





ADDIS ABABA

# PRELIMINARY RESILIENCE ASSESSMENT

SUMMARY REPORT

March 2019











## Contents

Introduction To 100 Resilient Cities In Addis Ababa	7
The Preliminary Resilience Assessment	9
Addis Ababa's Unique Context	11
Addis Ababa's Risk Profile	
Addis Ababa's Priority Shocks	16
Addis Ababa's Priority Shocks	18
Stakeholder Engagement	23
Stakeholder Engagement	24
City Actions	2E
Overlay of Actions + Perceptions	27
Discovery Areas And Cross Cutting Themes	. 25
Discovery Area I - The Governance We Pursue	
Discovery Area Ii - Our Prosperous City	
Discovery Area lii - The City We Deserve	36
Discovery Area Iv — Our Healthy And Livable City	38
Next Steps – Towards A Resilience Strategy	41



## Glossary

ASSET – The physical, economic, social, built and natural resources that contribute to a city's resilience.

CHIEF RESILIENCE OFFICER — The driver and principal owner / author of the city's resilience strategy.

CITY RESILIENCE FRAMEWORK (CRF) – Developed by Arup with support from the Rockefeller Foundation, the City Resilience Framework provides a lens to understand the complexity of cities and the drivers that contribute to their resilience, and a common language that enables cities to share knowledge and experiences.

DISCOVERY AREA – Important areas for discovery during Phase II activities of the resilience strategy.

INITIATIVE – An action identified in the resilience strategy that addresses specific priorities for building resilience in the city.

PHASE I – This phase is designed to conduct a holistic scan of the city's state of resilience, establish the office of the CRO, and begin to engage and galvanize stakeholders, critical voices and experts around resilience.

PHASE II – Building on the mobilization and analysis of Phase I, in Phase II the CRO will partner with diverse and interdisciplinary teams and platform partners to explore the challenges and innovate solutions generating from the city's defined discovery areas.

PRELIMINARY RESILIENCE ASSESSMENT (PRA) — Establishes a baseline understanding of the city's strengths and weaknesses using a holistic understanding of resilience as described in the City Resilience Framework.

RESILIENCE – The capacity of individuals, communities, institutions, businesses and systems within a city to survive, adapt and thrive no matter what kinds of chronic stresses or acute shocks they encounter.

RESILIENCE STRATEGY – A tactical road-map to build resilience in the city. The strategy articulates the city's resilience priorities and specific initiatives for short-, medium- and long-term implementation.

SHOCK – An acute natural or man-made event or phenomenon threatening major loss of life, damage to assets and a city's ability to function and provide basic services, particularly for poor or vulnerable populations.

STAKEHOLDER – Individuals and groups within and outside of city government with the influence or capacity to build resilience; representatives of diverse interests and needs of the civic, private and public sectors.

STRATEGY – The overall collection of priorities, initiatives and action plans that the CRO and stakeholders will identify and implement to build resilience in the city.

STRESS – A chronic (ongoing or cyclical) natural or man-made event or phenomenon that renders the city less able to function and provide basic services, particularly for poor or vulnerable populations.



### Introduction

100 Resilient Cities – Pioneered by the Rockefeller Foundation (100RC) is a global initiative dedicated to helping cities around the world become more resilient to the physical, social, and economic challenges that are a growing part of the 21st century.

100RC defines urban resilience as "the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow, no matter what kinds of chronic stresses and acute shocks they experience".

Core to 100RC's mission is a deep belief that for cities to become resilient, they need to consider not just acute shocks – one-time catastrophic events such as earthquakes, drought, floods – but also the day-to-day stresses, such as water shortages, high unemployment

and poverty, that weaken the fabric of a city over time. By addressing shocks and stresses together, a city is better able to overcome adverse events and deliver essential functions in both good and bad times to all its residents, particularly the poor and the vulnerable.

In May 2016, Addis Ababa was selected to join the 100RC Network from among 325 applicant cities worldwide. Addis Ababa was chosen because of its strong commitment to develop and implement an inclusive and integrated City Resilience Strategy which will serve as a road-map for building resilience in the city. To lead this work, the City appointed a Chief Resilience Officer (CRO) and established the Addis Ababa Resilience Project Office (AARPO).

Led by the CRO, the AARPO is responsible for coordinating the development and implementation of Addis Ababa's first Resilience Strategy. In addition, the AARPO plays an important role in establishing partnerships with government agencies at all level,



Figure 1. 100RC's Network of Cities

The Resilience Strategy is a tactical road-map for building resilience in the city. The Strategy articulates the city's resilience priorities and specific initiatives for short-, medium-, and long-term implementation. The main purpose of the Resilience Strategy is to trigger action, investment and support within city government and beyond to build a more resilient Addis Ababa.

strategy. It is responsible for developing proposals for bankable projects and securing resources for the successful implementations of initiatives included in the Resilience Strategy. The AARPO is accountable to the City's Plan and Development Commission

There are two principal phases in the development of the Resilience Strategy:

- Building on extensive stakeholder engagement and analysis, Phase I aims to establish a baseline of Addis Ababa's existing state of resilience and to identify cross-cutting Discovery Areas, or priority questions, to guide deeper exploration in Phase II.
- During Phase II, innovative research and deeper diagnostic is conducted into each Discovery Areas. These diagnostics and assessments are then turned into actionable initiatives and projects which will be

included in the Resilience Strategy.

As a member of the 100RC network are offered four types of support:

- 1 Funding for hiring a Chief Resilience Officer (CRO) to lead the resilience-building efforts in the city
- 2. Technical support and analytical tools to develop and implement a customized City Resilience Strategy
- 3. Access to 100RC's platform of 130 pro-bono planning, research & analysis services from over 90 partners valued at over \$250 million
- 4. Membership in 100RC'S network with opportunities for knowledge sharing and peer-to-peer collaboration with other cities across the globe.

