academics. All continents represented.



The Barcelona Resilience Week took place ifour iconic and symbolic locations.

Sant Pau Art Nouveau Site - Today the home to leading institutions in the fields of sustainability, health and education but once a cutting-edge public hospital with a unique approach to ensuring health services to the local population. Home of UN-Habitat Office in Barcelona.

Smart City Expo World Congress (Fira de Barcelona) – The world's foremost event for Smart Cities where the latest smart solutions are presented by the think and do-tanks of the world and world renowned participants share ideas.

World Secretariat of United Cities and Local Governments (UCLG) - A global home for local and regional governments and the engine behind the localizations of the global agreements.

Espai Endesa – The control centre for an essential service in the city of Barcelona – electricity. The space is also a learning area and testing ground for energy innovation.

UN-Habitat's stand at the Smart City Expo attractedver 300 visitors over the course of the three days including the private sector, international organisations, local government representatives, academics, as well as numerous start-up or think-tank initiatives.





Opening and Keynote Session

Opening Session

Moderator: Mr. Andre Dzikus, Coordinator of the Urban Basic Services Branch and the Acting Coordinator of the Risk Reduction and Rehabilitation, UN-Habitat

I. Mr. Manuel Valdes, Deputy Manager of Infrastructures and Urban Coordination, Barcelona City Council

Barcelona's resilience model was born out of crises and the real need for resilient urban design. Given the city's history and considerable progress in this area, Barcelona is open to sharing its model and experience with any other city that requires support. These efforts are part of Barcelona's commitment to building resilience globally and addressing the challenges of urbanization all over the world. The third edition of Barcelona Resilience Week is a good example of how sharing knowledge and experiences among cities can and does lead to transformational action

II. Mr. Sanjaya Bhatia, UNISDR

Disaster Reduction Risk should be considered as an investment approach, not least at the city scale. Highlighting the global framework that establishes the targets, goals and action areas required to address disaster risk reduction, Mr. Bhatia recalled that adoption of the Sendai Framework was also the fruit of local-level efforts by more than 100 mayors.

The Making Cities Resilient Campaign has gathered over 4,000 signatories and demonstrates the level of commitment from cities to building resilience. Now is therefore the optimum time build on this momentum and develop local strategies to ensure they align and integrate with efforts by other key actors such as national governments, academia, private sector, civil society, among others. To achieve this, new and innovative partnerships will be key.

III. Mr. Lars Gronvald, Head of Section Cities, European Commission-DEVCO

The vision of a donor such as the European Union is advancing in terms of resilience. Increased efforts are being focused on climate change, in particular on adaptation measures, as a result of increased calls by many member states. These efforts and the subsequent funding allocation must be alianed and integrated with the goals set out in the Paris Agreement. The second drive within the EC is to focus more on cities and the potential for impact by working with local governments and city actors to reduce risk and build resilience. In this regard, UN-Habitat is a key actor and natural partner for the EC to advance in this agenda.

In order to support local authorities in these two areas, advocacy, tools, peer-exchange, collection and analysis of data for evidence-based decisions are urgently needed, however partnerships that strengthen parallel and complementary processes are also called for.

IV. Ms. Christine Musisi, Director of the External Relations Division, UN-Habitat

Transmitting the message of UN-Habitat's Executive Director, Ms. Maimunah Mohd Sharif, Ms. Musisi underlined the importance of resilience for UN-Habitat. As risks in cities multiply, so too do their negative impacts on people. However not all urban residents experience risk equally and we know that the poorest will proportionately pay the highest price. Resilience cannot be separated from the other major challenges we are facing in cities, informality, inequalities, access to basic services, among others so as more people move to cities every day, we must increase our efforts to reach them.

Our collection vision must not be for people to simply survive in cities but to thrive. This is driving UN-Habitat's work across many different areas but the Barcelona Resilience Week is extremely pertinent as it provides a common space to bring together all partners working on resilience and work together to ensure that no city, town or person is left behind.



Keynote

A Perspective from Gaza: Urban and Social Resilience

Mr. Jordi Cortés from Barcelona City Council introduced Mr. Mohammed Abdalfatah (Al-Halabi), Director of International Cooperation at the Municipality of Gaza. Drawing on the longstanding cooperation between the two cities, Mr. Cortés reiterated the support from Barcelona to working with the Municipality of Gaza to improve the quality of life for residents in Gaza.

'Being resilient is not an option for Gaza', opened Mr. Abdalfatah, 'it is a necessity'. Resilience challenges in Gaza are similar to those faced in most cities across the world - education, energy, water, sewerage - however the context in which they must be addressed is different. A recent UN report claims that Gaza will not be livable by 2020 owing to its resource shortages, mainly water, and ineffective sewage management. For the Municipality, this is extremely worrying and is the driver of all its work.

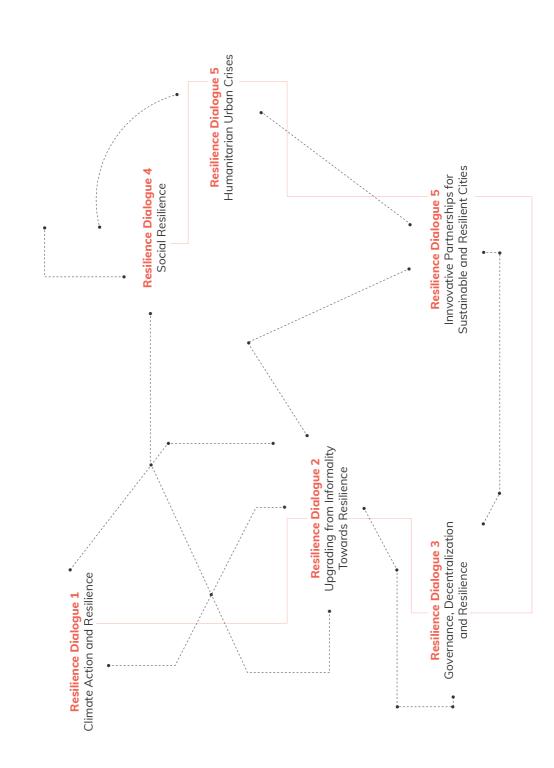
Mr. Abdalfatah highlighted that additional resilience challenges also stem from the ongoing conflict that has come to characterize the region. During conflict, the water pipes stop running and residents cannot access water. To date, the solution has been to build local wells however the quality of the water cannot be guaranteed under these circumstances. Entrepreneurship has been promoted across Gaza as a resilient solution to the economic challenges and many residents are exploiting the opportunities offered by the global market.

The difficulty for actors such as the Municipality is that many of the shocks experienced cannot be anticipated and this makes resilience very difficult. To date, the resilience response in Gaza has been to find new ways to address challenges and always try to find innovative solutions. New technology is opening up opportunities to energy, employment challenges and, when combined with the social resilience that has been growing over the previous decades, the Municipality is able to maintain functionality during crises. Nevertheless, Mr. Abdalfatah proposed that the biggest challenge for Gaza today is the lack of political solution on the horizon.





Resilience Dialogues



Resilience Dialogues

Resilience Dialogue 1: Climate Action and Resilience

Climate change is not a distant threat to future generations but arguably the most pressing challenge for humanity today. In urban settings, climate action presents specific challenges related to scale - cities account for the majority of greenhouse gas emissions and are home to the majority of the population, as well as the complexity of urban systems, governance structures, and many other factors. The opportunities for positive climate action in cities are significant, from maximizing economies of scale to capitalizing on proximity and population density to testing innovative green solutions but coordination, resources, data and knowledge are often cited as common

This dialogue session featured panel interventions and exchange and questions from the floor.

Panel Contributions

Moderator: Ms. Megan Rowling, Journalist, Thomson Reuters.

I. Mr. Albert Sandy Daniel, Honourable Lord Mayor of Port Vila, Vanuatu

Port Vila has 60,000 people located on a small island. With this fact, the Lord Mayor opened the session and highlighted the importance of resilience for small island developing states (SIDS). Vanuatu was recognized as the most vulnerable country to climate change in the world and sea level rising, floods and droughts are already destroying livelihoods.

Port Vila is the capital and the economic, cultural and administrative center of Vanuatu and is experiencing rapid growth in industries such as tourism. The capacity of the municipality to address climate change is limited as a result of a restricted budget, human resources and training opportunities, thus compromising its ability to deliver basic service provision and address risks. Sample projects presented included public space management, strengthening storm water systems, work on waste disposal and the creation of capacity against acidification.

The biggest asset for the city is its high level of community resilience, developed over decades of disasters. Inviting all participants to consider the potential of social resilience when combating climate change, the Lord Mayor highlighted that social resilience must be at the heart of any meaningful resilience efforts in Port Vila.

