

Urban Recovery Framework

Urban Profiling Toolbox

Analysis tools for urban profiling
in crisis-affected cities.

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URBAN RECOVERY ANALYSIS FRAMEWORK FOR URBAN PROFILING IN CONFLICT-AFFECTED CITIES

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LIST OF ABBREVIATIONS AND ACRONYMS

BHS	Baseline Household Survey
CAF	Common Analysis Framework
CAP	Community Action Plan
CBO	Community Based Organization
CBP	Community Based Planning
CFT	Core Facilitation Team
CMWO	Coastal Municipalities Water Utility of Gaza
DNA	Detailed Needs Assessment
FGDs	Focus Group Discussions
GBV	Gender-Based Violence
GIS	Geographic Information Systems
HH	Household
HLP	Housing, Land and Property Rights
HRP	Humanitarian Response Plan
IDPs	Internally Displaced Persons
iMMAP	Information Management and Mine Action Program
(I)NGO	International Non-Governmental Organization
JIPS	Joint IDP Profiling Service
KI	Key Informant
KIIs	Key Informant Interviews
MICS	Multi Indicator Cluster Survey
MoLAE	Ministry of Local Administration and Environment
NCEI	National Centers for Environmental Integration
NDVI	Normalized Difference Vegetation Index
NGO	Non-Governmental Organization
NOAA	National Oceanic and Atmospheric Administration
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
PCBS	Palestinian Central Bureau of Statistics
PDNA	Post Disaster Needs Assessment
PHCCs	Primary Health Care Centres
ROAS	Regional Office For Arab States
RPS	Rapid Planning Studio
SDCs	Social Development Centres
SME	Small and medium-sized enterprises
UFI	Urban Functionality Index
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
UXOs	Unexploded Ordnances
UNRWA	United Nations Relief and Works Agency for Palestine Refugees in the Near East
WASH	Water, Sanitation and Hygiene
4Ws	Who is Where, When, doing What (in terms of humanitarian actors)

INTRODUCTION

URBAN RECOVERY FRAMEWORK

Urban profiling is a methodology implemented in various conflict-affected countries in the region. Through urban profiles, UN-Habitat seeks to provide up to date, holistic documentation and analysis of the impact of the crisis in key cities, synthesising information and insight from existing sources and priority sectors, supplemented by direct field research by UN-Habitat teams based in each city. This document has been developed with the goal to assist practitioners in implementing urban profiles in conflict-affected countries. It consists of two parts: an analysis toolbox and an analysis framework.

The Urban Recovery Analysis Framework has been developed to support the development of an urban profile through a shared set of research questions that examine:

- 1) How conflict has affected the city;
- 2) What the relief phase challenges are and how they will impact the development phase;
- 3) What strategic areas or projects require attention in the short-medium timespan.

The Urban Recovery Analysis Framework aims to:

- (i) Establish a baseline for urban functionality and quality of life;
- (ii) Determine the most affected and most in need neighbourhoods in the city;
- (iii) Identify opportunities for multi-sector interventions (humanitarian and recovery) by UN-Habitat, stakeholders and other actors using an area-based approach and action plans;
- (iv) Explain how investments and priorities can aid peacebuilding and reconciliation agendas;
- (v) Engage local stakeholders in a progressive process of knowledge-building of the city; and
- (vi) Strengthen communication of needs and

negotiation position of local government towards central government and humanitarian/development actors.

DESIGN OF THE FRAMEWORK

This analysis framework has been developed with the understanding that different cities can differ greatly in terms of size and density; whether they might be fragile or in a state of conflict; by the drivers of conflict that may be present; and by the development challenges they face. Due to these varying factors, this framework is not a comprehensive methodology, nor does it provide a step-by-step process for implementing an urban profile. Rather, it provides a starting point, tools and learning for practitioners faced with implementing a profile on the ground. Furthermore, this framework takes into consideration the recommendations put forward in the paper entitled "Urban Profiling For Better Responses To Humanitarian Crises" (<http://urbancrises.org/wp-content/uploads/2019/02/1.-Urban-Profiling-For-Better-Responses-to-Humanitarian-Crises-1.pdf>)

The urban profiles developed under this framework should attempt to address the majority of its primary research questions, which are intentionally formulated in a general way for each of the pillars shown in Figure 1. These research questions have been formulated based on UN-Habitat's extensive experience with urban profiles in different contexts. This gives space for individual profiles to determine the relative emphasis placed on, and effort to be devoted to the different research questions. The research questions themselves can form the basis for Terms of References for independent researchers that are mobilized for developing the urban profile, and as a checklist to ensure the profile has covered all relevant topics. Each research question has a non-exhaustive list of suggested products and indicators that have proven to be useful in the development of past profiles.

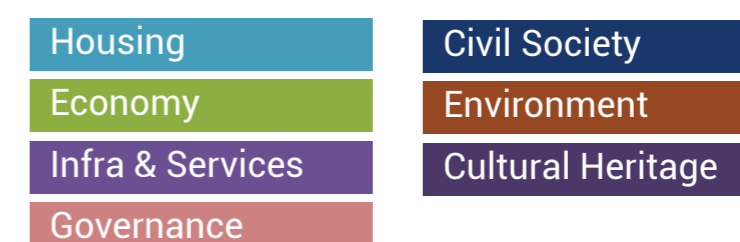
Tools to support the implementation of profiles:

A 'toolbox' is attached to this framework. It contains the necessary guidance for analyses that have been implemented in previous urban profiles.

Alignment with existing frameworks:

The frameworks pillars are based on the ongoing work on Urban Recovery Frameworks, currently being developed within UN-Habitat's Regional Office for Arab States (ROAS), due to its extensive urban profiling experience in the region, including in Syria, Libya and Yemen. A regional approach was initiated to learn from similar contexts in the region.

FIGURE 1. Urban Recovery Framework Pillars



Context Analysis

A context analysis should provide a brief overview of the crisis and unpack the economic, social, political and spatial factors that have played a role in the conflict, and whether they will enable or hinder the humanitarian response.

To address the key urban profiling questions under the seven pillars and to identify the key interventions for conflict affected cities, it is important to get a sense of how the city functioned in the past, and how the city and its people have been affected by the conflict situation. Essentially, what is considered “normal” for the city, and what are the direct and indirect impacts associated with the conflict that have resulted in the city’s current urban conditions.

The following should be considered when drafting the context analysis:

- Develop a conflict timeline with 5-10 key dates and events describing the conflict dynamics in the city and the surrounding areas.
- What spatial and physical environment factors have played a role in the conflict and how will they impact the humanitarian response?
- Examine the root causes of the conflict. What are the historical grievances and conflict drivers, and how have they changed during the conflict?
- Focus on trigger events that will have future implications, such as land disputes and evictions, influx of internally displaced persons (IDPs), key security incidents, social disputes, changes in control, etc.
- The humanitarian impact of the crisis – displacement and population changes, accessibility and transport, economic impact, social impact, etc.
- What are the prospects of return for the displaced population? Are migrants/returnees who might have left voluntarily before the peak of the crisis able to return?

Pillar 1: Housing

RQ 1: How was the pre-crisis accessibility and availability of housing?

RQ 2: How has the conflict affected the accessibility and availability of housing?

RQ 3: What are the temporary housing solutions that have appeared as a result of the conflict?

RQ 4: What are the housing finance mechanisms that could facilitate recovery?

International human rights law recognizes that each person has the right to an adequate standard of living, including adequate housing. A house provides conditions to live with security, protection, privacy and comfort. The loss of housing represents more than a physical deprivation; it is a loss of one's identity, dignity and privacy. Housing is a complex asset, with links to health, education, livelihoods, security, social and family stability. In recent years, a number of countries in the Arab region have witnessed wars and mass destruction that has affected housing stock. The reconstruction of housing is vital in the recovery of the community due to it being one of the most important needs for people's well being, especially for the most vulnerable. Housing, land and property (HLP) rights are also an important consideration and challenge in the recovery phase. Lacking or weak protection of HLP rights can exacerbate the negative impacts of an emergency such as loss of property and physical structures, forced displacement, land disputes and so forth, particularly impacting vulnerable populations, especially women, whose access to adequate housing may already be compromised.

Due to destruction, damage, and/or neglect of housing, post-conflict areas suffer from housing shortages. Providing post-conflict housing is a complex challenge, as time is needed to rebuild or repair damaged houses and to construct new buildings. In the meantime, it is critical to develop architectural solutions that provide those affected by the conflict with temporary accommodation solutions.¹ This in turn enables the rapid return of people to conflict affected areas and the resumption of their income generating and livelihood opportunities. It can also contribute to gender empowerment and equity by minimising the challenges that women face in receiving housing reconstruction assistance.²

One of the most important components of post-disaster housing recovery will be its financing system. Broadly speaking, financing models fall into three categories: outright cash grants, partial support or loans.³ It is however more advantageous for the community and individuals to participate in the financing of their own housing reconstruction, therefore it is of key importance to assess local resources, not only in terms of financial assets, but should also consider the available human resources (skilled and unskilled labour); institutional and community resources; building materials; and technology.⁴

1. Daniel Felix et. al (2015), "The role of temporary accommodation buildings for post-disaster housing reconstruction"

2. Krisanthi Seneviratne et al. (2016), "Managing housing needs in post conflict housing reconstruction in Sri Lanka: gaps verses recommendations"

3. Sultan Barakat (December 2003), "ODI Humanitarian Practice Network Paper - Housing reconstruction after conflict and disaster"

4. *Ibid.*

RESEARCH QUESTION 1: How was the pre-crisis accessibility and availability of housing?

- » Rental price changes by neighbourhood and overcrowding rates (pre-crisis population/habitable units vs. current population/habitable units).
- » Prevalence of secondary occupation and capacity of vulnerable people to access justice after HLP violations.
- » Number of dwelling units to current population (ratio).
- » Informal settlements and types of buildings in the city prior to the conflict.

RESEARCH QUESTION 2: How has the conflict affected the accessibility and availability of housing?

- » The building typologies present in the city and price /m2.
- » Classification of neighbourhoods according to tenure type. Analysis of the level of security for different tenure types offers to holders, and types of evidence compatible per type.
- » Informal settlements locations within the city, and growth of informal settlements and types of buildings following the crisis.
- » Recent growth of the city, and capacity of the city to absorb additional expected population growth within the current legal boundaries.
- » Damage assessment: pre-crisis units and damage by building type/number of units.
- » How has the conflict impacted physical accessibility - including connectivity of housing, accessibility to public transport and roads/infrastructure that may have been damaged.

RESEARCH QUESTION 3: What are the temporary housing solutions that have appeared as a result of the conflict?

- » The current location of collective centres and camps.
- » Increase of informal settlements since the start of the crisis within the city, camps and in the direct surroundings.
- » Location and type of interventions of outside actors (UN Agencies and NGO's) to support providing shelter to IDPs, returnees and other persons in vulnerable situations.
- » Renting or hosting in existing neighbourhoods?

RESEARCH QUESTION 4: What are the housing finance mechanisms that could facilitate recovery?

- » Pre-crisis financing mechanisms for housing construction (banks or private sector) and the current government ability/capacities to reactivate such mechanisms.

RESEARCH QUESTION 5: What is the ability of the population/communities to contribute to the reconstruction of housing?

- » Community (including women) ability/skills to contribute to the reconstruction and access to vocational trainings.
- » Accessibility/availability of construction materials, equipment and machinery.

Pillar 2: Economy

RQ1: What were the economic drivers before the crisis?

RQ2: How are local economic activities affected by the crisis and how has this affected the population?

RQ3: What new economic potentials have appeared as a result of the crisis?

With cities generating more than 80% of global GDP today, the world's economic activity and growth is heavily concentrated in them, and a staggering 96% of urban growth is projected to occur in cities in fragile contexts.⁵ The outbreak of conflict in fragile settings has enormous economic consequences on cities, its surrounding and the territories. Warring parties, in order to gain strategic advantage, may intentionally damage physical capital by targeting telecommunication and electricity infrastructure, ports, energy plants and other physical facilities that are economically vital.

Another factor that contributes to the downgrading of a country's physical capital is the lack of government spending on infrastructure maintenance during the course of an armed conflict. This is often the result of not only on-going insecurity and violence, but also of a decline in overall government revenues, an increasing share of which is devoted to military spending.⁶ Loss of physical capital may be substantial, and can severely restrict economic recovery capacity in the post-conflict period. Damage and destruction to physical capital has a critical effect on a country's productive capabilities and economic activities. Population displacement also causes a major loss to human capital. People are separated from their livelihood sources and access to education when forced migration occurs. Human capital is also lost as a result of voluntary migration of talent and skilled labour, leading to the so-called 'brain drain'.

Significant changes in the structure of the economy are seen in the case of conflict. In particular, it results in a substantial increase in informal activities and subsistence agriculture as people who have lost their formal employment opportunities try to survive. Therefore, the economy does not disappear altogether, even during the most protracted conflicts. While some normal economic activities continue, there is a shift in economic activity reflecting the structure changes and incentives that accompany conflict.⁷ To transform the adverse conditions and reduce the risk of a violent conflict recurrence, economic recovery is essential.⁸

5. ICRC (April 2017), "War in cities: what is at stake?"

6. Collier and Hoeffler (2004), "Greed and Grievance in Civil War"

7. *Ibid.*

8. UNDP (2008), "Post-Conflict Economic Recovery - Enabling Local Ingenuity"

RESEARCH QUESTION 1: What were the economic drivers before the crisis?

- » Strategic importance of the city, and changes to this as a result of the crisis.
- » Ease of access and mobility within the city, and between the city, region and rural catchment area, and international markets.
- » The key urban economic sectors of the area pre-crisis based on volume and revenue generation.
- » The 10 most important formal sector businesses, industries located in the city based on largest employers and revenue generation.
- » Strategic infrastructure facilities such as refineries, airports, logistical hubs and ports, free zones, industrial zones or cities, productive watershed that leads to the city markets and tourist attractions.
- » Strategic trade/commerce links within and beyond the region.
- » Functionality of the main roads, railways, logistical hubs and terminals.
- » Current availability of skilled labour in the city (job distribution by sector).
- » Barriers and drivers for the operation of SME's.
- » Current most important import and export markets.

RESEARCH QUESTION 2: How are local economic activities affected by the crisis and how has this affected the population?

- » The key urban economic sectors of the area based on volume and revenue generation. (e.g. tourism, construction).
- » The 10 most important formal and informal sector businesses and industries active in the city based on largest employers and revenue generation.
- » Change in commodity prices – by comparing a common basket of household goods with change in prices as a result of the conflict.
- » Changes to access and mobility within the city, and between the city, region and rural catchment area.
- » Percentage of functioning markets and their location.
- » Effect of the crisis on the labour (including child, youth and women) market in terms of changes in labour share.
- » Effect of the crisis on the functionality of SME's.
- » Lost import and export markets as a result of the crisis.
- » Did the conflict impact on the percentage of female-headed households? And has it reduced women's ability to partake in livelihood activities (e.g. due to the closing of social services, schools and care facilities)?
- » Has the security situation or destruction of infrastructure impacted women's ability to physically access their workplace (including also security in public space/transport); and acknowledging that women are more often employed in the informal sector, how has this impacted their ability for survival?
- » What was its impact on other vulnerable groups (e.g. youth - do they have access to vocational training or formal education?).

RESEARCH QUESTION 3: What new economic potentials have appeared as a result of the crisis?

- » What skilled labour is currently available in the city (approximate job distribution by sector) as a result of the crisis?
- » New barriers and drivers for the operation of SME's.
- » New important import/export markets as a result of the crisis.
- » What new sources of income have emerged since the crisis, including informal economy and war economy?
- » What is the employment rate of women post-conflict and how does it compare to pre-crisis rates?

Pillar 3: Infrastructure & Services

RQ 1: To what extent is the capacity of basic services infrastructure able to meet the demands of the current population following the conflict?

RQ 2: How are the current institutional arrangements set-up for supplying basic services post-conflict?

RQ 3: What are the main factors enabling or restricting access to basic services after the conflict?

Basic infrastructure and services include the delivery of sanitation, safe water, waste management, electricity, social welfare, transport and communication facilities, health and emergency services, schools, public safety and the management of open spaces.⁹ Equitable affordable and safe urban basic services form the foundation of inclusive and well-functioning cities.

However, many cities, particularly those that are experiencing rapid unplanned growth levels, are already facing systemic challenges when it comes to urban basic services delivery. Basic services are based on interdependent hardware, people and consumables. Adverse impacts on any of the following components can lead to the disruption of essential urban services: critical hardware (e.g. infrastructure and equipment), critical people (e.g. operations and maintenance staff and teachers) and critical consumables (e.g. chlorine, fuel and medicine).¹⁰

Crisis situations can increase the strain on resources, and in turn exacerbate systemic issues and inequalities, increasing the risk of tension between the displaced and host communities. Access to different basic services can also be highly dependent on a person's legal status. While IDPs may be able to tap into existing domestic service provisions due to their citizen status, refugees are usually more reliant on external humanitarian assistance.¹¹ On the other hand, migrants with no formal/regular migration status may find that they are unable to access services, making their situation very challenging. The direct result of conflict also leads to the serious weakening of many state institutions as a result of a lack of funding and neglect. The capacity of a state institution to provide their population with essential public services, to enforce property rights and the rule of law is vital for a properly functioning economy.

9. The Habitat Agenda, "Istanbul Declaration on Human Settlements," 27 February 2006

10. ICRC (2015), "Urban services during protracted armed conflict: a call for a better approach to assisting affected people."

11. ICRC (April 2017), "War in cities: what is at stake?"

RESEARCH QUESTION 1: To what extent is the capacity of basic services infrastructure able to meet the demands of the current population following the conflict?

- » Damage to basic infrastructure (water, road, and electricity networks).
- » Capacity of urban services in relation to demand (health and education) and other administrative services.
- » Coverage of basic services by neighbourhood and their accessibility by different groups.
- » Electricity: sources, transformer stations, hours per day of access, hours per source per day (private, local grids and monthly prices), quality, reliability and alternative/renewable sources.
- » Water supply: networked system plus coping mechanisms/sources (e.g. trucks), quality, quantity, access and rate of increase on water unit prices.
- » Percentage of patients hospitalized due to increased water pollution?
- » Water sources, wells and rivers.
- » Sanitation: system plus locations of strain.
- » Solid waste: transfer stations, informal dumping sites (if they exist), collection capacity, routine collection, street/market cleanliness.
- » Health: public and private; staff count; and indicators of access, quality, and reliability,
- » Education: public and private; staff count; and indicators of access, quality and reliability.
- » Current functional parks and public spaces and their usability.
- » Mobility: how are people linked (through public and private transport) to other parts of the city or surrounding areas?
- » Communication: phone and Internet access, and post offices in the city.

RESEARCH QUESTION 2: How are the current institutional arrangements set-up for supplying basic services post-conflict?

- » Post-crisis community-based or government-based alternatives to accessing services for all above-mentioned sectors mechanisms.
- » Current basic services provided by humanitarian actors (4Ws).
- » The current development plans of the government and their approach, local resources and capacities to complete repair projects.

RESEARCH QUESTION 3: What are the main factors enabling or restricting access to basic services after the conflict?

- » Presence of roadblocks and/or unexploded ordnances (UXOs).
- » Threat by different sects or extremist groups.
- » Barriers to accessing basic services for women and girls due to safety concerns/gender-based violence.
- » Supply constraints/destruction of infrastructure (e.g. roads)/lack of connectivity (e.g. camps far away from town/cities).
- » Debris and raw sewage water blocking access.
- » Inability of people to pay for services.
- » Impact of COVID-19 on access to basic services.

Pillar 4: Governance

RQ1: To what extent are the current official governance arrangements still appropriate to address to the current challenges on the ground?

RQ2: What are the different forms of local management and governance that have emerged as a result of the crisis?

Urban governance and law play a critical role in shaping the social and physical character of urban areas. Urban governance refers to how local, regional and national government and stakeholders plan, finance and manage urban areas, and urban law is the collection of policies, laws, decisions and practices that govern the development and management of urban areas.¹² A variety of actors operate at multiple levels with overlapping jurisdictions, resulting in complex power dynamics. Typically, the public, private and informal sector, along with civil society, have established roles and responsibilities that ensure that the city functions well.

Following the immediate aftermath of conflict, stabilization should be of critical importance to provide a minimum level of security in order for economic recovery to begin and to lay the initial foundation for long-term institutional development.¹³ As governments are often weak in conflict affected countries, where a new state may have to be constituted in the aftermath, post-conflict countries often require substantial and immediate assistance in restoring governance and to carry out tasks of political, physical and economic reconstruction. International assistance organisations, such as the United Nations, the World Bank, non-governmental organizations, bilateral aid agencies and others are key participants in the early and transitional stages of post-conflict recovery in assisting governments with increasing their capacity to perform essential functions.¹⁴

12. GSDRC (2016), "Urban governance"

13. United Nations/World Bank (May 2017), "(Re)Building Core Government Functions in Fragile and Conflict-Affected Settings"

14. UNDESA and UNDP (June 2007), "The Challenges of Restoring Governance in Crisis and Post-Conflict Countries"

RESEARCH QUESTION 1: To what extent are the current official governance arrangements still appropriate to address to the current challenges on the ground?

- » Administrative structure (governorate, municipal and neighbourhood level) and diagram.
- » Current capacity of the relevant authorities under the administrative structure.
- » Current functional administrative buildings of the municipal government (civil, cadastral, municipality, courts).
- » Damage to administrative buildings and their locations.
- » Operational police buildings and fire departments.
- » Mistrust between population (or certain population groups) against police or government officials.
- » Capacity of municipal finance arrangements to meet the city's maintenance and development needs.
- » Current local policing arrangements and public trust in these arrangements.
- » Efficacy of current planning processes (masterplans and urban recovery plans) in achieving future urban development aims.
- » Efficacy of current humanitarian/development planning processes (UNDAF, HRP) in achieving recovery aims.

RESEARCH QUESTION 2: What are the different forms of local management and governance that have emerged as a result of the crisis?

- » Known non-official community arrangements to support service delivery and maintenance.
- » Unofficial de-facto power arrangements above the neighbourhood level.
- » Different stakeholders (NGOs, CBOs, etc.), their mandates (welfare NGOs/cash providers, construction, social programmes, etc.) and institutional arrangements (e.g. their role and relation to the government).
- » Line of control affecting the city; major checkpoints and crossing points (sensitive language can be used here, for instance checkpoint can be replaced by the term access deterrence, etc.).

Pillar 5: Civil Society

RQ 1: How has the population changed during the crisis?

RQ 2: What are the main areas where social tensions are likely to occur, and over what topics?

RQ 3: What are the post-conflict gender sensitivities that need to be considered?

Cyclical and recurring waves of conflict affect millions of people around the world. They often experience displacement many times, and are on a near-constant search for safety. The long-term impact of cyclical and protracted displacement can reduce household and community resilience and, over time, erode coping strategies. Furthermore, repeated cycles of displacement are associated with more risk-averse economic behaviour and the shortened planning horizons among households, with implications for reduced investment in assets, livelihoods and property.¹⁵

Conflict-induced displacement critically disrupts a community's social fabric, and makes the task of reintegrating and rebuilding lives following displacement even more challenging. Violent conflict and trauma can erode social cohesion, trust and acceptance between different groups. Even relatively homogeneous communities and their systems of solidarity, mutual support and reciprocity can be eroded by the isolation of displacement and violent shocks. In this context, the risk of post-conflict communities relapsing into violence is very likely. Vital steps that need to be taken to lay the foundation for sustainable and meaningful peace include supporting local systems for managing community-level disputes and rebuilding relationships.¹⁶ While it has been found that migrants and refugees contribute to the economic, social and cultural fabric of their host community, they are often seen as burdens rather than assets. As the forcibly displaced often find themselves in poor areas where people struggle to meet their own development goals, host communities also need support, which in turn will help reduce social tensions.¹⁷

While many displaced people share similar challenges, gendered dynamics demand unique attention. During every stage of the displacement cycle, women and girls are at risk. At the start of conflict and initial flight, they are often targets of sexual and gender-based violence. While displaced, they may not only experience abuse and sexual exploitation, but also gendered denial of access to basic services. Women face further challenges on return as they are conditioned by social roles, and their status as widows, mothers, property owners and violence survivors. The experience of men and boys in displacement and conflict are also profoundly gendered, and include being targets for forced recruitment and being extremely restricted in terms of their mobility.¹⁸

15. Concern Worldwide (June 2018), "Voices of Displacement and Return in Central African Republic's Neglected Crisis"

16. *Ibid.*

17. World Bank (March 2020), "Forced Displacement"

18. *Ibid.*

RESEARCH QUESTION 1: How has the population changed during the crisis?

- » Pre-conflict population estimate and current population estimate.
- » How have population demographics changed due to the conflict – e.g. gender, age, race, ethnicity, education, profession, occupation and income level.
- » Displacement trends over time: (i) number of people inbound and outbound and (ii) internal and external displacement trends.
- » Socio-economic characteristics by neighbourhood (low, medium, high income).

RESEARCH QUESTION 2: What are the main areas where social tensions are likely to occur, and over what topics?

- » How has the population distribution changed within neighbourhoods/urban sectors? Were some neighbourhoods/sectors abandoned, and did some neighbourhoods/sectors receive an additional influx?
- » Are there dominant or influential social groups or communities in certain neighbourhoods/areas of the city (e.g. specific community groups, influential families, income groups, dominant cultural identities, tribal lineages, etc.) and what are the socio-economic characteristics (labour by gender and age, education by gender and age, illiteracy rate, main source of income and average expenditure, and expenditure by category).
- » What pre-conflict aspects of commonalities do areas of focus have (e.g. income level, relation of kin or tribe, migrants vs. old residents, prevalent economic activity, building typology and legal status, social habits, etc.).
- » What post-conflict impact similarities do areas of focus have (e.g. severely damaged, abandoned, strained due to hosting, etc.).
- » Which areas in the city are the most attractive to IDPs, refugees, or migrants generally and why?
- » Are there tensions between the host community and IDPs, refugees and migrants?
- » Key civil society-led initiatives (e.g. women groups and activists, trade and labour unions and professional syndicates).

RESEARCH QUESTION 3: What are the post-conflict gender sensitivities that need to be considered?

- » Have gender roles been affected by the conflict? What impact has this had on the population (e.g. domestic arrangements, violence, livelihoods, etc.)?
- » What are the special challenges and needs of women/girls in cities (e.g. that could be supported by spatial planning)?
- » What are the places where women/girls feel most insecure?
- » Did gender-based violence (GBV) occur during the conflict and are women and girls still at risk (e.g. are they able to travel without fear of GBV)? What measures are currently in place to protect them from GBV?

Pillar 6: Environment

RQ 1: To what extent has the crisis reversibly or irreversibly impacted the environment?

RQ 2: What are the main climate stressors, including climate change and natural hazards, that are likely to affect the city?

RQ 3: What is the current government's capacity to manage environmental challenges?

The environment has long been a silent victim of armed conflicts worldwide. The environmental consequences of conflict are often widespread and devastating, with impacts ranging from the destruction of forests; contamination of land; pillage of natural resources; to the collapse of management systems. The livelihoods, health and security of people can be threatened by environmental risks resulting from direct or indirect environmental damage, which can ultimately undermine post-conflict peacebuilding.¹⁹

Climate change, in combination with other factors, is also projected to increase the displacement of people over the 21st century. It can indirectly increase violent conflict risks in the form of inter-group violence and civil war by amplifying documented conflict drivers such as economic shocks and poverty.²⁰ The adverse effects of climate change are predicted to slow down the economy and make poverty eradication more difficult, as a result of further erosion to food security and the creation of new or prolonged poverty traps, particularly in urban areas. Climate change can exacerbate social tensions and accelerate existing conflicts, by leading to displacement, for example, due to increased competition for scarce natural resources, such as land and water.²¹

In conflict-prone fragile states, linking adaptation and conflict-sensitive and peacebuilding agendas can aid in ensuring that the rights of those most adversely impacted by environmental challenges are protected. In fragile states with weak institutional capacity, the equitable management of natural resources and the prevention of resource exploitation and competition, and environmental degradation are particularly challenging. Global warming effects such as unpredictable precipitation and increased droughts, along with existing environmental degradation, is expected to increase pressure on local communities' resilience and fragile state systems, and these threats should be properly managed.²²

19. UN Environment Programme (2009), "Protecting the environment during armed conflict"

20. IPCC (2014), "Assessing and Managing the Risks of Climate Change"

21. UNHCR (2015), "The Environment and Climate Change"

22. Wijeyaratne, S. (2009), "Fragile Environment, Fragile State: What Role for Conflict-Sensitivity and Peace-Building?"

RESEARCH QUESTION 1: To what extent has the crisis reversibly or irreversibly impacted the environment?

- » Polluting events that have taken place as a result of damage to industrial, health or other infrastructure that harbour hazardous materials.
- » Current practices of war debris disposal and environmental standards followed to ensure safe processing of hazardous materials.
- » Definition of areas that are known or likely to still contain UXOs.
- » Destruction of natural systems (i.e. water table, drainage network, forest cover, etc.).
- » Have natural resources and the environment been affected by the conflict, and what are the implications for livelihoods and human health?
- » Damages to sewerage networks and impact on surface and groundwater.

RESEARCH QUESTION 2: What are the main climate stressors, including climate change and natural hazards, that are likely to affect the city?

- » Main climate stressors that have affected the city in recent years (e.g. drought, floods, heatwaves, frequent hurricanes and typhoons, etc.) and their impact on vulnerable communities.
- » Definition of areas under threat as a result of climate change (e.g. deforestation, flooding, salination, land degradation and desertification). What are the implications for the local population?
- » Climate/weather characteristics of the city during the year.
- » Identify settlements located in areas that are prone to natural hazards/environmental risks (e.g. land slides) and areas that are ecologically vulnerable.
- » How could climate stressors impact the local economy/livelihoods (e.g. agriculture)?

RESEARCH QUESTION 3: What is the current government's capacity to manage environmental challenges?