Addis Ababa joins the 100RC Network

MAY 2016

F

Addis Ababa + 100RC hold an Agenda Setting Workshop

DECEMBER 2016



The Addis Ababa Resilience Project Office (AARPO) was established by regulation for a period of 5 years

NOVEMBER 2017



The Mayor appoints Fitsumbrhan Tesgaye as Addis Ababa's Chief Resilience Officer (CRO)

FEBRUARY 2018



AARPO launches Phase 1 of the strategy development process

**AUGUST 2018** 





#### **MARCH 2019**

The PRA is reviewed and approved by the city leadership



#### DECEMBER 2018

The AARPO conducts a validation workshop to present and seek feedback on the findings of the PRA from key stakeholders



#### DECEMBER 2018

Addis Ababa hosts 100RC's first Africa Network Exchange focused on City Resilience and Urban Informality





#### NOVEMBER 2018

100RC and AARPO teams hold the Preliminary Resilience Assessment (PRA) Bootcamp



#### OCTOBER 2018

AARPO conducts stakeholder engagement through several workshops anda door-to-door survey

March. 2019

## THE PRELIMINARY RESILIENCE ASSESSMENT:

Addis Ababa's Preliminary Resilience Assessment (PRA) was developed based on extensive stakeholder engagement, literature review, and analysis conducted in Phase I. Between August and December 2018, we engaged with a wide range of stakeholders from government authorities, development partners, private sector organizations, civil society, as well as research and academic institutions (see Figure 3).

Through these various engagements, we've been able to gather valuable data and perceptions on Addis Ababa's unique city context, priority assets, shocks and stresses, resilience strengths and weaknesses, as well as past, ongoing and planned actions that contribute to making the city more resilient. The data and insights gathered were then transposed into various tools provided by 100RC for further analysis. The outputs of these tools are analyzed and presented in this report, using the City Resilience Framework (see Box 1) as a common framework for comparison.

By bringing these analyses together, we were able to gain a renewed and deeper understanding of Addis Ababa's key resilience challenges; the "gaps" in knowledge and capacity which are critical for the City to address; and the opportunities for the City to build on existing interventions to strengthen its resilience. These, in turn, helped us to identify cross-cutting Discovery Areas which we will delve deeper enduring Phase II of the strategy development process.

The PRA summarizes the outputs and findings of the engagement and analysis conducted thus far, outlines the Discovery Areas which will serve as the basis for our work in Phase II



WORKSHOPS





5382
RESPONSES FROM
A DOOR-TO DOOR SURVEY



**ONLINE SURVEY** 

We conducted:

- an Agenda Setting Workshop attended by over one hundred stakeholders
- •a Perceptions Assessment Workshop
- an Assets and Risks Workshop with 29 asset owners and managers across the city
- A FGD with Addis Ababa Edir Council Councils leaders and Consumer Association members-
- A FGD with Ethiopian Elderly and pensioners Association and Mekedonia Home for Elderly and Mentally Disabled

12 Key Informant Interviews with senior government officials at both city and federal level, as well as key development partners

A Door-to-door survey across all 10 sub-cities in Addis Ababa which reached more than 5,000 respondents in the city. Designed and conducted in partnership with the Central Statistical Agency (CSA), the door-to-door survey gave due attention to vulnerable groups and informal settlers, thus enabling us to elevate the perceptions and voices of residents who are often not included in planning efforts.

An Online survey completed by 75 respondents from government (13.3%), private sector (42,7%), Civil Society (24%), Academia (12%) and Development partners (8%).

Figure 3. Stakeholder Engagement Methodology

#### THE CITY RESILIENCE FRAMEWORK

Developed by Arup with support from the Rockefeller Foundation, the City Resilience Framework (CRF) is a key tool used in the Resilience Strategy Development process. The CRF provides a lens to understand the complexity of cities and drivers that contribute to their resilience. It has been used throughout Phase I as a lens to diagnose Addis Ababa's areas of strength and weakness. The CRF is built on four essential dimensions of urban resilience:

- I. HEALTH AND WELLBEING: this dimension is about ensuring that everyone can meet basic needs (food, water, shelter, etc.) even in times of crisis, through livelihood opportunities or aid, and have access to healthcare that prevents the spread of disease.
- 2. ECONOMY & SOCIETY: this dimension is about creating cohesive communities characterized by active citizens, cultural identity and strong social networks; as well as the formal systems to promote law and order and sound fiscal management.
- 3. INFRASTRUCTURE & ENVIRONMENT: this dimension looks at the man-made and natural systems that provide critical services, protect, and connect urban assets enabling the flow of people, goods, services, and knowledge.
- 4. LEADERSHIP & STRATEGY: this dimension looks at the processes that promote effective leadership, inclusive decision-making, empowered stakeholders, and integrated planning.

Each dimension is further divided into three drivers which reflect the actions that cities can take to improve their resilience. In total, 12 drivers form the core of the CRF, and when taken together they represent a city's resilience to a wide range of shocks and stresses. Fundamental to the CRF is the idea that resilience cannot be achieved through a single action; it requires multiple actions at multiple levels. Resilience is the result of cumulative action to strengthen the 12 drivers over time.