II. Mr. Alessandro Attolico, Executive Director, Province of Potenza, Italy

The province of Potenza is a supra-local level similar to a region and its capital city, Provenza, has a population of 65,000. Mr. Attolico presented the Regional Masterplan (2013), which stemmed from the need to coordinate and support planning efforts at the regional level to better address challenges in a coordinated manner, particularly those related to climate. The initiative also sought to influence the urban planning tools used by cities in the region and develop decision-making at local level to address climate change and sustainable development action in regional plan.

Potenza joined the Makina Cities Resilient Campaian to identify best practices and auidance that would support the implementation of a master plan across the region's cities. This first analysis revealed that many urban structures were prepared for the potential impacts of climate change. The next step was to design a process of increasing capacity and awareness and set up two networks to collaborate on governmental proposal to implement the masterplan. As a result, a strong commitment by local stakeholders was built and the inclusion of communities though bottom-up approaches increased buy-in. The approach adopted in Potenza was presented as a good practice that stands to be replicated in other regions.

III. Ms. Ares Gabàs, Chief Resilience Officer, Barcelona City Council, Spain

Ms. Gabàs gave an overview of the impacts and challenges that Barcelona has, and it is likely to face in relation to climate change, and the main actions that Barcelona City Council is taking. As a member of the Covenant of Mayors, the city is committed to delivering on the Paris Agreement and has developed its Climate Action Plan for 2030. The main climate challenges in Barcelona are temperature rise, projected at between 1.7 to 3 degrees by the end of the century, changes in rainfall patterns resulting in -26% rainfall and increased unpredictability, and intense droughts. Heat waves will likely multiply as well more extreme minimum and maximum temperatures resulting in socio-economic risks for vulnerable populations. The basis of Barcelona's Climate Action strategy was to engage actors from within and outside the City Council and build a participatory process involving all the parties. The actions defined support both mitigation and adaptation



to climate change as per the Paris Agreement and these objectives are related to carbon neutrality, green spaces, reducing water consumption, climate justice by reducing energy poverty and access to basic services and include citizen action.

The case of Barcelona is in no way unique, and the challenges and approaches presented resonated with many participants of the session. Barcelona city council extended its commitment to sharing its lessons with other willing municipalities.

IV. Ms. Laia Romero, Operations and Strategy Director, Lobelia by ISARDSAT - Satellite data for climate

Lobelia by IsardSAT is a research and development enterprise that provides services and solutions in the Earth Observational field. The enterprise uses satellite data that can be gathered on any area of the globe to support areas where ground information is limited. Data and information about climate change and projections is particularly useful in areas most affected and developing contexts where ground data is difficult to collect. In the case of climate change impacts, satellite data is being gathered and counter-checked with information on the ground. This provides an accurate, reliable and traceable basis for decision making.

In collaboration with UN-Habitat, Lobelia by IsardSAT has gathered satellite data on the cities working with the City Resilience Profiling Tool to provide insights and inputs into the resilience analysis. The data visualization is intuitive and interactive to allow decision-makers to explore and the approach can be applied to almost any

V. Mr. Stelios Diakoulakis, Deputy Regional Director for Europe, C40

A network of 96 member cities leading climate action, C40's programme "Deadline 2020 - How cities will meet the Paris Agreement" sets out a roadmap of how cities will achieve the ambitious goals of the Paris Agreement. The key goal is to implement climate action plans in line with the most ambitious targets and develop understanding of how cities contribute to climate change mitigation and adaptation actions. Highlighting the connection between climate action and resilience building, Mr. Diakoulakis suggested both processes are complementary and mutual enriching.

Networks such as C40 catalyse new, better and faster climate action by helping cities learn from one another and bringing city officials together in workshops, online meetings, and webingrs to initiate joint projects and coordinate technical assistance to cities. As a concrete example, the "City Diplomacy Project", which partners UN-Habitat, ICLEI, 100RC, Slum Dwellers International and Cities Alliance, represents the voice of southern cities and addresses one of the major gaps in these countries, research and data collection for resilience. Mr. Diakoulakis invited participants to consult the recently released, "Data speak louder than words" (2018) findings report.

VI. Mr. Mikhail Vorobev, Deputy Mayor on Economy and Finance, Yakutsk City Council

Yakutsk is the capital of the Sakha region in North Eastern Russia and the largest city built on permafrost. The highest temperature range recorded in the city is 100 degrees, from below 60 to plus 40, and the city's population is growing. In such a unique environment, climate related hazards are numerous according to Mr. Vorobev. The city is focussing on three principal climate impacts and presented measures taken to mitigate and adapt to the severe temperatures, the permafrost and frozen soil, and the probability of floods.

Yakutsk also faces risks that are unique to the temperatures, most notably owing to the 200 days/year during which heating is required in homes and workplaces. Such a huge dependency on heating systems could have potentially devastating consequences in cases of failure. Climate change is warming the active layer of the permafrost causing thawing and, consequently, destabilizing buildings and deteriorating agriculture productivity. There is a lack of regulation on permafrost protection however each local government regularly conducts studies on the situation within municipal area. Innovative solutions such as cooling pipes around buildings to transfer warm temperatures to the surface without the need of a source of energy, embankments dams and awareness raising programmes stand to be shared with other Arctic cities and adapted to other extreme climate cities

Discussion Points

A representative from the Barcelona Provincial Council (Diputació de Barcelona), Ms. Carme Melcion, shared the perspective from a regional level and highlighted that is easier to advocate for mitigation efforts than to show cost-benefit of action. Initiative such as Barcelona Resilience Week and global reports and research can help make the case for these efforts and should be scaled-up.

Mr. Beniamino Russo from Suez, explained how initiatives like the RESCCUE project brings together numerous actors to address climate challenges in cities. This type of project, which proposed adaptation strategies, support a holistic approach to climate resilience that is needed in all cities for effective action.

Mr. Lorenzo Chelleri from the UIC (Universitat Internacional de Catalunya) pointed out the multi-disciplinary profiles needed to manage collaboration and develop tools for resilience-building for them to be truly effective. These profiles should be developed by academia through cross-disciplinary study programmes.

Disaster Risk Reduction measures are not enough, resilience must be a broad process that is enabled by national, regional and local policies. The difficulty of advocating for the cost-benefit of climate action and resilience was repeatedly highlighted and the obstacles to influencing policy-making were highlighted. These capacity gaps are preventing the implementation of resilience actions in many cities.

Participants emphasized the challenges when working with national governments on climate and resilience issues, including: the lack of commitment to disaster management, and the unequal representation of local and national voices in decision making and resource allocation. Many participants made a plea to national government to help them meet nationally determined contributions not only by allocating resources but also by allocating powers to the cities to address climate change.

Take Aways

- Many cities are facing a technical capacity gap when it comes to addressing climate action and resilience;
- Regional level climate action and resilience requires coordination between many municipalities, regional authorities are well positioned to lead this process;
- Many cities are actively meeting the targets in the Paris Agreement to both mitigate and adapt to climate change. Networks offer gateways to scale-up city-to-city collaboration;
- Technology such as satellite data offers new opportunities for cities to make informed resilience actions however access and awareness must be scaled up:
- Climate change is bringing new resilience challenges to cities. National government and policy making must be able to adapt resources and powers accordingly;
- Defining and implementing climate and resilience actions must be a participatory process that engages local, regional and national governments in collaboration with many other disciplines. Coordination, communication and collaboration must be increased.



Resilience Dialogue 2: Upgrading from Informality Towards Resilience

In a rapidly urbanising world, cities are often unprepared for the challenges population growth brings, or lack the capacity to accommodate its increasing number of inhabitants. As a result, urban sprawl, informal settlements and the informal economies they create are a common feature in our cities. The importance of building resilience in the upgrading process, as a means to ensure that development gains are not compromised in the face of shocks or stresses, is paramount.

Panel Contributions

Moderator: Ms. Carmen Mendoza, Assistant Director of the UIC Barcelona School of Architecture, Universitat Internacional de Catalunya

I. Opening Remarks: Mr. Musa Kualkikaya, Director General of the Statistical, Economic and Social Research and Training Centre for Islamic Countries

Current urbanisation trends in cities across the world do not promise prosperity gains for all residents, particularly when the delivery of infrastructure and services are associated with rapid population growth. The number of slum dwellers has increased by more than 30% in the last two decades, to the point that today, about 1/3 of urban residents in the global south live in informal settlements. This number is likely to continue to grow, as the majority of urban population growth is expected to take place in developing countries. This trend has made informality one of the most challenging issues for building resilient cities. In order to face the issue effectively and ensure inclusivity for all, efforts must focus on understanding the root cause of this trend, as well as unpacking the core values of our cities' residents in order to find appropriate solutions.