- » The impact of climate change on specific communities and the city-at-large.
- » Institutional and financial capacity to develop programmes and projects to help mitigate and adapt to the effects of climate change.
- » Availability of indicators and data through which levels of pre-crisis and post-crisis resilience can be ascertained and improved.
- » Ability to identify immediate (relating to health risks) and long-term (relating to adaptation) actions that can be enacted by governmental and non-governmental entities to build resilience.
- » Ability to identify areas prone to natural disasters and capacity to reconstruct in sites with less environmental risks.
- » Are there communities who might rely on natural resources (e.g. for firewood) that risk depleting those resources (e.g. due to rapid population growth)?
- » What services/infrastructure has been damaged that impact environment protection (e.g. water/waste management)?

Pillar 7: Cultural Heritage

RQ 1: How has the conflict affected important cultural heritage sites?

RQ 2: What is the capacity of the local government to manage and prevent damage to cultural heritage?

RQ 3: What are the human (skills) and material resources available to manage the city's tangible and intangible cultural heritage assets?

According to UNESCO, culture is “the set of distinctive, spiritual, material, intellectual and emotional features of a society or a social group that encompasses art and literature, lifestyles, ways of living together, value systems, traditions and beliefs.”²³ Urban heritage represents a cultural, social and economic asset and resource that reflects the dynamic historical layering of values that have been developed, interpreted and passed on by successive generations, leading to an accumulation of experiences and traditions recognized as such in their diversity.²⁴ Urban heritage includes urban elements (infrastructure, morphology and built form, open and green spaces), architectural elements (buildings, monuments) and intangible elements.

In the last 25 years, urban culture and heritage are increasingly threatened and targeted, especially in conflict-affected areas. Cities and their historic monuments or cultural institutions, as visible platforms of cultural diversity, are under threat of intentional destruction or looting. Part of one's cultural traditions, identity and expressions are composed of monuments and institutions, making them primary targets for oppression and psychological warfare. This type of heritage destruction directed at a particular population, or against its history, art and memory is referred to as ‘cultural cleansing’.²⁵ Cultural symbols have been attacked with the intention of weakening the foundations of social cohesion and to threaten peoples’ cultural diversity and integrity. Post-conflict heritage recovery has also become a vital source of resilience for local communities, and an important part of the peace-building process, where multiple interpretations of heritage should also be considered. Thus, protecting heritage should be considered a key security issue. In the years that have passed since the signing of the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict, few governments have enacted the safeguarding provisions of the Convention to proactively prepare for conflict during peacetime. While governments have been using response-orientated strategies such as disrupting the black market after looting has occurred, holistic approaches should be considered prior to the onset of conflict to prevent the loss of urban culture and heritage.²⁶

23. UNESCO (November, 2001), “Universal Declaration on Cultural Diversity”

24. United Nations Conference on Housing and Sustainable Urban Development (2017), “Habitat III Issue Paper 4 - Urban Culture and Heritage”

25. European Parliament (March, 2016), “Briefing - Protection of cultural heritage in armed conflicts”

26. Sasan Aghlani (March 2016), “The Next Monuments Men? How Militaries Could Protect Culture in Conflict”

RESEARCH QUESTION 1: How has the conflict affected important cultural heritage sites?

- » Location of main heritage sites and (satellite) assessment of damage to main heritage sites.
- » Current threats to heritage sites (defacement, cultural and/or environmental threats) as a result of location.
- » Is the site at risk of losing its status on the UNESCO World Heritage List?
- » How is local economic development impacted by the loss/damage of cultural heritage (e.g. tourism and hospitality sector)?

RESEARCH QUESTION 2: What is the capacity of the local government to manage and prevent damage to cultural heritage?

- » Local, national and/or international recognition of cultural heritage sites and the capacity of local government actors to manage those sites (staff, resources).
- » Suitability of legal framework for management of heritage (accountability, consideration of heritage in planning laws, implementability).
- » Presence of adequate documentation of heritage sites (e.g. national databases).
- » Actual availability of recurrent funding streams for maintenance and restoration of heritage sites.

RESEARCH QUESTION 3: What are the human (skills) and material resources available to manage the city's tangible and intangible cultural heritage assets?

- » Access to skills required for restoration or maintenance of heritage sites.
- » Access to required material resources at a reasonable cost within the country for the maintenance of heritage sites.

URBAN PROFILING - AN INNOVATIVE TOOL TO IMPROVE URBAN RECOVERY

CONFLICT IN CITIES

In past centuries, wars were primarily fought in vast battlefields, where opposing armies fought each other with heavy weaponry in open fields. While cities risked being sacked or besieged, fighting on the streets was a rare occurrence. Armed conflicts today look quite different, with city centres and residential areas becoming the battlegrounds of current times. In cities, protracted conflicts lead to a cumulative effect on an urban system's three key components: hardware (infrastructure and buildings), people (with their distinctive skills) and consumables (fuel, water, medicine, etc.), leading to major disruptions to the lives of residents. It is therefore vital to better understand urbanisation and its complexities and challenges, in order to improve and adjust humanitarian response.

Since 2011, conflicts in the Arab region have severely affected cities. This has resulted in huge human and financial losses, and massive destruction in infrastructure and housing. Municipal basic services have often broken down, resulting in disruptions to the delivery of basic services. Furthermore, conditions leading up to the conflict, such as poverty, informal settlements and underserved areas, have exacerbated these conflicts.

We can observe following five interrelated challenges in cities in the Arab region:

1) Non-functional municipal structures create an information gap:

As the regular processes for managing basic urban services have broken down, many conflict-affected cities have very little up-to date information on their functionality. This complicates the initiation of projects that adequately address the actual needs on the ground.

2) Recovery and reconstruction happens late and on an ad-hoc basis:

Due to a focus on humanitarian programming, recovery and reconstruction happens late, and on an ad-hoc basis. It is often difficult for donors to identify the best ways to support the recovery and reconstruction process, as intervention in cities poses a unique set of problems.

3) Long-standing urban challenges are exacerbated by conflict:

In almost all cities covered, urban challenges that have built up over a longer period of time such as poverty, poor urban growth management and unequal access to services, such as housing have increased their fragility. Crises compound these problems. For example damage to the housing stock can exacerbate a pre-conflict housing availability crisis.

4) Coordination mechanisms focus mainly on humanitarian response:

Humanitarian responses often have difficulties to appreciate the challenges that arise from working on a city and neighbourhood scale, as they are usually not set-up to coordinate and adequately address responses at this level.

5) Return of IDPs depends on the multi-sectoral recovery of an area:

The lived experience of people is not divided in 'sectors'. Safe and voluntary returns by IDPs and migrants can only be achieved by addressing areas as a functional whole.

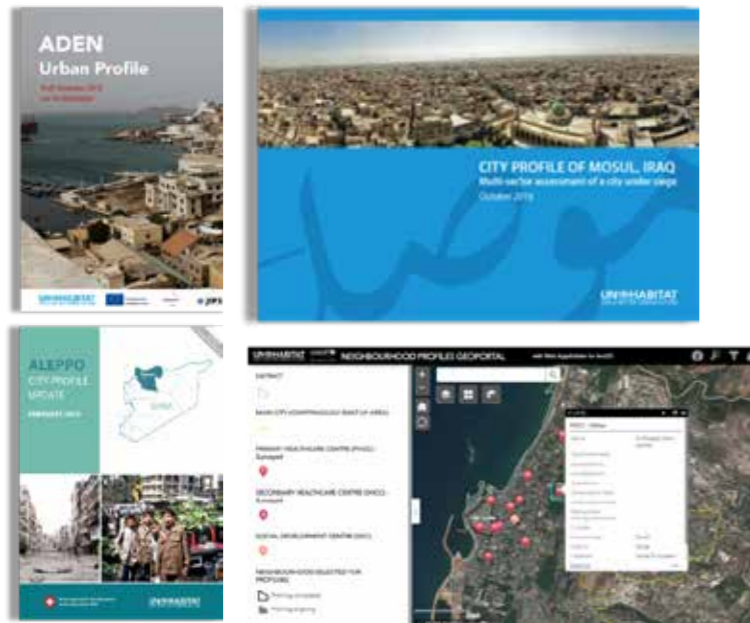


FIGURE 2. UN-Habitat urban profiles and an urban data platform

WHAT IS URBAN PROFILING?

Urban profiling is a tool used to effectively develop an understanding of the complex nature of urban settings and cities. UN-Habitat has long used this tool to document the conditions of the urban systems and their interaction to enable different UN agencies, NGOs and the national and local authorities to effectively address the urban challenges on the neighborhood or city level. Recently, different international agencies have collaborated on complex urban challenges such as internal displacement (JIPS) and forming alliances like the Global Alliance for Urban Crises.

Though urban crises can affect cities in a many different ways, they also share some similarities, so that analysis tools can be re-used across different context. Profiling is a collaborative process for data collection and analysis that brings together different stakeholders with an aim of developing a collaborative strategic actions for city recovery.

URBAN PROFILING PRODUCTS

UN-Habitat has developed more than 40 city profiles and recovery plans; 40 neighbourhood profiles; and urban data platforms in five countries in the Arab states in recent years. These provide crucial information on the social, economic and physical status of the cities in selected conflict affected countries, to guide prioritisation of interventions and to identify priorities for reconstruction interventions.

MENU OF URBAN PROFILES

A wide variety of urban profiling models have been explored in the region using different tools and objectives. The type of profile that is possible and appropriate will be different for each context, and dependent on the local government's desires, the interests of the international community and/or specific challenges of the local community. For example: an urban profile can be forward-looking, assessing the impact of displacement and identifying models for sustainable development to tackle the challenges of absorbing a large number of people. An urban profile can also assess the unequal impact of conflict on accessibility of basic services, such as water and electricity, within a city to identify neighbourhoods to prioritise for intervention. An urban profile can also attempt to identify the main drivers of conflict, in both the past and future, and propose actions for overcoming social divides to find pathways towards increased stabilisation.

When designing an urban profile, the main constraints are the 'relation to conflict' which is the key differentiator of this 'Urban Recovery Framework'-based methodology from a regular urban profile, 'level of accessibility' as the extent that the profiling team can access the city and the 'level of participation of the government'.

Relation to conflict:

A. Cities indirectly affected by conflict will normally have little damage. While not at the centre of the fighting, these cities can still be affected due to currency devaluation, import/export restrictions, threats of violence and the displacement of people, either to or from the city. Profiles addressing this stage are typically built around development

perspectives, identifying medium to long-term interventions that address development challenges.

B. Cities in conflict will often have contested governments, face rapid changes in the situation and suffer from an increasing amount of damage, while having very little data that is reliable or accessible. The profiles for these types of conflict may be designed to revolve around urban dimensions for humanitarian interventions, such as safeguards for working in the city. If accessibility and funding allows, these profiles can assess the impact of conflict disaggregated by neighbourhoods, focusing on urban functionality and damages. Typically, the profile would identify short- and medium-term interventions relating to critical infrastructure (allowing for 'building-back-better'), but long-term considerations may fall on deaf ears.

C. Cities post / pre - conflict are often unstable, reeling from the conflict or simmering with tensions, looking for a path to stability, dealing with problems of equity while having to build or rebuild trustworthy institutions and face pre-existing urban challenges. These profiles benefit from being designed around the humanitarian-development nexus with a strong focus on resilience. Medium-term interventions, making use of a window of opportunity to address pre-crisis challenges, and long-term interventions may be identified.

Level of accessibility:

1. No accessibility. In this case, it is not possible for the profiling team to enter the city, which may be due to the security situation - ongoing tensions, no recognised government to provide a security umbrella, a high presence of UXO's - or other restricting circumstances. Remote sensing techniques such as damage assessments, nightlight assessments and NDVI assessments will be helpful when there are accessibility restrictions. These can be supplemented with research through journalist networks, displaced government officials or other 'informants'.

2. Some accessibility. In this case, the city is in principle accessible, for example for short-term missions, but access can be restricted to secure compounds, making household surveys and site visits complicated unless implemented by an NGO with access. In addition to the tools that can be used when there is 'no accessibility', participatory recovery plans are possible, but will usually not include communities due

to having to implement them through workshops outside of the city.

3. High accessibility. In addition to the activities possible under 'some accessibility', this case offers relatively extensive opportunities for site and household visits, with or without support from government actors. It opens the door to focus group discussions, site visits and local participatory recovery plans involving community members. While the implementation of surveys is limited to NGOs in areas with some accessibility, in this case other partners (e.g. university students) may be considered to implement surveys.

Level of government engagement:

- Low government engagement

Low government participation in the form of no approval given by the government, or no desire or possibility to participate in a significant way to the consultation processes. If government actors are not sharing data, the profiling team will have to find ways to produce primary data (using remote sensing, ethnographic analysis, surveys) and not only rely on secondary data. In the first option, results may not always be shareable, while for both options, the development participatory plans will be complicated.

+ High government engagement

High government involvement opens the door to workshops that serve to understand the view of the local government, and enables data collection of municipal departments and training components, such as training municipal government partners, may be considered to implement key aspects of analysis. A verification or comment process of the analysis will be critical to increase government buy-in in any of the following discussions.

Based on the three above constraints, in theory 18 (3x3x2) different urban profiling models are possible (although in practice not all of the 18 will be viable), of which we highlight the following five key models that have been implemented in the region (see Figure 3).

Key Model	Type of Urban Profile	Type of Data Collected and Interventions
A2+	Spatial analysis profiles (e.g. Basra, Somalia, Saudi Arabia).	Focuses on spatial analysis, urban development trends, addressing medium/long term structural urban challenges, while ensuring government participation for opening debates on policy and intervention options.
A3-	Neighbourhood Profile (e.g. Lebanon, Iraq)	Focuses heavily on household surveys, focus group discussions and identifying short-medium real intervention 'projects'.
C1-	Research-based profiles (e.g. Basra, Mareb)	Focuses on interviews with journalists, displaced government officials and secondary (sometimes unpublished data) from partner UN agencies. These profiles are strong in identifying root causes of conflicts, perspectives on political developments (focusing on dialogues) and their implications for medium-term interventions.
B2-	Urban Functionality Index-based profile (e.g. Urban-S Syria, Yemen)	Focuses strongly on the unequal impact of conflict across neighbourhoods as well as functionality (accessibility, quality and reliability) of services.
C2+	Technical support-based profile (MTOS Syria, Libya)	Designed around technical support to municipalities, training technical staff in assess-ments, project prioritisation and GIS skills in developing the contents of the profiles.

FIGURE 3. Five key models of urban profiles implemented in the region

THE URBAN PROFILING TOOLBOX

The following toolbox accompanies the Urban Recovery Analysis Framework to provide guidance on the different types of analyses that have been implemented in previous urban profiles. They fall under three main categories:

- 1) Survey-based tools
- 2) Participatory tools
- 3) GIS-based tools.

These tools have been implemented in the urban profiles of seven countries in the Arab region, and the methodologies have been refined with each iteration. Literature reviews, consultation workshops, remote sensing tools and data collection through methods such as key informant interviews and focus group discussions inform the analysis of the seven pillars of the Urban Recovery Analysis Framework.

URBAN PROFILING TOOLBOX OVERVIEW

	Housing	Economy	Infra & Services	Governance	Civil Society	Environment	Cultural Heritage
SURVEY-BASED TOOLS							
Neighbourhood socio-economic household survey	Active	Active	Active	None	None	None	None
Inventory of damage & operational capacity through KIIs	Active	Active	Active	Active	Active	Active	None
Neighbourhood profiling field assessments	Active	Active	Active	Active	None	None	None
Neighbourhood profiling household surveys	Active	Active	Active	Active	Active	None	None
PARTICIPATION TOOLS							
Stakeholder and conflict analysis	None	None	None	Active	Active	None	None
City Cahier / Urban Functionality Index	Active	Active	Active	None	Active	Active	None
Community Based Planning for Rapid Urban Profiling	Active	Active	Active	None	None	Active	None
Neighbourhood profiling focus group discussions	Active	Active	Active	Active	Active	Active	None
Neighbourhood profiling key informant interviews	Active	Active	Active	Active	Active	None	None
GIS-BASED TOOLS							
Satellite damage assessment	Active	Active	Active	Active	None	Active	Active
Regional spatial analysis of refugee settlements	Active	Active	Active	None	None	None	None
Accessibility analysis	Active	Active	Active	None	Active	None	None
Building counts with satellite imagery	Active	Active	Active	Active	None	Active	None
Nightlight analysis for economic recovery analysis	Active	Active	Active	None	None	None	None
NDVI Analysis	None	Active	Active	None	None	Active	None



Household Surveys in Lebanon © UN-Habitat (2019)

SURVEY BASED TOOLS

Survey-based tools are tools that requires good access to the city for their implementation. In cases areas are still unsafe, for example due to the presense of UXO's, uncleared rubble, or recurring security incidents, implementation typically takes places through NGOs with the right security precautions. Even though the implementation of surveys can be costly and lengthy, it is often worth the effort as it can provide data on the effect of a crisis on people (people-centered approach), which is more difficult to attain with other tools.

1 NEIGHBOURHOOD SOCIO-ECONOMIC HOUSEHOLD SURVEY

URF Pillars

Economy

Infra & Services

Housing

Country

Iraq

Date of implementation

2019

Cities

Mosul, Ramadi and Basrah

Capacities required

GIS, E-form design, data analysis

Analysis duration

+/- 2 weeks

Focal point

Raniah Kamal

Agency

UN-Habitat

Partner

CNSF

MAIN ANALYSIS GOAL

1. What is the demographic data at the household level?
2. What is the household level income and expenditure?
3. What are the needs and concerns of the neighbourhood?

BACKGROUND ON THE TOOL

This tool was used to gain a better understanding of the history behind an area's informal settlements and their socio-economic situations, using the methods of door-to-door baseline household surveys (BHS) and focus group discussions (FGDs). In Iraq, the focus was on demographic data, safety, security, employment and education levels. The field surveys were supported by FGDs and conducted by a local NGO. 150 questions were designed based on four household assessments, these being the Ministry of Planning informal settlements survey, a socio-economic vulnerability assessment, UN-Habitat Lebanon's neighbourhood profile field assessment and Cash Working Group assessments.

The resulting data from the field surveys was used to secure funding for the upgrading of informal communities' infrastructure, and to bring their situation to the attention of the Ministry of Planning to encourage them to upgrade the community's status to an official settlement or to at least endorse a law to protect them. A change in status would enable the government to provide them with access to basic services. This was the case in Tanak informal settlement in west Mosul, it was found that there was a need for street lightening and water network upgrading. This led to UN-Habitat installing new water pipes and improving the informal settlement's night lighting by installing solar lights on the main street.

STEP-BY-STEP IMPLEMENTATION

Step 0: Contracting the implementing partner (local NGO);

Step 1: Designing the baseline survey questionnaire on KoBoToolbox, a free open-source tool for mobile data collection, with the number of questions agreed upon in the implementing partner contract, to collect quantitative data for the report;

Step 2: Download KoBoToolbox electronic-form (KoBo Collect) on smartphones after coordinating with the enumerators to run tests to ensure the latest version of the tool is working and to provide them with training on how to use it;

Step 3: Draft field maps using Book Map, a tool that divides a geographic area into a series of uniquely coded boxes, and share it with the enumerators to familiarize them with the study area location;

Step 4: Conduct field visit with enumerators and practice using the E-form with an in depth guide for recording replies and coding plots;

Step 5: Introduction of enumerators and scope of survey to community representatives and providing information to the municipality and local police so that they are aware of their presence;

Step 6: Deployment of enumerators for door-to-door interviews;

Step 7: Data cleaning, analysis of findings, write-up and finalization of reports;

Step 8: Coordinating with Community Development Committee to select locals from 5 different age groups;

Step 9: Drafting the FGD key points to complete the household survey data in order to collect qualitative data;

Step 10: Conducting the FGD sessions and collect the resulting information;

Step 11: Data analysis, presenting results found and reporting in the form of a neighbourhood profile.

LESSONS LEARNT AND HOW TO ADAPT

- When contracting the implementing partner it is important to specify the number of questions required and to go into detail about the expected data quality in the contract;
- In terms of field maps, the book map should be clear and, ideally, a prior visit to the field should be conducted to rereview the maps;
- In the design stage of the E-form, use smart skip logic to allow for the correct flow of questions;
- To ensure data quality, minimize the need for data cleaning by guiding the team for question reply types;
- With imagery and geo-data updates, on a weekly basis, update the team submission on the map linking the field maps after the survey and coding of the plots;
- Lastly, to monitor the FGDs, supervise at least two of the sessions.

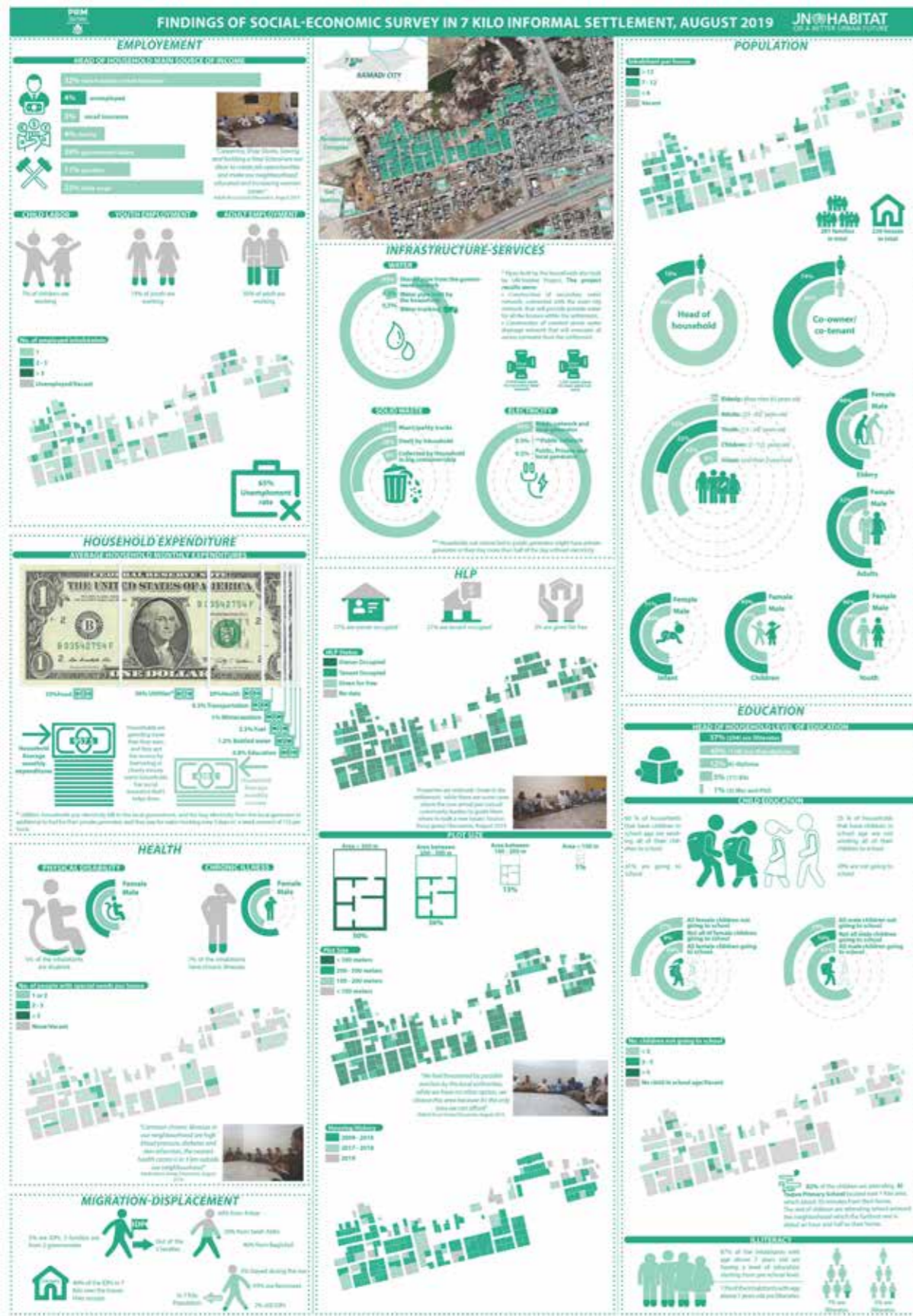


FIGURE 4. Social economic results in 7-Kilo informal settlement. Data source: field survey



FIGURE 5. Socio economic results in Qibla and Tanak informal settlements. Data source: field survey

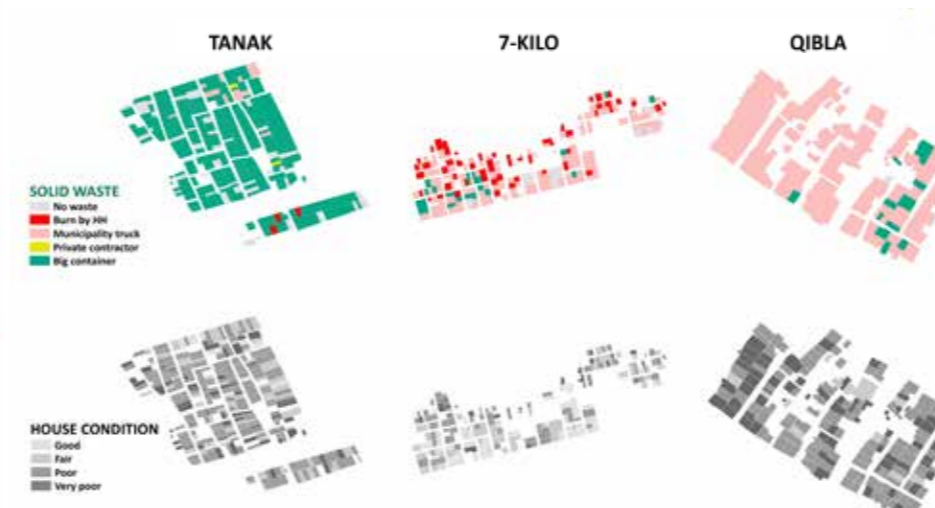


FIGURE 6. Services and property conditions for the three pilot locations. Data source: field survey

EXPLANATION OF RESULTS

Field surveys provide data for indicators such as the following for each theme:

Employment:

- Head of households main source of income
- Youth, child and adult employment rate
- Number of employed inhabitants
- Women labour
- Existing skills of inhabitants for job opportunities
- Needed training to upgrade the skills of youth

Household expenditure:

- Average monthly expenditure of households
- Annual expenditure on winterization
- Annual expenditure on education

Health:

- Percentage of inhabitants with physical disabilities
- Percentage of inhabitants with chronic illness
- No. of people with special needs per house

Migration displacement:

- Number of IDPs and returnees
- Origins of IDPs

Infrastructure services:

- Water source
- Solid waste collection
- Access to electricity

Housing, land and property rights:

- HLP status (owner occupied, tenant occupied or given for free)
- Plot size
- Housing history

Population:

- Inhabitants per house
- Head of household by gender
- Co-owner/co-tenant by gender
- Population by age group and gender

Education:

- Head of household's level of education
- School attendance rate
- Percentage of boy and girls attending school
- Illiteracy rate

2 INVENTORY OF DAMAGE & OPERATIONAL CAPACITY THROUGH KEY INFORMANT INTERVIEWS

URF Pillars



Country
Yemen

Cities
Aden

Analysis duration
+ - 2 months

Agency
IMMAP

Date of implementation
2019

Capacities required
KoBoToolbox

Focal point
Lina Nasereddin

Partner
JIPS, UN-Habitat, NFDHR

MAIN ANALYSIS GOALS

The surveys aim to gather district and city-level data on:

1. How conflict dynamics and population movements have affected or continue to affect the city, and;
2. To what extent is the city able to provide an adequate standard of living for all of its inhabitants?

BACKGROUND ON THE TOOL

The profile tries to support the resilience of affected populations in Yemen, using the pilot cities of Sana'a and Aden, to find ways for them to cope with the impact of the conflict, and provide better targeted and coordinated humanitarian, recovery and development investments. The expected results of the project include a comprehensive urban analytical framework with an in depth conflict sensitive analysis at the city and district-level, and to develop an urban information management system; damage assessments and one synthesis report; two city profiles and constituent district profiles; one national urban recovery/reconstruction strategy; and capacity building of the different stakeholders.

The elements of the key informant (KI) tool seek to collect sector-experts knowledge on specific assets (components of infrastructure such as facilities, roads, a school, a hospital, etc.) to a) estimate and verify the level of damage to that asset, and b) estimate whether that asset is operating as it would be under normal conditions. This is its operational capacity. This data will then be aggregated to create an inventory of damage and operational capacity at the city and district-level. Therefore, the results acquired from this tool are suitable to feed into the profile that lead to immediate recovery and rehabilitation planning.

KI interviews are a suitable tool for situations where there is limited access and resources, and where quick insights on the broader level are needed e.g. in order to understand what

needs to be distributed in an emergency. The methodology of this surveying tool was developed by the Joint IDP Profiling Service (JIPS).

STEP-BY-STEP IMPLEMENTATION

Step 0: Use the tool to assess the availability, accessibility and quality of basic services for the local population. This information was collected from KIs who were experts in the relevant sectors. Some sector experts overlapping is to be expected due to certain KIs being able to provide information on different sectors or districts. The sample size is dependent on the city size and the type of services and infrastructure available, for example 50 KIs were interviewed for Aden.

Step 1: The tool is in the format of a questionnaire designed using the KoBoToolbox E-form, with each E-form covering all sectors. Following the end of the primary data collection phase, one form was completed for each district to answer all questions related to the city's supply of basic services.

Step 2: In each city, the data collection team nominated at least two experts in each district (with possible overlaps between sectors) based on the following criteria:

a) They are an expert in one or more of the identified priority sectors.

b) They must have any of the levels of expertise outlined below, in the following priority order:

I. Administrative/municipal officials:

Service providers, member of official departments and directorates, operators or engineers

II. NGO officials:

Supervisors, syndicate engineers/officials

III. Local practitioners:

retired officials, field practitioners with a minimum of 10 years of experience

c) They have been nominated by authorities/stakeholders to contribute to the outcome of the Urban Profiling project.