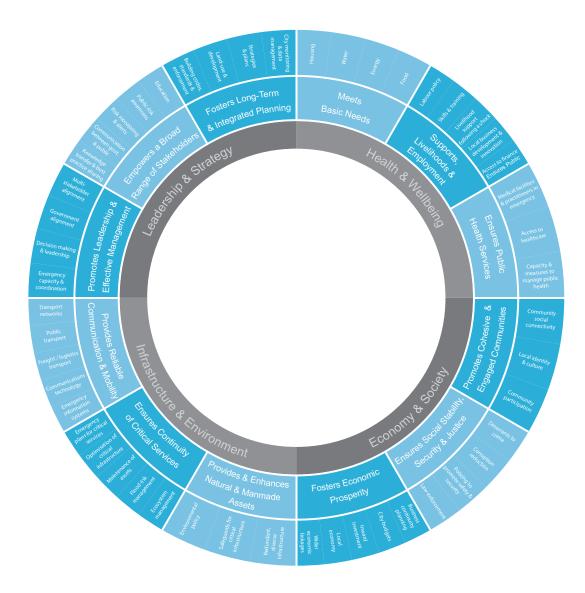


Figure 5. The City Resilience Framework Wheel

March, 2019 9



# ADDIS ABABA'S UNIQUE CITY CONTEXT

## Demographic and Regional Context

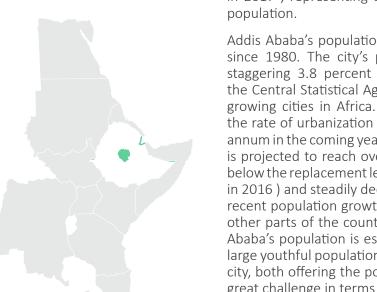


Figure 6. Addis Ababa Location Map

Addis Ababa is the capital and the single largest city of Ethiopia, Africa's second most populous country. According to official estimates, approximately 3.4 million people lived in Addis Ababa in 2017, representing 17 percent of the country's total urban population.

Addis Ababa's population has more than doubled every decade since 1980. The city's population is currently expanding at a staggering 3.8 percent per annum according to estimates by the Central Statistical Agency (CSA), making it one of the fastest growing cities in Africa. According to World Bank projections, the rate of urbanization is expected to increase to 5 percent per annum in the coming years. At this pace, Addis Ababa's population is projected to reach over 6 million in 2035. With fertility rates below the replacement level (estimated at 1.8 children per women in 2016) and steadily declining in recent years, much of the city's recent population growth is attributed to high in-migration from other parts of the country. In addition, more than 50% of Addis Ababa's population is estimated to be under the age of 20. This large youthful population represents a double-edge sword for the city, both offering the potential to spur growth but also posing a great challenge in terms of job creation.

Established in 1886 by Emperor Menelik II and Empress Taitu, Addis Ababa has emerged overtime as an important political and diplomatic center in Africa. Owing to its role as the capital of Africa's oldest independent country, the city played a historic role in hosting the headquarters of the African Union (AU), an organization which contributed to liberation movements across the continent, and the United Nation's Economic Commission for Africa (UN-ECA). With over 115 embassies, Addis Ababa is also home to the third largest diplomatic presence worldwide, only after New York and Geneva. The city is thus often called the diplomatic capital of Africa. Addis Ababans exhibit a great sense of pride in their city's multicultural and religious identity, as well as in its historical, political and diplomatic prominence in the continent.



51%
INCREASE OF URBAN EXTENT 2007-2017

92%

**DECLINE IN DENSIT**)

2007-2017

3.8% annual population growth

DEMOGRAPIC & REGIONAL CONTEXT



3.4 MILLION
RESIDENTS
PROJECTED
IN 2017



LARGE YOUTH POPULATION

40.6%
GROWTH RATE OF BUDGET BETWEEN 2015 AND 2019

**LEADERSHIP & STRATEGY** 



20.2%

ZU.Z%

UNEMPLOYMENT

RATE



80%

CURRENT LITERACY LEVEL



\$

63%

OF GDP FROM SERVICE SECTOR

 $^{\circ}$ 

62%

OF UNEMPLOYED ARE WOMEN



**ECONOMY & SOCIETY** 

30%
OF URBAN GDP



23.5%

LIVE BELOW THE POVERTY LINE





#### **ENVIRONMENT**



OF GREEN AREA COVERAGE, WELL BELOW W.H.O. STANDARD OF 9M2



40%

OF FLOODS

DUE TO

DEFORESTATION





PROVIDED BY PARATRANSIT

### TRANSPORT & MOBILITY



55%

OF TRIPS MADE
BY WALKING



**FATALITIES ARE** 

**PEDESTRIANS** 

65%

OF ROADS LACK

**ADEQUATE** 

**SIDEWALKS** 

17 YEARS

AVARAGE AGE OF A CAR



1: 8,604

DOCTOR TO
PATIENT RATIO

65 %

OF THE CITY'S

**LANDFILLS** 

**HEALTH & WELLBEING** 



1.2 MILLION

UNITS NEEDED TO MEET HOUSING NEEDS OVER NEXT 10 YEARS



40 L / CAPITA

OF WATER PER DAY





10 %

CONNECTED TO SEWER LINES



## Vulnerability to Shocks and Stresses



Acute shocks are sudden sharp events that threaten a city



Chronic stresses weaken the fabric of a city on a day-to-day or cyclical basis,

Developing a holistic understanding of risks and vulnerabilities is an important first step towards building resilience in any city. We thus engaged several stakeholders through workshops, FGDs, interviews and surveys to identify and prioritize (based on likelihood and impact) the most significant shocks and stresses currently facing Addis Ababa, and those which are anticipated to affect the city in the future.

We also triangulated the findings with evidence from an extensive literature review to ensure that we were also capturing long-term trends (both past and future) which were not necessarily reflected in our consultations

While the assessment was very comprehensive, we recognize that many of the issues came up because they were top of mind for stakeholders. This is linked to both the timing of the engagements and consistency of the problem. Issues like riots, civil unrest, and internal displacement were overwhelmingly mentioned due to the current socio-political condition while stresses like water scarcity were less pronounced

While the assessment was very comprehensive, we recognize that many of the issues came up because they were top of mind for stakeholders. This is linked to both the timing of the engagements and consistency of the problem. Issues like riots, civil unrest, and internal displacement were overwhelmingly mentioned due to the current socio-political condition while stresses like water scarcity were less pronounced. Although water scarcity is a long-standing problem which is likely to worsen in the future under the pressure of rapid population growth and climate change, it wasn't prioritized by stakeholders at the time of our engagements. This could signify that this is an area where residents are accustomed to the challenge and have therefore been desensitized.