II. Mr. Erhan Türbedar, Researcher, Statistical, Economic and Social Research and Training Centre for Islamic Countries

Urbanisation in the 57 recognized Islamic countries across the world follow global trends and more than 50% of their populations live in urban areas. Nevertheless, rural areas also hold strong economic interests and must not be overlooked according to Mr. Türbedar. Our approach to urban development must be balanced with sustainable development in rural areas. Improving informality should happen at a local level, and cities that face this challenge should be considered laboratories for policy-makers and researchers in order to extract good practices that can be replicated and up-scaled.

Urbanisation is about people, and globalisation is about where these people are settled. The current trend is that wealth and power are concentrated reduced spaces that are not accessible to all. Mr. Türbedar made a call for increased political engagement to ensure that the design of cities does not continue be based on economic and political interests but rather people-centred.

III. Mr. Marcos Cáceres, Advisor for Social Affairs, Asuncion City Council, Paraguay

Asunción is a city that faces many risks and those most pertinent are those related to demographic growth. The visible result in the city today is an increase in precarious settlements in very vulnerable areas, such as the edge of its waterways that are prone to flooding.

To give an idea of the scale of the challenge, Mr. Cáceres recalled the events that took place between 2014 and 2016 when the flooding of the Paraguay river forced the city to evacuate over 100,000 people to higher areas, where 200,000 inhabitants were already settled. The resulting impact on the residents and the economic losses were substantial and for every person who moves into a temporary camps, twice as many people living in the surrounding greas are also affected.

As a response, the government's 2015-2020 programme includes risk and disaster management in all its development plans and its two main actions are the reinforcement of the river banks to protect the city, and the construction of a rain and sewage drainage system. The city of Asunción is working with UN-Habitat through the City Resilience Profiling Programme to better understand the risk and define targeted resilience building actions, particularly in relation to water hazards and floods, and the tool stands to support other cities with similar challenges.

IV. Ms. Sara Márquez, Architecture without Borders, and Mr. César Cunquara, Informal Settlements, Maputo City Council, Mozambique

Urban law is exclusive to formal cities. In order to build a sustainable and inclusive city it is crucial to create rules adapted to informal settlements, and it is important to work closely with its inhabitants. The Chamanculo neighbourhood of Maputo is characterised by insecurity of land-ownership, and unequal and unplanned informal settlements. One of the major challenges in these neighbourhoods is the lack of land tenure by informal settlers, even long-term or second generation residents.

The Chamanculo Pilot Upgrading Project aims to promote and facilitate membership of DUAT, a process to obtain land property and regularise the public space and streets. By promoting land tenure, it aims to empower people and protect them against speculative urban processes. The people-centred approach focuses on designing a city with and for its people and is driven by consultation with local residents. Ms. Márquez and Mr. Cunquara presented the before and after images in the neighbourhood and highlighted that this Project will be up-scaled across Maputo and could be extended to other cities as a tested way of upgrading informal

V. Mr. Braulio Eduardo Morera, Director of Strategy Delivery, 100 Resilient Cities

Informality is a unique resilience challenge that requires different approaches and multi-actor collaborations. Resilience is the ability of a city to ensure services, and in relation to informality, this means services for everyone, including the most vulnerable. Globalisation, climate change and rapid urbanisation are pressing concerns and now is the time to increase resilience building according to Mr. Morera.

The speaker presented the City Resilience Framework that describes the essential systems of a city in terms of four dimensions: health and wellbeing, economy and society, infrastructure and environment, and leadership and strategy. The Frameworks has revealed that applying universal tools is limiting, as each city has different needs and priorities and rigid tools cannot adapt. With regards to informality, approaches to building resilience must take into account the capacities and priorities of slum dwellers. For this to happen, it is crucial to follow a thorough process of collecting information that must be participatory and include engagement with those affected, and not only with politicians.

VI. Mr. Osvaldir Rodrigues, Architect, Praia City Council, Cape Verde

Praia city is the centre of all administrative services and political structures of Cape Verde. In parallel to the city's rapid growth, increased spatial and social segregation emerged. The city has two types of unplanned informal settlements: those that appeared before independence in 1975, and recent settlements that have emerged in the last 20 years.

The main climate risks at the local level are landslides, floods, the erosion of coastal zones, droughts, and desertification. In relation to human interference, the city is also at risk of the obstruction of drainage channels, the construction of dangerous slopes, destabilization of the soil and an alteration of its natural characteristics, and high population density along the coast.

The municipality's programme of monitoring construction and informal settlements (PREIM) aims to study, control and deal with the challenges of informal settlements, and has both administrative and technical elements. Mr. Rodrigues explained the programme in detail and invited participants to find our more and explore the possibility of replicating such programmes in their cities.

Discussion Points

The discussion focused on the extent to which policy-makers must develop appropriate policy alone, or if not, how to involve the residents of informal settlements in the process. The contributions of the speakers highlighted that the engagement of residents increased in projects, programmes and initiatives substantially increased the final impact and success.

For Mr. Morera, bottom-up solutions are the most appropriate, as the old colonial approach cannot be applied to new urban challenges. However, governments have to be engaged with emerging trends, and committed to creating safer environments for their residents, as they are the only ones that can provide the community with basic services.

Mr. Marco Cáceres highlighted the barrier between formal and informal systems. Like Mr. Morera, he stressed that the solution must always come from the people, requiring governments to provide them with opportunities to put forward their own ideas and preferences.

The discussion also covered the education of children and young people, with panellists agreeing that education is central to this process, as educated youth can provide valuable inputs for finding solutions. As concrete example was provided by Architecture without Borders in Maputo that includes working with local children in the city-planning activities.

Take Aways

- Urbanisation is inevitable, and so cities must have adaptive policies in place to incorporate newcomers and give them non-discriminatory access to the cities' services;
- The challenge of informality must be faced with a context-based approach, creating tailored solutions for each city in collaboration with residents of informal settlements;
- If city planning is not improved, we will run out of space. Cities need to find ways to accommodate the influx of people while simultaneously fulfilling their international commitments to protecting the natural environment;
- It is essential to understand people's motivations for moving to urban areas in order to offer appropriate solutions:
- Other ways to control urban expansion include rural development, and the building of intermediary cities.



Resilience Dialogue 3: Governance, Decentralization and Resilience

Understanding the structures and processes of decentralisation in cities, in relation to responsibilities, planning and financial capacity is key to building urban resilience. Local governments have a unique role in promoting, ensuring and maintaining urban resilience, as they are largely responsible for applying local competencies and knowledge to best tailor plans, processes and initiatives to their local contexts.

Panel Contributions

Moderator: Mr. Nicola Tollin, Professor on Urban Resilience, University of Southern Denmark (TBC)

I. Mr. Alfredo Martínez, Mayor of Santo Domingo Este, Domican Republic

Building resilience and mitigating disasters requires institutions to work closely with citizens, which in turn requires national regulations to be as decentralised as possible. The priorities of Santo Domingo Este's municipal council are efficiency, transparency, and citizen participation, which is reflected in its urban development plan. In 2018 a city diagnosis was carried out, from which the outline of a municipal plan for Disaster Risk Reduction was developed. Citizen participation was prioritised in the drafting of the plan through the creation of a municipal committee on risk management that included actors at many levels, including national organisations and municipal managers.

The committee also works with organisations from vulnerable neighbourhoods, getting to know the particular challenges they face, and receiving their own ideas for increasing resilience. The goal is to strengthen current mechanisms by including disaster risk reduction and climate change adaptation strategies, as well as encouraging citizen participation, and increasing capacity-building and knowledge. Mr. Martínez invited participants to learn more about the approach taken in Santo Domingo Este and implement, where applicable, the lessons learned.

II. Mr. Agustí Serra, Secretary for Land and Sustainability, Generalitat de Catalunya

Catalonia region has long had urban and territorial planning in place, but these laws have never been fully integrated. In response, the local government has chosen to implement the New Urban Agenda as a vehicle to act locally but from a global perspective. First, an initial analysis sought to identify the desired quality of life in the city for the coming 20/30 years. The initiation of the New Urban Agenda's implementation coincides with a current local debate on territorial law, and these complement each other.

A Catalan Urban Agenda was created to identify and prioritise the agenda in sectorial policies. It is organised by an Urban Assembly that allows shared governance, and is made up of all relevant agents and social and economic actors. Its goal is to draft and validate the Catalan urban agenda before the government approves it, and highlight the value of its broad content, its multi-sectorial perspective, and its citizen participation. The multi-actor approach and institutional space created to develop the Catalan Urban Agenda is a rich testina ground that other regions can learn from, according to Mr. Serra.