FIGURE 7. Problems affecting communications by district. Source: KI Survey, June/July 2019



LESSONS LEARNT AND HOW TO ADAPT

- KI surveys cannot sufficiently provide information on how people cover their basic needs in the city, which schools they attend, if they face eviction and whether they are unable to buy supplies at markets because they are too far away or expensive. Information on market level availability always varies by market so a wider sample net would be necessary to collect it (which requires a Household (HH) level survey);
- Collected data should be triangulated with other types of data, such as secondary data analysis which draws on publications, media reports and remote sensing;
- The tool can only be used in areas where there is sufficient access, both in terms of logistics and in terms of approvals for data collection by the relevant authorities;
- The surveys were created using KoboToolbox and XLSForms, which give you access to an app that enables you to edit, replicate and import/export the same forms so that they can be used again. It also allows you to collect and store data offline, a useful feature in challenging environments and demanding contexts.
- As illustrated in Figures 7-9, the tool provided data on the school attendance rate for basic education in Aden over the span of different years segregated by age group and sex. It also collected information on problems affecting communications in Aden's districts, and data on the frequency of garbage collection, including health hazards as a result of visible garbage dumps.

ANALYSIS OF RESULTS

In the case of the Aden profile, it was found that in 2013 the total enrollment for basic education in the city was 80%, of which 66% of children attended public schools and 14% attended private institutions. The following year, the enrollment rate was estimated to be 77% (79% male and 75% female), of which 63% attended public schools and 14% attended private institutions. A 3% decrease was observed for male students in public schools.

Currently, attendance varies from one district to another, with the lowest rates observed in Khur Maskar. Female students aged 3-5 and 13-17 are disproportionately affected in Al Mualla where an estimated two-thirds of the respective age group populations are out of school.

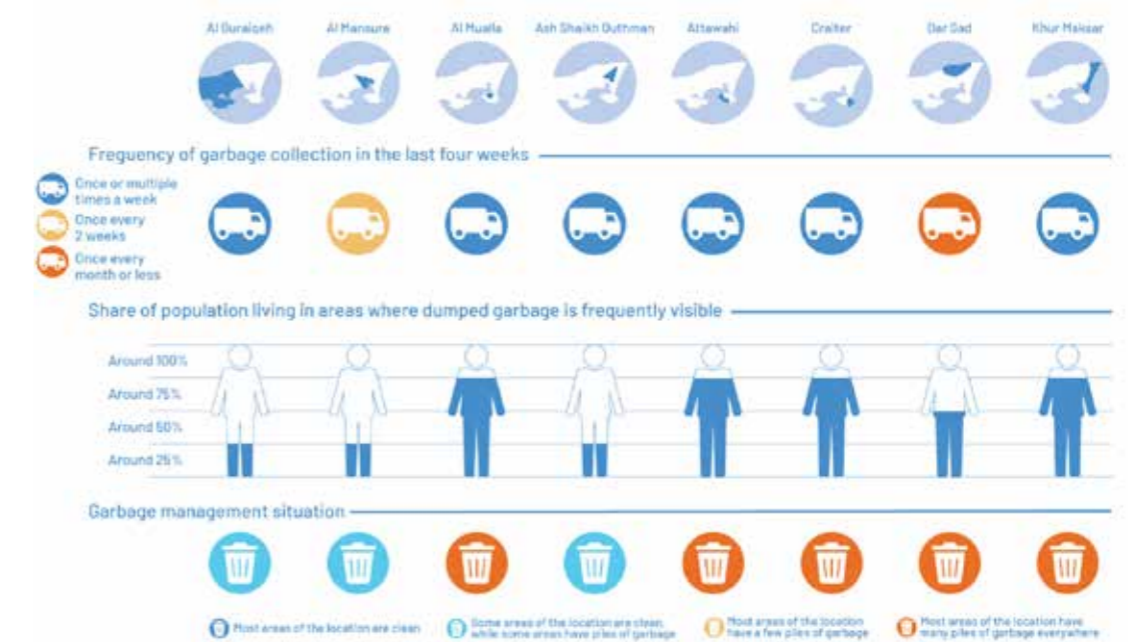


FIGURE 8. Garbage management availability per district. Source: KI and CFP Surveys, June/July 2019.

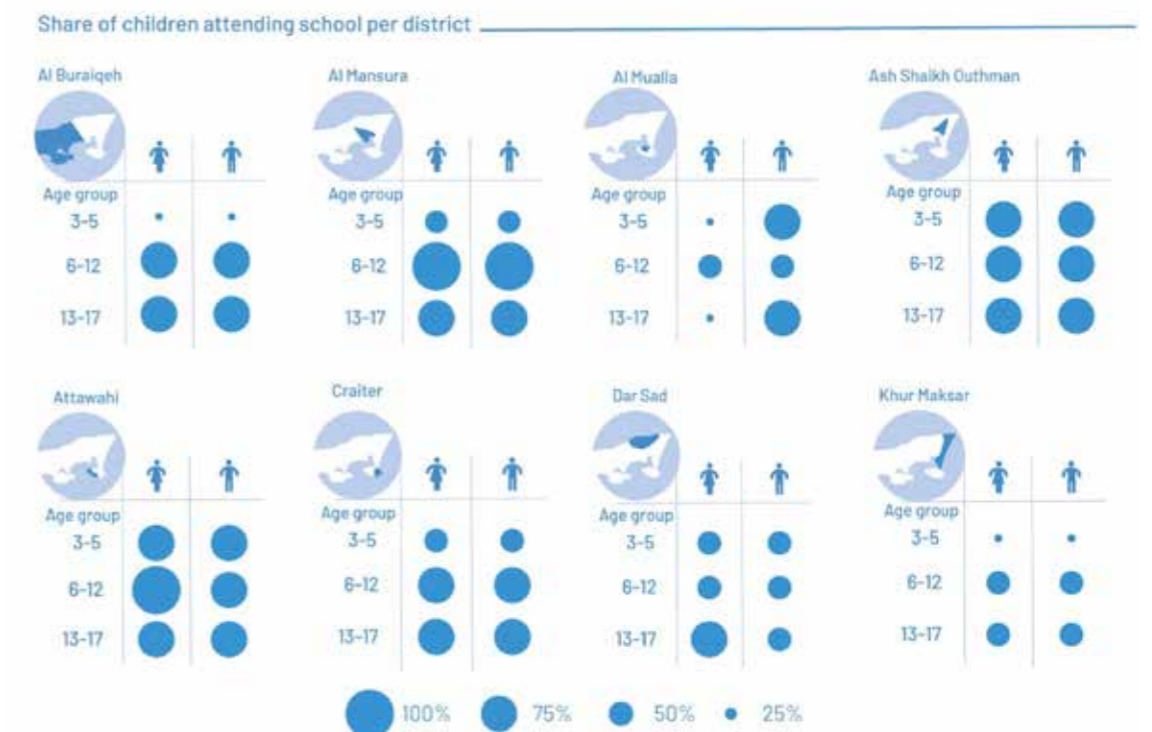


FIGURE 9. School attendance rates per district. Source: KI Survey, June/July 2019.

3 NEIGHBOURHOOD PROFILING FIELD ASSESSMENTS

URF Pillars



Countries

Lebanon

Cities

N/A

Analysis duration

N/A

Agency

UN-Habitat
Lebanon Office

Date of implementation

2016-2020

Capacities required

Survey123 and ArcGIS

Focal point

Nanor Karageozian

Partner

UNICEF, (I)NGOs
and municipalities

MAIN ANALYSIS GOALS

To provide information on the vulnerabilities and needs of residents in disadvantaged neighbourhoods by collecting data and analysis on the demography and the local economy, as well as the condition of buildings, basic urban services and open spaces.

BACKGROUND ON THE TOOL

The joint UN-Habitat and UNICEF neighbourhood profiles contain original spatialized data and analysis for over 30 disadvantaged neighbourhoods in Lebanon, contributing to an understanding of host and refugee vulnerabilities as they converge in sub municipal pockets of urban deprivation. Neighbourhood profiles offer a cohort-stratified, multisectoral evidence base on features of and associations, if not causal links, between residents and their social, economic and built environments.

The data in field assessments is collected at different levels (neighbourhood; open space; street; building, including ground floor; and residential unit), depending on the assessment. The collected data is uploaded to an online geodatabase (referred to as a geoportal) where it is stored as georeferenced information. The geoportal allows users to filter data, change map scales and extent, analyse spatial relationships by selecting specific layers and enables comparisons of different neighbourhoods. The quantitative data from the assessments also contributes to building an online and freely accessible national database, which allows users to compare the main findings and indicators of all profiled neighbourhoods by sector/theme. The database can be used to better understand the living conditions in the most vulnerable urban pockets that cadastral, municipal and district averages can be blind to, and how these relate to their wider urban contexts.

STEP-BY-STEP IMPLEMENTATION

Step 1. Field preparation

The preparatory phase requires the active involvement of local stakeholders, including local authorities, community representatives, (international) non-governmental organizations (I)NGOs and universities, and providing them with training on the survey forms and survey applications like Survey123. The neighbourhood is georeferenced with each building and street being assigned an ID.

Step 2. Data collection

Data collection is based on the field enumerators' visual inspection and interviews with one or more randomly selected key informant(s), residents or enterprise owners, at a building and street level.

Population count:

- A comprehensive population count is conducted for all residents within the profiled neighbourhood. The population is surveyed by residential units based on one or more key informant interviews for each building. For each residential unit, information on the total number of residents is collected, stratified by nationality, gender and age.

- Data is collected for each residential unit using a mobile application. A residential unit is considered a self-contained space used for a residential purpose by one or more persons and household(s). It could be an apartment, studio, workshop, rooftop add-on, basement, etc.

- The comprehensive population count is used to derive a representative sample for the Lebanese and non-Lebanese populations of the neighbourhood (See next tool "#4 Neighbourhood Profiling household surveys (Lebanon)").

Building condition assessment:

- A comprehensive building condition assessment for

all buildings within the profiled neighbourhood is conducted; and the collected data is georeferenced by providing each building with a unique ID on a base map, which is given to the field enumerators. If necessary, enumerators are requested to update the base map based on their observations in the field.

- The assessment focuses on four main building components:

Structural building condition: structural elements (i.e. beams, columns)

Exterior building condition: components of the building envelope (i.e. walls, roof, windows, doors and balconies)

Communal spaces of buildings: shared spaces of a building (i.e. means of exit, entrances, lighting, and provision of ramps for people with disabilities)

Connection to services: building connection to infrastructure networks (i.e. stormwater, domestic water, wastewater and electricity)

- Each of the above components is assessed through direct observation. A building evaluation manual has been developed to provide a standardized base from which trained field enumerators can make an evaluation of the condition of each building component, rating it as good, fair, substandard or critical, according to specific criteria.

Basic urban services survey:

- This survey is designed as a two-step data collection process, consisting of a mapping exercise and a questionnaire with indicators collected at the street level to provide data on basic urban services provisions.

- Data collection is based on the field enumerators' visual inspection and interviews with one or more randomly selected key informant(s), such as residents or enterprise owners, at the street level. Enumerators map the infrastructure features

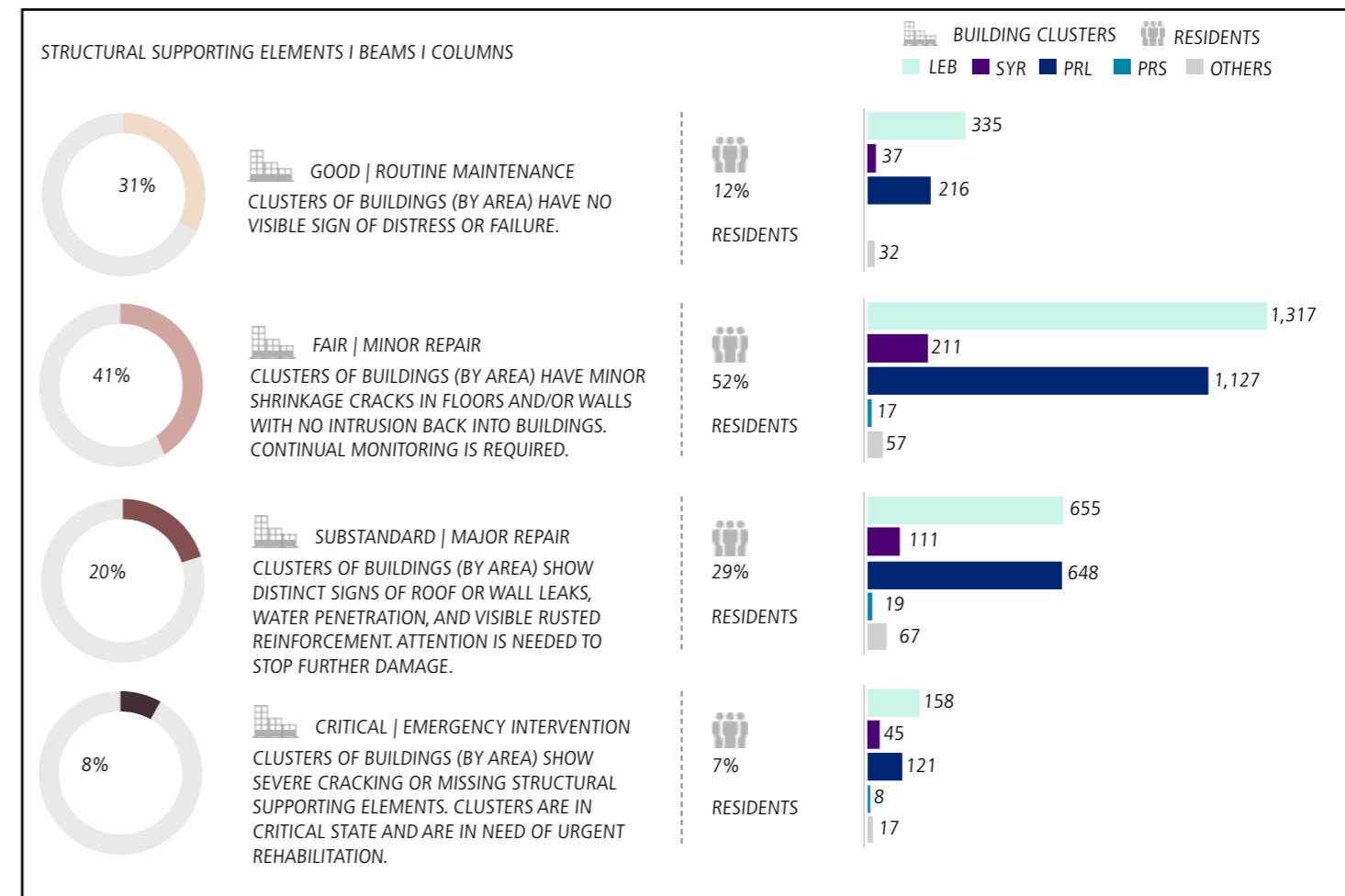
while completing the rest of the questionnaire on the mobile application form.

- The collected data is georeferenced with each street section within the neighbourhood having been assigned an ID based on the road layout and intersections.

- The services and infrastructure features that are assessed are:

- Water, sanitation and hygiene (WASH)
 - Domestic water
 - a) Availability of domestic water network at street level
 - b) Water reservoirs and wells
 - Wastewater
 - a) Functional/malfunctional sewage network
 - b) Sewer flooding
 - c) Wastewater sea/river discharge, wastewater lifting stations, wastewater treatment plants
 - Stormwater
 - a) Condition of stormwater network
 - b) Water ponding
 - c) Stormwater drains
 - d) Combined/separate network
- Solid waste management
 - a) Garbage collection system availability
 - b) Litter on streets
 - c) Dumpsters and bins
 - d) On-street garbage disposal
- Electricity
 - a) Public/private electricity supply
 - b) Renewable energy sources
 - c) Tangled overhead wires
 - d) Electrical hazards
 - e) Street lighting functionality
 - f) Electric substations
- Access
 - a) Road surface condition
 - b) Blocked roads
 - c) Sidewalk condition

FIGURE 10. Structural building condition



Open space survey:

- To understand the use of various spaces in the neighbourhood, perceptions of security and accessibility and condition of accessible open spaces, a thorough assessment of all types of publicly and privately used open spaces in the profiled neighbourhood (parks, playgrounds, sport fields, landscaped areas, informal street gatherings, agricultural land, unused lots, cemeteries, parking lots, etc.), except for streets and sidewalks, is conducted.

- Field enumerators collect data following an established set of characteristics, focusing on three main themes:

1) General information: type, ownership, management, space area, users' age/gender/cohort, (public) accessibility, entrance policy (fees) and (perceived) security.

2) Safety and security: presence of armed actors, walkability, vehicular circulation around the space, signs of substance abuse and child protection issues.

3) Physical facilities and their conditions: lighting, litter bins, shelters and shade structures, furniture/seats, equipment in playgrounds.

Enterprise assessment:

- A complete mapping and count of all enterprises within the neighbourhood boundary is conducted when surveying buildings (ground floor use).

- Enterprises are surveyed comprehensively if there are under 400 in the neighbourhood.

- The enterprise survey is administered to the shops and workshops samples to collect data following an established grid of characteristics divided in different topics:

- Business type
- Operation hours /vacancy
- Customer catchment area
- Business age
- Ownership/ rent value
- Enterprise (approximate) area
- Business holder(s) information
- Employee(s) information

LESSONS LEARNT AND HOW TO ADAPT

- Neighbourhood profiles contain data gathered for the territory within the neighbourhood boundaries only. It is strongly recommended that any actions based on this profile are undertaken with awareness of the wider context of which this neighbourhood is a part of, and the spatial relationships and functional linkages that background implies.
- A published neighbourhood profile offers a snapshot in time and, until or if further profiles are undertaken for the same territory, trends cannot be reliably identified.
- It is not known whether residents surveyed for the comprehensive population count (by residential unit) have more than one nationality.
- Neighbourhood profile resident counts currently do not distinguish between refugees and economic migrants, noting that these categories are not mutually exclusive or may be mixed even at the level of one household.
- Assessments of buildings are undertaken visually by trained field staff and offer a guide to building quality, including structural quality. Acquired data suggesting highly precarious and/or potentially life-threatening structural and/or architectural elements is fast-tracked to the competent bodies as soon as possible ahead of full profile publication. The neighbourhood profile data on buildings cannot be treated as a final definitive technical guide to risk. Detailed technical structural assessments may be required to inform some types of action.
- Red Flag (unsound buildings) Reports are designed to fast-track the release of field assessment data that indicates time-sensitive, acute and/or potentially life-threatening situations relevant to one or more sectors and/or local authorities. They can be channeled through established United Nations sectoral rapid referral systems to the relevant competent body mandated to respond.
- Among the total number of buildings in the neighbourhood, not all buildings were accessible or evaluated for all the questionnaire/assessment items. Hence, percentages pertaining to building conditions or connections to infrastructure networks (i.e. domestic water, stormwater, wastewater, public and/or private electricity, telecom) relate to the collected data only.

FIGURE 11. Building cluster uses and landmarks in Old Saida, based on the results of a field survey

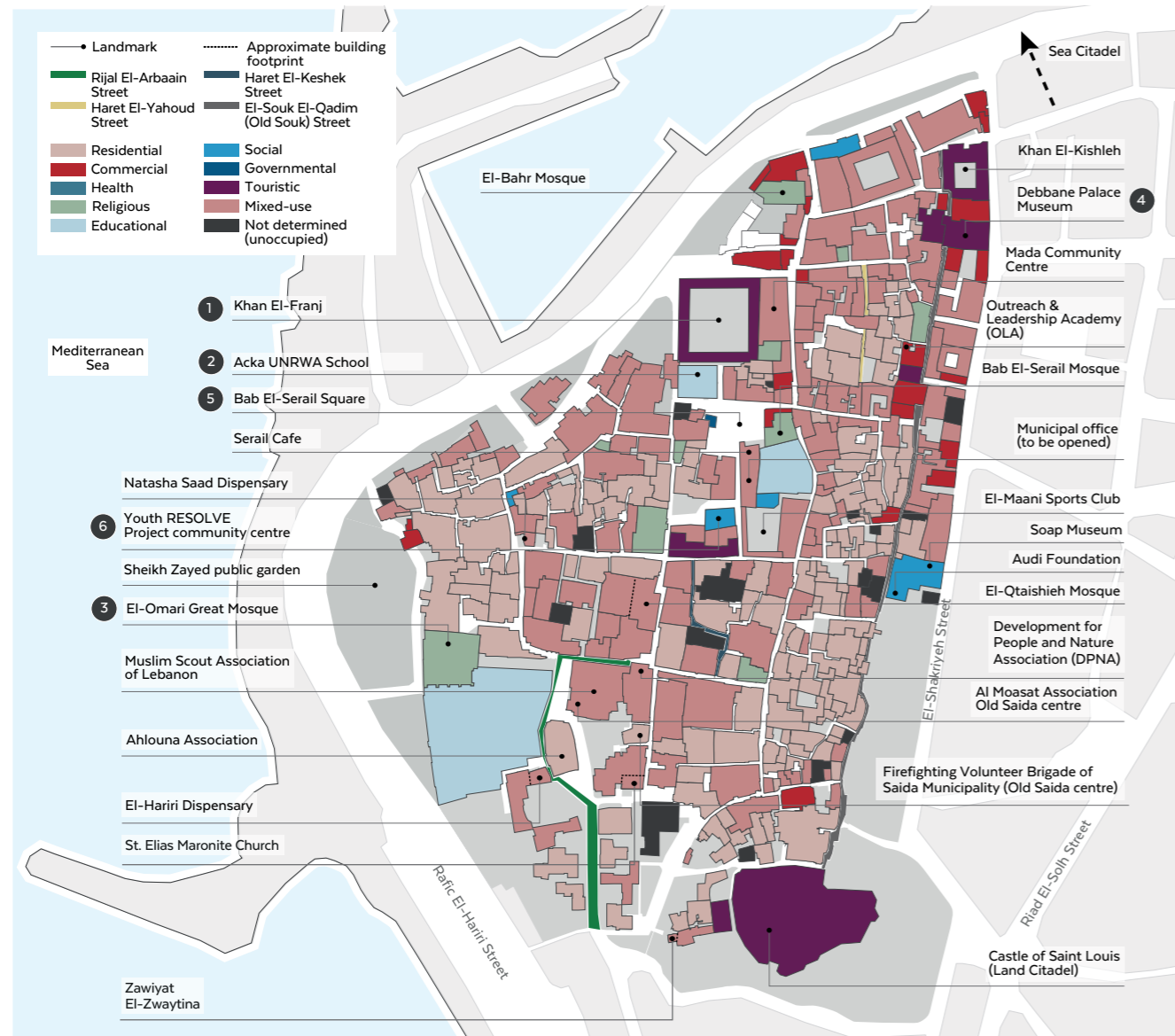
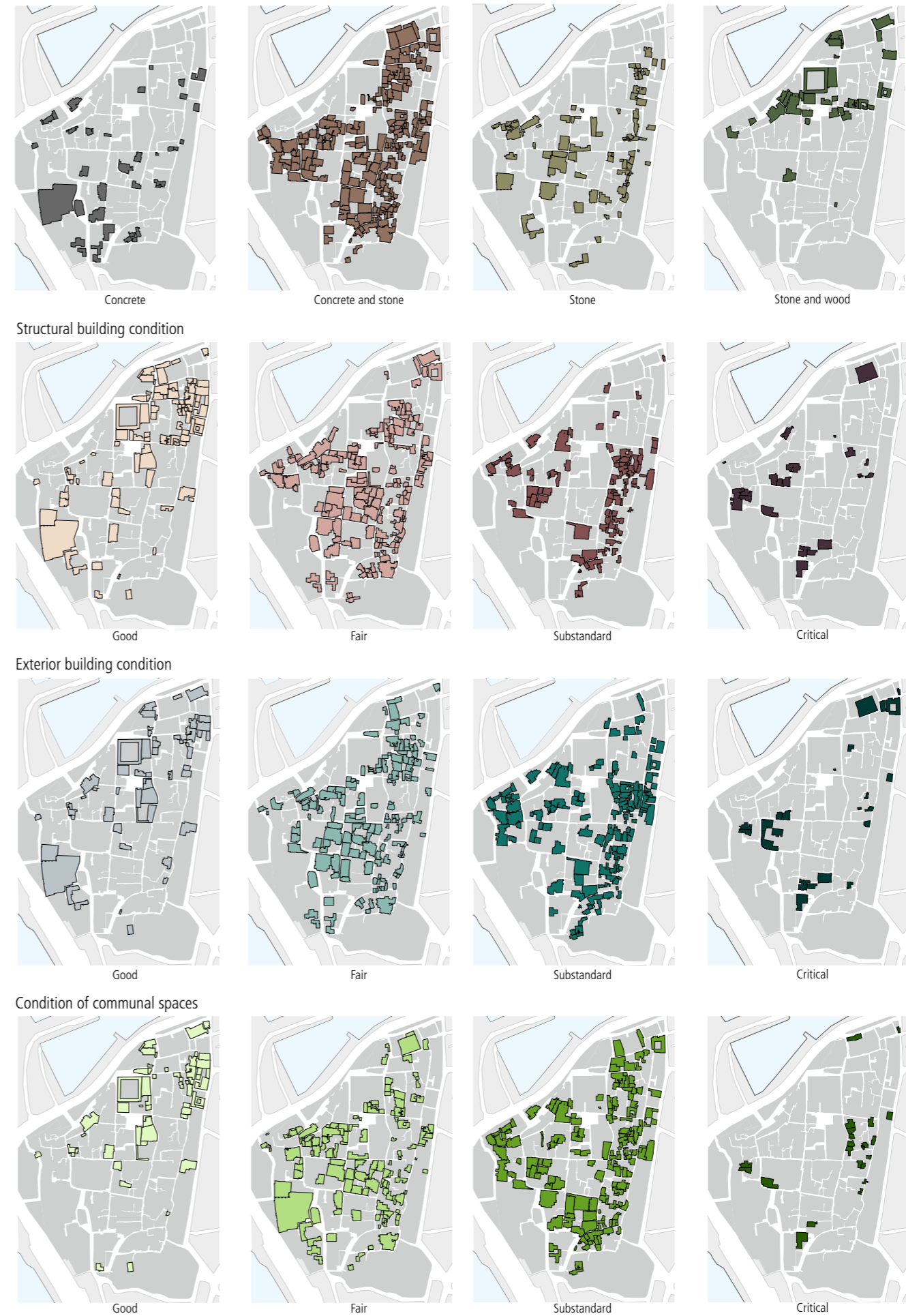


FIGURE 12. Conditions of building clusters



LIST OF QUANTITATIVE INDICATORS

Field assessments provide quantitative and/or georeferenced data on the following themes:

Context:

- Profiled neighbourhood (location and boundary) in the context of its city (continuously built-up area)
- Historic, religious and touristic sites (if applicable)
- Neighbourhood typology by zone (if applicable)
- Schematic section across the neighbourhood (if applicable)
- Neighbourhood landmarks

Population:

- Total number of residents
- Population distribution by nationality cohort, age and gender
- Age distribution by nationality cohort
- Nationality cohort distribution by age group
- Residential occupancy per building
- Population distribution by occupied residential unit
- Population distribution by residential unit per nationality cohort

Safety and security:

- Security threats and measures at a geographic level

Child protection:

- Information on child labour (enterprise locations are not published)
- Children with disabilities (percentage and count)

Local economy and livelihoods:

- Overview of the local economy and commercial activity in the neighbourhood in connection to its surroundings
- Total number of enterprises (shops, workshops and vacant spaces)
- Business age and tenure type of the enterprises
- Customer catchment area
- Basic urban services in commercial streets/near enterprises
- Types and occupancy of enterprises
- Souk analysis/commercial activity in the neighbourhood
- Distribution of shops and workshops by type
- Number and distribution of main shops and workshops
- Information on business owners and employees
- Business age of enterprises, business owners and employees

by enterprise type

- Working-age (15–64) population

Buildings and housing:

- Total number of buildings
- Number of storeys of the buildings (low-, medium- and high-rise)
- Building and ground floor uses
- Buildings with residential rooftop add-ons
- Construction dates of buildings
- Construction materials used in buildings
- Structural building conditions of all occupied and unoccupied buildings vis-à-vis the proportion of total residents, stratified by nationality cohort
- Exterior building conditions of all occupied and unoccupied buildings vis-à-vis the proportion of total residents, stratified by nationality cohort
- Condition of communal spaces in all occupied and unoccupied buildings vis-à-vis the proportion of total residents, stratified by nationality cohort
- Unsound buildings (Red Flag Report)
- Total number of residential units

Domestic water:

- Street-level assessment of the domestic water network
- Condition of buildings' connection to the domestic water network
- Service provision/management

Wastewater and stormwater:

- Street-level assessment of the wastewater/stormwater network
- Condition of buildings' connection to the wastewater/stormwater network
- Service provision/management

Solid waste:

- Street-level assessment of solid waste accumulation and collection
- Service provision/management

Electricity:

- Street-level assessment of the electrical network
- Condition of buildings' connections to the electrical network
- Service provision/management
- Assessment of street lighting

Accessibility and mobility:

- Access and circulation issues at a street level
- Assessment of road conditions
- Assessment of sidewalk conditions

Open spaces:

- Open spaces in and around the neighbourhood (total area, types, usage, projects)
- Surveyed open spaces by user age group, nationality cohort, and gender
- Open spaces for children and youth

#4 NEIGHBOURHOOD PROFILING HOUSEHOLD SURVEYS

URF Pillars



Countries
Lebanon

Cities
N/A

Analysis duration
N/A

Agency
UN-Habitat
Lebanon

Date of implementation
2016-2020

Capacities required
KoBoToolbox and GIS

Focal point
Nanor Karageozian

Partners
UNICEF, (I)NGOs
and municipalities

MAIN ANALYSIS GOALS

The household survey provides quantitative data at the household level for Lebanese and non-Lebanese residing in the same neighbourhood, that allows for a better understanding of their living conditions.

BACKGROUND ON THE TOOL

Within UN-Habitat and UNICEF neighbourhood profiles, one of the tools used is the Multiple Indicator Cluster Survey (MICS) from the UNICEF Lebanon Baseline Survey (2016), later modified in 2017 and 2019, to meet the objectives of the neighbourhood profiling exercise. The survey provides a representative sample of the comprehensive population count (see previous tool #3 "Neighbourhood Profiling Field Assessments, Lebanon"), proportionally stratified by nationality (Lebanese and non-Lebanese).