It is also worth noting that while events such as inflation or hazardous material release were initially categorized as shocks to align with 100RC's definitions, both the analysis and stakeholder perceptions have revealed that these should be categorized as stresses in the context of Addis Ababa.

Given these complexities, it is important to keep this in mind in highlighting the problems as well as in directing our efforts in the upcoming phases

## Addis Ababa's Priority Shocks

INFLATION



Inflation was rated as the top priority shock facing Addis Ababa both in terms of current as well as future likelihood and impact. It consistently appeared in the top five shocks across all engagements and was rated the top priority shock in the door-to-door survey, online survey and perception workshop. Stakeholders prioritized inflation because of its potential to trigger and exacerbate other shocks and stresses such as poverty, food insecurity, homelessness, lack of social cohesion, crime and violence, rioting, etc. Stakeholders also emphasized

that, in the specific context of Addis Ababa, inflation should be categorized as a stress rather than a shock, given that this is a recurring and long-standing problem. Stakeholders felt that inflation will continue to be a priority shock for the city as this is a complex challenge which will unlikely be solved in the short-term. Stakeholders highlighted that while inflation hits all residents in the city, its disproportionately affects low-income groups.

RIDTS AND CIVIL UNREST



Due to political and economic problems that have persisted in Addis Ababa, rioting and civil unrest have recently increased as a way of showing political dissent. It's worth noting that rioting and civil unrest was ranked significantly lower during the Agenda Setting Workshop in 2015, revealing the massive shift that has occurred in the political situation in the country three years later. Rioting and civil unrest was identified as the top shock in both the online and door-to-door surveys,

revealing that this is a concern that cuts across different income groups. Interestingly, it is also the top shock for key asset owners and utilities companies in Addis Ababa. Most stakeholders believed that political questions and points of contention were being answered but suspected that economic questions such as youth unemployment and economic inequality will be reasons for continued civil unrest and riots in the near future.

FLOODING



Addis Ababa is prone to both surface and river flooding.
Stakeholders identified flooding as a high likelihood and high impact shock facing the city. They highlighted that while river floods particularly affect households living in informal

INFRASTRUCTURE FAILURE



Addis Ababa has experienced a massive boom in construction in the past two decades. While there are a few current examples, stakeholders believe that infrastructure and construction failure will grow to become a higher future risk especially given the growing construction industry. Stakeholders expressed concerns over the poor quality of infrastructure and buildings that are being constructed, which is enabled by poor enforcement of regulations and corruption. The lack

settlements located along riverbanks, all parts of the city are now vulnerable to flash-floods due to the poor drainage infrastructure and increase in impermeable areas.

of regular and adequate maintenance of infrastructure and buildings further exacerbates the risk of future collapse. Stakeholders were particularly concerned by collapse of both first generation and more recently built condominium buildings which are already showing signs of deterioration.

## th

## Addis Ababa's Priority Shocks

INTERNAL DISPLACEMENT

3 3

Driven by the recent upsurge of violent conflicts across the country, internal displacement has become an issue of major concern in Ethiopia. Overall, it was rated as the second highest shock currently facing Addis Ababa. Stakeholders emphasized that the increase in IDPs is placing pressure on already strained basic infrastructure and services as well as on the city's

ability to provide jobs. Some stakeholders associated internal

displacement with the relocation of residents impacted by the City's urban renewal program and highlighted strong interdependencies with stresses such as unemployment, poverty, and lack of social cohesion. The recent change in policy which favors on-site relocation is however believed to limit the likelihood of this shock in the future.

URBAN FIRE

(M)

Urban fire is a long-standing shock in Addis Ababa which typically affects residents living in dense, inner-city informal settlements. While there have been some efforts to enhance the City's capacity to respond to fire emergencies, stakeholders felt that much remains to be done in terms of enhancing both institutional and community preparedness. Furthermore, stakeholders highlighted

an increasing risk of urban fire associated with the ongoing construction of high-rise buildings in the risk. Prevention, preparedness and response to emerging high-rise fire risk is considered inadequate.

HAZARDOUS MATERIAL RELEASE



Addis Ababa is home to 65% of the country's industry and more than 90% of these industries discharge their waste directly into nearby rivers without proper treatment. Consequently, the city's rivers have become heavily polluted, posing a significant threat to ecosystems, public health and future water supply. Stakeholders

perceived the current intensity of this risk to be high and requiring immediate attention.

DISEASE OUTBREAK



Addis Ababa has experienced repeated outbreaks of measles and water-borne diseases such as acute water diarrhea (AWD), typhoid and typhus, among others. Stakeholders rated disease outbreak as a medium priority shock. This is associated with stakeholders' positive perceptions of government efforts in the health sector (i.e. availability of awareness programs, free

health services for the urban poor). Stakeholders felt that the city was relatively well-prepared to respond to disease outbreaks, as compared to other shocks. However, disease outbreaks remain a threat due to inadequate sanitation and drainage infrastructure and services

TERRORISM



Overall, terrorism was identified as a lower likelihood/ lower impact shock. However, it was ranked as the 3rd most important shock among respondents of the door-to-door survey. Stakeholders identified terrorism are an emerging shock for the city, associated with the increasing political volatility in the

country. An overwhelming proportion of the face-to-face survey perceived that the risk of terror attacks will likely increase in the future.

## Addis Ababa's Priority Stresses

HIGH Unemployment



Stakeholders from across all our engagement types consistently identified unemployment as the top priority stress Addis is facing. While unemployment rates in Addis Ababa is decreasing overall, it continues to be a critical problem especially considering rapid urban growth and migration rates. Stakeholders believe that the increasing in-migration towards Addis Ababa and the fact that the city's population is

predominantly comprised of youth, will counter efforts to ease unemployment as the demand for jobs grows. Key informants also expressed dissatisfaction with the city's current ability to tackle unemployment and underemployment and perceive unemployment will continue to be a priority stress for Addis.