III. Ms. Emilia Saiz, Secretary General, UCLG

Decentralisation and governance are complex concepts, making them difficult to implement: decentralisation refers to questioning how power is distributed and understanding society at a local level in order to face complex challenges, but governance is not a concrete or technical concept, and needs to be built around trust, clear roles, and resources, in order to implement decisions while incorporating everyone affected.

Local and regional governments are still learning about participation and inclusion, and they have to encourage national governments to make the link between resilience and governance. Building resilient communities is not only technical, but also involves working as an inclusive community to face the unknown together because governments cannot do the work alone.

The New Urban Agenda should be recognised as part of achieving the SDGs. Ms. Saiz challenged participants to consider the global agendas as one pack: the Agenda 2030 and SDGs, the New Urban Agenda, the Paris Agreement, and the Sendai Framework, suggesting that following this approach, we will be very close to the type of governance models that we need to achieve their targets.

IV. Mr. Joan Clos, Former Executive Director of UN-Habitat

The question at hand is how to achieve resilience independent from the city's development. Good local-level governance can provide tools such as laws or regulations that mitigate even low-probability risks. But, if a local government is weak it is hard to even find the inspection capacity to make sure that people are safe. Therefore, resilience and development are interrelated, and increasing development is essential to strengthening resilience, which is closely linked to fulfilling the SDGs and the New Urban Agenda. This link is the reason that there is a need to improve governance systems to serve people.

There is a common feature in the analysis of urbanisation in both developed and developing countries, which is an increase in urban sprawl. The challenge of low population density is that the cost of service provision rises and basic services becomes unaffordable. Building resilience requires large financial resources to provide basic infrastructure, raising the question of where this finance comes from. However, planning and designing cities correctly can help urbanisation create value and build resilience. For this to happen, according to Mr. Clos, it is important to design and close the financial loop at every level.

V. Mr. Guilherme Johnston, Global Resilient Cities Coordinator and Program Manager, ICLEI

The benefits of involving local governments in tackling global challenges include an increase in the quality of information and bottom-up initiatives, the visibility of each city's needs, and higher chances of innovation and knowledge-sharing. Furthermore, local action often has a larger impact than national action. Local action faces challenges such as limited staff capacity, conflict with other local priorities, weak legal and institutional frameworks, lack of access to finance, and weak coordination between different levels of government.

The "Data speaks louder than words" report shows that the main problem local governments face is funding. Cities fund about 70% of their own actions, leaving them under-resourced to address issues related to resilience-building. Food and agriculture, public health, and energy are the assets and services most affected by climate change at the local level, with food and agriculture being the asset most affected in cities and regions of the global south. Mr. Johnston reinforced the commitment of ICLEI to promoting innovating finance that incorporates resilience into local government budgets, helping national governments recognise local capacity, involving the private sector, and strengthening international cooperation at all levels of government as ways to support local governments make their cities more resilient.

Discussion Points

The speakers discussed how local and regional governments can work together more effectively, how to tackle the lack of resources faced by local governments, and how decentralisation is evolving in practice.

Panellists highlighted the existence of factors that link local and national governments, for instance financing and capacities. Participants suggested that urban plans must become real, applicable, and legally-binding frameworks if they are to contribute to the achievement of more sustainable and resilient cities.

The audiences' main concern was how to help cities access funds and the discussion returned to this issue on several occasions. The main actor in recognising the importance of resilience and supporting resiliencebuilding with adequate financial resources is national government, collaboration between the different levels of governance is therefore essential and must be strengthened.

Take Aways

- Urban resilience is intrinsically correlated with the level of development and governance in cities;
- The main challenges that local governments face when addressing resilience is the lack of access to financial resources, lack of capacity, and a lack of support from national governments;
- Urban planning and related policies must be cross-cutting and specific to each city's needs, context and realities. To increase the likelihood of success, consultation with all relevant actors is essential;
- Resilience and governance are two concepts yet to be defined and understood universally and this complicates their implementation, limits action and hampers local efforts to build resilient cities.





Resilience Dialogue 4: Social Resilience

Urbanisation provides the opportunity to promote social inclusion, including greater equality, access to services, and new opportunities for all. Resilience-building in cities must adopt a people-centred approach that goes far beyond infrastructure considerations. The process of creating resilient cities must include awareness-raising, training, and provide access to decision-making for all, without exception, for cities to be sustainable long-term.

Panel Contributions

Moderator: Ms. Anamaria Vrabie, Director Cluj Innovation Fund

I. Mr. Emil Boc. Mayor of the City of Clui-Napoca, Romania

Cluj —and in Romania as a whole— went through a transition period as it shifted from a communist regime to a democratic system and free market economy. With little industry and few employment opportunities, a resilience perspective was chosen to promote innovation in the city. In less than 20 years the city has become a hub of innovation and an ecosystem innovation economy according to Mr. Boc.

After the fall of communism, elderly people were left without pensions or resources and, along with the change of regime, the currency lost its value. Nationally, migration trends led to 2 million talented people leaving Romania, while people with fewer resources migrated to cities and urban centres in search of better opportunities. The experience in Cluj revealed that a resilience strategy should focus on reducing vulnerability and increasing participation in decision-making. The social programmes implemented were centred on providing basic services for elderly people and the Roma community living near landfill sites, and education, as one of the primary strategies to eradicate poverty and marginalisation. As such, the social resilience of the city increased considerably and is more likely to be sustained over the long-term.

II. Mr. Luis Nhaca, Councillor for Urban Planning and Environment, Maputo City Council, Mozambique

Maputo is the capital city of Mozambique and is composed of 7 districts. One of Maputo's unique characteristics is the presence of both planned and unplanned informal settlements, in which around 70% of its population resides. As a coastal city, Maputo suffers from the effects of climate change such as floods and cyclones, and the ones at most risk are people living in flood-prone areas.

The principal objective of its urban planning strategy is the improvement of land management, climate change mitigation, the prevention of informal settlements, preserving natural heritage, and safeguarding the rights of local communities. The sustainability of informal settlements must be ensured by combining three main components: urban planning and environment tools using the 'DUAT' method (see Informality Dialogue) to improve land rights, a Municipal Development Program, and a City Master Plan. With these in mind, Maputo City Council is working with UN-Habitat to implement and develop the City Resilience Profiling Tool (CRPT). Mr. Nhaca highlighted the value of the multi-stakeholder approach promoted by the CRPT and the City Council as a key ingredient for success.

III. Mr. Luis Carvalho, Coordinator of Civil Protection, City of Amadora, Portugal

The municipality of Amadora, Portugal, has a population of 175,558 inhabitants. Almost 4% of its residents live in slums, where people of up to 40 different nationalities reside. Between 2000-2017 Amadora experienced over 18,000 disasters, including floods, traffic accidents, and urban fires.

Since 2010, Amadora has participated in the Making Cities Resilient Campaign and has since establish an institutional structure to support disaster risk reduction, providing training in all departments. The strategy for resilience is based on the dialogue with the community. It is a circular process in which stakeholders provide inputs such as data and information about the city in order to analyse the situation, and the local campaign team works to convert this data into outputs that serve the community. Currently, Amadora is at the phase of measuring the project's impact and Mr. Carvalho affirmed that the outlook is positive and will soon be

IV. Mr. Mourade Dièye Guèye, General Secretary, City of Dakar, Senegal

Dakar is the economic, political and administrative capital of Senegal. While it is rapidly expanding as an economic hub, many of its neighbourhoods suffer inadequate public services, and internal and international migration are some of the main challenges the city faces. Housing prices have increased, infrastructure is deteriorating, traffic jams and pollution are increasing, urban crime threatens safety, and anarchic occupancy of public spaces associated with human pressure is becoming a problem.

The city authorities have defined a vision of what a resilient Dakar should be with 5 strategic objectives, of which 3 are directly linked to social resilience; promoting an inclusive resilience agenda by and for Dakar's citizens, providing them with a healthy living environment, and promoting inclusive and efficient governance.

The resilience actions carried out focus on resettlement projects, social service provision such as free dental care and elderly care, a medical centre, and social inclusion mechanisms for young people to access financing. Through its engagement with UN-Habitat's City Resilience Profiling Programme, Mr. Diève is confident that Dakar City will consolidate its current efforts towards a more resilient city.

