MENA Workshop on Urban Disaster Risk Reduction and Management

Building Urban Resilience

Beirut, Lebanon

December 16-18, 2013

International Federation
of Red Cross and Red Crescent Societies

Compiled by Ryan Freeman

Contents

Executive summary

On December 16-18th the MENA Urban Disaster Risk Reduction & Management workshop was held in Beirut as the last of a regional series of workshop/consultations in 2013. The workshop was supported by the IFRC Urban DRR/DM programme and the IFRC MENA office to:

1. To achieve better and deeper understanding of the urban contexts including challenges, opportunities and priorities in MENA for Red Cross and Red Crescent DRR/DM interventions and programmes
2. To make recommendations on the appropriate approach and methodology through which the MENA NSs can engage effectively in urban DRR/DM
3. To make recommendations on the cooperation among high risk cities of MENA on urban DRR/DM

The MENA regional workshop on Urban DRR/DM brought National Societies from highly disaster prone megacities of MENA region as well as other stakeholders, to discuss the current status of urban vulnerabilities and Red Cross Red Crescent (RCRC) priorities for urban DRR/DM in MENA region. The workshop targeted the megacities of the MENA region, Tehran, Beirut, Cairo, Marrakech and their respective National Societies.

In all, there were seven National Societies represented during the workshop: Lebanese RC, Egyptian RC, Moroccan RC, Austrian RC, Iranian RC, British RC and American RC; with additional participants from IFRC Geneva and MENA offices, the Global Disaster Preparedness Center (GDPC), UNISDR and the American University of Beirut.

Over the course of the workshop National Societies and regional actors highlighted ongoing activities and programmes addressing urban risks along with identifying existing trends and challenges. Presentations and working group discussions addressed several key questions and concepts identified in previous regional urban DRR/DM workshop/consultations.

Key conclusions:

- Participants at the Beirut workshop stressed that the growing urban disaster risks in MENA region is a serious source of concern which should be considered as a priority at national and regional levels;
- Participants at the Beirut Workshop endorsed the ongoing initiative and efforts of IFRC and NSs to enhance urban DRR and DM in MENA region and committed to support and cooperate with these efforts as much as they can;
- Collaborative efforts and multi-stakeholder cooperation at local, national and regional levels are essential for effective urban disaster risk reduction and management in MENA region;
- The existing DRR & DM approaches, methodologies and tools should be upgraded and enhanced and adjusted to urban contexts;
- The linkage between urban DRR & DM and other sectors and issues such as climate change, urban development, health, education, legal systems, technology, etc. should be better understood and included in the relevant programmes.
- IFRC Urban DRR and DM in MENA should include also the conflicts and violence.

The following specific commitments were made by the MENA NSs at the workshop:

Egyptian Red Crescent: To share the details of the experience of ERC on Nahda resilient city initiative and other relevant activities, and to consider urban DRR and DM a priority in the NS planning.

Iranian Red Crescent: To share the process and outcomes of the planned pilot city study on urban DRR and DM in Tehran through the IFRC and to consider the urban DRR and DM a priority for NS.

Moroccan Red Crescent: To prepare a Contingency plan for one of the highly disaster prone cities in Morocco and share the process and outcomes with the IFRC and NSs.

Lebanese Red Cross: To share the experience and outcomes of the LRC ongoing programme on urban DRR with the IFRC and NSs.

Background

Rapid urbanisation and climate change are amongst the most significant phenomena of the 21st century. In 2010, for the first time in human history the number of global urban inhabitants outnumbered the rural inhabitants. Urbanisation, beside the social and economic opportunities provided to communities and states, is also a source of risk to many people. In more accurate terms, urban sprawl and unplanned urbanisation as consequences of improper development accumulate extensive risks which threaten life, property and dignity of millions of people around the world.

Today more than half of the world's population lives in cities, with an additional two billion urban residents expected in the next 20 years. Much of the population growth is expected in small and medium-sized cities in developing countries. Nearly 1.5 billion people currently live in informal settlements and slums without adequate access to healthcare, clean water and sanitation. Many are at risk of hurricanes, cyclones, flooding, earthquakes and epidemics, as well as crime, fires and industrial accidents. Developed countries are not totally safe and immune against urban disasters risks. Some of the most destructive urban disasters occurred in highly developed countries in the recent years. In the rapidly growing urban risk environment, it is the responsibility of everyone from development sectors to humanitarian actors to take urban disaster risk reduction and management as a serious concern and priority for action. The solution for this concern is building and enhancing the resilience of people and communities against risk of disasters and crises in the urban context.

 The global financial crises, climate change and migration have all introduced new challenges and risks for cities. Climate change is aggravating the impact of climate-related hazards, particularly those related to temperature and precipitation changes, which, in turn, bring forth environmental health risks. The impacts of climate change should be cause for grave concern in urban regions as they multiply existing exposures and vulnerabilities. These include exposure to sea-level rise, and intensification of the heat island effect. The impacts of climate change and disaster risk in rural areas influence migration patterns, which characteristically contribute to the growth of low-income urban settlements. It is estimated that 20-30 million of the world's poorest people move each year from rural to urban areas. The growing vulnerability of these populations is the seed for disaster; vulnerability is the enemy of a resilient city.

About the MENA Urban DRR/DM workshop

In 2013 the Red Cross Red Crescent (RCRC) hosted a number of regional workshops and studies addressing urban DRR/DM and urban resilience. These efforts build off previous lessons and aim to scale up RCRC activities to address urban risk and strengthen RCRC capacities to support resilience building.