CORRUPTION



among stakeholders across different engagement types. Key informants pointed out that its prevalence on all levels of city government has been an impediment to the city's development. They also pointed out that there is lack of on accountability, knowledge and commitment, which contributes to poor

Corruption was consistently ranked as a high priority stress

governance and a weak regulatory system. Stakeholders pointed out that this has led to significant failures including the lack of implementation of building codes resulting in the construction poor and unsafe buildings across the city and infrastructure failure.

LACK OF AFFORD-ABLE HOUSING



The cost of housing has been rising exponentially making it increasingly more difficult for residents of Addis Ababa to access a home (either rental or owned). Lack of affordable housing was thus rated as the one of the highest stresses faced by the city by most of our stakeholders. Stakeholders,

especially those engaged through the household survey, pointed out that most of their income is reserved for covering housing costs, which makes fulfilling their other needs difficult.

## ENVIRONMENTAL DEGRADATION



Urban encroachment, significant gaps in the city's environmental legal framework and poor environmental regulation throughout Addis has led to the degradation of the city's environment. Thus, stakeholders from across engagement types identified environmental degradation as a high priority stress. Stakeholders from key informant interviews expressed concern that deforestation, air and water

pollution, in addition to absence of green areas, is affecting the livability of Addis. They also pointed out several factors including increasing industrialization within and around the city and a growing number of cars as adversely affecting the city's environment. Residents highlighted their concern with the increasing number of vehicles and industries which are

HOMELESSNESS



As rural to urban migration increases in Addis, the number of homeless individuals has been increasing drastically as well. Thus, homelessness was ranked as a significant stress, especially among participants engaged through the household survey. The survey, which engaged vulnerable and homeless

participants, showed that the lack of affordable and adequate housing stock in the city, and the prevalence of unemployment and disenfranchisement among youth further exasperates the threat of homelessness in Addis.

## Addis Ababa's Priority Stresses

WATER SHORTAGE



Addis Ababa's increasing population and the city's unprecedented construction boom has exponentially increased the demand on access to basic services, especially water. This, in addition to poor water management, affects the city's water provision capacity, making water shortage a significant current and future stress for most of our stakeholders. Key informants

also stated that environmental degradation and climate change is affecting the city's water supply, making water stress a significant and imminent threat to residents.

DRUG & ALCOHOL ABUSE



The prevalence of unemployment, especially among youth, poverty and homelessness in Addis has contributed to the rise of drug and alcohol abuse. The household survey conducted showed that alcohol and drug abuse is of particular concern to the city's vulnerable and homeless populations. Key informant

interviewees also stated frustration with the lack of adequate enforcement of age restrictions in consuming drugs such as chat and alcohol, which they attributed to increasing their accessibility by underage youth.

POPULATION GROWTH



Addis Ababa's population is growing mainly due to rural urban migration. Stakeholders, especially those engaged through the online survey and perception workshop identified unprecedented and unplanned urban growth fueled by increasing population as medium priority stress. Unmanaged population increase is

viewed by stakeholders as a current and future threat to the city's environment and as added pressure to the city's already strained basic service provision.