V. Mr. Sebastià Riutort, Social Rights Department, City of Barcelona, Spain

Barcelona represents 0.3% of the territory of Catalonia, and houses 21.5% of its population. Barcelona has lower unemployment levels than other administrative region and is a competitive city at an international level in terms of attracting companies. Besides this, Barcelona suffers challenges such as social exclusion, inequality, and injustice, particularly between different neighbourhoods. The poorest 10% of the population have 27% less income, while the incomes of the wealthiest 10% are 11% higher. Poverty feeds into many additional problems such as a lack of access to energy, inadequate nutrition, lower life expectancy, education drop-out rates, and, most of all, serious problems in accessing housing.

Social urban policy needs to balance two dimensions: gentrification and segregation. Therefore, the city's social policy approach combines active and passive initiatives, such as direct investment to recipients, and indirect investment to the neighbourhoods. The social policy develops strategy specific to each neighbourhood, emphasises co-diagnosis, co-decision-making, and co-production, enhancing individual and collective abilities to make decisions. Mr. Riutort highlighted that only by using multi-faceted approaches, such as the ones employed in Barcelona, can complex challenges such as social resilience be addressed.

VI. Mr. Erick Elysio Amorim, Municipal Secretary, City of Teresina, Brazil

Teresina is the capital of the state of Piauí, in the semi-arid Northeast of Brazil, and has a population of about 860,000, and 1.2 million including the metropolitan area. The city's main challenges are rising temperatures. increased rainfall resulting in floods, and an expected doubling of its population in the next 30 years.

The chosen strategy to tackle these issues has been to focus on sustainable urban development through a new urban masterplan and a sustainable mobility investment. Regarding social resilience, Teresing City Council is working to upgrade participatory mechanisms, and 135 projects chosen by popular demand are already in place: road paving, an improvement in public spaces and green areas, housing, and cultural centres.

Teresina City Council is beginning to incorporate the SDGs and build a city that is resilient to climate change, while prioritising the needs of the population however Mr. Elysio highlighted that such processes can be challenging for the local level and supporting tools and guidance are called for.

Discussion Points

Ms. Sandra Sotelo, Gender Justice and Resilience Advisor at Intermón Oxfam, raised her concern about the incorporation of a gender justice perspective in urban planning as a major obstacle to achieving social resilience. Women and girls are particularly vulnerable and should be given special consideration along with other vulnerable groups.

Ms. Vrabie, the moderator, asked the panellists to choose one indicator to measure resilience in the city. For Mr. Boc the best indicator for urban resilience is the quality of life. Mr. Sebastià Riutort, Mr. Luis Carvalho and Mr. Mourade Diève thought that the number of partnerships, community participation, and citizen engagement are good indicators for resilience in a city. Mr. Erick Elysio stated that if it existed, happiness would be the best indicator.

Take Aways

- Social resilience is about decreasing the vulnerability of people and improving their decision-making capacity, and because not all people are equally vulnerable, special consideration should be given to marginalized groups or those without access to decision-making spaces;
- The main challenges to inclusive and resilient cities are equal access to basic services, management of land property and the safeguarding the human rights. When shocks or stresses compromise city functionality, these challenges are exacerbated.
- In order to implement an effective urban strategy with a social perspective, citizen engagement and dialogue with all the relevant stakeholders are essential.
- Many initiatives and projects are being implemented across many cities to increase social resilience and these must be shared in order for partner cities to take up and tailor to their contexts.
- In many contexts, social resilience is the strong asset within a city and resilience action must be built on this foundation.

Resilience Dialogue 5: Humanitarian Urban Crises

Resilience lies at the core of the humanitarian-development nexus, bridging two often disparate agendas. Ensuring resilience across the city can reduce risk by increasing capacity, while addressing vulnerabilities in the city decreases fragility and mitigates impacts, hereby enhancing effective and forward-thinking responses.

Panel Contributions

Moderator: Mr. Havard Breivik, Coordinator of the Global Alliance for Urban Crises

I. Mr. Dan Lewis, Expert, West Coast International (WCI) and Cardiff University

Mr. Lewis focused on the role that informal economies can play in post-conflict and/or post-disaster contexts, creating livelihood opportunities for many residents, particularly migrants, refugees, and affected communities. The main informal economies in a post-conflict environment include: conflict economy, replacement economy by supplying essential goods, refugee camp economy, solidarity economy, and livelihoods economy. This reality should, according to Mr. Lewis, be taken into account and not considered a barrier to resilient recovery but an asset.

Many opportunities emerge from these situations, such as the creation of new jobs, the growth in the number of female entrepreneurs, the building of community-based associations, consolidation of peace and stability, and increasing support for strategies, policies, and laws such as taxation registration, urban planning, and inclusion, as the roles of local governments mature.

II. Mr. Iorn Casper Owre, Advisor, NORCAP/Norwegian Refugee Council

Displacement patterns are constantly changing, and over 70% of refugees are now seeking shelter and opportunities in cities. If we do not devise new ways of responding to displacement in cities, this 70% of globally displaced people will be neglected.

While forced mass displacement varies according to different drivers -rapid urbanisation, climate change, and technological developments —there are general processes and trends taking place at a global scale. For Mr. Owre, these trends should allow us to better meet the needs of the displaced and prepare cities without compromising functionality. A multi-disciplinary and more integrated approaches to displacement, particularly as displacement increasingly affects the urban environment, is required and a key element is building consensus among humanitarian actors to improve the work for and with local authorities, local communities, and people.

III. Mr. Mohammed Abdalfatah Al-Halabi, Director of International Cooperation, Municipality of Gaza

In Gaza, there is a continuous back-and-forth between moments of crisis and moments of stability meaning that it is essential to always be prepared for the worst scenario. The approach is applicable to all actors but particularly the local authorities and communities. New technology is opening up more reliable ways to prepare and respond when emergency situations and local governments stand to benefit from this opportunity according to Mr. Al-Halabi. One project currently being implemented in collaboration with the Norwegian Refugee Council aims to improve communication tools in order for city authorities to be prepared for the various stresses and to exchange more quickly in real time.

The project has thus far installed a call centre, trained people on providing key information in an emergency situation and established a connection to the GIS department to register these data spatially. Over time, these data will provide valuable information on response and vulnerability and could support the definition of priority

IV. Ms. Maggie Stephenson, Specialist on Resilient Housing Reconstruction

We face numerous challenges in relation to housing according to Ms. Stephenson, and many are set to escalate unless urgent action is taken. There is a political and economic question mark over how to approach the housing crisis, and there is a general vacuum of housing policies, meaning that it is becoming increasingly necessary for governments to intervene.

Housing is not like other basic facilities. A lot of time and efforts are put into addressing and recovering from crises in the public domain however housing is reliant on markets and the private domain, which are equally as susceptible to crises. A major challenge to addressing the current global housing crisis is knowing who should act. Crises will always provide opportunities, and in terms of housing, crises can be an opportunity to address housing challenges (quantity, quality, accessibility, etc.) however there is a lack of capacity at technical and



political levels to seize this opportunity.

V. Ms. Asma Charfeddine, Assistant Programme Officer, UN-Habitat Libya and Tunisia Programme

The need to carry out urban profiling work in Libya was illustrated by the lack of evidence-based data available in the country, which was compromising sound decision-making. Urban profiling was therefore initiated in Libya in order to improve coordination between different stakeholders in the country and generate a reliable evidence basis

The fragmentation of the Libyan territory into various zones of control, the diverse tribal and social composition of the country and its cities, the existence of two parallel powers (east-west), the control exerted by militias in the south, and fluctuating prices for the same goods in different regions of the country, were the main obstacles highlighted by Ms. Charfeddine.

Upon completion of the profiling reports, the question remained over how to implement the analyses. The initial response was to enhance information sharing through the Libya portal, a platform accessible to all international organisations and public authorities in the country, and creation of an urban observatory to monitor issues such as the emergence of informal settlements. These steps could be replicated in other complex contexts or situations of conflict to generate buy-in from all stakeholders.

Discussion Points

The moderator invited the panellists to talk about the role of the private built environment sector, the paradox of protection, and how to respond to different mandates.

Ms. Stephenson pointed out that professionals of the built environment must also learn from being exposed to more disciplines. Built environment is a social construct, not a physical equation.

Gaza and Libya were two examples highlighted in which informal economy played a key role in recovery but also brought risks for long-term resilience. For over 60 years Gaza's informal economy has been evolving in a sophisticated way, with informal players pay a form of 'tax', although it is not paid directly to the public administration. In Libya, certain aspects of the informal economy feeds into or drive human trafficking, exploiting the vulnerability of marginalized groups and displaced people.

A question from the floor raised of the issue of how in a country like Colombia, cities can cope with the influx of migrants from Venezuela and still be sustainable and resilience. Mr. Lewis suggested that social resilience is the basis and given the large-scale internal displacement in Colombia, the social fabric of across the country is strong enough to absorb the rapid demographic changes.