The tool assesses vulnerabilities related to different sectors/issues at the household level, which are then analysed holistically with those identified at other levels (e.g. neighbourhood, street, building) through other tools (see other neighbourhood profiling tools listed in this toolbox). In addition, some of the household survey indicators per sector can be compared with figures available at national and governorate levels for the same nationality groups. The indicators contribute to building an online and freely accessible national database, which allows users to compare the main findings and indicators of all profiled neighbourhoods by sector/theme. The household-based indicator database provide a better understanding of the living conditions of the most vulnerable urban pockets that cadastral, municipal and district averages can be blind to, and how these relate to their wider urban contexts.

STEP-BY-STEP IMPLEMENTATION

Step 1. The sampling design consists of a two-stage random sample. Separate sampling frames are used for Lebanese and non-Lebanese inhabitants. The sample size for non-Lebanese is calculated using the same formula, but by applying a finite population correction factor that accounts for the smaller population size of non-Lebanese within the neighbourhood.

Step 2. A grid technique is then used to divide the neighbourhood into units equal in population density and easily identifiable by landmarks. From these strata, a random sample of clusters is chosen for data collection. Next, a random selection of households takes place using a standard cluster survey methodology from 2015. Accordingly, starting points are chosen for data collection in each selected cluster.

Step 3. Interviews are conducted with the heads of the households (mostly mothers). The average time an interview takes is 1 hour and 15 minutes.

Step 4. Data is collected electronically using the KoBoToolbox, which is monitored during and after the data collection process.

LESSONS LEARNT AND HOW TO ADAPT

- Household surveys could be used by different countries after contextualizing some of the questions or answers (e.g. currency and range of service fees). In terms of lessons learnt, the following methodological caveats were encountered:
- Given the absence of an accurate line listing of all households, field enumerators spin a pen as a starting point, which can be subject to biases. However, the sampled area is relatively small in size; this helps limit discrepancies.

- The household survey is conducted with a sample of non-Lebanese residents, who are referred to as such. In some neighbourhoods, it happens that the majority of non-Lebanese belong to one nationality. However, the comprehensive population count by residential unit collects data on building inhabitants by nationality cohort. Hence, there is an interplay in the use of the term "non-Lebanese" and a specific nationality in the neighbourhood profiles.
- National and governorate indicators are derived from the 2016 UNICEF Baseline Survey, where a household survey (based on the MICS) was conducted at national and governorate levels for Lebanese and non-Lebanese (proportionally stratified by nationality) residents. With some modifications made in order to meet the objectives of the UN-Habitat–UNICEF profiling exercise, the household survey was replicated at the neighbourhood level for representative samples of Lebanese and non-Lebanese (the latter not further stratified by nationality). Thus, when a neighbourhood's findings for non-Lebanese (without further specifying their nationality) are compared with national and governorate indicators, the latter pertain only to the nationality group that comprises the majority of non-Lebanese in that neighbourhood.

- The household survey is based on self-reporting. Therefore, subjective interpretations of questions/answer options, unreported answers and answer refusals cannot be ruled out.

ANALYSIS OF RESULTS

The household survey covers a household's characteristics, members, education level and livelihoods; housing, land and property issues; displacement; child health, labour and discipline; water and sanitation practices; and accessibility to subsidized education and health services as well as social development centres. It provides quantitative data on the following themes:

Population and housing:

- Proportion of overcrowding
- Proportion of owned housing
- Proportion of rented housing

Health:

- Care seeking for diarrhoea
- Health insurance coverage
- Awareness of subsidized health services
- Relevance of subsidized health services to the needs of the population
- Willingness to use subsidized health services
- Satisfaction with subsidized health services
- Recommendation of the public health services

Education:

- Primary school net attendance ratio
- Secondary school net attendance ratio
- Gender parity index (primary school)
- Gender parity index (secondary school)
- Out-of-school children (primary school age)
- Out-of-school children (lower secondary school age)
- Out-of-school children (higher secondary school age)
- Primary level of education of heads of households
- Secondary or equivalent level of education of heads of households
- Higher level of education of heads of households
- Awareness of subsidized education services
- Relevance of subsidized education services to the needs of the population
- Willingness to use subsidized education services
- Satisfaction with subsidized education services
- Recommendation of subsidized education services
- Homework support
- Rate of children enrolled in public schools
- Rate of children enrolled in private schools

Child protection:

- Violent discipline at home

- Violent discipline at school
- Marriage before the age of 15
- Marriage before the age of 18
- Young women aged 15-19 who are currently married
- Awareness of subsidized social services
- Child marriage rate for girls and boys
- Rate of children involved in either economic activities or household chores for girls and boys
- Proportion of children involved in hazardous types of labour
- Proportion of children mistreated by employer
- Relevance of subsidized social services to the needs of the population
- Willingness to use subsidized social services
- Satisfaction with subsidized social services
- Recommendation of subsidized social services

Youth:

- Proportion of 15–19 year olds who are pregnant
- Completion rate of primary education
- Out-of-school rate
- Child marriage rate (by ages 15–18)
- Percentage of 20–24 year olds who got married before the age of 18
- Adolescent population
- Percentage of 14–17 year olds who experienced psychological or physical punishment or discipline, at home, in the past month
- Percentage of 14–17 year olds who experienced psychological or physical punishment or discipline, at school, in the past month
- Percentage of 14–17 year olds who reported being bullied at least once in the last couple of months
- Percentage of 15–24 year olds engaged in labour
- Unemployment rate among 15–24 year olds
- Rate of youth working outside the neighbourhood

Livelihoods:

- Mean household monthly income in USD
- Households receiving remittance
- Overall poverty

Water, Sanitation and Hygiene (WASH):

- Use of improved drinking water sources
- Water treatment
- Use of improved sanitation
- Solid waste recycling

FIGURE 13. Awareness about, usage of and satisfaction with health services

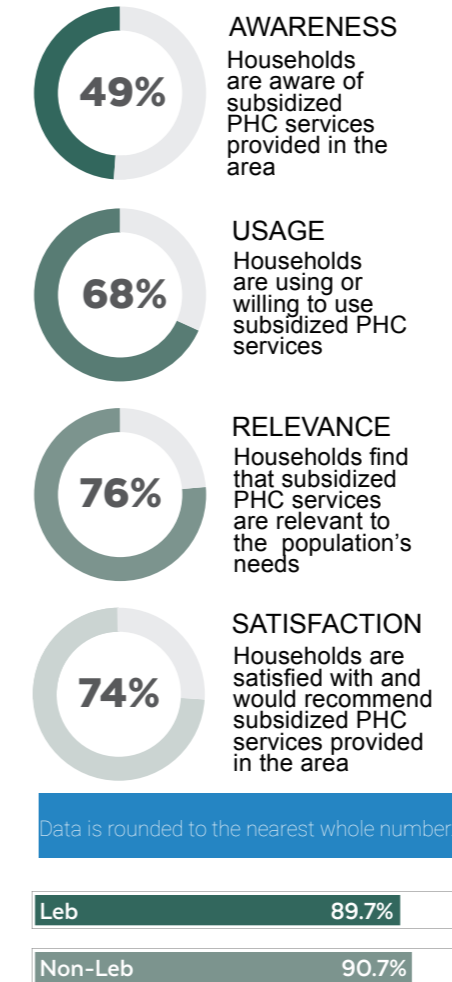
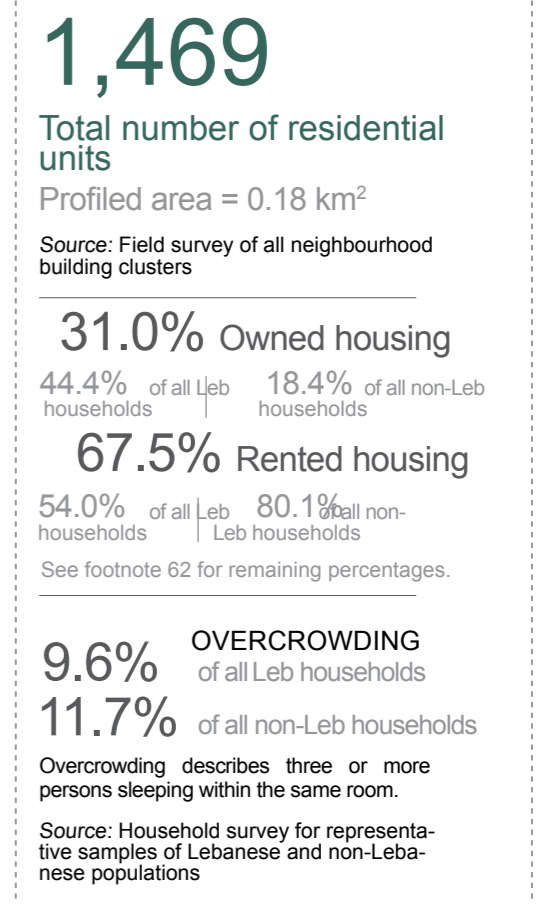
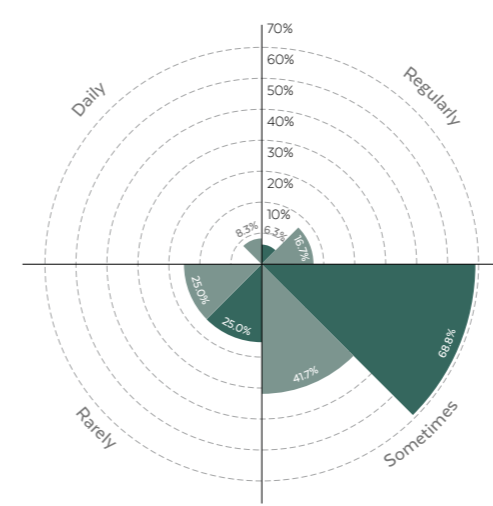


FIGURE 14. Unfurnished rental occupancy reported by surveyed households



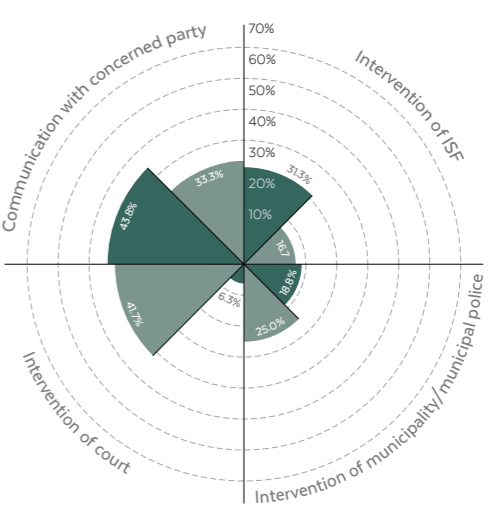
Frequency of disputes*



Other response: Missing answer.
Legend: Leb (dark green), Non-Leb (light green)

FIGURE 15. Frequency of disputes and how they are resolved

Methods of resolving disputes*



Other responses: Intervention of host community members, intervention of community dignitaries, seeking the help of local religious figures, no resolution/unfavourable decision or action, and intervention of United Nations agencies, INGOs and NGOs.

FIGURE 16. Key figures on residential units, housing issues and overcrowding



Urban Recovery Planning workshop in Jordan on the city of Aden© UN-Habitat (2019)

PARTICIPATORY TOOLS

In urban profiling, participatory tools are most often used to elicit knowledge from key urban stakeholders, such as government officials. Examples include mapping out implicit knowledge on stakeholder relationships, testing analysis assumptions and conclusions coming out of data collection activities, the exploration of root causes of unrest on the city. Urban profiles also utilize participatory tools to draw up urban recovery plans.

#5 CONFLICT AND STAKEHOLDER ANALYSIS

URF Pillars

Governance

Civil Society

Countries

Syria

Cities

Multiple, Raqqa

Agency

UN-Habitat

MAIN ANALYSIS QUESTIONS

1. Identify the stakeholders and analyse how their interactions affect or exacerbate conflicts, or have the potential to create new ones.
2. By conducting conflict and stakeholder mapping, and using conflict analysis methods, understand the root causes of the conflict in order to explore intervention entry points.

BACKGROUND ON THE TOOL

As urban profiles provide a snapshot of the conditions of a city following displacement and conflict, an analysis of the stakeholders, conflict dynamics and risks is vital to the development of a comprehensive profile. Mapping the conflict and its stakeholders enables the visualisation of all actors, the relationships and conflict issues between them, and explores potential entry points for intervention. It is part of the broader conflict analysis, and allows for a better understanding of the different actors or stakeholders in any setting, as well as their relationships, and the possible impact they will have in post conflict recovery scenarios. It will help you determine who you should keep informed and who you should work with closely.

The mapping exercise should be supported with conflict analysis, which is a systematic study of a conflict's profile, actors, causes and dynamics. It aids humanitarian, development and peacebuilding organisations to better understand the context in which they are working in and their role in it. There are three dominant schools of conflict analysis that are frequently used, these are the Harvard Approach, Conflict Transformation approach and Human Needs Theory. These are discussed in more detail in the following section.

STEP-BY-STEP IMPLEMENTATION

Step 1: Identify all stakeholders that are involved, both in peacetime and in wartime, enabling those in post conflict recovery interventions to not only focus on the 'known' conflict actors but also to explore indirect actors that may have had significant involvements in the conflict.

Step 2: Decide on graphic elements to use when mapping stakeholders. In the case of the Raqqa mapping exercise, as illustrated in Figure 17, actors were represented by varying circle sizes, the bigger the influence of the actor in the issue at stake, the bigger the circle. Different line styles can be used to illustrate the type of relationship between the actors.

Step 3: Have as many conversations/conduct as many interviews as possible and triangulate your sources by conducting desk reviews in conjunction.

Step 4: Use the dominant schools of conflict analysis to better understand the context of the conflict, its actors, causes and dynamics. Conflict analysis is influenced by different views of the world, and therefore is not an "objective" art.

The following are the three most frequently used conflict analysis methods used:

1) The Harvard Approach discusses discourse and narrative. Every conflict has a narrative, however they underlie actual positions that are linked to core interests. Understanding what lies beneath in order to help actors get out of the narrative and help to unpack the conflict.

2) Conflict Transformation Approach - transformation of the conflict to successfully deliver peace deals through a linear approach, e.g. a new constitution, a new coalition government, elections, etc. Transforming the conflict is about redefining the actions of the rebellious groups, identifying the actual needs and helping them to proactively engage and not to simply demand or overreach in their demands - that is the definition of the transformation of the conflict.

3) The Human Needs Theory (HNT) has been found to be the theory that best fits UN-Habitat's mandate as it also discusses the issues of infrastructure and services in great detail. In HNT, conflict is said to happen when a human need is not fulfilled, or the potential for humans to thrive has been impeded or blocked by, for example, a state, a dominant sect, a neighbouring power, etc, meaning that the root causes of protracted conflicts are going to persist. It explores the conditions for conflicts to wind down and transform the actual conversation.

LESSONS LEARNT AND HOW TO ADAPT

- The three schools of conflict analysis are not vastly different. All of them can be applied and are equally efficient, with both negatives and positives, but when it comes to methodology they all require a complex set of mixed methods. It is ideal to have a team with multiple talents, including journalists, ethnographers, social and political scientists and/or anthropologists to conduct desk reviews, interviews, triangulation of sources, to collect feedback and have interpersonal connections and talents. There must be people on the team who are capable of social analyses to really understand the root causes of the conflict and the stakeholders involved.
- Stakeholder and conflict mapping can result in encroaching into uncomfortable territory, due to the structure of cities, ethnocentric tensions and accumulative HLP grievances coming into play. One must be careful to do no harm, and to interview as many actors as possible, while also triangulating your sources.
- From the outset, it should be made clear that the whole “truth” is not represented in a conflict map. Rather, it is developed by a person(s) with a specific view of how the conflict has happened. A conflict map is also time-specific in that it will change over the time as the conflict unfolds or changes.
- A lack of clear understanding of the actors involved in the conflict can lead to an under or over estimation of the power some of them hold. This could not only inhibit the objectives of possible interventions, but could also fuel and/or escalate the conflicts.

EXPLANATION OF RESULTS

- UN-Habitat has conducted stakeholder mapping in Raqqa, Syria, which has undergone many changes in control since the start of the conflict, all of which have involved military operations and violence, each changing bringing completely new governance systems.
- The Urban Analysis Network consortium worked with different actors involved in the Raqqa response to develop a comprehensive conflict and stakeholder analysis map, which is illustrated in Figure 17.

- The actors involved, their interactions, their core interests and their connections to civil society actors were analyzed, and results were shared to achieve consensus. The exercise enabled humanitarian and resilience actors to navigate a sophisticated map of stakeholders, to analyse risks, and to coordinate responses with stabilizations programmes where relevant.

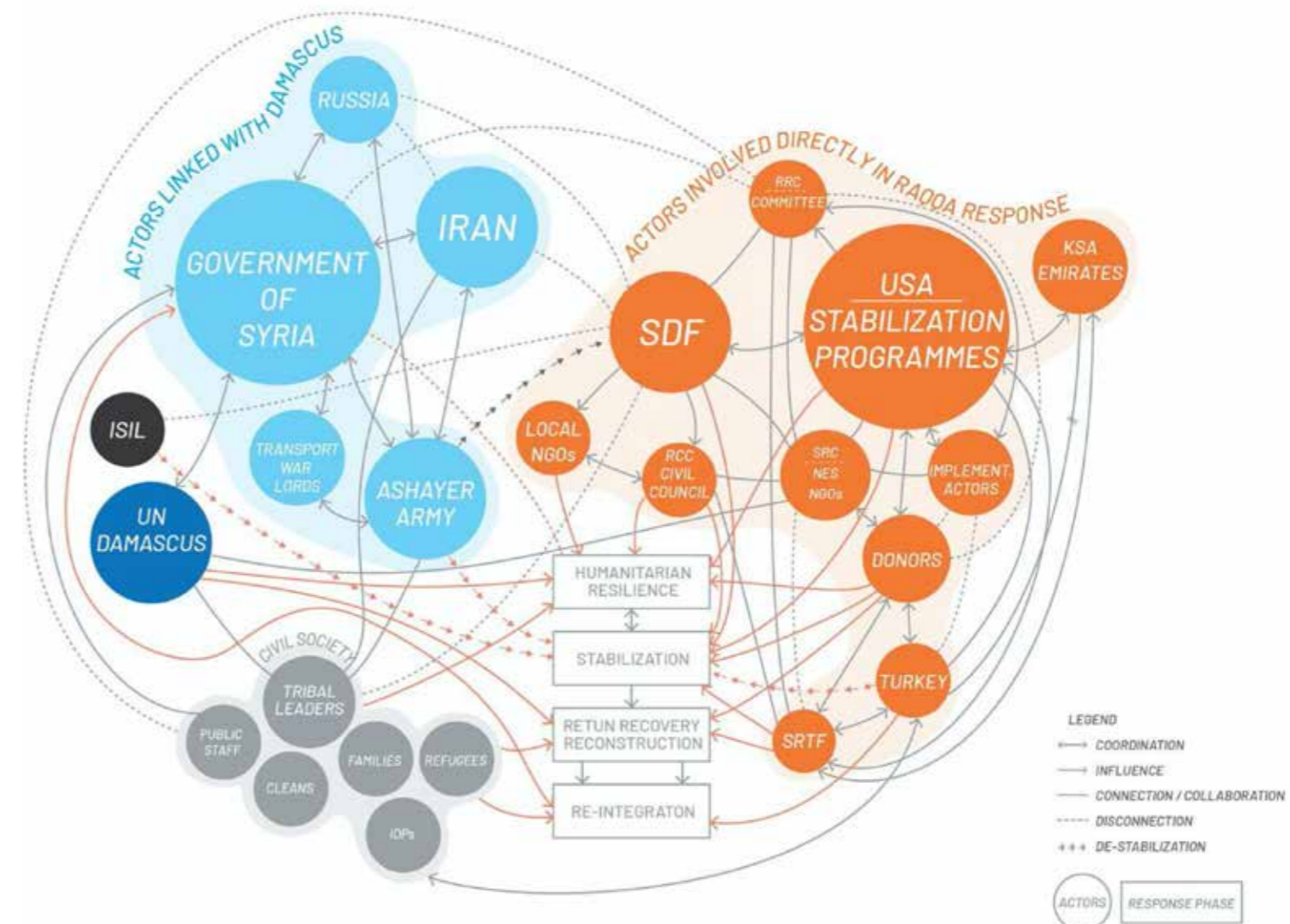


FIGURE 17. Raqqa stakeholder and conflict mapping exercise

#6 INVENTORY OF URBAN SERVICES AT THE NEIGHBOURHOOD LEVEL (CITY CAHIER)

URF Pillars



Countries

Syria

Cities

Multiple cities

Capacities required

GIS, consultations
facilitation

Agency

UN-Habitat

Partner

Local municipalities,
engineering syndicates

MAIN ANALYSIS GOALS

1. To provide a comprehensive overview on a city's governance structure, the linkage between the urban and rural areas while taking into consideration the population, spatial boundaries and land uses pre and post conflict.
2. Assess the functionality of urban systems (physical and operational status) and develops an inventory of urban services at the neighbourhood level.
3. Develop an action plan for a selected neighbourhood to prioritize and tackle the issues it faces.

BACKGROUND ON THE TOOL

Crises and unrest that impact cities in the Arab region can result in material damage to the urban fabric and/or severe population pressures due to displacement. The urban cahier identifies indicative data, figures and challenges facing the city in terms of increasing population and IDPs, damage to buildings, functionality of the urban system and services during and following crises in order to develop a comprehensive overview of the city. The data is refined to accommodate the diverse needs of the different stakeholders. This is followed by selecting a neighbourhood to implement a pilot project in with the aim of rehabilitating it.

The urban profile for the ancient city of Dar'a, which has been heavily impacted by protracted conflict, provides a comprehensive overview of its interlinked social, economic and built-environment challenges. It was developed by local actors with the help of consultations with the city's residents. The profile offers tangible area-based knowledge as a starting point for national and international agencies, donors and programmes to define and plan interventions and projects that are implementable and transformative in respect to established policies and coordination methods. This can be both for alleviating immediate needs and for longer-term sustainable urban development planning.

STEP-BY-STEP IMPLEMENTATION

Step 1: Introductory meeting with city officials to agree on the work plan (Ministry of Local Administration and Environment, Municipality, UN-Habitat).

Step 2: Training programme for municipality engineers, service technicians and the syndicate of engineers, on the topics of:

- An introduction to GIS (collecting data and basic information on the cities)
- Methods of monitoring, collecting and inserting data on damage in a database (field assessment forms and high resolution satellite images)
- Cartographic illustration of plans and maps

Step 3: The damage assessment involves the following:

- The collection and analysis of field damage data and accompanying cartographic illustration;
- Developing the damage assessment and analysis form (MoLAE, city council, engineers syndicate, UN-Habitat);
- Developing the rapid damage field assessment maps (area divisions, work teams and damage assessments);

- Insertion and analysis of damage data on the neighbourhood level (buildings and infrastructure);
- Prioritizing urban needs on the neighbourhood level (damages and local community needs).

Step 4: Consultation meetings with local community representatives such as neighbourhood committees, mkhateer and civil society representatives to define needs and priorities on the neighbourhood level.

Step 5: Development of the city and neighbourhood draft recovery plan.

Step 6: Recovery plan presentation and discussion with partners in preparation for the endorsement of the final plan.

LESSONS LEARNT AND HOW TO ADAPT

Low capacities of the municipality to reach its full potential and carry out its responsibilities regarding city management and planning, decision making, development and financing. There is also a lack of conductive communication with national, regional and local levels, and a lack of resources for collecting and sharing data on different levels.

There is a lack of functioning and sustainable municipal financing system that addresses threats and opportunities in an innovative manner, leading to large municipal expenditures and uninvested wealth resources, in times of great financial needs.

Further support is needed on a wider scale to prepare and continuously train elected city leaders, municipal staff and local stakeholders assume their changing responsibilities and functions and to gradually become financially and administratively independent. This should be done in parallel to supporting and equipping monitoring and analysis units to prepare recovery plans and define priorities within the city, and training the unit to include indicators to monitor and assess Municipal Development Plans. This is done through the gathering, management and secure use of transparent data, in a way that encourages sharing and the safe use of citizen and corporate data. Additionally, enable vertical and horizontal coordination between stakeholders at the regional, sub-regional, country and city levels to promote regional experiences sharing and knowledge consolidation.

Enable local financial management and fiscal decentralization by applying minimum restrictions on municipal development projects and training municipal staff on locating possible local economic opportunities and get the best out of Dar'a competitive advantages such as agricultural livelihoods, the tourism potential of the river valley, and the possibilities of the shared economy to leverage youth productivity. Prioritizing support for Dar'a livelihoods and economic development over the collection of taxes and fines as a source of municipal revenue.

EXPLANATION OF RESULTS

The city cahier provides data and analysis on the following indicators for the Dar'a city profile:

Damage assessments:

Level of damages (severe, partially damaged, slight or no damages) suffered by neighbourhood, data that has been collected with the assistance of the rapid assessment form shown in Figure 19.

Economy:

- Public employment
- Farming and animal breeding
- Emerging skills
- Industry
- Markets

Services:

- Education provision
- Healthcare provision
- WASH
- Electricity
- Solid waste management

Environment:

- Ecological zones/areas
- Pollution and contamination (enhanced solid waste management)
- Heritage

The above data then helps to inform the City Recovery Plan, as shown in Figure 18, for the rehabilitation of different areas of a neighbourhood and to identify the priority interventions for each.

#7 URBAN FUNCTIONALITY INDEX

URF Pillars



Countries

Syria

Cities

Multiple cities

Focal point

Koen van Rossum

Agency

IMMAP /
UN-Habitat

Capacities required

GIS and consultations
facilitation

MAIN ANALYSIS GOALS

The main objective of the Urban Functionality Index (UFI) is to identify relief, early recovery and recovery initiatives and to prioritize them by the number of affected persons and the potential returns in future funding plans.

BACKGROUND ON THE TOOL

The UFI is a composite measurement tool used to inform spatial prioritization in a city for short, medium, or long-term interventions, based on the accumulated impact of functionality of essential services and population movement. This area-based approach allows for better understanding of services and population movement, as well as spatial comparisons between neighbourhoods, supporting prioritization and ranking of responses at the neighbourhood and city level.

The tool is composed of a combination of indicators to describe the performance of essential services and the impact of population movement, using the official neighbourhood boundaries as a unit for the analysis.

The performance of essential services is measured through indicators related to population's reporting on the level of access to basic services, their quality and reliability. Responses to the questions in the data collection tools have been weighted to facilitate the ranking. The population indicators provide a metric for the impact of the crisis on population movements by neighbourhood, which utilises estimates on affected people who either stayed in, returned to or were displaced to the city that is being profiled.

The value of the index comes from quantifying the accumulated impact of multiple indicators at the neighbourhood level, which can be used to guide which parts of the city should

be prioritised for interventions and how different types of programmes can be combined to increase the impact. While the index presents a useful starting point for spatial analysis and prioritization, it cannot identify the kind of interventions needed or specific gaps within a sector, for which further analysis is needed as part of the overall methodology for urban profiling.

The UFI consists of the following:

a. Essential services index: provides a metric for the cumulative functionality of services essential for the neighbourhood's livability, namely health; education; water, sanitation and hygiene (WASH); solid waste management; electricity; markets; and safety. Performance of a service is defined in the index as the community's experience and perception of its level of accessibility, reliability, and quality.

b. Population index: provides a metric for the impact of the crisis on population movements by neighbourhood. The index factors in all affected persons who either stayed in, returned to, or were displaced to the city being profiled. The index summarises three indicators: neighbourhood population relative to city population, IDPs and returnees' population relative to neighbourhood population, and the resident population to neighbourhood population.

c. The response continuum: provides the starting point for short, medium- and long-term interventions. It applies weights to the cumulative results from both the services and population indices, to identify three types of responses. The results of combining the two indices are generally organised into three distinct categories: relief, early recovery, and recovery. The diagrams below show that when the population index is weighted more strongly, the results indicate a more relief-oriented (short-term) response, and when the services index is weighted more strongly, the results indicate a more recovery-oriented (long-term) response:

- **Relief-oriented response:** emphasizes immediate humanitarian response and the restoration of basic functions. Interventions target specific cases (for example vulnerable households) and aim at alleviating hosting stressors.

- **Early recovery-oriented response:** emphasizes medium-term interventions to restore the functionality of services and infrastructure, with less emphasis on short-term basic needs.

- **Recovery-oriented response:** emphasizes long-term interventions aimed at creating a conducive living environment. These tend to target areas, for example neighbourhoods, rather than households or specific population groups.

STEP-BY-STEP IMPLEMENTATION

Step 1. The services index:

The functionality of essential services is determined by key performance indicators as perceived or reported by the users of the service. It thus requires information collected directly from the community, either through household level data, or by collecting information from key informants. The following categories of indicators are included in the assessment and are needed to build the UFI:

- Access to the public service: refers to people's ability to obtain and benefit from goods and services. It often concerns the physical location of services (distances, road access, bridges, etc.), but can also be influenced by purchasing power, social discrimination or security issues that constrains movements.
- Quality and reliability of the public service: Quality refers to the degree of excellence, benefits, or satisfaction one can enjoy when consuming a good or a service. It may depend on the number of people with the required skills and knowledge to perform a given service or produce a good, but is also influenced by reliability (consistency of quality over time), diversity and security of the provided service or good (i.e. water quality, sterilization of medical tools, etc).
- Impact of the non-functional service on the affected populations (proxy indicators were used through KI interviews if HH level data is not accessible)

To determine the functionality at the neighbourhood level, the index produces a score by neighbourhood that describes the accumulated impact of multiple indicators, which can then be used to direct locational prioritization. A weighting of responses to each question was developed to combine the indicators. Weighting for each question was determined in consultation with experts and based on the profiling exercise pilots. Analysis of the answers provided for each question related to quality, access, reliability or impact of the non-functional service in the population, can also help the sector highlight a gap in service provision, or will inspire the type of needed response.

The service index adopts a three-point scale to weight each service, where (0) reflects the worst-case scenario - poor functionality if at all functional, and where (2) reflects the

best-case scenario - a functional service, based on minimum standards. The overall neighbourhood UFI score is derived from the cumulative score of all the services.