INADEQUATE WASTE AND SANITATION



TRAFFIC CONGESTION

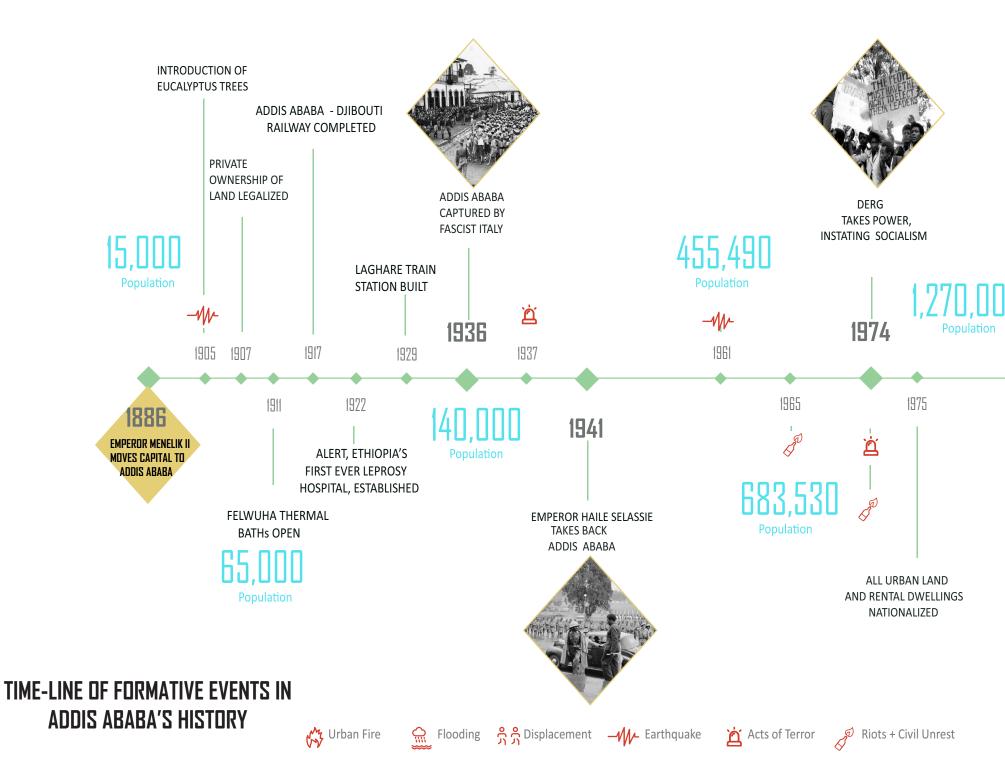


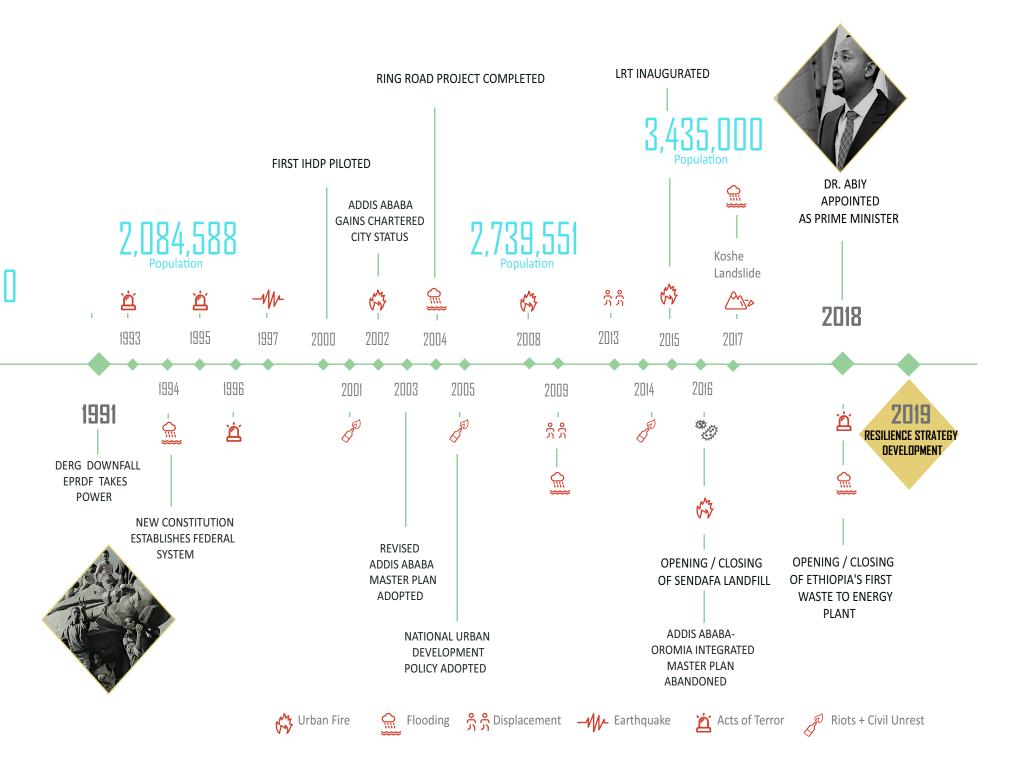
Although Addis Ababa has been making significant investments in waste management, the city's sanitation systems (both liquid and solid) still have a long way to go to achieve adequate provision for residents. Thus, inadequate waste and sanitation was ranked as a medium priority stress among stakeholders, especially those engaged in key informant interviews and workshops. In addition to recognizing the gap in treating waste

Although the city's car ownership rates are lower than global norms, Addis Ababa still suffers from significant traffic congestion due too poor traffic management, poor coordination of public transport services, and road design, making congestion a medium priority stress. Stakeholders from the perceptions workshop

generated by residents, stakeholders also stated concern with the city's inability to deal with hazardous materials that are bi-products of increased industrialization. Stakeholders also pointed out the link between the city's poor drainage system and the prevalence of flooding which significantly contributes to traffic congestion.

pointed out that Addis Ababa's poor road infrastructure and drainage system will ensure congestion to be a future stress for the city as well. .











3

WORKSHOPS



2

FOCUS GROUP DISCUSSIONS



12 KEY INFORMANT INTERVIEWS



5382 RESPONSES FROM A DOOR-TO DOOR SURVEY



75
RESPONSES FROM AN ONLINE SURVEY

## Stakeholder Perceptions

A unique feature of the PRA development process is the strong emphasis placed on understanding what different stakeholders across the city perceive as being Addis Ababa's main resilience strengths and weaknesses.

Leveraging the various stakeholder engagements conducted, we have gathered perceptions from a broad and diverse group of stakeholders, ranging from city technical staff to residents in informal settlements, thereby capturing and elevating the perceptions and voices of residents who are often not included in planning efforts.

These different views have been captured and populated in 100RC's dedicated Perception Assessment tool which organizes these inputs against the drivers and sub-drivers of the CRF. A total of 65,909 factors or drivers of resilience have been captured from our engagements with stakeholders. Using the tool, we were able to understand where there is consensus and dissonance on Addis Ababa's resilience performance and begin to map interconnected resilience issues. The outcome of this assessment will inform the city's discovery areas and subsequent development the Resilience Strategy in Phase II.

The outcome of this stakeholder perceptions gathering and analysis is presented to the right.

