

# URBAN RESILIENCE,

DRIVING INNOVATION FOR BETTER CITIES.

# HACKATHON LESSON LEARNT.



**Kenya**  
Red Cross

**UN HABITAT**  
FOR A BETTER URBAN FUTURE

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The Hackathon was organised in coordination amongst UN-Habitat, Kenya Red Cross Society, and the International Centre for Humanitarian Affairs.

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*Group photo, BOMA Hotel.*



# Introduction

Kenya Red Cross Society (KRCS) is a humanitarian relief organization created through an **Act of Parliament, CAP 256 of the laws of Kenya on December 21<sup>st</sup>, 1965** and operates through a network of county offices all over the country. KRCS mission is to work with vigor and compassion through networks and with communities to prevent and alleviate human suffering and save lives of the most vulnerable during emergencies. The organization runs a youth program under the organizational development with a vision to empower, educate and create an enabling environment for youth engagement in the humanitarian action.



The United Nations Human Settlements Programme (UN-HABITAT) is the United Nations agency for human settlements and sustainable urban development with a mission to promote socially and environmentally sustainable human settlement developments and the achievement of adequate shelter for all. It was established in 1978 as an outcome of the First UN Conference on Human Settlements and Sustainable Urban Development held in Vancouver, Canada, in 1976. UN-Habitat, headquartered in Nairobi, Kenya, has been supporting the Kenyan Government on urban planning and design and enhanced urban governance and management capacity levels, and the establishment of more effective tools to achieve sustainable urban development.

In early 2018, KRCS and UN-Habitat signed a Memorandum of Understanding to collaborate on urban resilience and regeneration. As part of the MoU, they embarked on programmes for scoping studies in specific areas in Mukuru informal settlement, speaking and brainstorming with people from vulnerable groups, such as youth and women on potential risk reduction solutions and strategies. Building on this initial collaboration, in 2019, KRCS and UN Habitat worked together, and with the International Centre for Humanitarian Affairs to organize an urban resilience hackathon targeting youth from informal settlements and ASAL areas to brainstorm for solutions to pressing issues in Mukuru informal settlement.

# Background

With increasing global populations and greater influxes of urban to rural migration, cities are facing unprecedented demographic, environmental, economic, social and spatial challenges that were previously unprecedented. By 2030, it is estimated that six out of every ten people in the world will be expected to reside in urban areas. Over 90% of this growth will take place in the global south, Africa, Asia, Latin America, and the Caribbean, and across existing secondary cities which will expand significantly within the time.

In the absence of effective urban governance, management and tools, such as adequate legislative, financial and planning modalities, consequences of global rapid urbanization will result in greater inequalities, suffering and inadequate distribution of resources for all. Within global expanding cities, the growth of informal settlements and poor residential neighborhoods remains a challenge, seeing as an estimated 25% of the world's urban population live in informal settlements, and with 213 million informal settlement residents adding to the global population since 1990. In informal settlements, inhabitants often have no security of tenure, land, or housing rights - for example, they may squat or rent informally. These neighborhoods usually lack basic services and city infrastructure and housing may not comply with planning and building regulations, often situated in geographically disadvantaged areas. Numerous interrelated factors have driven the emergence of informal settlements, such as high and sporadic population growth, rural-

urban migration, lack of affordable housing, weak governance (particularly in policy, planning and urban management), economic vulnerability and low-paid work, marginalization and displacement caused by conflict, natural disasters and climate change related influences.

The humanitarian impacts of disasters, both natural and man-made, are increasingly concentrated in cities as much as it is in traditional Arid and Semi-Arid Land (ASAL) areas (which often face critical perennial water shortages). Cities are now experiencing greater rates of urban crises, such as through greater social and environmental risks - flooding, fire outbreaks, disease epidemics, infrastructural collapse, road accidents; whose impacts include not massive damage to properties, loss of life and injuries, but also damage to critical infrastructure, such as roads, sewers, water lines, electrical supply networks, hospitals, institutions, and communities. Given the density of cities, and interconnected nature of its infrastructures, the impact from urban crises can be magnified and at dangerous rates causing greater resultant complexities. In addition, in poorer or developing countries and cities, solutions for more sustainable urban resilience and development, such as effective waste management, public and open space distribution, adequate standards for land and housing development, conservation and sustainable water use in urban areas are often overlooked and underutilized.

## Project Description

The Urban Resilience hackathon organized by KRCS in collaboration with UN-Habitat was a 3-Day event for youth innovators from Nairobi and ASAL areas, held across 28<sup>th</sup> to 30<sup>th</sup> May. The chosen focus site for the Hackathon study was in Mukuru informal settlement, one of the largest slums in Kenya. The innovation was to hack for solutions (specific to urban challenges) for the three thematic areas as follows, which are elaborated in the next section:

1. Environmental conservation and water use;
2. Open and public spaces;
3. Innovative business solutions for livelihood and youth employment.

The event began on Day 1 in BomaHotel, where a panel discussion took place to discuss the three thematic areas, including a site visit to Mukuru informal settlement. Mukuru informal settlement is one of the largest of over 150 informal settlements in Nairobi,

This day activities aimed to achieve the following:

- Create a platform for inter-generational dialogue between youth and experts in urban development regarding Environmental conservation and water uses, Livelihoods and public/open space.
- Sensitize youth on climate driven risks and hazards facing urban/peri-urban areas focusing on their environs and their potential contribution to risk reduction, prevention and recovery;
- Promote meaningful youth engagement on sustainable urban development as key players in planning, designing and managing urban spaces;
- Strengthen the inclusion of young people in urban development processes including city planning by collaboration with relevant authorities.

From Day 2, the hackathon took place in Mathare Environmental Conservation Youth Center (Mlango-

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