To better contextualize and understand the challenges of the urban environment on RCRC programming the workshop focused on following three topics:

1. Urban DRR/DM, current situation in MENA
2. Key concepts and common approach for RCRC urban DRR/DM in MENA region
3. DRR/DM methodologies and tools in the urban context, do we need different or improved tools for urban DRR/DM

The workshop provided an opportunity to enhance understandings of the urban context and identify the role of the Red Cross Red Crescent when addressing urban risks. Urban DRR/DM champions within the Red Cross Red Crescent were able to share their expertise and lessons learned to both National Societies and the local/regional organisations present.

Participants were also provided a global update on urban DRR/DM events and activities like the IFRC Iranian Red Crescent Partnership for Urban DRR/DM programme, UNISDR Resilient Cities Campaign and the upcoming World Urban Forum 7.

Outcomes of the MENA Urban DRR/DM workshop:

1. Mapping of the current engagement and activities of MENA NSs as well as other stakeholders in urban DRR/DM with a focus on the 4 highly disaster risk prone cities of MENA (Tehran, Beirut, Cairo, Marrakech)
2. Identifying the existing gaps and weaknesses of RCRC work in urban DRR/DM in MENA region in terms of planning, tools, standards, methodologies, coordination, and partnerships
3. Review of the RCRC existing DRR/DM tools for application in urban contexts in MENA region
4. Exploring ways and means to enhance and develop NSs capacities in urban DRR/DM
5. Identifying appropriate ways and means for improvement of cooperation with external partners on urban DRR/DM in MENA at city, national, and regional levels. Red Cross Red Crescent case studies, lessons learned and methodologies for urban DRR/DM

The UNISDR Making Cities Resilient Campaign

With its 10 Essentials for Making Cities Resilient and previous success from 2010-2012, the UNISDR Making Cities Resilient Campaign is entering its second phase: 2012-2015 from awareness to implementation. The campaign targets local governments and city-to-city learning which aims to *achieve resilient, sustainable urban communities through actions by local governments to reduce disaster risk*. Whether adapting to climate change, fluctuating energy prices, food production and insecurity or the global financial crisis, the campaign recognises that cities are more important than ever before.

Fundamentally based off the Hyogo Framework for Action priorities, the campaign advocates an approach to:

- **Know more-** raise the awareness of citizens and local governments on risk reduction options and urban risk
- **Invest wisely**- raise political commitment along national and local governments for services and infrastructure projects and budgets to include disaster risk reduction aspects
- **Build more safely** – promote participatory urban development planning and protect critical infrastructure

The Beirut example

As a proactive member and advocate of UNISDR's Making Cities Resilient Campaign, Lebanon's National Government supported the sign up of 255 cities in 2012. As a coastal commercial centre and capital city, Beirut is a huge economic engine driving GDP and plays an essential role in the national and global economy. Similar to other cities in the region, it harbours 75% Lebanon's GDP and hosts the majority of the country's government sectors. The city by its location is highly vulnerable to earthquakes and related tsunamis; especially with 50% of its inhabitants living in coastal areas.

Following its new urban resilience agenda in 2010, Beirut allocated a dedicated DRR budget, developed a risk database and currently conducting risk assessments all helping to develop a DRR master plan.

Egyptian Red Crescent

With increased rural to urban migration and the subsequent unplanned urban expansion, Egypt has nearly 40% of the population living in urban areas. While Egypt's megacities are exposed to concentrated risks and hazards, small or medium sized cities can be equally at risk. Akin to other informal settlements, 16 million slum inhabitants are often in overpopulated areas with little or no access to public services or able to cover basic minimum needs. Recent events in Egypt and in neighbouring countries have only intensified the socio-economic constraints on the most vulnerable.

Slums development: dealing with silent disasters and chronic risks

In 1999 the ERCS took on the ambitious plan to redeveloping the Zeinhum slum area in Cairo. The initiative lasted two decades and with three phases spanning from 1999-2009. To address the chronic vulnerability of the Zeinhum community the ERCS partnered with local authorities, academia, NGOs and businesses.

This approach provided an opportunity to redefine the relationship between the local authorities and slum dwellers. Being a successful mediator, the ERCS fostered new relationships between these two groups and empowered the Zeinhum community. From the outset, ERCS provided inhabitants with needed services including health care and awareness training regarding existing risks. In order to do this, work centred on providing administrative and economic facilities like a police station, trading centre, post office and ensuring access to health services.

To build the necessary community resilience and capacity, effective stakeholder engagement and communication mobilisation were essential. Critical community development strategies focused on literacy programmes, vocational training, women's clubs, youth activities and educational opportunities.

Nahda resilient city initiative: Building resilience and integration with development

Resulting from a 5.9 magnitude earthquake in Cairo, 25,000 families were displaced and in need of shelter and eventual resettlement. To avoid the risk of creating an unplanned settlement local authorities and the ERCS developed the Nahda community development and relocation programme. This programme followed six strategies to empower and guide the development of the Nahda community:

1. Community participation in urban planning and development
2. Training of community leaders, members and executives to plan and implement the suggested activities for social, educational, cultural and economic development
3. Organising the community into functional entities
4. Capacity building of society through self-reliance as an alternative to requesting aid
5. Improving the quality of life for the community
6. Project sustainability

Recognising that the transition from the relief to recovery phase is a great opportunity for long term planning, a strong partnership arose between national/local actors, UNICEF and the ERCS. Joint efforts included site and vulnerability analysis prior to relocation and development efforts. Further collaborations resulted in the establishment of the Nahda Social and Health complex.

This new multi-function complex supplied the community with medical services, educational opportunities and income generation activities. The ERCS also established clubs for women and the elderly and eventually a training program for school children and the disabled.