Services Index Score	Interpretation
0.00 – 0.69	Poorly functional (if at all)
0.70 – 1.39	Partially functional
1.40 – 2.00	Functional

Step 2. Population index:

Estimation of the population, and the disaggregation of population estimates by demographic characteristics (age, sex, gender, and displacement status) is an essential component in the assessment. The population Index defines population as affected people who either remained, returned to or were displaced to cities in crisis. It provides estimates on IDPs, returnees and residents' and how they are distributed in the city at neighbourhood level. It does not factor in density due to the limited access to pre-conflict density data and current housing-related figures. Hence, the population index allows for the identification of neighbourhoods with:

- Concentration of IDPs and returnees (potential vulnerable populations)
- Concentrations of resident populations (populations that did not leave their neighbourhoods)

The population index combines three indicators:

- Neighbourhood population relative to average neighbourhood population in the city: defined by measuring the neighbourhood population relative to the distribution of the city population.
- Proportion of resident population per neighbourhood: defined by measuring the resident population relative to the total population on the neighbourhood level.
- Proportion of IDPs and Returnees per neighbourhood: defined by measuring the IDPs and returnee population relative to the total population on the neighbourhood level. IDPs are non-residents who were displaced from other cities, while returnees are residents who left the city and later returned to their city of origin.

LESSONS LEARNT AND HOW TO ADAPT

To contextualize and adapt the UFI tool results it cannot be used alone, as the descriptive results should be integrated with other relevant results from the profile's urban analysis. This is achieved through having an explanatory analysis that looks for associations, correlations and more generally for connections between observations and measurements. Identifying relationships is an important part of the analytic process because it prepares for moving from a simple description of the population and urban conditions to explanations of why and how things happened as they did. This analysis is critical as it allows one to identify the causes of current conditions, which should be addressed during the response.

Lessons learnt while implementing the UFI methodology:

- Sometimes all the neighbourhoods for a specific city show the same functionality level, which fails to provide an additional value or prioritisation for any neighbourhood. So, adding more contextualized indicators might be of an added value.
- For large cities with a large number of neighbourhoods, a combination of several neighbourhoods with similar characteristics is encouraged while adopting the boundaries officially suggested by authorities in charge of the city to facilitate identifying patterns and analysing the index findings.
- Sometimes the index findings could contradict with the other profile analysis layers. Such contradictions should be highlighted in the response interpretation narrative for they trigger a need for further exploration by relevant actors as they initiate their programming strategies.
- The population index does not factor-in the population density change; this metric fails to reflect the impact on the population change. For example, decreased population does not necessarily reflect better living conditions, this can be clearly seen in depopulated neighbourhoods.
- In cases where neighbourhood-level population is inaccessible, the population index should follow the same population projections adopted in the demographics section of the profile.

• In cases where specific population data is missing, such as IDPs and returnees' figures, the population index section should clearly mention the limitation of the relief response prioritisation. Also, it is important to find a way that makes the methodology work accurately even with the missing data.

ANALYSIS OF RESULTS

The response continuum offers findings to inform joint programming related to relief, early recovery, recovery or longer-term interventions. This enables actors to prioritize and phase their interventions accordingly, while ensuring coordination and complementarity of efforts. It does so by identifying neighbourhoods most affected by the accumulated impact from both the functionality of essential services and population movement, and then applying weights to these in order to highlight priority neighbourhoods specific to each of the three types of responses: relief, early recovery and recovery. The table to the right is an example of how the population and services indices are combined and weighted accordingly, as well as the maps, shown below the table, that can be produced to present these results.

FIGURE 21. Response continuum UFI score by neighbourhood

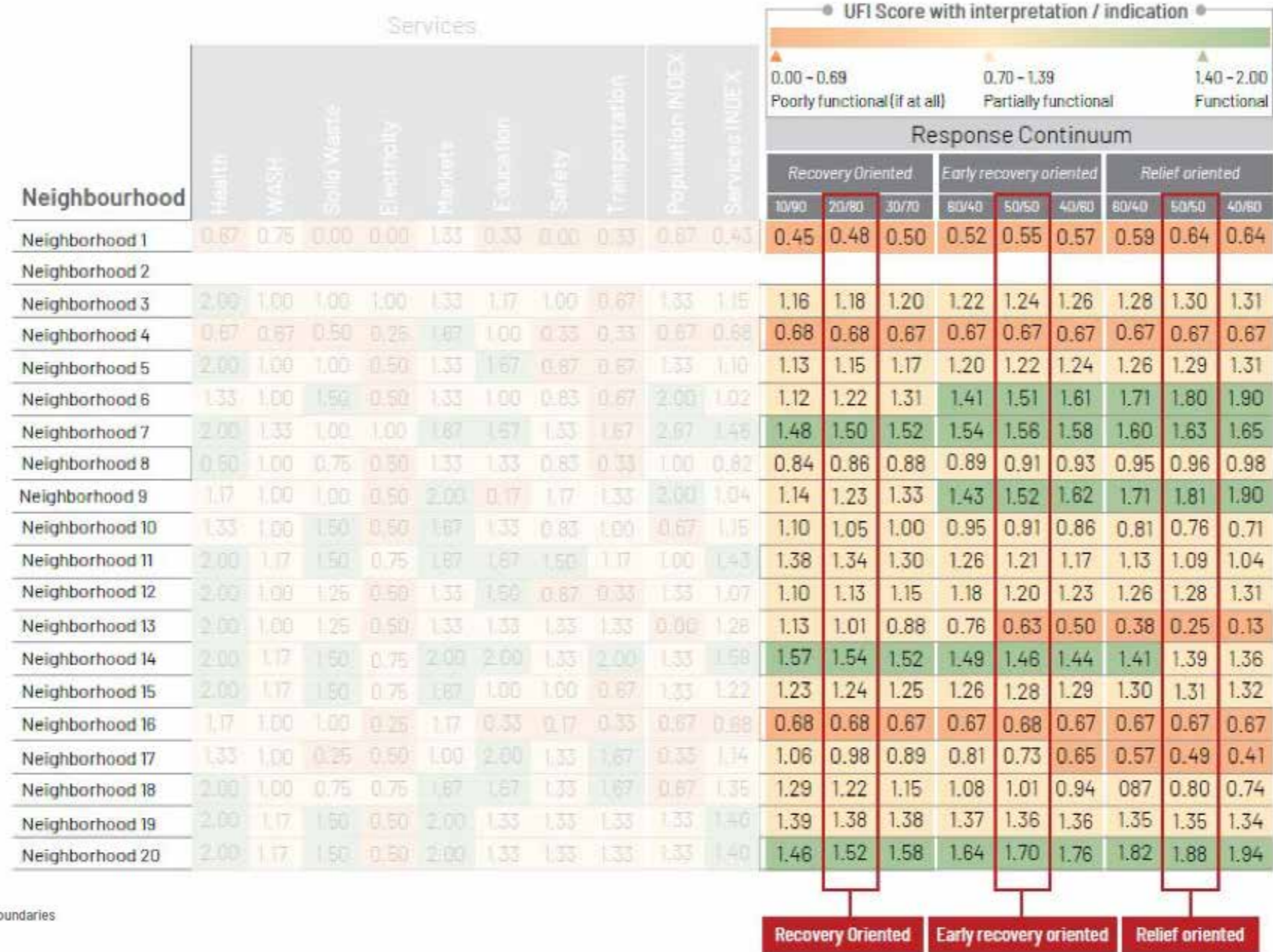
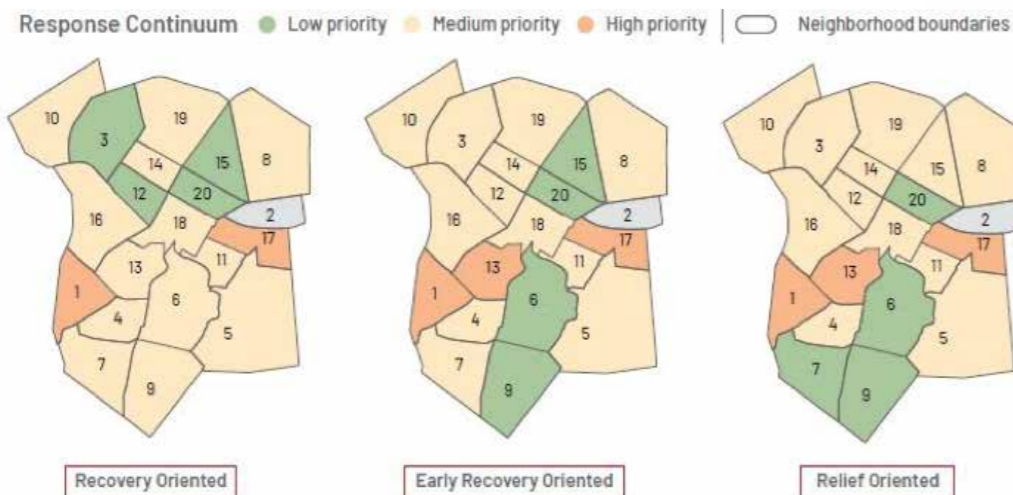


FIGURE 20. The response continuum



#8 COMMUNITY BASED PLANNING FOR RAPID URBAN PROFILING

URF Pillars



Countries
Somalia

Date of implementation
2018-2019

Cities
Kismayo, Baidoa, Hudur, Dollow, Garowe, Jowhar, Beledweyne and Balcad

Capacities required
GIS, consultations facilitation

Analysis duration
+/- 4 months

Focal point
Pablo Fernandez Maestre/
Sophos Sophianos

Agency
UN-Habitat

Partners
IOM, UNDP, local and state authorities and Federal Government of Somalia

MAIN ANALYSIS GOALS

1. What are the links between the priority needs of communities affected by massive displacement and the local development potential to unlock resources for the humanitarian-development nexus in a short time?
2. How can community based planning be improved so that it enables social and spatial inclusion?

BACKGROUND ON THE TOOL

This tool is part of the Midnimo (meaning unity in Somali) Programme which is entitled "Support for the Attainment of Durable Solutions in Areas Impacted by Displacement and Returns in Jubaland and South West States". The programme aims to enhance local leadership capacities to facilitate the sustainable return, recovery, social integration and peaceful co-existence of displacement affected returnees, other migrant groups and host communities in Jubaland and South West States.

The tool consists of community based planning (CBP), a participatory, bottom-up planning process in which host communities and vulnerable socio-economic groups such as IDPs, returnees, women and youth can analyse their current situation. This enables them to develop a shared vision to prioritize development initiatives that facilitate social cohesion, peaceful coexistence and fulfil their basic needs and rights, particularly access to basic social services.

The main outcome of community-driven consultations is the Community Action Plan (CAP), a provisional District Development Plan endorsed by local and state authorities. The CAP is a community-driven process that is led by the government, and is closely tied to the local and state government's efforts to respond to the most urgent needs of the communities with the aim of strengthening the humanitarian-development nexus.

STEP-BY-STEP IMPLEMENTATION

Step 1: Preplanning - IOM, UNDP and UN-Habitat as joint implementing partners conducted pre-planning meetings with the state authorities to agree on the framework of the project, objectives and steps of the CBP process;

Step 2: Formation and training of core facilitation team - District Commissioner Office nominates the Core Facilitation Team (CFT) members to become facilitators and intermediaries for the participatory community planning, implementation and monitoring of activities. The CFT is composed of civil society members as well as public officers;

Step 3: Community consultations - with different socio-economic groups are conducted over a period of five days;

Step 4: Community Action Plan - produced, reviewed and endorsed by the community, local and state authorities;

Step 5: Spatial analysis and recommendations - for long term sustainable development is developed and complements the CAP to unlock additional resources for implementation.

LESSONS LEARNT AND HOW TO ADAPT

- In contexts such as Somalia where there is great social instability, it is key to involve the community and to let them analyze the city and the territory that they live in. Due to the high importance of the community engagement component, CBP is an important tool.
- To use this tool in different countries/contexts, it is necessary to understand the social dynamics and the different groups present. Following this, a representative group of society be formed to carry out the next phases of this tool and thus obtain a realistic and precise vision of the area being analysed.
- CBP is a very effective tool for collecting information for Rapid Urban Profiling in contexts where data is not available, local and state authorities have just been established and a formal planning system does not yet exist. CBP also empowers communities, including vulnerable groups to demand and actively participate in development initiatives that are relevant to them.
- Participatory processes such as CBP are crucial for the success of the Somalia Resilience and Recovery Framework and the National Development Plan.

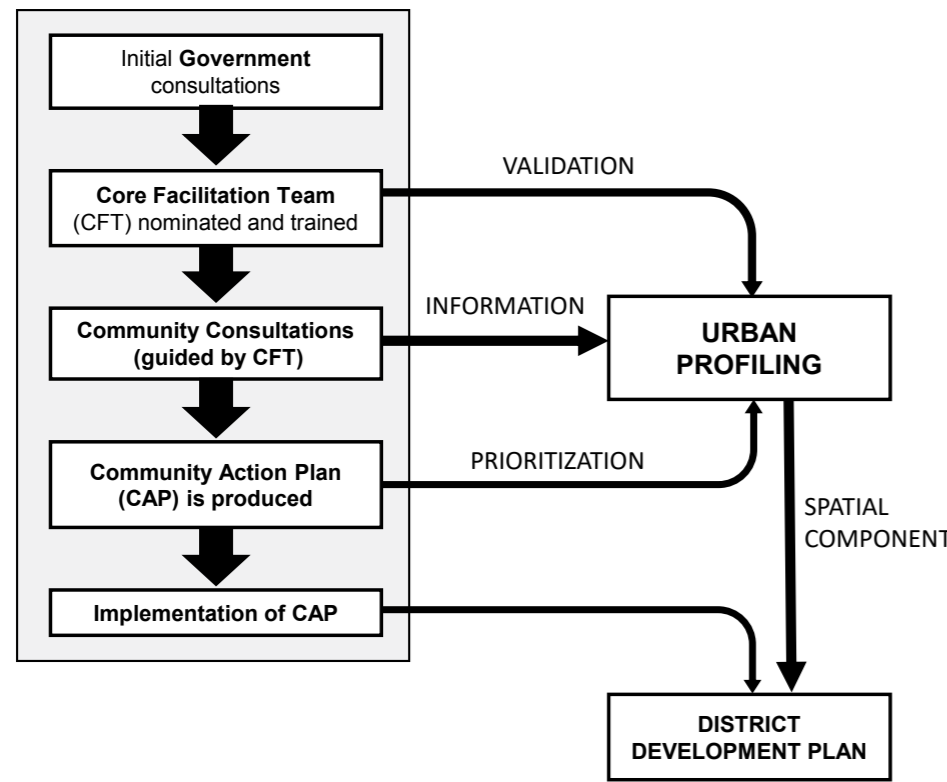


FIGURE 22. Community consultation and urban profiling process

GOAL 1: Improved public infrastructure and facilities	
STRATEGY	PROJECTS
Construction of new public infrastructure	<ul style="list-style-type: none"> Construction of women's centre for peace Construction of Adale courthouse Construction of Mogdishu – Adale road Construction of fishery development centre
Rehabilitation of old public infrastructure	<ul style="list-style-type: none"> Rehabilitation of Adale lower primary school Rehabilitation of Adale upper Primary and Secondary School Rehabilitation of the Veterinary Department in Adale
GOAL 2: Improved health services	
STRATEGY	PROJECTS
Construction of new health centres	<ul style="list-style-type: none"> Construction of Maternal and child health (MCH) facility for the outskirts villages
Rehabilitation of old health infrastructure	<ul style="list-style-type: none"> Rehabilitation of the main hospital in Adale
Sanitation activities	<ul style="list-style-type: none"> Sanitation activities along the Adale seashore Sanitation activities in the villages
GOAL 3: Improved livelihoods	
STRATEGY	PROJECTS
Initiation of self-help, income-generating projects	<ul style="list-style-type: none"> Business top-up grants Initial capital for start-ups Community dialogue/reconciliation events for peaceful coexistence between the residents
Fishing and livelihood development	<ul style="list-style-type: none"> Community mobilization and outreach Capacity building training on fishing and livelihood skills Distribution fishing facilities, fishing gears, accessories, and cooling equipment/ materials Training on group forming and basic business management skills Training workshop on loan management and saving for women groups Provide a cooling system using solar energy Training workshop on fishery development Training for women on fish cooking and marketing skills Public awareness-raising /campaigns on reducing river garbage disposal

FIGURE 24. Prioritised strategies and projects in Adale (2018-2019)

EXPLANATION OF RESULTS

Urban profiling is directly linked to CBP. By spatially analysing the information collected in the CAP, local authorities are in a better position to understand challenges and to develop holistic, sustainable and evidence-based development policies. This process makes local and state authorities more accountable to their constituents and it also entails capacity development for public officials.

Through CBP, the following types of information can be collected:

- Community livelihood analysis per each socio-economic group
- Conflict mapping to analyse the root causes
- Analysis of community resources through mapping of service providers and assets
- Community SWOT analysis
- Community's visions, goals, strategies and priority projects (see Figure 24. for examples)

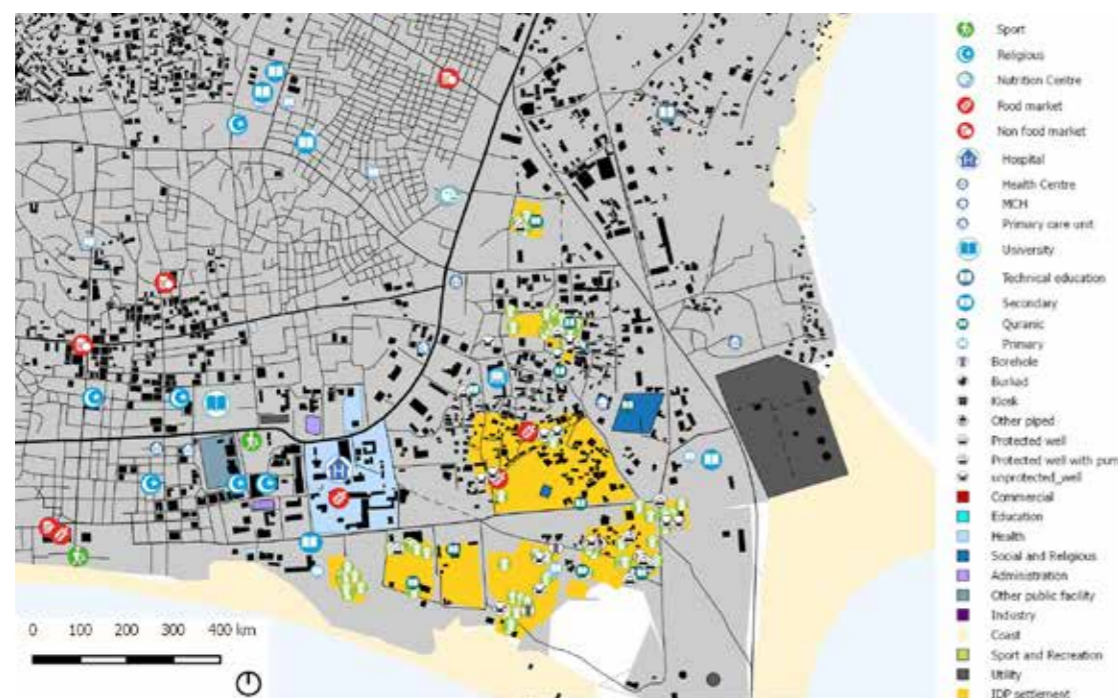


FIGURE 23. Basic urban services map, Kismayo Urban Profile



FIGURE 25. Proposed interventions as per CAP, Hudur

#9 NEIGHBOURHOOD PROFILING FOCUS GROUP DISCUSSIONS (FGDS)

URF Pillars

Economy
Infra & Services
Housing
Governance
Civil Society

Countries
Lebanon

Cities
N/A

Analysis duration
N/A

Agency
UN-Habitat
Lebanon

Date of implementation
2016-2020

Capacities required
Discussion moderation
and mapping

Focal Point
Nanor Karageozian

Partners
UNICEF, (I)NGOs
and municipalities

MAIN ANALYSIS GOALS

Focus Group Discussions (FGDs) are held to gather qualitative data that draws upon attitudes, feelings, beliefs, experiences and reactions of a neighbourhood’s inhabitants.

BACKGROUND ON THE TOOL

UN-Habitat and UNICEF neighbourhood profiles contain original spatialized data and analysis on over 30 disadvantaged neighbourhoods in Lebanon, contributing to an understanding of host and refugee vulnerabilities as they converge in sub municipal pockets of urban deprivation.

Neighbourhood profiles offer a cohort-stratified, multisectoral evidence base on features of and associations—if not causal links—between residents and their social, economic and built environments. Profiles cover multiple sectors and issues, including context; governance; population; safety and security; health; education; child protection; youth; local economy and livelihoods; buildings; water, sanitation and hygiene (WASH); electricity; and accessible and open spaces.

A total of around 16 FGDs are conducted with Lebanese and non-Lebanese; female and male; child, youth and adult participants. In addition, FGDs are held with Lebanese and non-Lebanese caregivers, parents of children with disabilities and elderly people.

Group	Type	
1	Children	Lebanese Females Non-Lebanese Females Lebanese Males Non-Lebanese Males
2	Youth	Lebanese Females Non-Lebanese Females Lebanese Males Non-Lebanese Males
3	Male Adults	Lebanese Non-Lebanese
4	Female Adults	Lebanese Non-Lebanese
5	Caregivers	Lebanese Females Non-Lebanese Females
6	Parents of children with disabilities	All gender, all cohorts
7	Elderly	All gender, all cohorts
TOTAL	16 FGD types	

FIGURE 26. Different types of FGDs

STEP-BY-STEP IMPLEMENTATION

Step 1: A team of five facilitators and four note takers is formed to conduct the FGDs.

Step 2: A one-day training is given to all team members by an experienced qualitative researcher with the following main objectives:

- (i) Achieve greater awareness and understanding on the importance of the study and applying ethical considerations in the field;
- (ii) Thoroughly review and discuss every question in the used discussion guides;
- (iii) Practice asking questions through review sessions and role-playing scenarios;
- (iv) Learn and demonstrate proper interview conduct and report on field implementation;
- (v) Learn how to write about reflections from the discussions and corresponding transcripts using pre-set templates.

Step 3: Venues for data collection are selected in coordination with identified community mobilizers in a neighbourhood.

Step 4: Information about the objectives of each FGD is provided at the beginning of the session. Confidentiality and anonymity are assured throughout the discussion. Each participant is asked if they consent to participate and if they agree to be recorded using a recorder. If participants refuse to be recorded, a note taker takes notes to capture the expressed perceptions and viewpoints.

Step 5: Finalized FGDs are transcribed into English and allocated a unique identifying number. Collected data is analysed using directed content analysis. Accordingly, each transcript is divided into condensed meaning units. Each condensed unit is labelled with a code. Similar codes and those having the same meanings are grouped together.

LESSONS LEARNT AND HOW TO ADAPT

- Piloting the FGDs is necessary and will lead to revising or deleting some questions and rephrasing sensitive ones.
- FGD inputs are translated from the source language by a native bilingual speaker. Every effort is made to ensure the accuracy of the translation.
- FGDs are conducted with a sample of non-Lebanese residents, who are referred to as such. In some neighbourhoods, it happens that the majority of non-Lebanese belong to one nationality. However, the comprehensive population count by residential unit collects data on building inhabitants by nationality cohort. Hence, there is an interplay in the use of the term “non-Lebanese” and a specific nationality in the report writing.

ANALYSIS OF RESULTS

FGDs provide qualitative data on the following themes:

• Safety and security:

- Perceptions of the neighbourhood’s safety by nationality cohort, age and gender.
- Mapping of unsafe areas within and immediately bordering the neighbourhood by nationality cohort, age and gender.
- Community relationships, conflicts, relations with law enforcement bodies, drug abuse, and attitudes towards refugees/displaced people.

• Health:

- Health status of the Lebanese and non-Lebanese populations.
- Awareness about, usage of, relevance of and satisfaction with subsidized primary healthcare services.

• Education:

- School dropouts and children who have never attended school.
- Information and perceptions on child labour, child marriage, and the use of violence to discipline children at home, school and in the streets.
- Children with disabilities: count (if available), types of reported disabilities, challenges faced, support available, provision of education and healthcare services, suggestions for improving well-being).

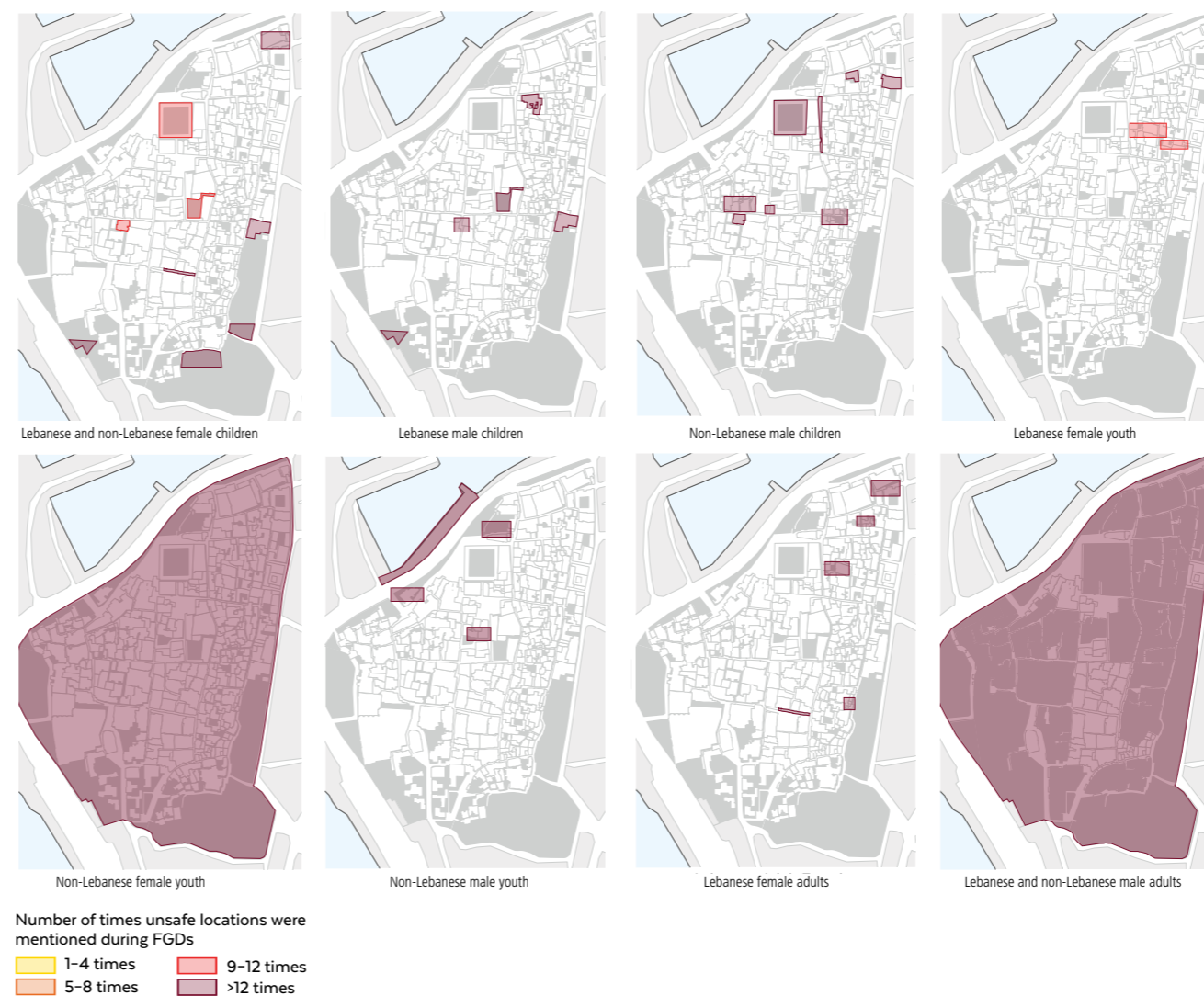
• Youth:

- Information and perceptions on youth employment, vocational training programmes and safety and security-related issues.
- Male, female and elderly employment and livelihoods issues (opportunities, challenges, preferred jobs, vocational training, women’s role in society, etc.).

• Basic urban services:

- WASH practices at a household level (drinking water sources, water treatment methods, type of sanitation facility).
- Service provision/management of basic urban services.
- Street-level assessment of solid waste accumulation and collection, management practices of residents/households (including recycling).

FIGURE 27. Reported unsafe areas within and immediately bordering the neighbourhood



#10 NEIGHBOURHOOD PROFILING KEY INFORMANT INTERVIEWS (KIIS)

URF Pillars



Countries

Lebanon

Cities

N/A

Analysis duration

N/A

Agency

UN-Habitat
Lebanon

Date of implementation

2016-2020

Capacities required

Discussion moderation
and mapping

Focal point

Nanor Karageozian

Partner

UNICEF, (I)NGOs
and municipalities

MAIN ANALYSIS GOALS

1. Key information interviews (KIIs) are used to collect in-depth information, including opinions from lay experts on the nature and dynamics of community life.

BACKGROUND ON THE TOOL

UN-Habitat and UNICEF neighbourhood profiles contain original spatialized data and analysis on over 30 disadvantaged neighbourhoods in Lebanon, contributing to an understanding of host and refugee vulnerabilities as they converge in sub-municipal pockets of urban deprivation.

Neighbourhood profiles offer a cohort-stratified, multisectoral evidence base on features of and associations—if not causal links—between residents and their social, economic and built environments. Profiles cover multiple sectors and issues, including context; governance; population; safety and security; health; education; child protection; youth; local economy and livelihoods; buildings; water, sanitation and hygiene (WASH); electricity; and accessible and open spaces.

KIIs are conducted one-on-one with main stakeholders living in and/or linked to the neighbourhood who have first-hand knowledge of the location. KII respondents typically include the following:

- Decentralized government stakeholders: mukhtar(s), municipal council member(s), a municipal police representative and a municipal engineer;
- Representatives of (international) non-governmental organizations (I)NGOs that are/were active in the neighbourhood;
- Social service actors: education, health and social development centres (SDCs) affiliated with the Ministry of Social Affairs;
- Business holders from key industries operating in the local economy
- Key religious and political influencers (if available).