Take Aways

- A maturing informal economy consolidates a platform for broader economic recovery, stabilisation, and peace, however given that it is unregulated, informal economies can result in exploitation, mistreatment and abuse;
- Urban crises must be addressed holistically and the response cannot be managed in silos. Local authorities, local communities, international organizations, the private sector and development actors all have a role to play;
- Data is a key challenge for decision-making in cities post-disaster or post-conflict. No one organization can 'go it alone'. Observatories and information sharing platforms offer new opportunities to use technology to share information and better inform decisions;
- The housing crisis is global and requires a national and local response. Addressing the capacity gaps at all levels and among all actors in housing must be priority, not only to improve reconstruction housing, but housing globally;
- Technology opens up new possibilities for efficient and collaborative work among city actors. Creative application of new ICT resources can support response and recovery to urban crises.





Resilience Dialoque 6: Innvovative Partnerships for Sustainable and Resilient Cities

The 2030 Agenda acknowledges the invaluable contribution of partnerships in achieving its vision and mission, and highlights the role of international organisations, the private sector, academia, civil society, and citizens. The world today is more interconnected than ever before, and innovative forms of partnership are opening new opportunities to promote sustainable urban growth.

Panel Contributions

Moderator: Rosa Suriñach, Partnerships, Advocacy and Outreach Coordinator, Urban Resilience Programme, UN-Habitat

I. Ms. Maria Jose Chesa, Head of External Relations, Barcelona Water City, Barcelona City Council, Spain

The Water Operators' Partnership between Barcelona City Council's water utility, BCASA, and the public water utility in Bethlehem is a longstanding non-profit technical cooperation. The partnership is similar to a city-to-city initiative but with a technical focus and has been composed of a series of exchanges between technicians from both parties. The objective of the exchanges are to training, share good practices, and present the infrastructure, procedures, and working methods of both parties in order to improve service provision in the respective cities.

Ms. Chesa highlighted that the learning in this partnership is two-way and both partners acquire knowledge from each other. This is, in her view, one of the innovative features of Water Operators' Partnerships and a strength that contributes to its longevity. BCASA is engaged in a number of other similar international partnerships that are helping support water operators in developing contexts to provide better services, more sustainably and to more people. The partnership was fostered under UN-Habitat's Global Water Operators' Partnerships Alliance, an alliance of water actors committed to achieving sustainable water and sanitation services for all.

II. Mr. Alexey Golubev, Mayor of Sarov, Russia

The city of Sarov experiences extreme weather events all year round —heatwaves and forest fires in summer, and some of the lowest recorded temperatures in the winter— and thus requires advanced preparation for resilience in face of these challenges.

Due to the daily challenges it faces, the municipality has developed the Smart Sarov Software (SSS), an online platform based on a multi-layer map of the city showing all city infrastructure. The SSS serves to provide detailed information about any problem in the city in real-time by monitoring weather conditions, energy supplies and cut-outs, public transport routes and schedules, city circulation, and the exact location of fire hydrants in the summer months, amongst others, allowing local authorities to react fast if an emergency occurs.

The tool can support both businesses, the municipality and city partners to make informed decisions and for this reason, the information provided by the SSS is publicly available. The open platform facilitates collaboration and synergies between all actors operating in the city and hereby increases a collective resilience effort.

III. Ms. Montse Martínez, Director R&D&I, Suez Advanced Solutions

Partnerships are a viable tool to drive the transformational change that is required in our global context commented Ms. Martínez. They can help address market failure, create platforms and communities of actors to achieve global targets such as the Sustainable Development Goals and promote the exchange of good practices.

The perspective of Suez, as a water cycle and waste management service provider, is that the private sector has a key role to play in sustainable and resilient urban development. Suez has planned a roadmap for development that consists of 4 pillars: A responsible company; a leader of circular and local economy; a solution provider; and a contributor to the common good by addressing the consequences of climate change, protection of biodiversity, among others.

The example of the RESCCUE project was highlighted as good practice in bringing together various perspectives in a resilience analysis. As Europe's first large-scale innovation and urban resilience project, RESCCUE works by increasing the capability of cities to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimum damage.

IV. Mr. Carlos Lafoz Naval, Head of North Iberia Network Operation, Endesa Distribution

The context in which service providers such as Endesa are working is changing, as extreme phenomena become increasingly devastating and unpredictable. Highlighting concrete examples both local and global, Mr. Lafoz outlined the roadmap developed by Endesa to prioritize action based on the type of events and ensure resilience in the electric network.

The use of new technology is increasing reliability and resilience across the key performance indicators established by Endesa which translates into real time information for clients and empowers them to take greater control of their services. The adoption of data-driven networks also allows the supplier collaborate with other actors in emergency preparedness, preparing in peace time for what can happen in emergency time. Mr. Lafoz also highlighted the RESCCUE project as a lighthouse collaboration of cross-sector partners that stands to be replicated.

V. Ms. Aslihan Albostan, Research Analyst, UNDP International Centre for Private Sector in Development

Istanbul's efforts to build urban resilience are closely tied to its plans to fulfil the UN's Sustainable Development Goals. Local authorities and UNDP have recognised that governments cannot achieve the SDGs alone, and require the support of the private sector, which in developing countries accounts for 90% of employment. In turn, the private sector requires the public sector to create an enabling environment for inclusive and sustainable businesses to grow. This public-private interdependence, and the prioritisation of ethical business models is at the heart of the city's resilience plans.

Istanbul's local authorities are supporting the private sector in order to close income gaps, allow low-income communities to participate in the market, and build a more inclusive city. A particular area in which Istanbul is making good progress towards resilience is in agriculture. The city municipality puts great importance on preserving biodiversity and protecting its surrounding green areas while working with businesses. The importance of including the private sector in building sustainable and resilient cities is particularly relevant, according to Ms. Albostan, in developing contexts and efforts in this line should be reinforced.

VI. Mr. Doudou Mbye, Head of Partnerships and Advocacy, UN-Habitat

Concluding the Innovative partnerships session, Mr. Doudou Mbye, Head of Partnerships and Advocacy of UN-Habitat thanked all panellists and participants for their contributions. He highlighted that it was fitting to conclude the week with a dialogue on partnerships, firstly because the week had been an exercise in developing and strengthening partnerships between parties that were often disconnected: from the IT companies at the Smart City Congress to the technicians of local governments, academia, private, civil society groups and participants form all regions of the world. The common and united feature among all was the commitment to building more resilient cities for the people that live in them. In his final remarks, he called on all present to continue their efforts and take the approaches, experiences and learning from this week into their everyday work, reaffirming that he will take the messages back to UN-Habitat's Executive Director to ensure that resilience remains high on the global agenda and to support the enabling environment needed for effective action.

Discussion Points

The discussion focussed on the new partnerships that are required to make our cities more resilient and the factors that make resilience in partnership easier or harder to achieve.

Endesa and BCASA responded that a central factor in building resilience is to include citizens in the process. BCASA drew on the experience of Barcelona's Climate Plan received support from local residents, explaining that in their view, if people are disconnected from the process little progress can be made. Suez supported this idea by saying that many actors are welcome to participate in their work and help deliver innovative solutions. These include the city council, citizens, technology providers, the private sectors, who working together provide a more effective response.

Mr. Golubev from Sarov added that in his experience, in order to build resilience we must all improve our ability to predict risks, in order to avoid them escalating into emergencies. This requires the collection of reliable data on social, natural, and technological areas that are prone to risk, from which predictions can be made.

In reference to the question of partnerships for resilience, Mr. Golubev added that it can be challenging to find the right partners for action, as you must be able to trust and rely on each other.

BCASA referenced the importance of partnering with academia, which here in Barcelona they prioritise and have had a positive experience of, given the funding. Endesa supported this point by saying that they frequently collaborate with universities, which they have found provide a broader information base on which to base their action.

Ms. Evgenia Mitroliou, Senior Officer on Integrated Climate Action at ICLEI, added that partnerships are especially important in the global south, though one challenge they face is how to involve the private sector in resiliencebuilding, as they are key actors.

UNDP however said that once you find organisations who have the same ideals and goals as you, building partnerships with them require little effort, collaboration comes naturally.

Take Aways

- Maximising modern technologies can be an effective tool in building resilience and partnerships allow for different capacities to come together and establish a shared vision;
- There are a number of well-performing and tested partnership models currently being employed to achieve resilience in cities -multi-partner, cross-sector, technical, public-public, public-private- the profile of such success stories must be raised;
- An open approach to data gathering and sharing has proven effective in many cities to building lasting partnerships and a shared vision for resilience:
- The private sector, most notably service providers, plays a critical role in building urban resilience and can contribute data, insights and solutions tailored to local needs.