School-based DRR program: Innovative community approaches

The ERCS public awareness and public education (PAPE) programme for schools aimed to create and spread the culture of risk and healthy behaviour among school communities. The main beneficiaries, youths, were encouraged to become ambassadors and DRR champions to advocate within the family and community. Components of the PAPE programme entailed first aid, disaster preparedness, climate change, water and sanitary hygiene (WASH), road safety and violence prevention. This comprehensive approach successfully incorporated teachers, family and community members to be actively engaged in making school communities safe, prepared and healthy.

The ERCS specifically identified several challenges when implementing RCRC programming in the urban environment:

- Complexity of underlying root causes
- Working with a heterogeneous community
- Unemployment and low income levels
- Low literacy level and health/risk awareness
- Needs over exceeded the available human and financial resources
- Weakness of coordination mechanisms among stakeholders
- Availability of accurate data and sharing mechanisms
- Insufficient communication technologies

Moroccan Red Crescent

The Kingdom of Morocco by its geographical position is exposed to seismic and climatic hazards including coastal erosion, droughts and extreme hydrometeorological events. Additional hazards include landslides, locust invasions and water scarcity. These natural hazards are compounded by urbanization as informal settlements are appearing in high-risk areas. This is especially true along the at risk coastal regions where vulnerable populations are located in flood or seismic prone areas.

Vulnerability capacity assessments for public awareness and education

The Moroccan Red Crescent Society has launched several urban DRR initiatives with twelve vulnerability capacity assessments (VCA) completed or planned in cities including Casablanca, Tangier and Fez. VCAs are also regularly integrated into other programming areas including community based health and first aid (CBHFA), climate change adaptation (CCA), migration and related development programmes. Three specialised VCAs were conducted to address technological hazards in Casablanca, migration risks near Algeria and overall climatic risks.

MRCS advocacy work focused on local communities, NS staff and volunteers, civil society, mayors and municipal actors, educational institutions. Further mainstreaming efforts integrated DRR and climate change adaptation into municipal charters like the MRCS work in Ouarzazate. Additional advocacy work included road safety education the distribution and promotion of the UNISDR resilient city campaign and its *10 essentials for making cities resilient*.

Successful collaboration outcomes with other national level actors included school safety programmes in most schools and colleges and a partnership with the Ministry of Employment regarding workplace safety. The MRCS has complemented its PAPE programmes with CBHFA trainings including basic first aid/lifesaving and emergency health. In a parallel effort, MRCS has expanded its capacity to prevent and respond to disasters with the recruitment of human resources, logistics, communication staff and qualified volunteers for a national disaster response team (NDRT).

During the course of its work in urban areas the MRCS has identified the following as challenges of working in the urban context:

- Specific materials relating to urban DRR/DM were needed
- Lack of coordination between sectors and actors
- Insufficient local and national budgets for urban DRR work
- The national platform for DRR is non-functional due to ta lack of legislative policies
- Current legal policies do not allow for the implementation of insurance/risk transfer systems
- The multi-hazard nature of urban DRR
- Lack of sharing and access to information as data was decentralised and sometimes incompatible
- Reliability of information, especially when relating to population/census data
- Lack of human resources prevents full utilisation of flood and earthquake early warning system
- Commercial agreements/accountability was limited to one type of hazard

Iranian Red Crescent

As Iran is located in a very seismically active region, there can be 30-40 earthquakes a day with 90% of the country prone to earthquakes. Over 70% of the population lives in urban areas and are exposed to a multitude of risks and vulnerabilities- from sudden earthquakes and sandstorms to slower climatic disasters.

Capacity development for disaster preparedness

Being mandated by authorities as the main emergency response agency in Iran, the Iranian Red Crescent Society (IRCS) has a high capacity and long history with disaster preparedness and response. As no branch is without relief supplies and with a presence in every city, the IRCS has a flexible capacity which can be adapted when needed. This is well reflected with over two million active volunteers with 200,000 available almost immediately and a dedicated force of 50,000 volunteers ready anytime.

To keep their volunteers interested and engaged, the IRCS utilises various incentives, provides distinctive activities and events along with special discount programs. For a longer term approach, twenty three high education centres are available offering two, three and six year programmes in disaster management.

To complement the national disaster relief stock, the IRCS textile company stores 600,000 tents and is capable of producing 30,000 tents a month when required. This facility and a secondary medical supply facility helps replenish domestic use and provide income generation opportunities.

6.5 magnitude earthquake contingency plan for Tehran

As a highlight of national preparedness, the IRCS with its national partners have developed a contingency plan comprised of nineteen specialised partnership committees covering risk monitoring and warning, information dissemination, restoring family links, search and rescue, shelter, health and logistics. While the IRCS only heads the emergency nutrition and shelter, and search and rescue committees, the remaining specialised committees are under the management of a relevant organisation and consist of fourteen to sixteen organisations.

The plan outlines the approximate estimation of damages for three different scenarios. Estimates include building damage, wounded people and potential fatalities. It further details locations of indoor and outdoor emergency shelter locations and their capacities. This preplanning allowed the creation of emergency camp maps and the prepositioning of essential relief items. Further support would be provided by six regional relief bases around Tehran and an additional integrated replacement strategy.

The replacement strategy's purpose is to clarify the procedure if Tehran's authorities, services and operational response are not functional or destroyed. In such a case, pre-identified auxiliary provinces outside Tehran will manage and coordinate relief operations to ensure the continuity of services. This same strategy applies for the replacement province as well; if the secondary province is unable then responsibilities are transferred to a tertiary province and so on.

Lebanese Red Cross

The Lebanese Red Cross Society (LRCS) is the main emergency medical service in Lebanon and has a long history in urban response. With a high acceptance among Lebanese communities the LRCS is

present and active on all Lebanese territory. Recent works include a comprehensive disaster management framework and a DRR strategy focusing on community resilience. While pending approval from local legislation, specific objectives of the DRR strategy focus on equipping the LRCS with structures, mechanisms and strategies for decentralised, community based DRR.