STEP-BY-STEP IMPLEMENTATION

Step 1: After mapping the key informants to be interviewed, a team of two (an interviewer and a notetaker) are formed to conduct the KIIs (in some KIIs, the interviewer also serves as the notetaker). A one-day training is given to the interviewers with the following main objectives:

- (i) Achieve a greater awareness on and understanding of the importance of the study and applying ethical considerations in the field;
- (ii) Thoroughly review and discuss every question in the interview guide;
- (iii) Practice asking questions through review sessions and role-playing scenarios;
- (iv) Learn and demonstrate proper interview conduct and report on field implementation.

Step 2: Prior to the interview, the interviewee is asked for consent and for approval to record the interview. If the interviewee rejects, the interviewer/notetaker takes notes during the interview. Time and place for data collection is decided at the convenience of the interviewee. At the start of each interview, the key informant receives detailed information about the objectives of the interview and is once again asked to provide oral consent. Confidentiality and anonymity are assured throughout the interview, which lasts around 30 to 45 minutes. Each KII is transcribed into English and given a unique identifying number and each transcript is divided into condensed meaning units. Each condensed unit is labelled with a code. Similar codes and those with the same meanings are grouped together.

LESSONS LEARNT AND HOW TO ADAPT

- Services are initially identified by mapping existing facilities within the neighbourhood and its catchment area (based on secondary references and the field assessments—See tool “#3 Neighbourhood Profiling Field Assessments”). Snowball sampling is used to identify additional key informants; for example, interviewed service providers would note other service providers that are commonly visited by neighbourhood residents.
- After receiving unidentified location references from key informant interviews, a map with landmarks is developed to be used during KIIs to locate any referenced area.
- The information provided by key informants is typically based on their personal knowledge and observations of a neighbourhood. Therefore, exaggeration, underestimation, inaccuracies or incomplete data in KII answers cannot be ruled out and need to be taken into consideration during content analysis. Some KII questions are repeated in focus group discussions, field assessments and/or household surveys (see other neighbourhood profiling tools listed in this toolbox) for the purpose of cross-cutting or triangulating data across different qualitative and quantitative methods/sources.
- KII inputs are translated from the source language by a native bilingual. Every effort is made to ensure the accuracy of the translation.
- With key informants, it is important to mention that while anonymity and confidentiality of participants is protected at any point in all activities by the careful treatment of personal data, generic information that pertains to services offered by a facility and/or activities an organization has implemented in a neighbourhood are published.

ANALYSIS OF RESULTS

KIIs with governance and social service stakeholders provides qualitative-based data which is analysed as illustrated below:

- Decentralised government stakeholders: Interviewing the municipality a neighbourhood falls under provides information about the former's profile, capacity and services, in addition to its knowledge of and experience/involvement in the neighbourhood. The data is used to draft a narrative of the municipality's financial or human-resource limitations and the impact of socio-political events on municipal governance in the neighbourhood.

KIIs with neighbourhood or village-level state representatives (mukhtars) also help provide data on the neighbourhood's history, community, dynamics, services, population, registration records and social change. The gathered data is analysed to assess the role of the interviewed mukhtars in the neighbourhood, their relationship with the municipality and other formal actors, as well as their knowledge of challenges the residents face.

- Religious and political leader(s): These KIIs provide knowledge of the community's common problems, social dynamics, cultural background and activities from the perspective of religious and political leaders who are active or influential in a neighbourhood. This helps analyse their non-state governance role through learning about their profile, services/activities provided, discourse in case of social tensions/community disputes, and relationship with the residents.

- International and local non-governmental organisations ((I)NGOs): The KIIs cover a (I)NGO's profile, interventions, targeted groups, means of reaching out, relationship with the municipality and other stakeholders, and project-implementation challenges. This information helps understand the contribution of non-governmental organisations in service provision in disadvantaged areas where municipalities can be limited in financial assets and human resource capacity.

- Social Services: Interviewing public schools, primary health care centres (PHCCs), and Social Development Centres (SDCs) of the Ministry of Social Affairs provides data on the service provision of subsidized education, health and social services (e.g. facility's capacity, service accessibility, beneficiaries, etc.).

- Business holders from key industries: Key informants operating in the local economy are interviewed regarding their observations for indicative socio-economic topics and events regarding the surveyed area and its surrounding markets. This data helps analyse contextual economic interrelations, perceptions of the souk economic situation, reasons for shops vacancy, impressions on business durability, impressions on enterprises trends, commercial/souk committee role and needs (if available). It also helps learn the challenges a key informant's business industry faces with respect to business growth, customers catchment, female employment, perception of child labour, etc.

FIGURE 28. Information on health facilities

IDii	Name	Catchment area	Accessible for					Accreditation		Guarantors	Consultation fee (LBP)				Immunization fee (LBP)				Malnutrition management fee (LBP)													
			Leb	Syr	PRL	PRS	Oili	Leb	Syr		PRL	PRS	Leb	Syr	PRL	PRS	Leb	Syr	PRL	PRS												
			{free-5,000} {5,000-18,000}	{free-5,000} {5,000-18,000}	{free-5,000} {5,000-18,000}	{free-5,000} {5,000-18,000}	{free-5,000} {5,000-18,000}	{free-5,000} {5,000-18,000}	{free-5,000} {5,000-18,000}		{free-5,000} {5,000-18,000}	{free-5,000} {5,000-18,000}	{free-5,000} {5,000-18,000}	{free-5,000} {5,000-18,000}	{free-5,000} {5,000-18,000}	{free-5,000} {5,000-18,000}	{free-5,000} {5,000-18,000}	{free-5,000} {5,000-18,000}	{free-5,000} {5,000-18,000}	{free-5,000} {5,000-18,000}	{free-5,000} {5,000-18,000}											
Clinic/Dispensary/PHCC																																
1	El-Hariri Dispensary	• Old Saida						No		• Hariri Foundation	3	7	3	7	3	7	3	7	3	7	3	7	3	7	3	7	3	7	3	7	3	7
9	El-Najda El-Chaabiyah PHCC	• Old Saida • Saida City • Saida sub-urbs						No		• Local community	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
23	El-Wastani Dispensary	• Old Saida • Saida City • Saida sub-urbs • Barja • Beirut • El-Ghaziyeh						No		• MoPH • YMCA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Hospital (Secondary Healthcare Centre)																																
29	Saida Governmental Hospital	• Old Saida • Saida City • South Lebanon						-		• MoPH • NSSF • Lebanese Army • UNRWA • United Nations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

FIGURE 29. Service provision in interviewed health facilities by type

	El-Hariri Dispensary	El-Najda El-Chaabiyah PHCC	El-Wastani Dispensary	Saida Governmental Hospital
Consultations	3	3	3	-
Medications	3	3	3	-
Examinations	3	3	7	-
Laboratory tests	3	3	3	-
Vaccinations	3	3	3	-
IYCF	3	3	7	-
Nutrition screening & management	3	3	7	-

FIGURE 30. Service provision in interviewed health facilities by medical specialty

	El-Hariri Dispensary	El-Najda El-Chaabiyah PHCC	El-Wastani Dispensary	Saida Governmental Hospital
Allergy/Immunology	3	7	7	7
Cardiology	3	3	7	7
Dermatology	3	3	7	3
Ear/Nose/Throat	3	3	7	3
Endocrinology	3	7	7	3
Gastroenterology	3	3	7	3
General medicine	3	3	3	3
General surgery	7	7	7	3
IMAM	3	3	7	3
Mental health	7	7	7	7
Neurology	3	3	7	3
Ophthalmology	3	3	7	3
Oral health	3	3	7	3
Orthopaedics	3	3	7	3
Paediatrics	3	3	3	3
Physiotherapy	7	3	7	3
Psychological support	3	3	3	3
Reproductive health	3	3	3	3
Urology	3	3	3	3



Satellite damage assessment in Al Hodeidah © UN-Habitat (2019)

GIS-BASED TOOLS

GIS-based tools, such as satellite damage assessments, nightlight assessments, accessibility assessments or building counts are useful to produce novel data sets covering a complete city. Whereas the utilisation of survey-based tools scales poorly due to the high amount of resources required, GIS-based tools have a much lower cost after the initial investment in base data sets, such as up-to-date satellite imagery. Another key advantage of GIS-based tools is that they can be used areas that are poorly accessible. A disadvantage of GIS-based tools is that their use is most suitable for analysis of the status of hard assets, such as infrastructure, housing and land. The use of GIS-based tools should therefore always be accompanied with tools that address more soft 'people-centered' aspects.

#11 SATELLITE DAMAGE ASSESSMENT

URF Pillars

Economy

Infra & Services

Housing

Countries

Yemen, Libya, Iraq, Palestine, Syria

Date of implementation

Multiple years

Cities

Multiple

Capacities required

GIS and access to satellite imagery

Analysis duration

Depends on size

Focal point

Ivan Thung

Agency

UN-Habitat

Partner

UNOSAT, JRC, UNESCO

MAIN ANALYSIS QUESTIONS

This tool aims to understand the impact of conflict to structures in the city. Results can be analysed on several levels; from building level to neighborhood to city level.

BACKGROUND ON THE TOOL

Cities in conflict often see high damages to buildings as a result of airstrikes, and ground combat. When there is low accessibility within an affected city, satellite damage assessments have been used to great effect to understand the scale (reliable on the level of order of magnitude) of damages of structures. This method has been used across the region (including in Libya, Yemen, Syria, Iraq and Palestine) to understand what neighbourhoods have been affected by clashes. During conflict, periodic damage assessments may be done to understand progression of damages over time.

STEP-BY-STEP IMPLEMENTATION

There are two main implementation modalities for developing damages assessments; outsourced or in-house. In several instances, UN-Habitat has outsourced damage assessment to partners such as UNOSAT and JRC. This produced reliable results, however it is usually more costly than in-house production of the analysis as it requires the acquisition of satellite imagery. This can be expensive and requires close supervision and training of the staff that conduct the analysis. Recently, some initiatives have been undertaken to automate damage assessments with machine learning algorithms. However, so far these results have proven to be unreliable.

Step-by-step in-house implementation involves the following:

Step 1: Acquiring recent satellite imagery with sufficient resolution (25cm is considered to be ideal);

Step 2: Deciding on the damage categories to be used in the analysis. Usually, a three-category system is used, consisting of "moderate damage", "severe damage" and "destroyed";

Step 3: Training of GIS staff to carry out the analysis;

Step 4: Manually analyzing the satellite imagery by comparing pre-conflict and post-conflict imagery;

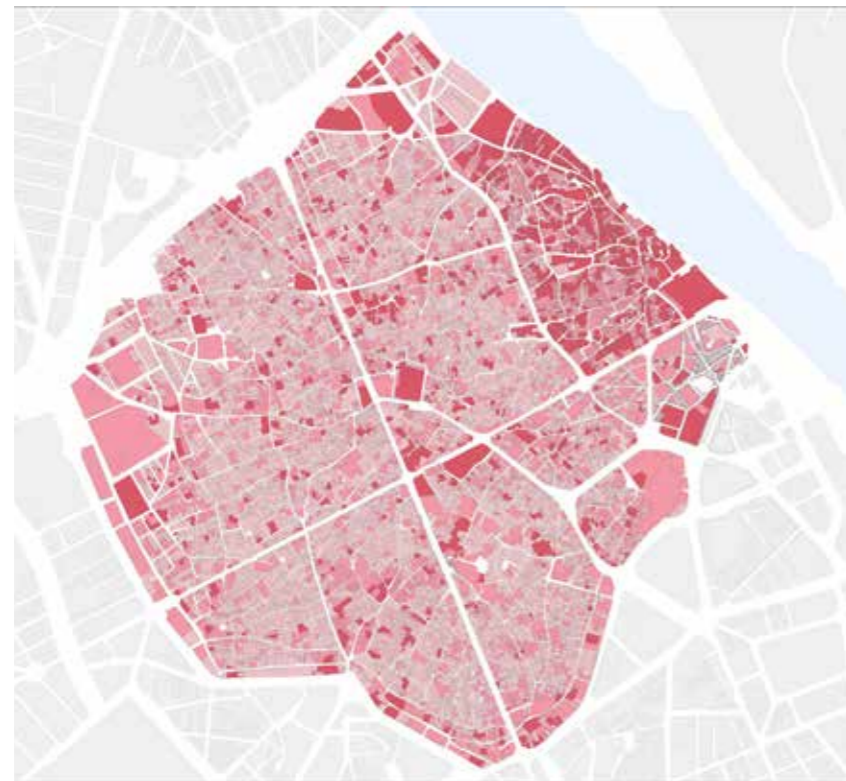
Step 5: Assigning categories to damaged structures by comparing points to a land-use map;

Step 6: Calculating the percentage of the city or neighbourhood that has been destroyed (only possible if there are figures on the amount of structures in the city).

LESSONS LEARNT AND HOW TO ADAPT

While satellite damage assessments can give quick overviews of the level of damage within cities, their reliability, particularly in 'lower' damage categories ('moderate damage'), will often be undercounted. This will also be the case for the 'light damage' category as satellite damage assessments are unlikely to spot damages if roof structures have not been affected. Consequently, damages that occur as a result of hand-to-hand combat (bullet holes, holes in walls, damage to doors and windows) are not found with these types of assessments. This results in a wide divergence between the count of damaged structures identified by satellite damage assessments and field surveys. Some spot-check comparisons have shown this to be in a range of 3-8x difference. As a result, satellite damage assessments have proven to be most useful as an indicator of relative level of damage between cities or neighbourhoods, with the caveat that they use the same satellite damage assessment methodology and image resolution.

FIGURE 31. Damage assessment Old City Mosul (drone imagery)



ANALYSIS OF RESULTS/CASE STUDIES

In Mosul in Iraq, damage assessments of the Old City were carried out in collaboration with UNESCO. As the damages in the Old City were so severe, it was difficult to distinguish damaged buildings with the debris of older buildings. Using drones, UNESCO’s partner ICONEM collected aerial photographs with a 10cm resolution. These images were analyzed manually by UN-Habitat GIS staff. Damage was then summarized on property boundaries in three categories (destroyed, severe damage and slight damage) to produce the map on the left. This map subsequently formed the basis of an Urban Recovery Framework for Mosul.

GAZA DAMAGE ASSESSMENT

BACKGROUND

The Israeli military operation that occurred from July 8 to August 26, 2014 in the Gaza Strip led to massive displacement, and the destruction of buildings and urban systems including water, electricity and sanitation. This has greatly exacerbated an already precarious situation as the long blockade of the Gaza Strip has resulted in acute vulnerabilities, including a serious housing shortfall.

The data on damages included in the profile are based on multiple references. However, most of the georeferenced data and maps on damages to structures are extracted from UNOSAT’s (OCHA) assessment from 27 August 2014 that was based on satellite images. Much of the background data was obtained through the Shelter Cluster’s initial damage assessment documents. The OCHA GIS database was a valuable resource for many of the produced maps. The Detailed Needs Assessment (DNA) that was conducted by UNDP in October 2015 provided a good source of information that helped in updating some of the data and provided an overall picture on the damages across many categories. Profiles produced for water and wastewater damages were based on maps and assessments produced by the Coastal Municipalities Water Utility of Gaza (CMWU) and were cross referenced with the PDNA assessment and OCHA data sources. The Palestinian Central Bureau of Statistics (PCBS) census data of 2008 was the key source for the pre-crisis profile, as well as the data obtained from UNRWA and ECHO.

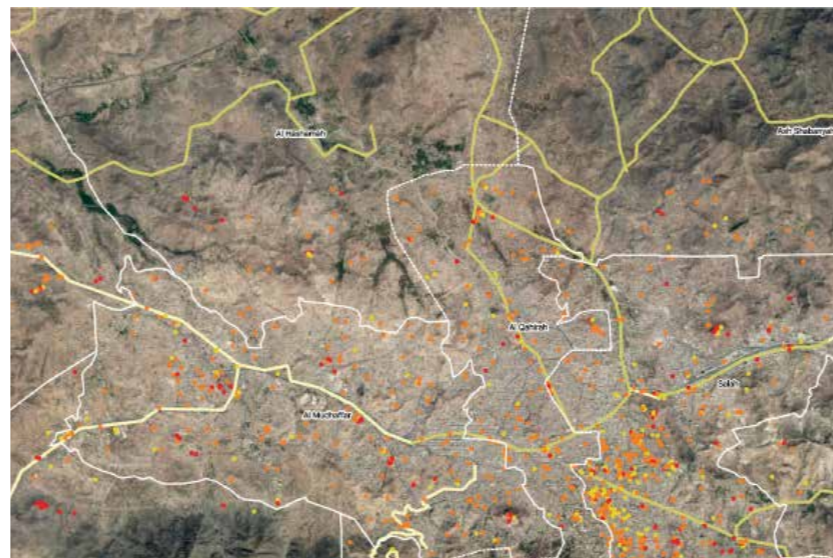


FIGURE 32. Yemen damage assessment (partner: UNOSAT)

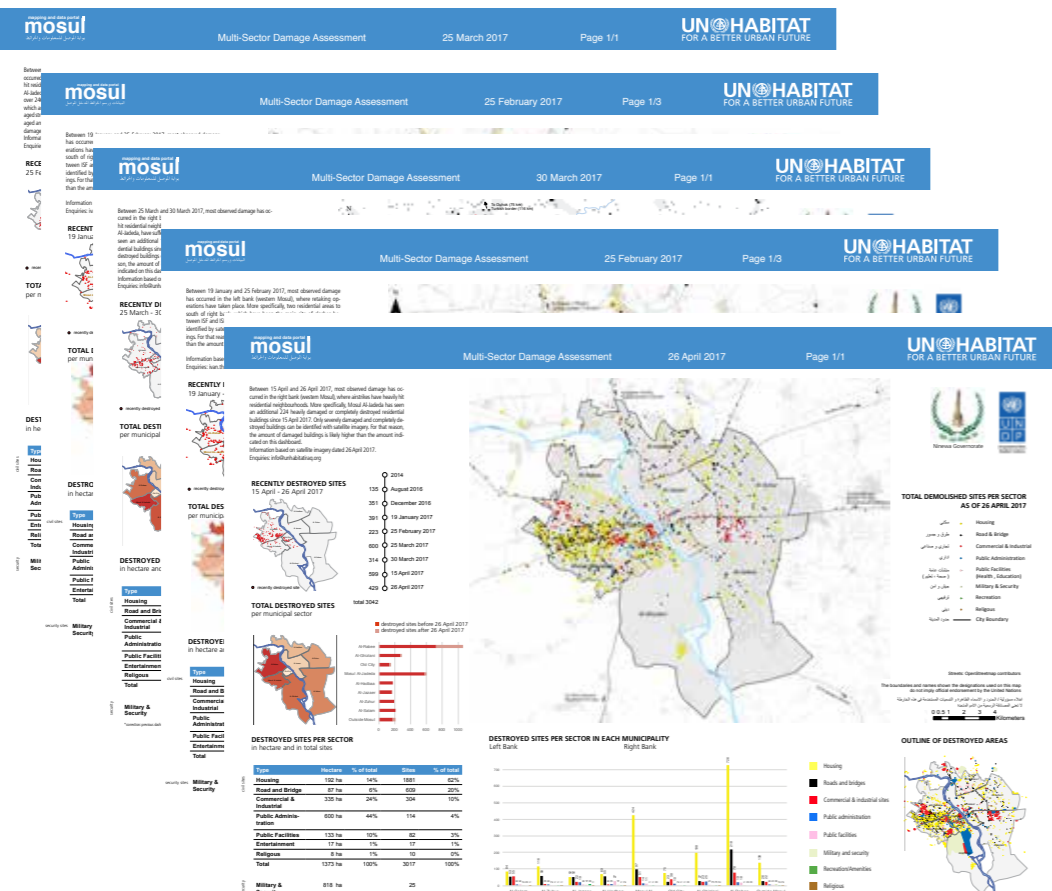


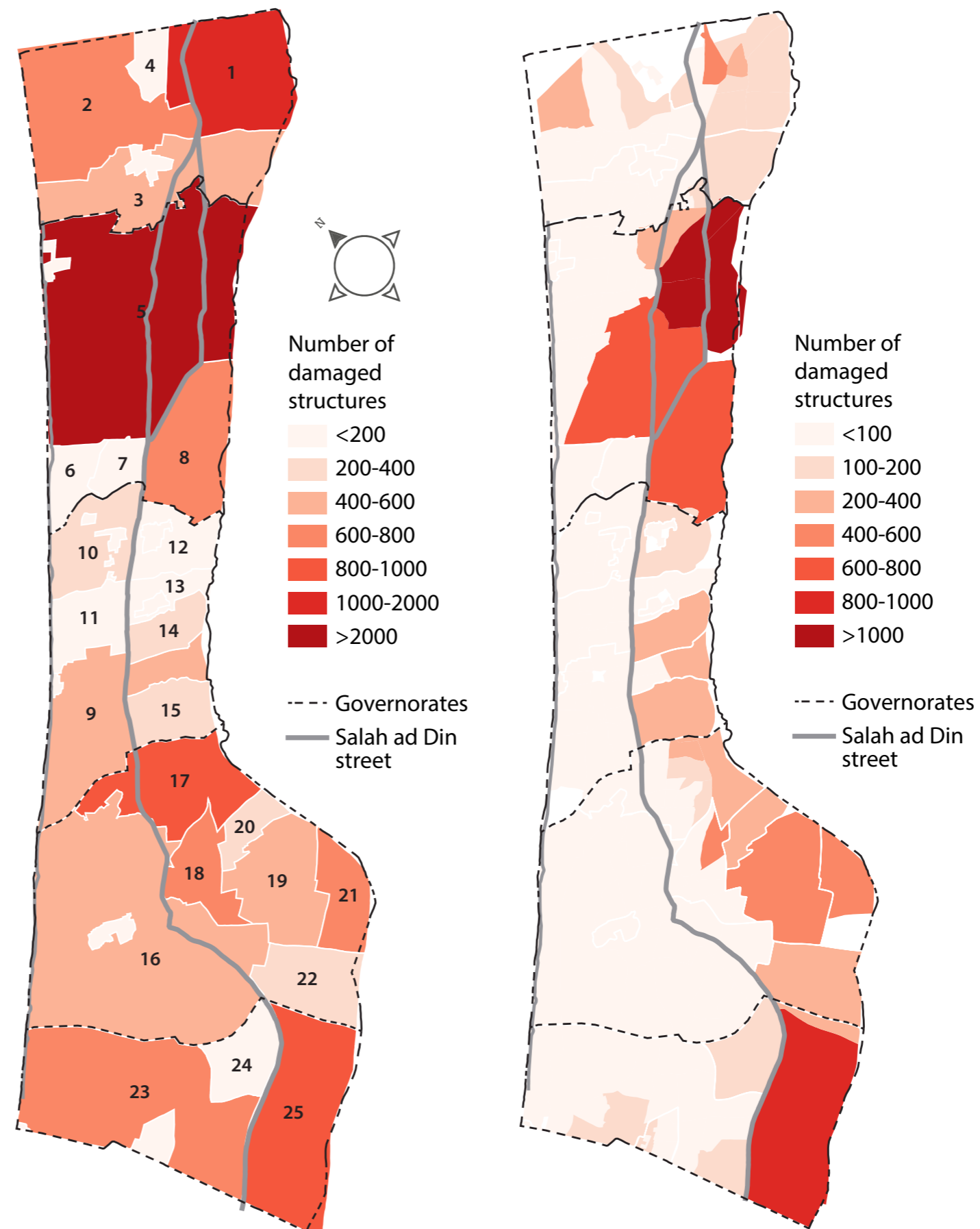
FIGURE 33. Bi-weekly damage assessments (in-house analysis)

During the retaking of the city from ISIL operation in Mosul, UN-Habitat conducted bi-weekly satellite damage assessments in Mosul in order to track damages over time. These dashboards, which were distributed to all cluster leads and the Humanitarian Country Team, were appreciated as they facilitated and improved planning for immediate responses. The damages were categorized by type of damage with the help of a contact, with knowledge of land-uses, in the local planning department.

LESSONS LEARNT AND HOW TO ADAPT

Some neighbourhoods witnessed both concentrated destruction and inward migration. An overall picture of the urban conditions of neighbourhoods, such as shelter, infrastructure, commercial and social services conditions, can help to prioritize, localize and streamline immediate and long-term interventions, and unleash opportunities that must be capitalized on. It is crucial to understand how the crisis impacts on vulnerable groups; especially women, children and the poorest communities throughout the Strip.

FIGURE 34. Number of damaged structures in Gaza



EXPLANATION OF RESULTS

Affected Population and Displacement: At the height of the conflict there were 500,000 IDPs, comprising 28% of Gaza's population. Although the pattern of displacement was not mapped, a general pattern of displacement from the Eastern side towards the Western side of the Strip was witnessed.

Most Affected Areas: The concentration of damages was within the 3km buffer zone East of Salah El Dein street that runs along the Strip from north to south, and along the northern border. 71% of the damaged buildings are located within this 3km zone.

Urban Functionality: In addition to the impact on infrastructure and social services damages that caused temporary or permanent disruption of services across the Strip, the war resulted in a combination of severe impacts on certain areas and is still hindering functionality of some neighbourhoods. The capacity of these areas to provide basic levels of services and an adequate living environment for their residents is severely reduced, or ceases to exist completely in some areas.

IDENTIFYING PRIORITY AREAS AND INTERVENTIONS

Although the most dysfunctional areas are considered priority areas for interventions, other factors need to be considered. Aspects of population size and density, as well as poverty rates in As Shoka and Kuzaa exceed 40%, making these two areas priorities for support and also impacts the nature of immediate and long term interventions and their components.

#12 REGIONAL SPATIAL ANALYSIS OF REFUGEE SETTLEMENTS

URF Pillars



Countries
Bangladesh

Cities
Cox's Bazar

Analysis duration
+/ 6 months

Agency
UN-Habitat

Date of implementation
2018-2019

Capacities required
GIS, Adobe Creative Suite

Focal point
Jonathan Weaver/
Yuka Terada

Partner
UNHCR

MAIN ANALYSIS QUESTIONS

1. What is the spatial impact of governance, economic, environmental and sociological context in which the camps are located?
2. What and where are the existing infrastructure plans and priorities, and how do they relate to the humanitarian response?
3. What development scenarios can be deduced from a spatial analysis of the regional context?

BACKGROUND ON THE TOOL

The Ukhiya Camps Profile in Cox's Bazar was conducted to serve as a guiding document for policy and decision makers in local, regional and national governments, as well as in the private sector and local and international NGOs. It aims to spatially contextualize the impact of the Rohingya refugee influx in and around Cox's Bazar through a deeper analysis of the land management and spatial coordination systems in Bangladesh, existing planning documents, environmental opportunities and constraints, transportation networks in the region, demographic trends and the potential for economic growth. By doing so, the purpose of the profile was to enable better coordination towards immediate, durable and sustainable solutions for refugees and hosting communities.

STEP-BY-STEP IMPLEMENTATION

Step 1: Introduction	Background on the crisis/reason for the influx of refugees.
Step 2: Context	Spatial Impact of the Influx; Land Management; Spatial Systems in Bangladesh; Existing Planning Documents.
Step 3: Urban and Spatial Analysis	International and National Settings; Environmental Settings; Location and Connectivity; Demographics; Growth and Economic Centres; Future Planned Infrastructure; Future Urban Growth; Ukhiya Context; Kutupalang Context.
Step 4: Assessment of Development Challenges	
Step 5: Assessment of Development Opportunities	
Step 6: Preparation of Development Scenarios	
Step 7: Macro Settlement Development Strategy	Through visioning; and Action planning.

LESSONS LEARNT AND HOW TO ADAPT

This tool was chosen for this context for a number of reasons. The scale of the humanitarian response to the refugee influx was placing major strain on district scale infrastructure and host communities across the region. In response to this major development banks were investing vast sums of money to support the emergency response but with little clarity on what existing plans and priorities were already in place.

The sheer number of actors operating across the district and the pace at which they needed to implement, required a strategic and spatial perspective to help in identifying where the major gaps and overlaps were occurring in terms of investment. The typical sectoral approach taken during emergency responses meant that actors often did not know what else was being done in a similar area limiting added value and risking significant redundancy.

For other contexts, the relationship with district authorities and the various line ministries needs to be strong to be able to obtain and share information rapidly. It should also be considered how centralised/devolved a governance system is as this will play a major role in how and where (locally vs centrally) decisions on investments are made.

Urban migration and refugee/IDP camp planning can often be short-sighted due to a lack of resources in host communities and the lack of coordinating instruments available across various governmental levels and sectors, and between humanitarian and development agencies. Spatializing an analysis of refugee settlements in the form of a regional profile provides decision makers with a common framework around which durable solutions that are mutually beneficial for people of concern and host communities can be considered as part of an integrated, evidence-driven approach to planning. In future iterations of the tool, the use of digital platforms will be prioritised to ensure longevity and easy update of information.