Resilience Workshops and Sessions



Resilience Workshops and Sessions

City Perspectives on Resilience: Challenges, Opportunities and Practice By UCLG and UN-HABITAT

This session offered local governments a unique opportunity to exchange experiences of building their capacity to influence, implement and maintain resilient urban growth, and identify challenges or gaps to be filled.

20 city representatives from across the world participated: Amadora, Portugal; Asunción, Paraguay; Barcelona, Spain; Cluj-Napoca, Romania; Dakar, Senegal; Gaza, Gaza Strip; Istanbul, Turkey; Makati, Philippines; Maputo, Mozambique; Port Vila, Vanuatu; Praia, Cape Verde; Region of Potenza, Italy; Sabadell, Spain; Santo Domingo Este, Dominican Republic; Sarov, Russia; Teresina, Brazil; Terrassa, Spain; and Yakutsk, Russia; and representatives from Barcelona Provincial Council and Generalitat de Catalunya (INCASOL-Catalan Institute of Land).

Discussion Points

Ms. Emilia Saiz, Secretary General of UCLG, opened the dialogue by highlighting the importance of working with the cities, and the global commitment to local action that is needed for building resilience. She welcomed the participating cities to the 'home of local governments' and reinforced the commitment of UCLG to create the enabling environment for cities to work towards sustainable urban development.

Mr. Esteban Leon, Head of the UN-Habitat's City Resilience Profiling Programme, summarized the achievements of local governments in building resilience through initiatives such as the Making Cities Resilient Campaign and the Making Cities Sustainable and Resilient Action, and encouraged participants to reflect on how to take these initiatives to scale.

Participants acknowledged the various shared challenges and opportunities identified during the exchange and highlight that, although resilience must be understood as a common goal, the starting point, path and timeframe will undoubtable vary for each context. Given that the participating cities were each at different phases in their resilience-building work, the possibility of learning through exchange offers great potential.

Mr. Leon from UN-Habitat and Ms. Saiz from UCLG concluded the meeting by committing to follow up on these exchanges and providing a clearer signposting process for local governments looking to build resilience. Local government networks such as UCLG are natural allies for international organizations such as UN-Habitat and UNISDR and strategic partners in the quest to increase urban resilience globally.



- Amadora, Portugal: Amadora emphasized in the importance to partnership with different stakeholders to implement a resilience strategy.
- · Asunción, Paraguay: Asunción insisted in the new approach to build resilience that is to be inclusive for everyone and for all the region.
- Barcelona, Spain: It is a model of a resilient city cross cutting climate change regarding its risks and opportunities to adapt.
- Cluj-Napoca, Romania: The experience in Cluj revealed that a resilience strategy should focus on reducing vulnerability and increasing participation in decision-making
- Dakar, Senegal: A country of destination for West Africa migrants which implies a challenge regarding the occupancy of public space.
- Gaza, Gaza Strip: To be resilient it is very important to have feasible and relevant data, and this is a problem for every municipality.
- Istanbul, Turkey: Turkey resilience strategy worked on the coexistence of its inhabitants and the 4 million Syrian refugee that received. • Makati, Philippines: Makati is the perfect combination of a megacity, highly dense and with a high risk of
- hazards that mean an urgency to be prepared. • Maputo, Mozambique: The principal factor is informal settlements which need to be addressed in terms of
- spatial planning, service delivery and improve inequality. • Port Vila, Vanuatu: Port Vila's two main challenges rely on the external economic dependence and the
- contingent impacts of climate change. • Praia, Cape Verde: The major problem is constant growth of the urban population from rural areas that puts the
- city under pressure and with an urgency to implement and develop a strategy. • Region of Potenza, Italy: Due to context it was mandatory to develop a resilience strategy in a multi-level
- governance to work with the 100 cities within the region. • Sabadell, Spain: The main goal is to be a city worth living by empowering citizens and their participation in the
- decision-making process. • Santo Domingo Este, Dominican Republic: Santo Domingo Este focuses on the redistribution of territorial
- resources leading civil action. • Sarov, Russia: 40% of the population work in the nuclear field thus it is very important to diversify the
- employment previewing an industry crisis. • Teresina, Brazil: The primary request from the population is to avoid the sun (heatwaves). That is why Teresina
- has improved transport system and try to improve air conditioning in public services. • Terrassa, Spain: Terrassa has developed a network of interconnected project to work together and continuously
- improve their situation.
- Yakutsk, Russia: The weather range between summer and winter is 100C which complicates sustainable transport system and constant monitoring of ground's temperature.
- Barcelona Provincial Council, Spain: It is a local government institution that provides technical, economic and strategic support for the over 300 municipalities of the province of Barcelona. It highlighted the relevant role of intermediary cities.
- Generalitat de Catalunya (INCASOL-Catalan Land Institute), Spain: It is a public urban development body with planning and management powers. It ensures coordination with other departments and institutions, which is a key element for building resilience at regional level.

Take Aways

- Resilience-building requires political commitment, and coordination between governance at all levels, and involvement of the local community;
- Disaster recovery and risk reduction are no longer enough. Resilience must be built into cities to allow them to anticipate, react to and recover from variables such as demography, climate change, and economy with confidence;
- Resilience must be taken as a holistic system that connects all elements of city life and engages all actors;
- City representatives expressed their interest and need to share good practices, and build an open and inclusive network of resilient cities that help scale-up action;
- UCLG and UN-Habitat looking for new ways to collaborate to support cities and how to materialize it after 2030.

New Resilience Challenges

By Six Fingers

Six Fingers Spain hosted a hands-on workshop, offering an original approach to building smart and resilient cities. Mr. Rob Adams, Founder of Six Fingers in the Netherlands, and Mr. Boyd Cohen, Smart cities expert and cofounder of Six Fingers Spain, introduced their idea of applying design thinking to the creation of smart cities, via their Happy Citizen Design Hexagon www.happycitizendesign.com.

The diverse and international participants worked in teams to apply Six Fingers' concepts —such as beginning a problem-solving discussion with a deep and holistic analysis of the problem from the citizens' perspective—to real-life challenges faced by city residents across the world, such as mobility, the creation of green spaces, and housing. The Six Fingers team focused on the early stages of design thinking which involve empathy mapping and identifying core problems, while avoiding jumping to surface-level solutions before the problem is fully understood.

The workshop was well-received, with participants actively engaging in the analysis process, sharing individual experiences, and even staying behind after the session to continue the debate. The Six Fingers design thinking workshop added valuable dynamism and team-work to a day of thought-provoking interventions and panel discussions.

Watch the video: Highlights from the workhop

Peer Review Tool on Disaster Risk Reductiont at The Local Level By UNISDR

Mr. Abhilash Panda, Deputy Director of the UNISDR Regional Office for Europe, presented the Uscore2, a peer review process designed by cities for cities and funded by the European Commission. It enables cities across the world to share their experiences and good practices in disaster risk management. City-level peer reviews offer the opportunity for experts in disaster risk management from one city (the peer-reviewer city) to provide ideas on disaster risk reduction to another city (the host city) and, in case they should happen, ways to respond to risks quickly and effectively.

Dr. Kathy Oldham, Chief Resilience Officer at Greater Manchester Combined Authority, UK, shared the experience of Manchester in the involvement of the Uscore2 project. She highlighted that the tool works by selecting cities based on thematic areas of interest in terms of context and challenges and identifying thematic areas for peer-reviewers to assess. The tool steps include: setting objectives, allocating focal points, building data-bases, assigning peer-review experts, carrying out field visits to the city with different stakeholders and local governments, submitting recommendation by experts, and receiving the city's feedback.

Professor Duncan Shaw, University of Manchester, UK, shared the Impact Evaluation Methodology, highlighting that it is an important part of the Uscore2 process. The methodology assesses impacts and evaluates whether the investment of time and money has added value to DRR for both the host and the review team. The process is designed to elicit information about the expected and achieved outcomes, and the impact of conducting the peerreview across five cross-cutting issues: strategy, vision and leadership; intelligence; management of systems, processes and planning. —including auditing; coordination and communication of operations; and delivery of operations.

Mr. Luis Carvalho, Coordinator Civil Protection at Amadora City Council, Portugal spoke of the piloting of Module 6 of Uscore2. Mr. Carvalho illustrated the challenges and lessons learned of the process, as well as the recommendations submitted by the peer-reviewers.

The session explored in depth the development, piloting and findings of the Uscore2 tool. Such innovative tools stand to build resilience by bringing new partners together, increasing efficiency and ultimately contributing to the goals and targets set out in the Sendai Framework for Disaster Risk Reduction, particularly the 2020 target on local disaster risk reduction strategies.