School based DRR programme: Earthquake preparedness in schools

The LRCS school based DRR programme concentrates efforts on twelve public schools on the Srifa earthquake fault with high exposure to risk. Initial assessments indicated 5100 students and over 500 teachers and staff were at risk with no evacuation plans or drills for any type of disaster. LRCS work also addressed the poor infrastructure, lack of first-aid training and no awareness of existing risks.

The programme centred on five objectives:

1. All students and staff are able to adopt the correct behaviour during an earthquake
2. All students and staff are able to evacuate the school rapidly and assemble in a pre-determined safe zone
3. Groups of teachers are trained in first aid, evacuation and light search and rescue
4. The school director and key school faculty are empowered and encouraged to implement regular evacuation drills
5. All participating agencies will present unified recommendations to the Ministry of Education & Higher Education to improve the school infrastructure

A joint, teacher-centred trainings and student awareness campaigns, approach was adopted and involved a range of stakeholders including local authorities, the armed forces and UN agencies. A select group from each school were selected to undergo a multiday training of trainers (TOT) exercise. As a result of this initiative, school attendees were able to successfully react, evacuate and provide first aid in the case of an emergency. Furthermore, school communities were also conducting their first emergency drills and promoting risk awareness.

British Red Cross

Recent work of British Red Cross Society (BRCS) has centred on their Learning from the city programme which explores lessons learned from previous urban disasters like Haiti and Kathmandu. Outputs from this programme include contemporary research on urban DRR/DM for RCRC programming areas with a priority on livelihoods, shelter and WASH activities. This research is oriented towards programme managers and technical advisers to guide future RCRC efforts on program design, monitoring and evaluation, impact indicators and minimum standards. BRCS future plans include to enhance understandings of urban risk awareness, beneficiary communication and extensive risk assessments from RCRC work done in Nepal and Bangladesh.

Urban characteristics impacting RCRC work:
- Density
- Mobility
- Livelihoods
- Displacement
- Awareness and communication
- Integration and coordination

As a consequence from the density of urban populations, disasters can be of a different order of magnitude with the potential to directly impact hundreds of thousands or even millions of people. Even a small scale event or disaster has the potential to overwhelm local systems and services. Urbanisation, without organised planning and preparedness, will solidify the link between population increase and vulnerability.

Overall mobility is limited and can be severely affected from the concentration of infrastructure and number of inhabitants. These complex transportation and mobility patterns can make logistics work difficult and very expensive even in good scenarios. Urban communities are heavily dependent on mobility and the availability of transportation systems which creates peak times of vulnerability. This also means that the timing of a disaster will have huge implications on the availability, location and vulnerability of responders.

Urban livelihoods are typically 100% income based and extremely dependent on market supplies and available services. These livelihoods favouring cash-based responses are also highly vulnerable to a disruption in supply chains or market access. Following a disaster or crisis, water, power and communication system recovery is essential to early recovery.

Normally in urban displacements, there isn't sufficient space for "camps", but a multitude of "sites." Relocating populations, both within the city or along the periphery, can create tensions with receiving communities and stress local services and infrastructure. Additional complications arise when groups in the community prefer to remain "invisible" and avoid or resist formal registration or assistance. Whether fearful of political, cultural or ethnic violence if identified, these "invisible" groups can be difficult to target and identify.

High demands on information and communications systems can result in more complex awareness and communication plans. Early warning, awareness and beneficiary communication will have to compete with a higher number of "other" sources like rumours or commercial and political messages.

As a nigh number of local or national actors and stakeholders are involved, integration and coordination becomes challenging. The host NS needs to dedicate time and resources to coordinate with public, private and civil society actors in urban areas. As some NSs will not be the primary relief organisation, providing support as an auxiliary to the government will be required.

American Red Cross

The American Red Cross Society (ARCS) with its partners have helped define RCRC understandings of the urban context. Urban work is not just rural work on a larger scale; it entails differing scale, complexity and resources. Local problems are often caused by non-local phenomena which require solutions derived from outside the community, at local, city, national or even sometimes international scales. Complexities arise from a larger range of livelihood options, available goods and services, social expectations and norms, along with social, religious, class and ethnic diversity all coexisting interlinked and overlapped. The scale and intricacy of urban environments requires and produces different resources in high contrast with rural environments.

The urban context

Cities are more than the sum of their buildings and physical infrastructure; they are epicentres of social and cultural affairs. Economic, ethnic and cultural inequalities are clearly reflected in the difference in the way space, opportunities and resources are produced, appropriated, transformed and used. Urban environments are highly complex entities that are largely dependent on their periphery and global systems. Disasters or crises like earthquakes or pandemics causing disruptions in access to these systems can cause significant loss of life and livelihoods.

Levels of engagement and risk analysis

The conventional sectoral approaches and service delivery mechanisms of RCRC are not suited to have meaningful impact at a city scale. The VCA as the main assessment tool is not designed to generate information that would allow analyzing city level systems and structures that have huge implications on the lives of vulnerable communities. The process should instead be based on a systematic risk and vulnerability analysis at different levels that would narrow down the assessment from city level to community level. City level engagement requires city risk analysis involving national, regional or provincial stakeholders and adopts a multi-hazard approach. Sub-city engagement requires developing "urban profiles" in partnership with district level stakeholders and can be designed to target specific hazard(s) or communities (geographical and/or communities of interest).