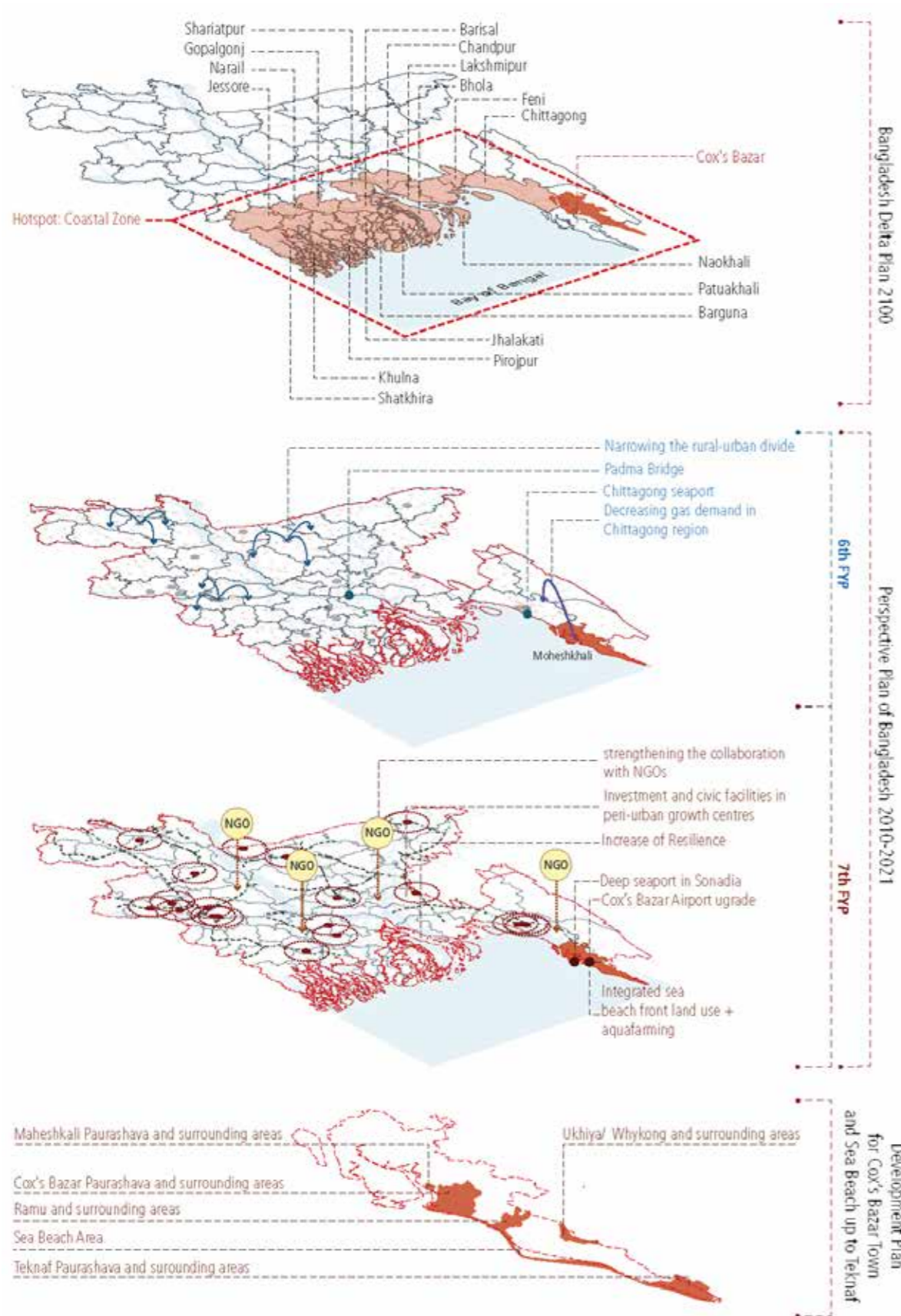


FIGURE 35. Official planning documents relevant at different scales



FIGURE 36. Urban and Spatial Analysis: Growth Trends (in relation to planned infrastructure)

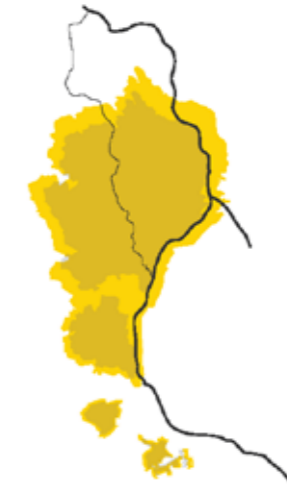
EXPLANATION OF RESULTS

Spatializing the land management system and affiliated planning documents laid the groundwork for understanding how other factors such as environmental constraints, disaster risk management, connectivity, demographics, infrastructure and growth trends can create development opportunities in the region around refugee camps. Such opportunities can help explain how certain planning decisions can lead to a desired development scenario.

STRATEGIC OPPORTUNITIES



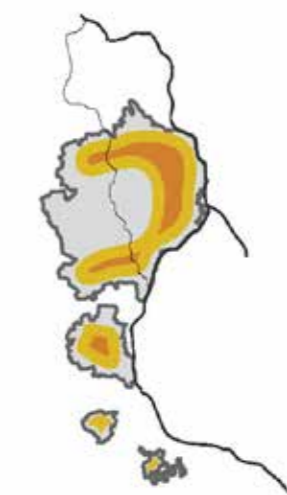
DO NOTHING



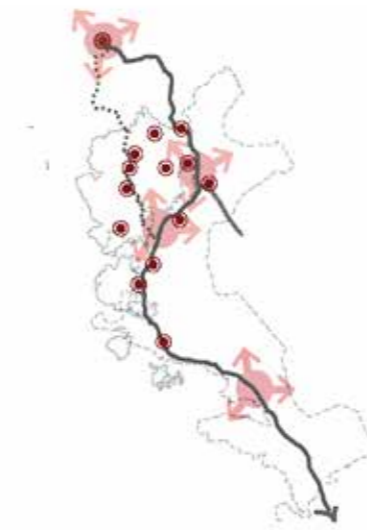
SPATIAL OPPORTUNITIES



DECONGEST AND CONSOLIDATE



SOCIO-ECONOMIC OPPORTUNITIES



DENSITY HOTSPOTS AROUND CENTRES

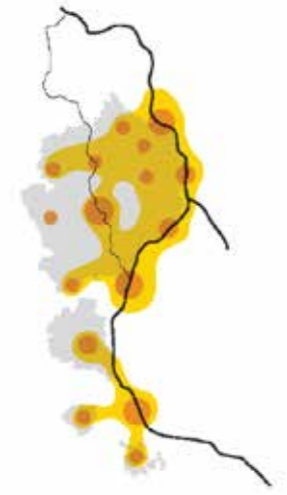


FIGURE 37. Development Opportunities

FIGURE 38. Development Scenarios

#13 ACCESSIBILITY ANALYSIS

URF Pillars



Countries

Kingdom of Saudi Arabia

Date of implementation

2014-2019

Cities

Abha, Al-Ahsa, Al-Baha, Arar, Buraidah, Dammam, Hael, Jazan, Jeddah, Madinah, Makkah, Najran, Qatif, Riyadh, Skaka, Tabuk, Taif

Capacities required

ArcGIS (paid),
QGIS (open source)

Analysis duration

-

Focal point

Antara Tandon

Agency

UN-Habitat

Partner

Ministry of Municipal & Rural Affairs for the Kingdom of Saudi Arabia

MAIN ANALYSIS QUESTIONS

1. What spatial information is needed in order to ground analysis and recommendations for the city?
2. How can potential future growth scenarios be modelled to help predict travel patterns, population and job densities in neighbourhoods, and permissible land for development?

BACKGROUND ON THE TOOL

The Future Saudi Cities Programme, a joint programme developed by the Saudi Ministry of Municipal and Rural Affairs and UN-Habitat, has been implemented in close cooperation with the municipalities of 17 major Saudi cities. The cities were selected based on their different population sizes, geographic distribution, and a range of criteria based on capacities and economic potential to create a more balanced regional development.

As part of UN-Habitat's Rapid Planning Studio (RPS) methodology, GIS is a helpful tool for conducting a quick diagnosis of current conditions in urban contexts, guiding the strategic recommendations for a city's growth, and testing proposed alternatives to support the evidence-based planning approach of the organization.

RPS workshops simulate a much longer planning process into condensed, intensive work sessions with governments, municipalities, consultants, professionals, and the community. These workshops include city profile analysis conducted by UN-Habitat and case study presentations, followed by interactive charrette style engagement, anchored by feedback and evaluation at the termination of the workshop.

The GIS methodology is essential to support the analysis of the existing urban dynamics in preparation of the city profiles. It provides the basis for diagnostic findings, compelling arguments to steer development, as well as an assessment and demonstration of the impacts of the recommendations proposed by UN-Habitat to further the New Urban Agenda and the UN's Sustainable Development Goals.

STEP-BY-STEP IMPLEMENTATION

GIS can aid in multiple phases of the RPS process at different scales. Supporting the data analysis and recommendations with GIS will help make compelling arguments and lead to an evidence-based decision-making process.

RPS Stage:

Role of GIS:

Step 0. Preparation

Gather base information as spatial or geographic layers

Step 1. Introduction

Current conditions - housing and transport infrastructure

Step 2. Analysis

Population density, land-use assessment, public transport accessibility and jobs/productivity

Step 3. Scenarios

Proposed growth areas, proposed density, proposed land uses, proposed public transport accessibility and increase in jobs/productivity

Initial step towards a more detailed and thoroughly worked out plans and products.

LESSONS LEARNT AND HOW TO ADAPT

Cities in the developing world often face challenges with data collection, verification, and analyses processes and the lack of data leads to incomplete plans or impediments during implementation. However, basing planning decisions on data that has been verified gives a more realistic picture of the conditions on the ground and strengthens the analysis using the data for future scenarios with a tangible/quantitative output. Planning decisions that are made based on data and an evidence-based understanding of the situation are more influential and make a strong case for communities and city leaders to translate their visions into action.

ANALYSIS OF PROPOSED SCENARIOS

The quick assessment of the city's present scenario equips the team to advance to the next state of planning with some broad strategic recommendations and actions to help achieve the goals or objectives identified at the outset of the RPS process. The scenarios proposed should be considered an initial step towards more detailed and thoroughly worked out plans and products. Due to the time-restricted nature of RPS, only broad and strategic recommendations can be utilized to develop a roadmap and to guide future planning efforts. The nature of the proposal will vary with the context, the structure of the workshop and the availability of data.

Example of a proposed scenario:

All cities in the Kingdom suffer from a lack of public mass transport systems and low usage of available public transport systems. In Madinah city, a proposed scenario (See Figures 39-42) would enable half of the total current population to gain access to public transport with the implementation of a new metro system alone. This would significantly impact the city's mobility patterns, facilitating economic development and ensuring better access to jobs, education and public services, while reducing energy consumption and environmental impact related to mobility.

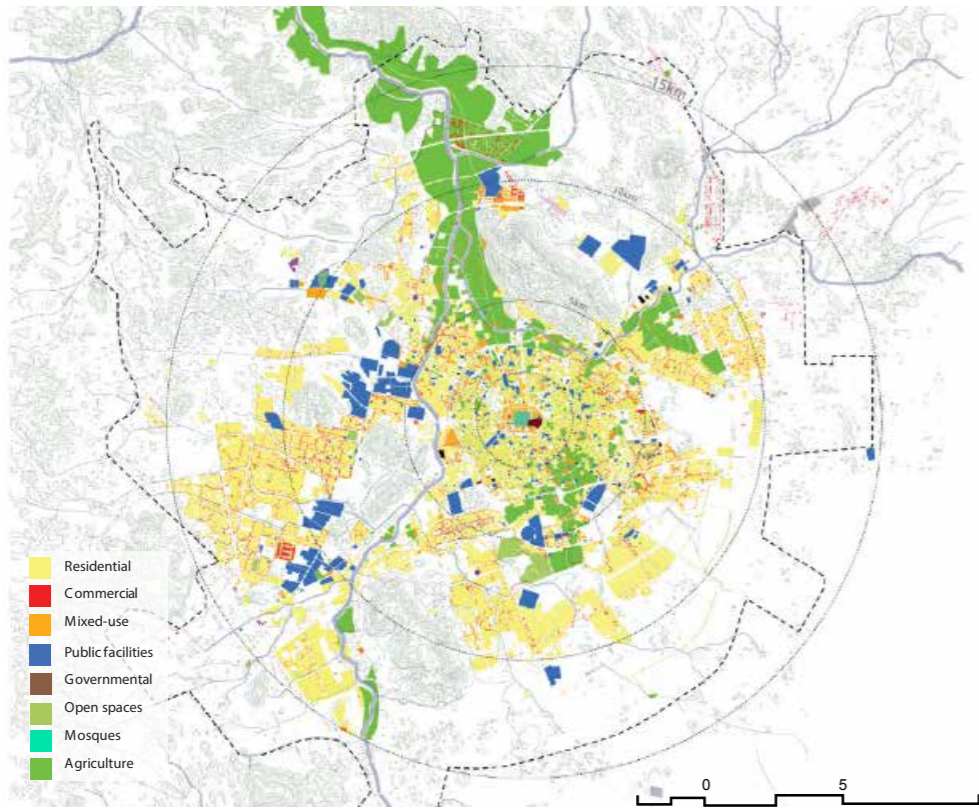


FIGURE 39. Example of Current Conditions: Current land-use allocation in Madinah

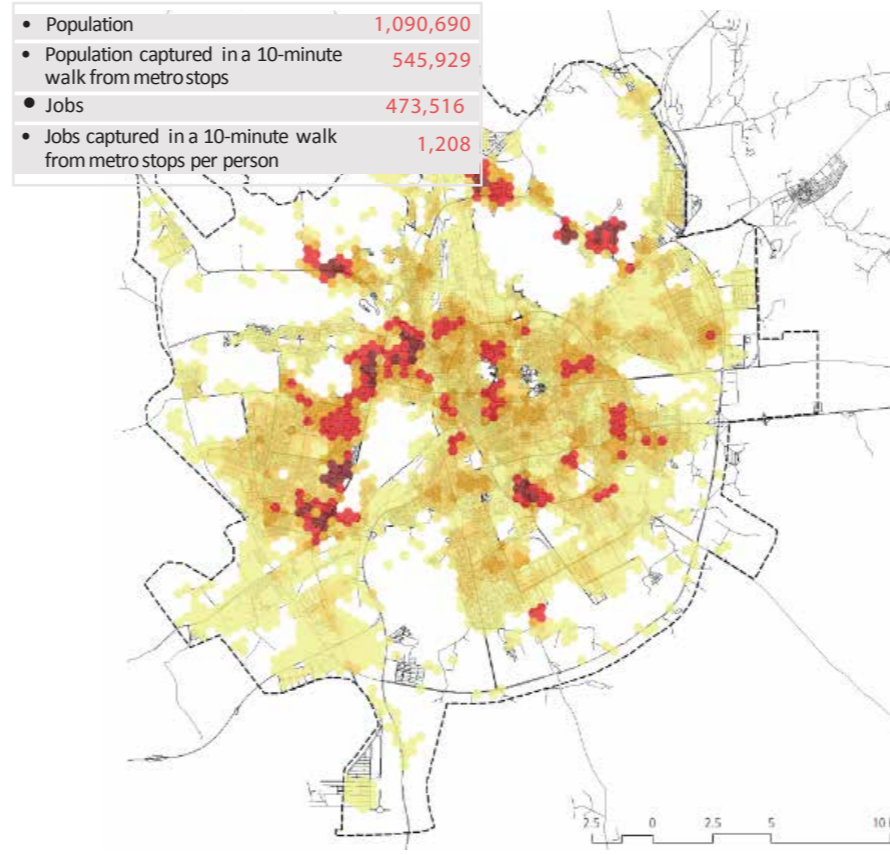


FIGURE 41. Access to jobs in current scenario in Madinah

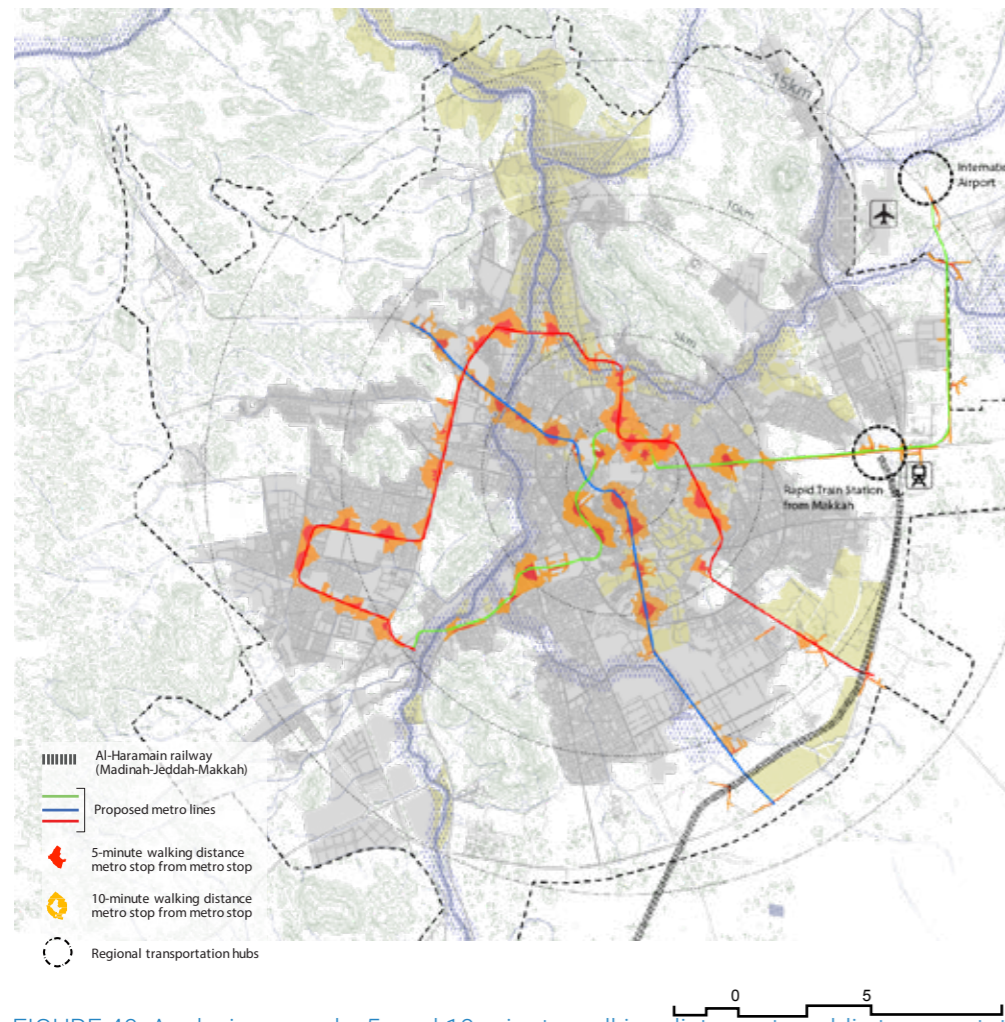


FIGURE 40. Analysis example: 5- and 10-minute walking distance to public transportation stops (Madinah)

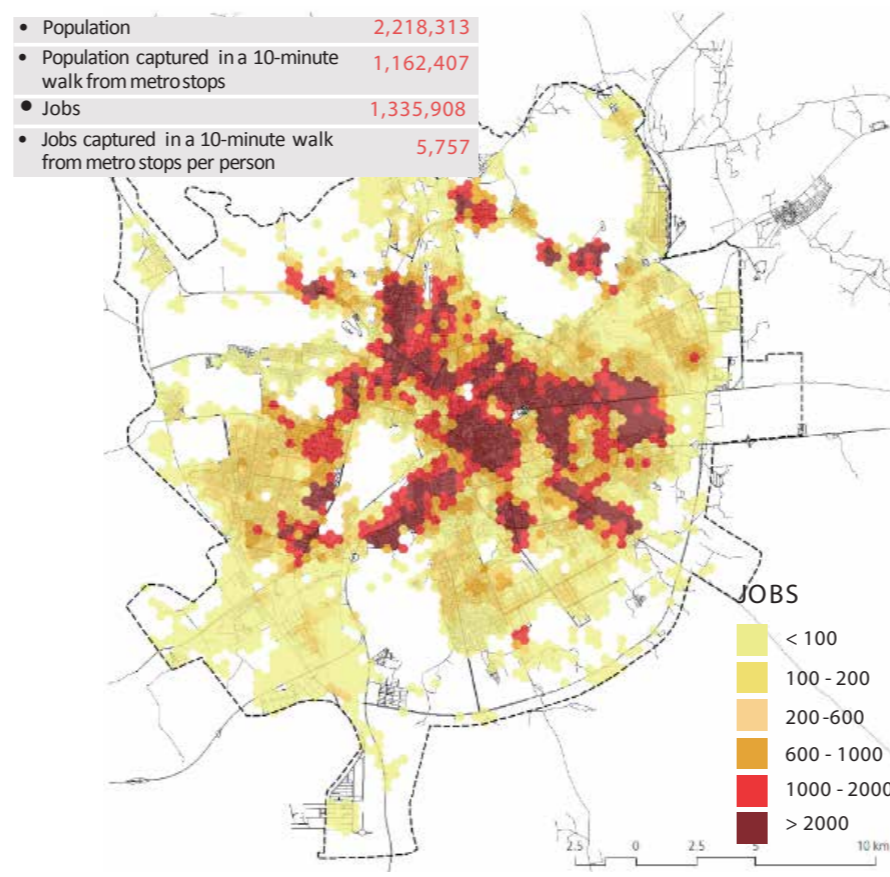


FIGURE 42. Access to jobs in proposed scenario in Madinah

The tool utilises the City Prosperity Index (CPI) to collect and analyse data that is made up of six dimensions. The following dimension serves to define targets and goals that can support the formulation of evidence-based policies.

Productivity

- Economic strength - city product per capita, mean household income, old age dependency ratio
- Employment - employment to population ratio, informal employment, unemployment rate
- Economic agglomeration - economic density and economic specialization

Infrastructure

- Housing infrastructure - access to electricity, improved sanitation, water, shelter, population density, sufficient living area
- Social infrastructure - number of public libraries, physician density
- ICT - average broadband speed, home computer access, internet access
- Urban mobility - average daily travel time, affordability of transport, length of mass transport network, traffic fatalities, use of public transport
- Street connectivity - intersection density, land allocated to streets, street density

Quality of life

- Health care - life expectancy at birth, maternal mortality, under-5 mortality, vaccination coverage
- Education - early childhood education, net enrolment in higher education, literacy rate, mean years of schooling
- Safety and security - homicide rate, theft rate
- Public space - green area per capita, accessibility to open public space

Equity & social inclusion

- Gender inclusion - equitable secondary school enrollment, women in local government, women in the workforce

Environmental sustainability

- Waste management - solid waste collection, solid waste recycling share, wastewater treatment

#14 BUILDING COUNTS WITH SATELLITE IMAGERY

URF Pillars

- Economy
- Infra & Services
- Housing

Countries

Afghanistan, Libya, Iraq

Cities

Multiple

Analysis duration

Agency

UN-Habitat

Date of implementation

Multiple years

Capacities required

GIS, Satellite imagery

Focal point

Ivan Thung

MAIN ANALYSIS QUESTIONS

1. What are the recent growth trends related to housing?

BACKGROUND ON THE TOOL

In many conflict and development contexts, population counts through censuses are difficult to implement. As a result, population numbers and housing numbers are often based on extrapolation of previous data. Building counts through satellite imagery is a relatively cheap way to produce primary data to understand recent development trends. In some cases, cities may be twice the size of what is reported in official statistics. Furthermore, this method can be used to highlight concerning trends regarding informal developments in areas that are not designated for residential use (e.g. agricultural areas).

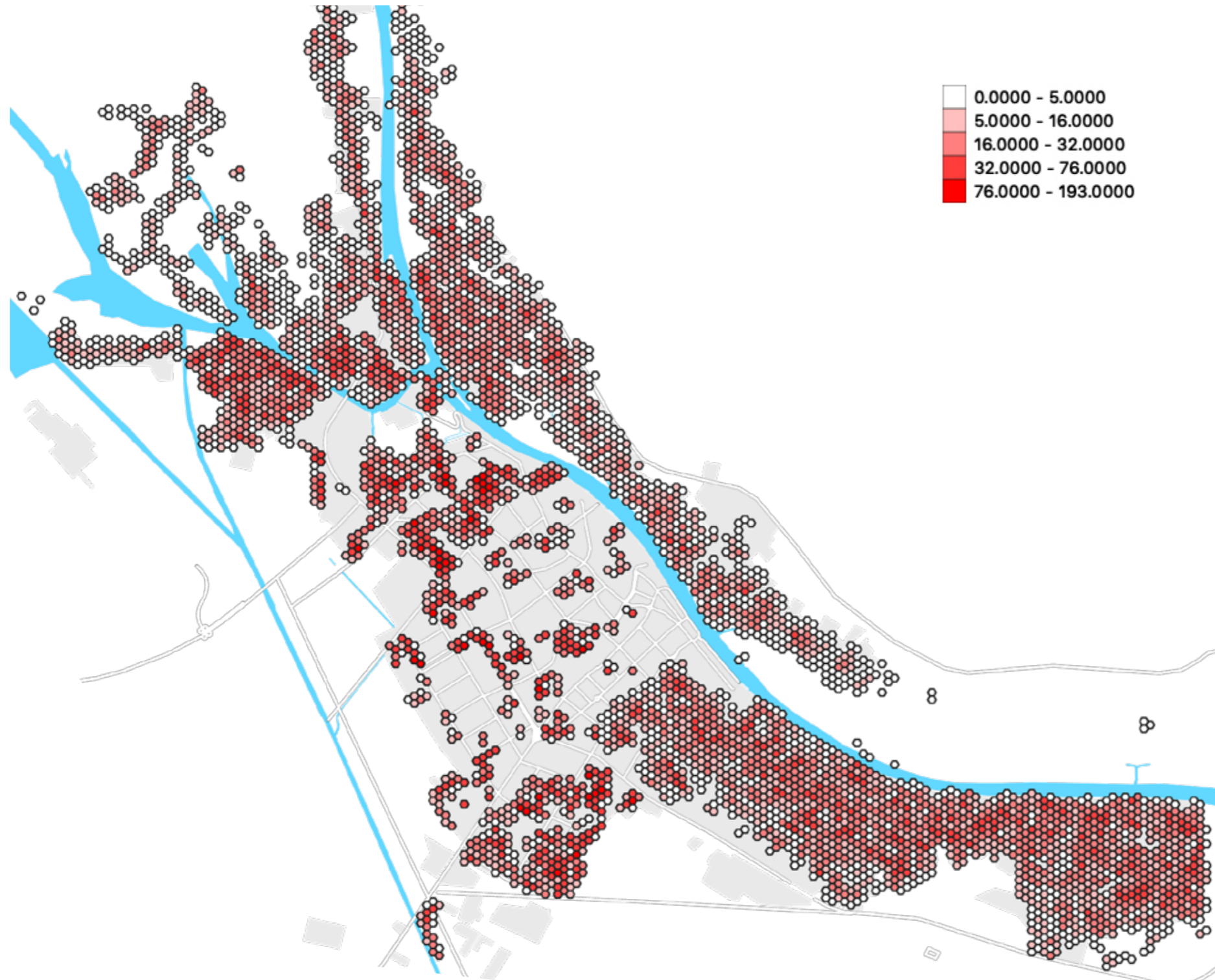
STEP-BY-STEP IMPLEMENTATION

- Step 1:** Acquiring recent satellite imagery with sufficient resolution. Usually open-source imagery is available, for example, through Google Earth which is of sufficient resolution;
- Step 2:** Deciding on the damage categories to be used in the analysis. Usually, a three-category system is used consisting of “moderate damage”, “severe damage”, “destroyed”;
- Step 3:** Training of GIS staff to carry out the analysis;
- Step 4:** Manually analyzing the satellite imagery by comparing images from two different dates in order to understand the rate of change;
- Step 5:** Assign building typologies to the structures (optional, as implemented in Afghanistan);
- Step 6:** Community verification of results (optional, as implemented in Afghanistan).

LESSONS LEARNT AND HOW TO ADAPT

The building count process is relatively easy to adapt to different contexts, although the set of building typologies to count will likely differ. The process can be time-consuming - taking about 10 days to cover a medium-sized city. However, particularly in the case of informal settlements where no official counts are available, the results will often be worth the effort. Recently, advances have been made to automate building counts using machine learning algorithms. The initial results are promising but a system that is low-cost and easy to mobilise on demand has not yet been implemented at the time of writing.

FIGURE 43. Number of informal structures in Basra



CASE STUDY: BASRA

Basra, in the south of Iraq, has recently seen significant developments in its surrounding agricultural lands.

Satellite imagery and on the ground verification and spot checks identified that there may be as many as 84,000 houses that do not conform to formal housing standards in the agricultural area on the west bank of the Shatt Al Arab. Currently, these numbers are not reflected in the official statistics. Considering that the average household size is 7.1 persons, these houses provide shelter to around 600,000 people or 30% of Basra's total population. In Basra, with a modest per m2 construction cost of 250,000 IQD, a two story house of 200m2 would cost around 50 million IQD (US\$42,000). This means that private individuals have invested at least US\$3.5 billion (42k*84k) in houses in agricultural areas. The scale and numbers in the other "informal" or "slum" areas of Basra could easily increase these numbers by at least 50%.

As these houses do not adhere to formal housing standards they are at risk of being demolished by local authorities, which would lead to a significant loss of investments. Lastly, as this scale of investment was made despite official barriers and obstacles, a lot could be achieved if the government facilitated investment in/construction of such houses.

District	Sub District	# Houses
Shatt Al Arab	Outba	3976
Shatt Al Arab	Markaz Shat Al Arab	19,663
Al Basrah	Al Hartha	20,019
Al Basrah	Markaz Al Basrah	23,770
Abu Al Khaseeb	Markaz Abu al Khaseeb	41,776
Total		109,204

FIGURE 44. Informal constructions in Basra

#15 NIGHTLIGHT ANALYSIS FOR ECONOMIC RECOVERY ANALYSIS

URF Pillars

Economy

Infra & Services

Countries

Yemen

Date of implementation

2019

Cities

Mareb, Al Hawtah, Zinjibar
Sana'a, Aden, Hudaydah

Capacities required

GIS, Python

Analysis duration

+/- 2 weeks

Focal point

Ivan Thung

Agency

UN-Habitat

Partner

PNGK

MAIN ANALYSIS QUESTIONS

1. How has the conflict impacted the within the city?
2. How has the city recovered in recent months compared to pre-conflict levels?
3. Has the economic integration of the cities been affected by the conflict?

BACKGROUND ON THE TOOL

Some studies have found a correlation between nightlight output and GDP on a city level¹, although few studies have generalised this to conflict settings.

In the absence of robust research on nightlight patterns in conflict-affected cities, some initial assumptions on the conclusions to be drawn from nightlight outputs are proposed here. First of all, in all samples of the cities analysed by UN-Habitat, there is a clear link between a decrease in nightlight output and the exact month that the city begins facing its first conflict. This has a few likely causes, such as damage to electricity networks and substations which usually affects nightlight output significantly, accounting for the most significant drop. Other factors will include the strategic military decision to turn off lights at night in order to complicate the targeting of airstrikes. Slowing down economic activity (e.g. in harbours and commercial streets) will also directly affect nightlight output. With the destruction of key infrastructure, populations often have to rely on generators which are costly, in particular if currency devaluations increase the price of diesel. In this context, v-shaped recovery patterns can indicate that key infrastructure is still intact and can be restarted after the initial shock. Slow recovery patterns can indicate that

1. For example, see [IMF Working Paper](#) - Hu, Y. and Yao, J. (April, 2019), "Illuminating Economic Growth"

the recovery is dependent on the capacity of individuals (e.g. traders and households) to afford generator fuel and will likely be related to both fuel prices and economic capacity. On a neighbourhood level, very clear recovery patterns can be seen when there are increases in nightlight output, as this indicates that the population is returning and economic recovery can be inferred from the results.