## Stakeholder Perceptions

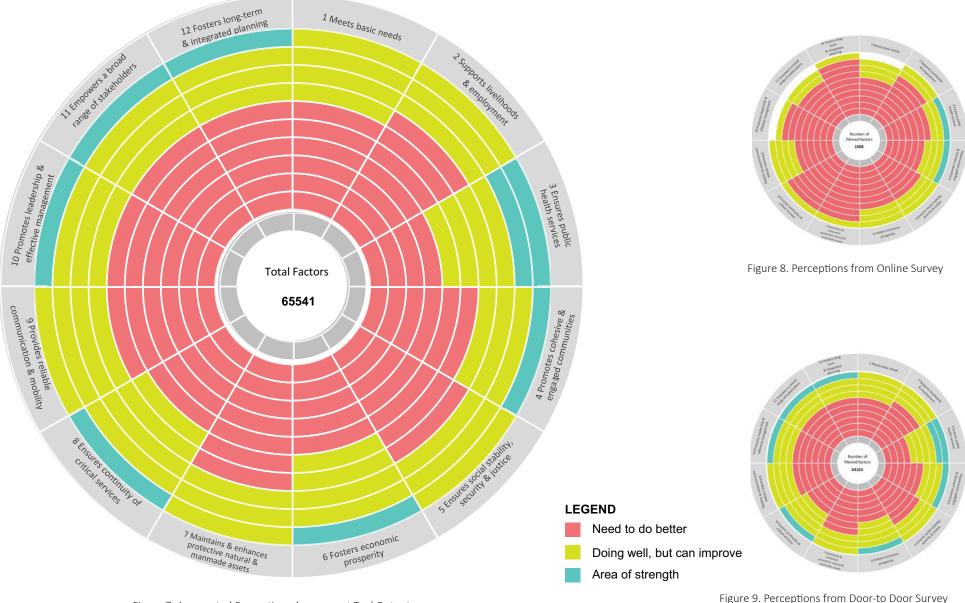


Figure 7. Aggregated Perceptions Assessment Tool Output

Addis Ababa Preliminary Resilience Assessment 24

#### **AREAS OF STRENGTH**

- Ensures Public Health Services

#### DOING WELL BUT CAN IMPROVE

- Fosters Economic Prosperity
- Promotes Cohesive And Engaged Communities

#### **NEEDS TO DO BETTER**

- Supports Livelihood And Employment
- Ensures Social Stability, Security & Justice
- Promotes Leadership & Effective Management
- Foster Long-Term & Integrated Planning
- Provide Reliable Communication & Mobility

"The City's Health Bureau was very reactive and worked diligently to raise awareness on the risk Acute Watery Diarrhea during the outbreak two years ago".

"The City is making efforts to address food insecurity through the urban safety net and food security programs"

"Ensuring social stability, security and justice is key for our city's development and peace. This has to be improved."

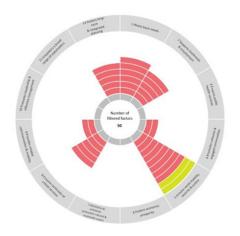


Figure 10. Perceptions from Focus Group Discussions



Figure 11. Perceptions from Workshops



Figure 12. Perceptions from Key Informant Interview

March, 2019 25

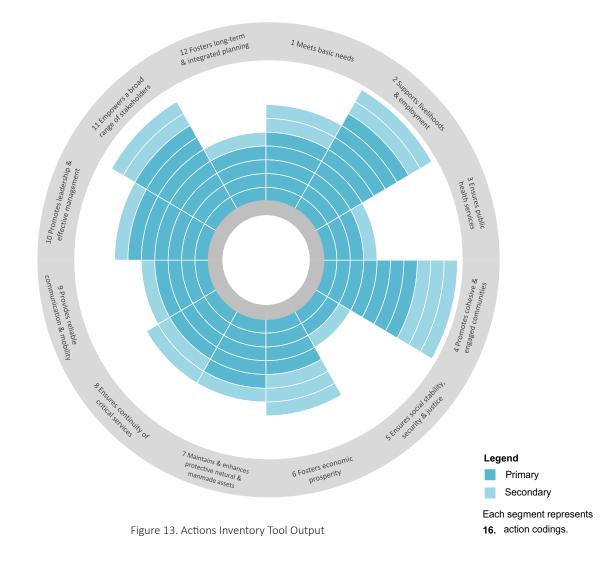
## City Actions

A key activity in Phase I of the strategy development process was to identify and catalogue past, ongoing or planned actions or interventions that contribute to Addis Ababa's resilience. The purpose of this inventory was to provide us with a comprehensive view of the range of resilience-building efforts underway in the city. The inventory also helped in identifying the areas where resilience efforts are being concentrated and where there are gaps. This is particularly crucial as the success of the Resilience Strategy will depend in part on the degree to which it is building from existing interventions and filling gaps, rather than duplicating efforts.

Through our various stakeholder engagements, we were able to gather a list of 299 priority actions that contribute to Addis Ababa's resilience. These actions were then cataloged in 100RC's Actions Inventory tool. Using the tool, the primary and secondary objectives of each action were then mapped against the 12 CRF drivers (see Figure 13).

Actions cataloged in the tool include plans, strategies, programs, projects, practices, initiatives, legislations, or funding that is deliberately designed to contribute to the protection, functioning or advancement of the city. We've listed actions owned by all stakeholders across the city (government, private sector, civil society, research and academic institutions, development partners) and that are being implemented at different scales, from neighborhood-level interventions all the way to national-level ones.

It is important to highlight here an important limitation of the Actions Inventory tool to ensure adequate interpretation of the outputs obtained. Indeed, the tool only provides an indication of effort (i.e. number of actions coded); it does not any information on the impact of each action. Lastly, it must be noted that this inventory is by no means comprehensive or final. It is determined by the conversations that we have had and the data that we have managed to collect thus far in a context where data is not readily and easily available. We thus intend to deepen our engagements with stakeholders to dynamically identify and resolve gaps in phase 2.



#### AREAS OF HIGH INTERVENTION

- Supports Livelihood and Employment
- Empowers A Broad Range Of Stakeholders
- Promotes Cohesive And Engaged Communities

#### AREA OF LOW INTERVENTION

- Ensures Social Stability, Security & Justice
- Ensures Public Health Services

Addis Ababa Preliminary Resilience Assessment

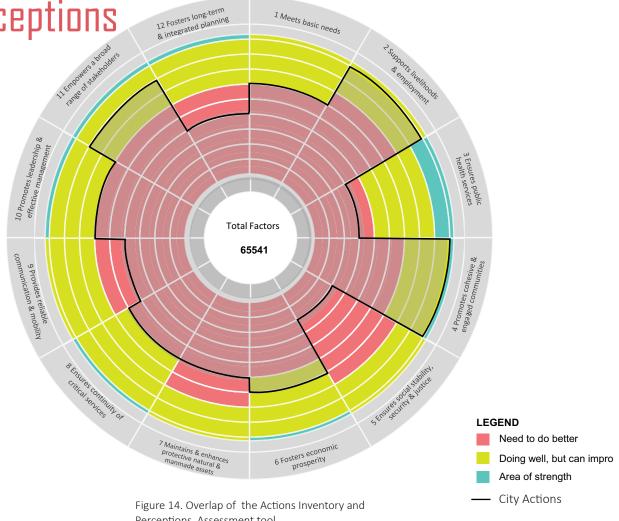
Overlay of Actions + Perceptions We also overlapped the Actions Inventory Tool with

the overall perceptions we have collected and coded to assess how the city's actions align with areas of perceived strengths and weaknesses.