City risk analysis		City level engagement
		• National/regional/provincial level stakeholders
		• Multi-hazard approach
Urban profiling		Sub-city level engagement
		• District level stakeholders
		• Hazard focused
		• Communities of interest
Community based analysis		Community level engagement
		• Target communities
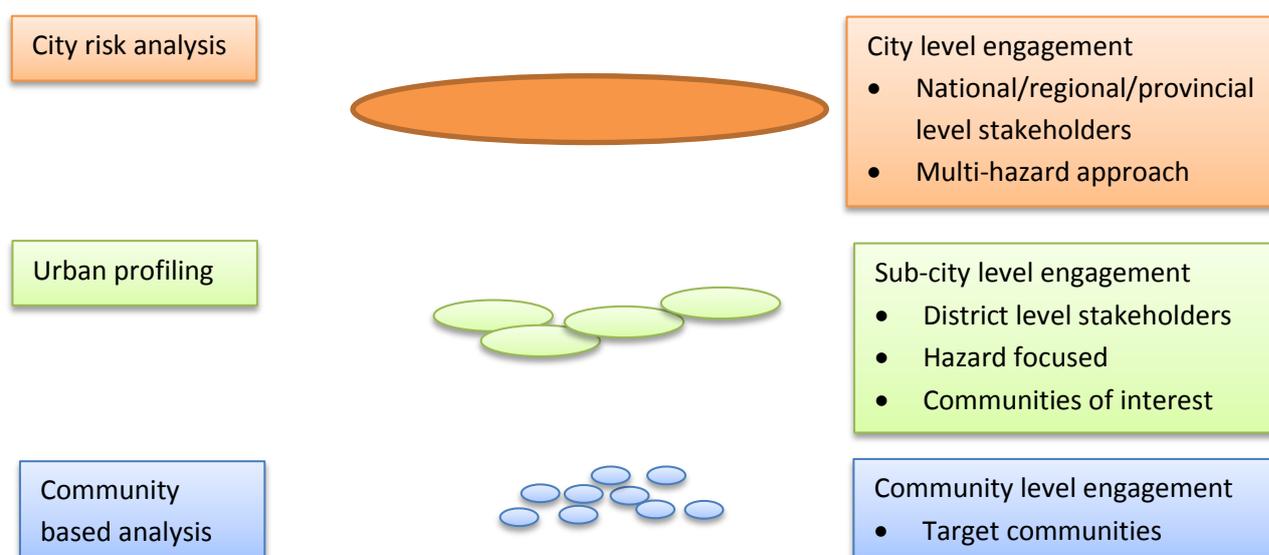
The process should also integrate systems thinking to analyze vulnerability at a city level in order to identify the root causes of the problems. System thinking in this context means developing a structured way of looking at the factors contributing to vulnerability and where the entry points are to shift those factors. Engaging in systems thinking requires clarifying the risks and vulnerabilities to 1) people and organisations, 2)infrastructure, services and ecosystems, 3) legal and cultural norms, and 4) exposure to disasters. An example of this approach is provided in Annex 1.

Austrian Red Cross

The Austrian Red Cross Society (AutRCS) is mandated by authorities as the emergency medical service in the county and has a strong national presence with more than 1,000 branches. Committed to integrated DRR/DM the AutRCS has incorporated new or increasing hazards like heat waves into

its awareness and preparedness campaigns. AurRCS has also partnered up with local NS to build safe and resilient communities in South Caucasus.

Systematic integration of "spontaneous volunteers"

Team Austria as it's called by the AutRC, is the group of active members of civil society that spontaneously volunteer for activities. With no long term commitment to the AutRC, they volunteer for specific activities with the RCRC or other organisations they are interested in. With over 31,000 volunteers registered into an online database, alarm and activation messages can be quickly sent when additional capacity is required. AutRC has been using this system since 2007 to address the spontaneous volunteers appearing during crises and provide an alternative attractive volunteering opportunity.

Safe and resilient communities in South Caucasus

AutCRS and its partners Armenian Red Cross, Azerbaijan Red Crescent and Georgian Red Cross have targeted 19 communities with the objective of enhancing and sustainably strengthening resilience to natural and manmade disasters. Addressing both rural and urban communities, activities included DRR awareness programs in schools and for the wider public targeting local and regional authorities. Participatory urban risk scenarios, best practise sharing and the development of an urban DRR strategy successfully increased cooperation and coordination between RCRC NSs, and national authorities.

Global Disaster Preparedness Center (GDPC)

The American Red Cross and the International Federation Red Cross and Red Crescent Societies (IFRC) have established the Global Disaster Preparedness Center (GDPC) as a reference center to support innovation and learning in disaster preparedness. Recently, the GDPC hosting several workshops on urban resilience, and guided several information technology innovations.

Global first aid application

Initially released by the British Red Cross and American Red Cross, the Universal First Aid App program utilities a new approach for mobile applications. Benefiting from 19 NS pilots, the global first aid application promotes:

- Everyday first aid approach with all material reviewed by the Global First -Aid Reference Centre
- Ability for NS to tailor all material respective to local language, legal and cultural conditions
- Once downloaded, all material is available without an internet connection

As NS are responsible to market and promote the application, it provides a great example for NS ownership sustainability. With an easy to use format with minimal learning for both designers and users, the application offers new opportunities to engage and educate communities.

Hurricane Sandy and the American Red Cross Hurricane App

The American Red Cross response to hurricane Sandy in 2012 indicated that each community will have different needs with varying groups all working to fulfil those needs. Connecting with key leadership and agencies are critical to ensuring:

- Appropriate services
- Timing
- Identification of isolated groups

- The "vertical" challenge

With key infrastructure damaged or destroyed, new urban phenomenon became apparent. As urban commuters stayed home, these commuter neighbourhoods were often unprepared for the increased demand on goods and services.