Presentation of The Resilient Cities Series Publications

By the UNESCO Chair on Sustainability

This session featured the launch of 'Urban Resilience for Risk and Adaptation Governance. Theory and Practice', the first volume of the book series "Resilient City: Re-thinking Urban Transformation". The book series analyses the contemporary challenges faced by cities, and provides an up-to-date body of knowledge, including a systematic collection of cutting-edge best practices from around the world, which is fundamental to managing the transition towards urban resilience.

The different contributions focus on approaches, policies, and practices for facing risks in the urban context, and generating social inclusion, equity and participation through bottom-up governance and co-evolution.

Speakers

- Ms. Ombretta Caldarice, Politecnico di Torino. Interuniversity Department of Regional and Urban Studies and Planning, Responsible Risk Resilience Centre - R3C
- Mr. Nicola Tollin, University of Southern Denmark. Unit of Civil and Architectural Engineering
- Mr. Jordi Morató, Universitat Politècnica de Catalunya. UNESCO Chair on Sustainability
- Mr. Esteban Leon, Head, City Resilience Profiling Programme (CRPP), UN-Habitat

Chair

• Mr. Mikkel K. Kragh, University of Southern Denmark. Unit of Civil and Architectural Engineering

Presentation of Guidelines on Resilient Reconstruction Housing By AXA Group and UN-HABITAT

Insurance companies are natural partners in building urban resilience and AXA's collaboration with UN-Habitat is an example of how this partnership can better prepare our cities for the challenges to come. These were the main points emphasized by Ms. Roslyn Stein, Stakeholder Engagement Officer at AXA Group to open the presentation session of the forthcoming guidelines. Reiterating the fruitful collaboration, Mr. Esteban Leon, Head of the UN-Habitat's City Resilience Profiling Programme, commented that AXA and UN-Habitat were leading the way through this shared project.

Presenting the rationale, demand and structure of the guidelines, Ms. Maggie Stephenson and Ms. Laura Smits, Specialists on Resilient Housing Reconstruction presented the innovative format the guidelines would take, presented as a 'recipe book' in which planners and post-disaster actors could select the best fit for their context. A key priority throughout development has been to ensure usability of the guidelines and accessibility by all. Full launch of the guidelines is expected in early 2019.

Exploring the Potential of Water Operator Partnerships

By Global Water's Operators Partnerships Alliance, GWOPA

This rapid-format conversation highlighted the potential of Water Operators' Partnerships in addressing resilience, by drawing on real cases from across the globe. WOPs have increased water provision efficiency and water security and have fostered solidarity between operators in emergency situation as recently in the aftermaths of the earthquake in Indonesia.

With:

- Ms. Anne Bousquet, Regional Coordinator for Africa and Asia, UN-Habitat/GWOPA
- Mr. Jordi Cortés, International Cooperation, Barcelona City Council, Spain
- Mr. Martí Kubisch, Engineers without Borders

Presentation of the Intensive Programme in Designing Policies for Resilience

By Elisava Barcelona School of Design and Engineering

The Barcelona Resilience Week hosted the presentation of an "Intensive Programme in Designing Policies for Resilience" of the Elisava Barcelona School of Design and Engineering. The programme aims at empowering agents of positive change for contributing to action and impact for a better society. The session ended with a networking cocktail with academics, students and professionals who attended the presentation.







Agreements

Port Vila Municipality and UN-Habitat formalize collaboration

The Honourable Lord Mayor of Port Vila, Mr. Albert Sandy Daniel, and the Head of UN-Habitat's Urban Basic Services Branch, Mr. André Dzikus, signed a Letter of Agreement. This letter represents an official commitment from both parties to fully implement the City Resilience Profiling Tool (CRPT) in Port Vila, Vanuatu, which is the UN-Habitat's tool for building urban resilience.

The signing took place on Monday 12 November 2018. The representatives discussed Port Vila's needs in resilience-building, and how the Port Vila Municipal Council can take the lead in addressing challenges currently affecting Port Vila, such as the growing impacts of climate change and natural hazards, and the growth of informal settlements.

Learn more



Making Cities
Resilience
Campaign Steering
Committee

Making Cities Resilience Campaign Steering Committee

The principle aim of the 6th Steering Committee meeting was to engage in an open discussion about the progress of the campaign, identify its shortcomings, and discuss the next steps. Long-standing committee members were present along with more recent campaign advocates and partners, including Ms. Mami Mizutori, Special Representative of the Secretary-General for Disaster Risk Reduction, Ms. Emilia Saiz. Secretary General of UCLG. and Ms. Christine Musisi, Director of UN-Habitat's External Relations Division.

During the introduction, Ms. Mizutori, highlighted that working on DRR at the local level increases coherence as it is the level at which global agendas such as the Sustainable Development Goals, the Paris Agreement, the Sendai Framework, and the New Urban Agenda come together. Ms. Musisi brought attention to the number of cities who have signed up to the Campaign (4,000) as an important milestone and a solid basis to scale-up. Finally, Ms. Emilia Saiz reminded representatives that all partnerships present in the meeting were great achievements in themselves, as they have helped put resilience on the agenda of many local governments.

Participants were reminded that the Sendai Framework for Disaster Risk Reduction, as for the Sustainable Development Goals, were set to be achieved in 2030. The importance of the 2020-2030 was highlighted as a key period for cities to make the necessary gains in addressing risk and building resilience if these targets and goals are to be met. While the gains of the campaian were acknowledge, in a global context efforts must be scaled-up both on the advocacy front and in translating awareness to action.

During the group discussions, participants were divided into two groups to discuss ways forward for the campaign post-2020, drawing on the progress of the first round of the campaign, and the mechanisms and resources required for a potential second round. Overall participants agreed to continue focusing on disaster risk reduction and building urban resilience through the campaign however suggested conducting a review to assess the campaign's impact so far. Two dates were set: a consultation with sample cities in early March; and a 3-day workshop for the steering committee to continue working on the Campaign in May 2019, in Nairobi. Learn more

Learn more





Social Activities & Site Visits



Social Activities & Site Visits

As well as varied interventions and dialogues, Barcelona Resilience Week offered participants the opportunity to engage in networking throughout the week. On Thursday 15th November, the City Council of Barcelona invited participants to visit first-hand some key local initiatives that are making Barcelona a more resilient city. The site routes offered a valuable opportunity for participants to visit innovative initiatives that usually go unseen, and added a practical element to their Barcelona Resilience Week experience. Two site routes were offered:

Route 1: Social Resilience

- 1. Emergency and Social Urgencies Centre of Barcelona (CUESB)
- 2. Barcelona Council Telecare Service

The Social Resilience tour included two site visits that showed different ways of assisting people in emergency need. CUESB offers a permanent phycological and social support service 24 hours a day, 365 days a year. The team is composed of psychologists and social workers trained to offer support during times of crisis.

On the other hand, the Telecare Service is a free attention service that improves the promotes the independence and safety of people in need, and of their families. It too works 24 hours a day, every day of the year. Its purpose is to help elderly and disabled people to continue living independently in their home, while ensuring their safely and mitigating the risk of isolation.

Route 2: Resilience on Basic Services

- 1. Ecoenergies Barcelona (Heating and Cooling Network)
- 2. Desalination Plant

The resilience on basic services route took participants on a tour of the renewable energy company Ecoenergies's biomass plant, with a presentation of how the company is expanding a centralised grid of renewable energy across the city. The group then visited a desalination plant, which serves as a back-up water source for times of water scarcity in the city. Participants learnt about Barcelona's water cycle and current water management policies, and received a detailed presentation of the desalination process, followed by a tour of the desalination facilities, seeing the process taking place.

Conclusions

Conclusions

Barcelona Resilience Week boosted the global discussion on urban resilience. International actors shared cuttingedge experiences that will lead to innovative policies, the engagement of global partners, and recognition of the importance of urban resilience.

The outcomes presented in this report will help prepare the trends of next year by giving visibility to the cities which are working towards resilience in their communities.

Barcelona Resilience Week offered the opportunity for the Making Cities Sustainable and Resilience Action project by DEVCO and all its partners to share their experiences and learn from each other through bilateral meeting and exchanges.

From the participants' perspective, Barcelona Resilience Week offered a unique opportunity to learn about resilience-building efforts across the world, as well as helping them expand their knowledge through the parallel events taking place in Barcelona such as the Smart City Expo World Congress.

Barcelona Resilience Week opened a door for new partnerships to form and for old partnerships to strengthen, creating opportunities to share experiences and know-how.

Barcelona Resilience Week 2018 www.urbanresiliencehub.org/action





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