STEP-BY-STEP IMPLEMENTATION

The Earth Observation Group, NOAA National Centers for Environmental Information (NCEI) provides [monthly observations](#) at a resolution of 15 arc-seconds, or roughly 450 by 450 metres. For a full explanation of the methodology used for aggregating nightlight values, [click here](#).

LESSONS LEARNT AND HOW TO ADAPT

Even though nightlight data can offer an insight into recovery patterns, it can be hard to link the outcomes to recovery actions. In terms of reliability, the resolution of the data source is important for the reliability of results on a sub-city (neighbourhood) level; some open source nightlight data is of such low resolution, that it is unreliable for neighbourhood-level analysis. Lastly, observed seasonal variations can be the result of moon-cycles (the reflection of the moon on roofs).

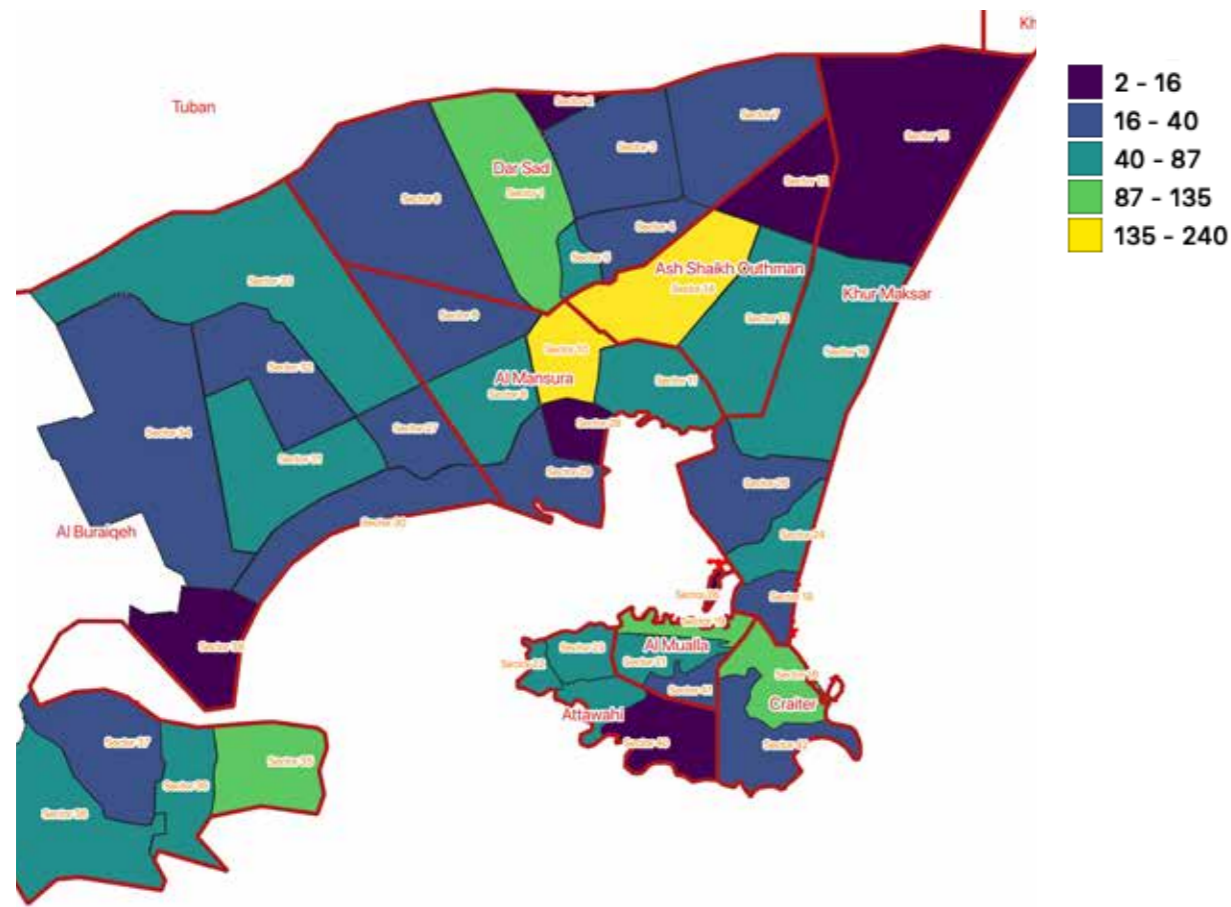


FIGURE 45. Total nightlight output - Median 2018

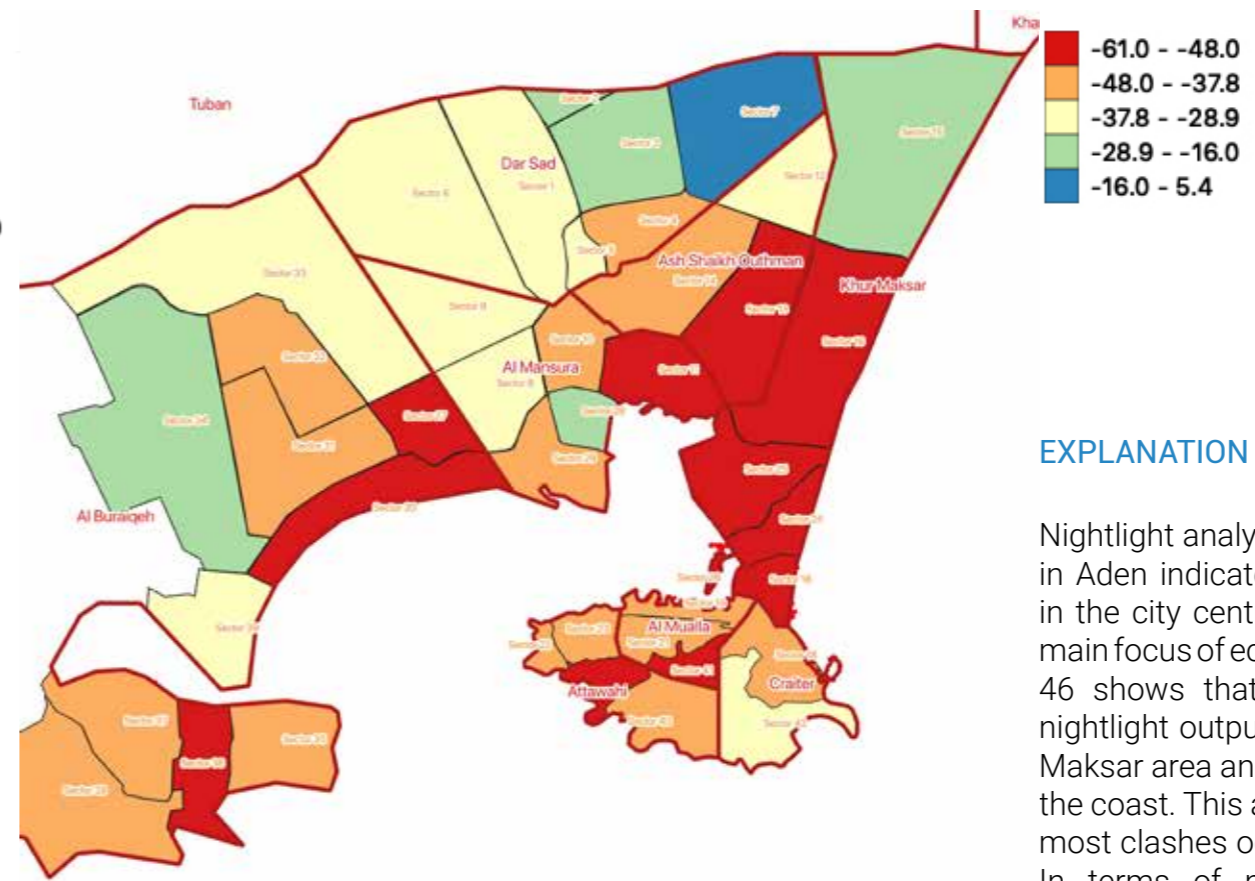


FIGURE 46. Total nightlight output - Percentage change to 2014 baseline

EXPLANATION OF RESULTS

Nightlight analysis of neighbourhoods in Aden indicates the highest activity in the city centre, coinciding with the main focus of economic activity. Figure 46 shows that the highest drop in nightlight output occurred in the Khur Maksar area and the whole area along the coast. This area is also area where most clashes occurred within the city. In terms of national comparisons, nightlight analysis suggests that Sana'a was hit significantly harder than Aden, seeing a staggering 95% drop in nightlight output. It also suggests that in relative terms, Aden was hit harder than Zinjibar (42% compared to 34% drop). However, by 2016, Aden appeared to have recovered by more than 13% points whereas Zinjibar has barely seen a recovery of its nightlight output in 2016 (1%).

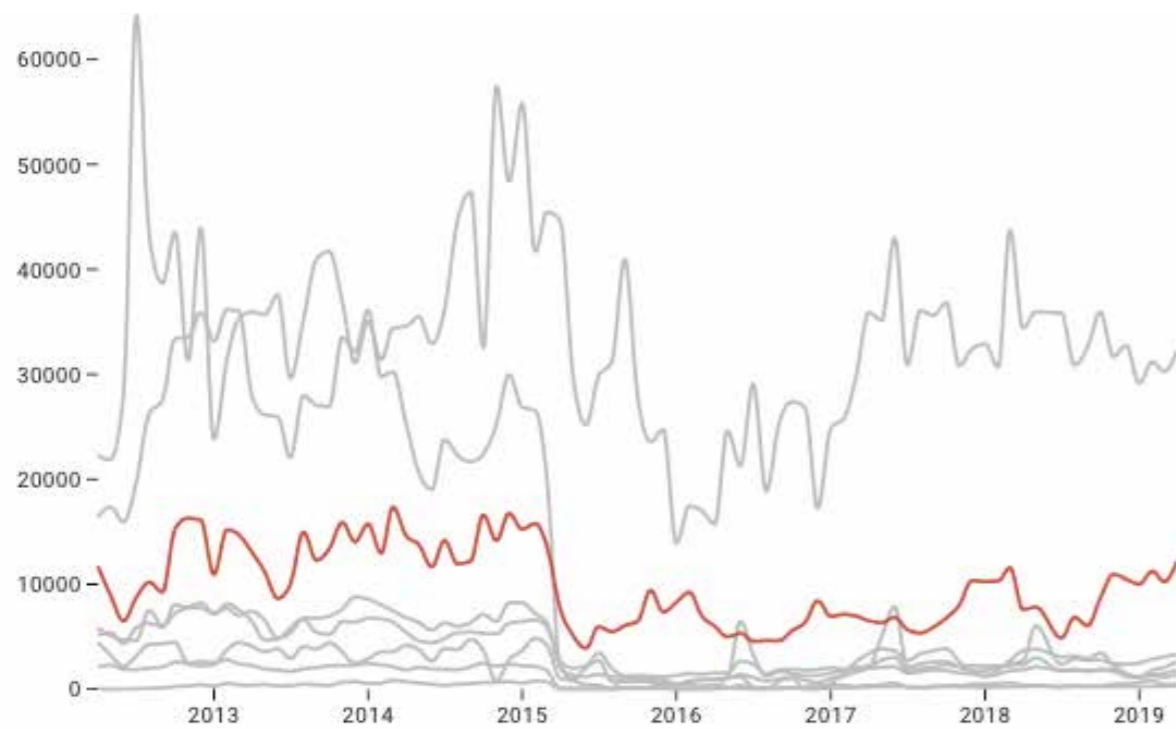


FIGURE 47. Nightlight output Aden over time

	2014	2016	change 2014-2016	nightlight_2018	change 2014-2016
Aden	18697.36	10867.61	-42%	12172.06	-35%
Sanaa	31683.86	1585.47	-95%	2711.5	-91%
Zinjibar	719.87	477.73	-34%	469.81	-35%

FIGURE 48. Nightlight output change

#16 NDVI ANALYSIS

URF Pillars

Economy

Infra & Services

Environment

Countries

Syria

Cities

Raqqa

Analysis duration

+- 2 weeks

Agency

UN-Habitat

Date of implementation

2019

Capacities required

GIS, Python

Partner

IMAPP
PNGK

MAIN ANALYSIS QUESTIONS

1. What is the impact of drought and other environmental factors on the economy?

BACKGROUND ON THE TOOL

In the early-mid 2000's Syria was hit by the worst drought in over five decades, which peaked between 2006 and 2008. As an agriculturally-dependent region, climatic changes on patterns of precipitation impacted approximately 60 percent of Syria's lands. This resulted in wide-spread food and economic insecurity. Cuts to diesel subsidies further impacted farmers in tenuous positions in cash-cropping areas. Over 35,000 families left their lands and went to seek employment in urban areas. 2007 and 2008 witnessed a drop in the combined wheat and barley production by 47 percent and 67 percent respectively. As a result, Syria imported wheat for the first time in its history. This period coincided with escalation of tensions in the region and the beginning of the crisis. Using the Normalized Difference Vegetation Index (NDVI) remote sensing method, regional agricultural activity and vegetation on the ground was monitored and analysed by registering the spectral signature of chlorophyll and therefore the vegetation canopy, on a satellite sensor using a sequence of images over time. Combining this information with precipitation and evaporation indices, it is possible to make inferences on the effects of the climate on a region's vegetation (see Figure 49).

STEP-BY-STEP IMPLEMENTATION

For a step-by-step explanation on how to create NDVI maps in ArcGIS and how to use them, along with an explanation on the NDVI formula, [click here](#).

LESSONS LEARNT AND HOW TO ADAPT

The most straightforward use of NDVI analysis is to create simple base layers that demarcate agricultural areas in order to understand development constraints. However, in order to draw more advanced conclusions on the impact of droughts, specialised knowledge related to agriculture in the context is required. This can include sowing and harvesting cycles, rainfall patterns, as well as types of prevalent agricultural crops in the region. Other applications include identifying fires (e.g. in agricultural lands) or loss or gain of tree cover, although these applications require robust knowledge of the tool as well.

FIGURE 49. Vegetated canopy in Raqqa region. Source: Joint Research Center of the European Commission (2018)

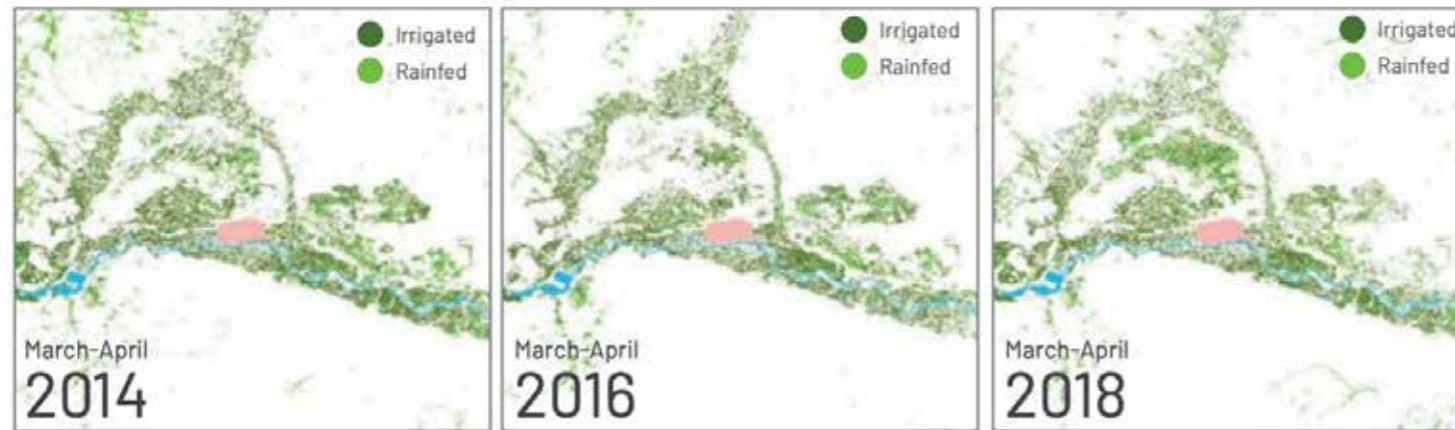
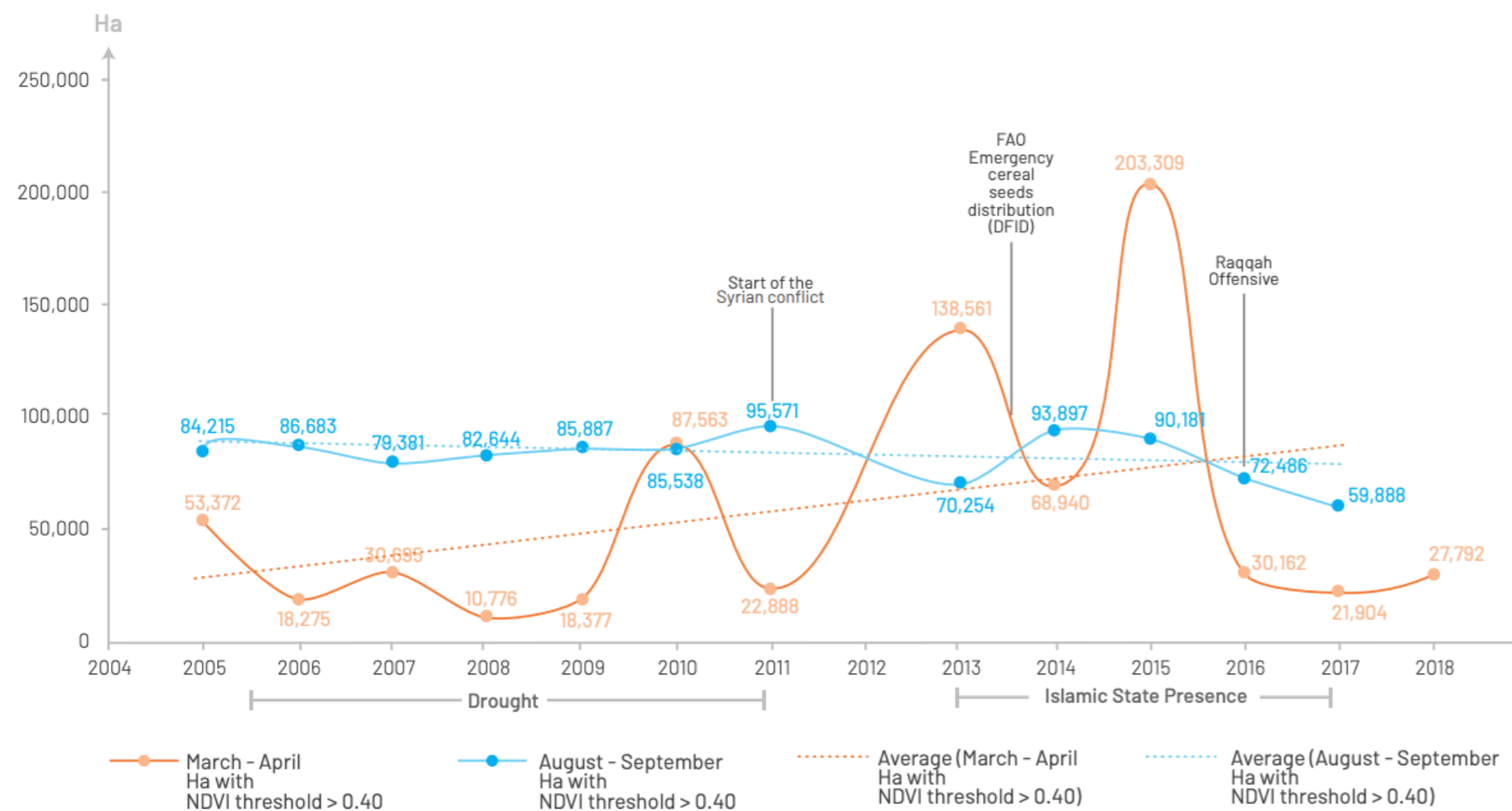


FIGURE 50. NDVI representation and impact on the region's agriculture. Source: Joint Research Center of the European Commission (2018)



ANALYSIS OF RESULTS

Analysis in the agricultural areas of the Ar-Raqqa governorate along the Euphrates river basin found that vegetation, over the period studied, fluctuated primarily due to seasonal rainfall. In 2011, the area was still affected by drought. However, heavy rainfall in October and November of 2015 dramatically improved farming conditions. Even despite barriers from ongoing fighting, reports indicated a 50 percent higher wheat harvest over the previous year. An emergency distribution of cereal seeds in October of 2014 provided 4,500 hectares of additional planting. From 2016-18, a drop in agricultural output was evident and likely as a result of heavy military operations in the area, especially during the late summer irrigation season. Current reports indicate a lack of materials and agricultural inputs such as fertilizer and seed. It is also useful to note the consistency

The NDVI also indicates that the area's agricultural productivity is currently underperforming. Low agricultural productivity affects the workforce throughout the region. It represents a loss of employment and income for rural residents, and negatively affects employment in food processing, trade, transportation, and other related industries. Wheat production in Raqqa and surrounding governorates has a direct impact on national food security and the region's role as Syria's 'food-basket'.

It is therefore vital to restore agricultural trade networks and linkages to rural satellite towns in Raqqa and surrounding governorates, and re-establish Raqqa as the key grain and cotton processing centre in northern Syria. Sufficient access to agricultural input such as seed, fertilizers, and machinery should be ensured. It will also be important to work with agricultural cooperatives to monitor seed types in order to prevent invasive species and unsustainable practices.

CASE STUDY: VEGETATION DENSITY IN MAREB, YEMEN

Mareb City is the only city within the Governorate of Mareb with significant agricultural resources, which rely on water from the Mareb dam. To understand the changes in agricultural areas pre- and post crisis, a Normalized Difference Vegetation Index (NDVI) analysis was done for the Mareb region in March 2013 and March 2019 with Landsat-8 imagery. The analysis results show differences in agricultural areas both in area size and crop type.

The analysis illustrated the following classes:

Class 1 (-1 - 0): Water Bodies

Class 3 (0.18 - 0.3): Vegetables, the NDVI is less than 0.20

Class 4 (0.3 - 0.6): Olives trees as they have a stable profile with a nearly constant value (>0.50) while new olive farms will have a stable NDVI that is in the range of 0.20 to 0.30.

The initial analysis suggests that the total agricultural area decreased from 2013 to 2019 by almost 40% for a total of 30 km².

Furthermore, the imagery suggests a significant shrinking of water bodies from 2013 to 2019 by almost 47%, likely indicating an increasing trend in drought. This could cause major challenges to food security in the region.

Over the last thirty years, Yemen has experienced four periods of drought, in 1979-1981; 1983-1984; 1990-1991; and in 2007-2009. This has caused severe damage to the Yemeni economy, which largely relies on agricultural resources.

Yemeni researcher Dhaifallah (2018), has shown that there is a gradual transition of agriculture areas from mild to moderate drought by 64% and from moderate to severe drought by 26% from 1985 to 2015, and suggests that this will cause major threats and challenges to both food security and the overall development of the country.

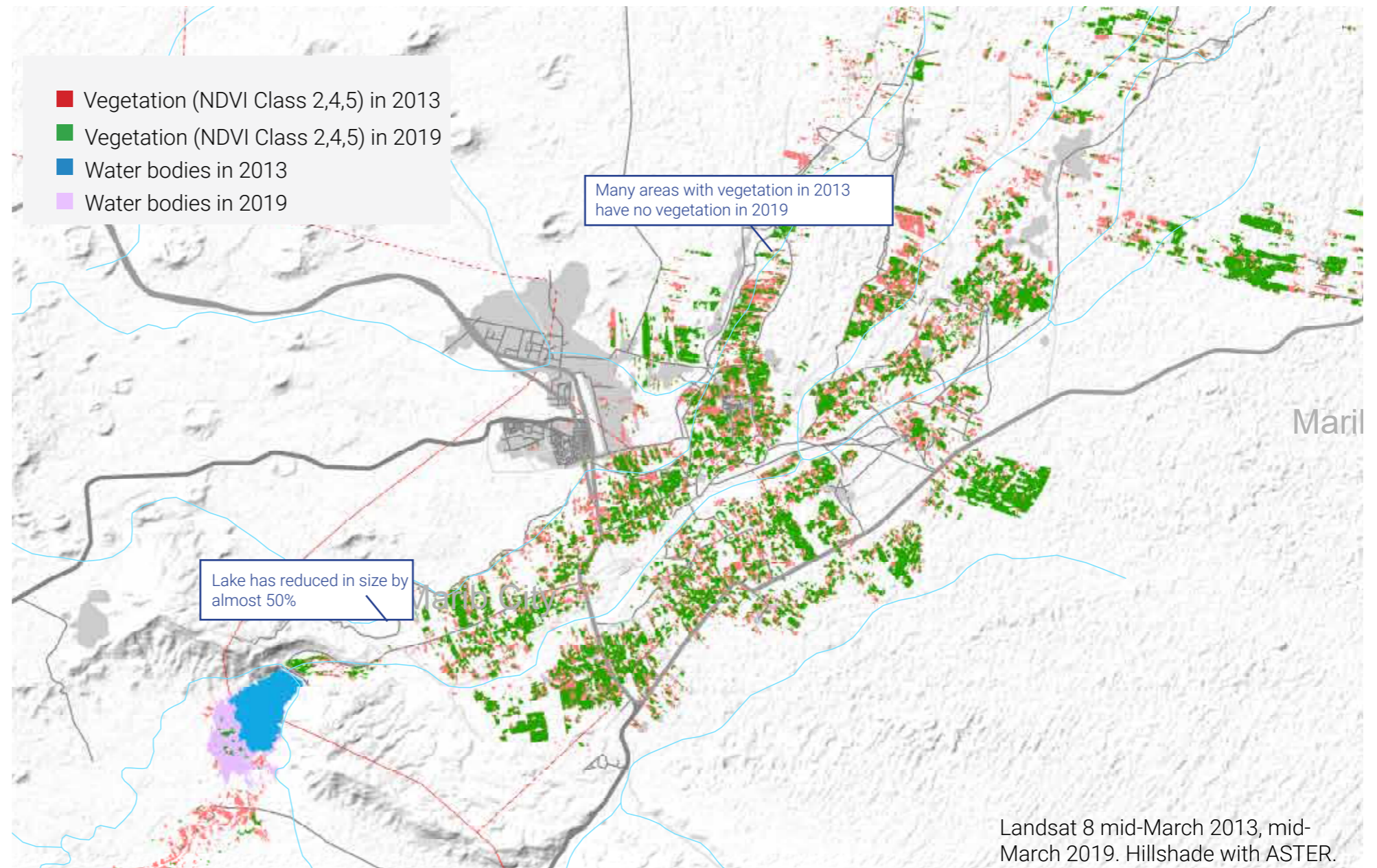


FIGURE 51. Geographical zones in Yemen. Marib is located on the border of the highlands and the desert zone.

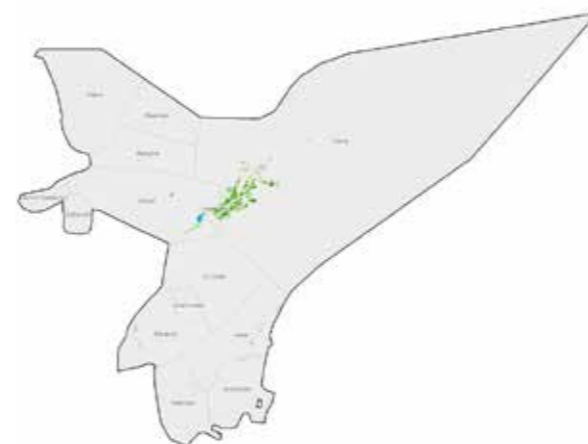
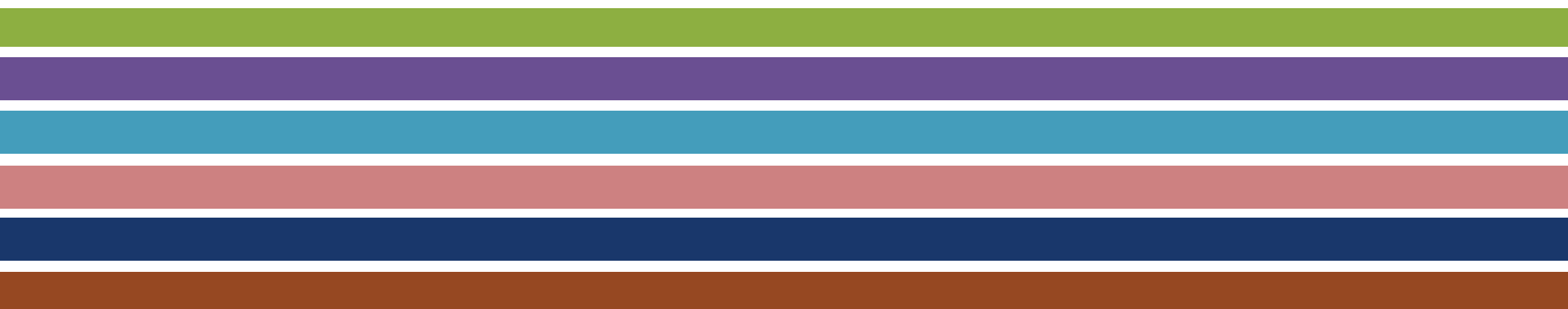


FIGURE 52. NDVI analysis Marib region

NDVI Class	2013 (km ²)	2019 (km ²)	Difference	% Change	Type
1.00	7.64	4.08	-3.57	47%	Water Bodies
3.00	63.58	49.48	-14.10	22%	Agricultural Area
4.00	16.67	0.52	-16.16	97%	Agricultural Area

FIGURE 53. NDVI analysis results

Landsat 8 mid-March 2013, mid-March 2019. Hillshade with ASTER.



Urban profiling is a methodology implemented in various conflict-affected countries in the region. Through urban profiles, UN-Habitat seeks to provide up to date, holistic documentation and analysis of the impact of the crisis in key cities. This publication documents the analysis framework and tools developed within various UN-Habitat country offices for future practitioners.

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