As mobility and transportation systems were limited or non-functional, tall vertical structures presented new challenges. These structures were heterogeneous clusters of conditions, needs, access and preparedness levels.

During hurricane Sandy, the American Red Cross Hurricane app sent approximately 6 million NOAA weather alerts and roughly 9 million hurricane specific pages were viewed. The application allowed for real-time addition of much needed content: food locator, open gas stations, warming stations, FEMA resources and more.

The use of social and new media allowed the American Red Cross to 1) "touch" thousands of families, 2) track requests and needs from the affected zone in real time, 3) identify areas of greatest need, and 4) leverage large numbers of spontaneous volunteers.

American University of Beirut (AUB)

As a model of institutional preparedness, the AUB practices environmental health, safety and risk management. Preparedness measures address six areas of risk:

- Life and fire safety
- Environmental and chemical safety
- Biosafety and sanitation
- Radiation safety
- Occupational safety
- Risk management

In order to achieve this, AUB approaches preparedness at three levels, a crisis response team, emergency response team and safety wardens in buildings. Each of the respective teams has specific responsibilities and is supported by risk education and advocacy. Current preparedness programs include drills and training conducted annually with specific high risk facilities conducting drills monthly. AUB also employs capacity development programmes comprised of first aid training, staff and response team training and the distribution of emergency guidelines/materials. Further preparedness measures include the pre-designation of safe assembly areas during earthquakes and tsunamis.

Key concepts, approaches and methodologies for urban DRR/DM

Over the course of the workshop, presentations and working group discussions provided an opportunity for NS and present partners to discuss the current urban DRR/DM situation in MENA and the key concepts, approaches and methodologies for urban DRR/DM. Their conclusions are as follows:

What are the main required approaches for effective engagement in urban DRR/DM?
• Adopting a holistic multi-hazard approach • Identifying and understanding the risks • Community based approach targeting the most vulnerable and affected people • Establishing networks for effective and efficient coordination mechanisms at national, city, district and community levels • Trend analysis and definition of clear indicators
What should be improved in our tools and methodologies for urban DRR/DM?
• Improve tools such as VCA to include migration, conflict and CCA • Improve tools for better youth engagement • Tools for risk assessment (sub-city level) • Stakeholder mapping and partnership management • Public-education tools • Documenting and sharing best/good practices (internally and externally) • Improve knowledge of risks and hazards • Analysis of the VCA information and compatibility of information • Use of social media and digital tools/developments (GIS)
How NSs can strengthen their capacities for urban DRR/DM?
• Identification and engagement with relevant stakeholders • Strengthen communication and documentation skills to better capture experiences • Regional information sharing of lessons learned and good practices- listening from others to promote active learning • Training and simulation exercises • Improve risk analysis skills and capacities • Improving human-resource skills including the recruitment of educated/skilled volunteers • Increase fund-raising capabilities • Better understanding of urban planning process and how to influence it
What are the proposed ways and means to improve our cooperation on urban DRR/DM in MENA region?
• Transparency • Trust building activities at community, city, national and regional levels • Mutually beneficial activities and viability • Better cooperation with specialized agencies and local governments • Clear and strong mandate in cities supported by authorities • Stronger and more effective presence and participation in the global and regional DRR platforms • Use advocacy and public awareness to position RCRC as a strong partner in urban areas

Recommendations and Commitments:

- Participants at the Beirut workshop stressed that the growing urban disaster risks in MENA region is a serious source of concern which should be considered as a priority at national and regional levels;
- Collaborative efforts and multi-stakeholder cooperation at local, national and regional levels are essential for effective urban disaster risk reduction and management in MENA region;
- The existing DRR & DM approaches, methodologies and tools should be upgraded and enhanced and adjusted to urban contexts;

- The linkage between urban DRR & DM and other sectors and issues such as climate change, urban development, health, education, legal systems, technology, etc. should be better understood and included in the relevant programmes.
- IFRC Urban DRR and DM in MENA should also include the conflicts and violence.
- Participants at the Beirut workshop endorsed the ongoing initiative and efforts of IFRC and NSs to enhance urban DRR and DM in MENA region and committed to support and cooperate with these efforts as much as the can.
- The Participants committed to share information, experiences and expertise on urban DRR and DM programmes and initiatives in MENA region.

The following specific commitments were made by the MENA NSs at the workshop:

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Moroccan Red Crescent: To prepare a Contingency plan for one of the highly disaster prone cities in Morocco and share the process and outcomes with the IFRC and NSs.

Lebanese Red Cross: To share the experience and outcomes of the LRC ongoing programme on urban DRR with the IFRC and NSs.

All workshop materials and presentations have been made available to workshop participants and are also available online through the urban DRR/DM FedNet page: https://fednet.ifrc.org/urbandrr .

In partnership with ◐ Iranian Red Crescent

Annex 1- Systems level analysis example (ARCS)

Sector	Exposure	Systems	People and Organizations	Legal and Cultural Norms
Water and Sanitation	☐ **Disasters** – Types? Frequency (chronic, ongoing, reoccurring)? Seasonal? Climate-sensitive? ☐ **Stresses** – Where is the water and sanitation system weak or vulnerable? Adequate for population growth?	☐ Safe water – Availability? Accessibility? Quality? Storage? Treatment? Distribution? Quality & availability during/ following disasters? ☐ Sources/points – Types? Accessibility? Quality & consistency? Covered & protected? Systems? Distribution? Protected from flooding? ☐ Solid waste –How is it disposed of? Impacted by disasters? Removal service? Central collection point? ☐ Latrines –Types utilized? Availability? Accessibility? Impacted by disasters? Can sanitation systems handle floods? ☐ Stormwater drainage – systems in place to prevent flooding? Extent? Connectivity?	☐ Who is in charge of the potable water system? ☐ Who handles solid waste? ☐ Who builds the drainage system? Who maintains it? Is there flooding? ☐ What coping mechanism do people use when potable water, solid waste or drainage systems fail?	☐ Is the community potable water system the same as that used by neighboring communities? Why or why not? Is it better or worse? ☐ Is the solid waste disposal system the same? ☐ Is the drainage system the same? ☐ Are there political, cultural or legal constraints on improving these systems? accessibility? ☐ Solid waste –Practices (disposal, collection)? Traditional excreta disposal practices?

Annex 2 – Workshop discussion outputs on 1) the root causes of urban risks in MENA, 2) consequences of urban risk, 3) urban risk trends, 4) National Society trends

Root causes of urban risks in MENA
- Exposure to natural and man-made hazards   - Climate/conflict-induced migration with increasing rural to urban displacement   - Unemployment and limited livelihood options   - Culture of response vs. culture of preparedness   - Not taking individual responsibility for preparedness- dependent on local authorities   - Climatic risks, i.e. increased flooding, sandstorms, encroaching deserts, deforestation and increasing frequency of extreme weather events   - Weak institutional capacity and lack of legislation or enforcement of safe building practices and land rights   - Weak governance and accountability   - Lack of clarity on roles and responsibilities and coordination   - Lack of allocation of resources for DRR   - Lack of national decentralized urban planning and the concentration of urban populations   - Inadequate or lack of access to transportation, education, health, water and sewage services   - Environmental or health issues from urban areas, i.e. pollution, transportation and industrial accidents   - Fragmented social structure with added political unrest, violence and conflict   - Communication, and information sharing between stakeholders/organisations
Consequences of urban risk
- Exposure to natural and man-made hazards   - Climate/conflict-induced migration with increasing rural to urban displacement   - Unemployment and limited livelihood options   - Culture of response vs. culture of preparedness   - Not taking individual responsibility for preparedness- dependent on local authorities   - Climatic risks, i.e. increased flooding, sandstorms, encroaching deserts, deforestation and increasing frequency of extreme weather events   - Weak institutional capacity and lack of legislation or enforcement of safe building practices and land rights   - Weak governance and accountability   - Lack of clarity on roles and responsibilities and coordination   - Lack of allocation of resources for DRR   - Lack of national decentralized urban planning and the concentration of urban populations   - Inadequate or lack of access to transportation, education, health, water and sewage services   - Environmental or health issues from urban areas, i.e. pollution, transportation and industrial accidents   - Fragmented social structure with added political unrest, violence and conflict   - Communication, and information sharing between stakeholders/organisations
Urban risk trends
- Exposure to natural and man-made hazards   - Climate/conflict-induced migration with increasing rural to urban displacement   - Unemployment and limited livelihood options

• Culture of response vs. culture of preparedness
• Not taking individual responsibility for preparedness- dependent on local authorities
• Climatic risks, i.e. increased flooding, sandstorms, encroaching deserts, deforestation and increasing frequency of extreme weather events
• Weak institutional capacity and lack of legislation or enforcement of safe building practices and land rights
• Weak governance and accountability
• Lack of clarity on roles and responsibilities and coordination
• Lack of allocation of resources for DRR
• Lack of national decentralized urban planning and the concentration of urban populations
• Inadequate or lack of access to transportation, education, health, water and sewage services
• Environmental or health issues from urban areas, i.e. pollution, transportation and industrial accidents
• Fragmented social structure with added political unrest, violence and conflict
• Communication, and information sharing between stakeholders/organisations
National Society trends
• More awareness and mainstreaming campaigns including gender and disability
• Advancements in available technology , specifically communication tools- mobile phones, social media, GIS
• Domestic and international support for disaster response and preparedness is growing
• Volunteer youth are more engaged and offer larger range of skills
• Leadership and engagement capacity is increasing
• Better or more effective fundraising

Annex 3 – Workshop objectives and agenda

MENA Workshop on Urban Disaster Risk Reduction and Management
- **Building Urban Resilience -**
Beirut, 16-18 December 2013

Objectives of the Workshop

Objectives of MENA Workshop on Urban DRR/DM are as follows:

1. To achieve better and deeper understanding of the Urban contexts including challenges, opportunities and priorities in MENA for Red Cross and Red Crescent DRR/DM interventions and programmes
2. To make recommendations on the appropriate approach and methodology through which the MENA NSs can engage effectively in Urban DRR/DM.
3. To make recommendations on the cooperation among high risk cities of MENA on Urban DRR/DM

Expected outputs/deliverables

1. Mapping of the current engagement and activities of MENA NSs as well as other stakeholders in Urban DRR/DM with a focus on the 4 highly disaster risk prone cities of MENA (Tehran, Beirut, Cairo, Marrakech)
2. Identifying the existing gaps and weaknesses of RCRC work in Urban DRR/DM in MENA region in terms of planning, tools, standards, methodologies, coordination, and partnerships
3. Review of the RCRC existing DRR/DM tools for application in Urban contexts in MENA region
4. Exploring ways and means to enhance and develop NSs capacities in Urban DRR/DM
5. Identifying appropriate ways and means for improvement of cooperation with external partners on Urban DRR/DM in MENA at city, national, and regional levels.

MENA Workshop on Urban Disaster Risk Reduction and Management
- **Building Urban Resilience -**
Beirut, 16-18 December 2013

Agenda

DAY I – Setting the Context

Time	Session	Speaker/ Facilitator
08:30 – 08:45	Welcome and introductory remarks	Lebanese RC and IFRC MENA
08.45- 09.00	Introducing the programme and agenda of the Workshop	IFRC MENA/Geneva
09.00– 09:20	Participants' Introductions and Expectations	All participants
09:20 – 9.45	Urban disaster risks: *IFRC Global Partnership for Urban Disaster Risk Reduction and Management*	IFRC Geneva
09:45 – 10:00	Urban Disaster Risks: *Global and regional trends and developments ,* and *Building Resilient Cities Campaign*	UNISDR
10:00 – 10:15	Academic Initiatives on Urban DRR/DM and areas of cooperation	American University of Beirut
10.15-10.30	Urban development and disaster risk reduction	UNDP Lebanon
10:30- 11.00	Break	
Topic 1: Urban DRR & DM, Current situation in MENA		
11.00 -11.15	Urban Disasters risks, *MENA Context*	IFRC MENA
11.15-12.15	Urban DRR/DM , *Overview on actions taken so far, presentations on Red Cross and Red Crescent action at national level and their experiences*	Iranian Red Crescent Egyptian Red Crescent Lebanese Red Cross Moroccan Red Crescent
12.15-12.45	Urban DRR/DM in MENA region, *Partners views*	American Red Cross Austrian Red Cross British Red Cross German Red Cross Norwegian Red Cross
12.45-13.00	Plenary discussion	
13.00-14.00	Lunch	
14.00-16:00	Working Groups: Current Situation and trends, identifying key challenges , root causes for Urban risks in MENA region	All participants
16:00-16:30	Break	
16:30-17:30	Report of WGs to Plenary and discussion	

DAY II – Approach and tools for Urban DRR/DM in MENA region

Time	Session	Facilitator
08:30 – 08:45	Brief recap of previous day & introduction to Day II	IFRC Geneva
Topic 2: Key concepts and common Approach for RCRC Urban DRR/DM in MENA region		
08:45 – 10.10	Presentation on : - *Urban vulnerabilities and resilience in MENA cities, concept of communities in Urban context (20 minutes)* - *Disaster preparedness and response in urban context, challenges and lessons learned (20 minutes)* - *Institutional and legal aspects, Auxiliary role of NS, - working with national and local governments and actors and external partners (20 minutes)* - *Capacity building for urban DRR and DM, is there need for a different capacity? (20 minutes)*	Egyptian RC Iranian RC Lebanese RC Moroccan RC
10.10-10.30	*Plenary discussion*	
10.30-11:00	*Break*	
Topic 3: DRR/DM methodologies and tools in urban context, do we need different or improved tools for Urban DRR & DM?		
11:00- 13:00	Presentation on: - Risk assessment in Urban areas, including the experience of responding to Hurricane Sandy (20 minutes) - Contingency planning for Tehran (20 minutes) - Use of science and modern technology in urban DRR and DM (40 minutes) - Urban DRR and DM planning in other regions: (40 minutes)	American RC Iranian RC a) American University of Beirut b) Global Disaster Preparedness Centre British Red Cross Austrian Red Cross German Red Cross

		Norwegian Red Cross
13:00– 13.15	Plenary discussion	IFRC
13:15-14:30	Lunch	
14:30-16:00	Working Groups on: 1. *What are the main required approaches for effective engagement in Urban DRR & DM?* 2. *What should be improved in our tools and methodologies for Urban DRR & DM?* 3. *How NSs can strengthen their capacities for Urban DRR & DM?* 4. *What are the proposed ways and means to improve our cooperation on Urban DRR & DM in MENA region?*	All participants
16:00-16:30	Break	
16:30-17:30	Report of working groups and plenary discussions	WGs
	End of Day 2	
19:00	Social visit – Dinner	

Day III Way forward

09:00-09:15	Brief recap of previous day	IFRC Geneva
Topic 4: Way forward, next steps		
09:15-09:45	Cooperation and partnership on Urban DRR & DM in MENA region	IFRC MENA
09:45-10:45	Next steps, Possibilities for a Plan of Action for MENA RCRC Urban DRR/DM + timeframe based on the recommendations of the WGs	All participants
10:45-11:30	Final recommendations and conclusions, closure of the Workshop	IFRC MENA/Geneva

Annex 4 – Participant list

Name	NS	email
Charbel Aidamouni	Lebanese RC	chaidamouni@gmail.com
Kassem Chaalan	Lebanese RC	k.chaalan@gmail.com
Magda El Sherbassy	Egyptian RC	erc@egyptianrc.org
Mohammad Mira	Egyptian RC	erc@egyptianrc.org
Mohamad Bendali	Moroccan RC	crm@menara.ma
Fatima Zahra Hadri	Moroccan RC	crm@menara.ma
Farouk Merhebi	AUB	Fm39@aub.edu.lb
Ragy Saro	UNISDR	saro@un.org
JUERGEN HOEGL	Austrian Red Cross	juergen.hoegl@redcross.at
Abou-Samra, Omar B.	GDPC	Omar.Abou-Samra@redcross.org
Davood Pourkhanali	Iranian RC	intdep@rcs.ir
Shahin Fathi	Iranian RC	intdep@rcs.ir
Jose Penya (via webconference)	British RC	jlpenya@redcross.org.uk
Tanya Kisserli (via webconference)	British RC	tkisserli@redcross.org.uk
Kadihasanoglu, Aynur	AmRC	aynur.kadihasanoglu@redcross.org
Mostafa Mohaghegh	IFRC Geneva	mostafa.mohaghegh@ifrc.org
Ryan Freeman	IFRC Geneva	ryan.freeman@ifrc.org
Hossam Faysal	IFRC MENA	hossam.faysal@ifrc.org
Ramzi Saliba	IFRC MENA	ramzi.saliba@ofrc.org