The most visible discrepancy is observed in the "Supports Livelihood and Employment" driver. Although this is an area of deep engagement for the city government and civil society organizations, there is a possibility that the existing interventions are not at the scale needed to achieve optimal impact. This inability to scale up interventions, when coupled with the large influx of youth that are migrating to the city in search for employment and the city's high rates of underemployment and unemployment, makes them insufficient in meeting the city's needs.

The second most visible mismatch between actions and perceptions is in the "Ensures Public Health Services" driver. The mismatch here can be attributed to the limitation of the tool which, as mentioned previously, only provides an indication of effort, and not impact. Thus, whilst our inventory suggests that there are fewer actions in the city aimed at "Ensuring Public Health Services", it is important not to interpret this result as a lack of impactful efforts in this area. Given stakeholders positive perceptions of the Government's efforts in the health sector, it is likely that while there are fewer actions that are coded against this driver, their scale and impact is significant.

Lastly, more actions were also populated under the driver "Empowers a broad range of stakeholders", though the general public perception about the issue is quite negative. This is justified as the 100RC Actions Inventory Tool counts actions directly or indirectly associated with sub-drivers including education, public risk awareness, risk monitoring, communication between the public and government, and knowledge transfer, as a source of empowerment for stakeholders.



Perceptions Assessment tool

#### AREAS OF MISS-MATCH BETWEEN ACTIONS AND PERCEPTIONS

- Supports Livelihood and Employment
- Ensuring Public Health Services
- Empowers a Broad Range of Stakeholders

March. 2019 27





## Areas of Further Exploration

The Preliminary Resilience Assessment has surfaced multiple areas that require further investigation and analysis in order to develop a robust understanding and evidence base for deciding which significant resilience challenges and opportunities the Addis Ababa Resilience Strategy should address.

In total, we have identified four Discovery Areas have that we will explore further in Phase II. These Discovery Areas reflect and respond to specific gaps, challenges and opportunities identified in the PRA. Each of the discovery areas has a series of Discovery Area questions to emphasize the process of inquiry we will take in Phase II. These DA questions were formulated keeping in mind the following criteria: alignment with existing city efforts, potential to add specific value to ongoing initiatives, potential for resource alignment, and existing knowledge/capacity gaps.

The PRA process has also revealed two cross cutting themes that will constantly appear and guide our investigation during Phase II. These cross-cutting themes, Informality and Innovation and Technology, are transversal topics which impact each discovery area in some way and will help us align our inquiry with the current realities of Addis Ababa, and the City's future aspirations.

## Areas of Further Exploration



#### DISCOVERY AREA



## THE GOVERNANCE WE PURSUE

Building an efficient and transparent governance system to better serve the residents of Addis Ababa

#### DISCOVERY AREA



#### OUR PROSPEROUS CITY

Fostering a diverse and sustainable economy that benefits all

#### DISCOVERY AREA



## THE CITY WE DESERVE

Strengthening systems that make up the backbone of the city

#### DISCOVERY AREA



## DUR HEALTHY AND LIVABLE CITY

Creating a healthy and livable environment for all

Figure 15. Discovery Areas and Cross-cutting Themes

Addis Ababa Preliminary Resilience Assessment





#### INFORMALITY

As evidenced in the Unique City Context section of this PRA document, Addis Ababa is very much an informal city. From community organizations such as Edirs, Mehabers and Equbs, which provide much needed social safety nets to the provision of housing and employment, the residents of Addis Ababa rely heavily on informality to meet the needs that the city's formal system is currently unable to address.

In December 2018, Addis Ababa hosted a Network Exchange on Informality and City Resilience, which convened eight cities from Africa, Latin America and Asia, in a conversation around how Cities can acknowledge, elevate and integrate informality into formal planning processes and strengthen resilience-building efforts. In hosting this convening, the City has recognized the value that informality brings to the Addis Ababa's resilience and social cohesion, while also acknowledging that the informal sector also faces vulnerabilities that need to be addressed.

In recognition of its significance in people's lives, in acknowledgment of the challenges and many opportunities the informal sector provides and capitalizing on the current positive attitude towards integrating it into planning processes, we will use Informality as a cross-cutting theme in further exploring out Discovery Areas.



#### INNOVATION AND TECHNOLOGY

Addis Ababa seeks to become a middle-income city by 2028 by addressing chronic stresses including governance, mobility and environmental issues and creating a competitive economy that further cements the city's role as Africa's diplomatic capital. Addis Ababa, in alignment with the federal government, seeks to lean on innovative and technologically apt solutions in pursuing this ambitious goal. The City has already made headway in investing in such solutions. For instance, it has instituted Lehulu Payment Service Centers, which make paying fees for basic services easier and more efficient, and invested in the AACA Knowledge Management System, a digital platform that documents projects being undertaken by the city's many agencies and preserves institutional memory. The City is also exploring the possibility of using Digital Jobs to tackle Addis Ababa's current unemployment and underemployment issues.

In addition to the City's interest, the private sector has also been taking significant steps in investing in entrepreneurship and gradually turning Addis Ababa into an innovation hub. In recognition of current opportunities and its relevance in the future development of Addis Ababa, we will use Innovation and Technology as our second cross cutting theme.

March, 2019 31



## 1. THE GOVERNANCE WE PURSUE

Building an efficient and transparent governance system to better serve the residents of Addis Ababa

#### **UNERNIEM**

Chronic stresses such as corruption, lack of coordinated planning and weak technical capacity have long challenged the effectiveness of the Addis Ababa's governance system. Because of this, the city's service delivery is still inefficient, ineffective and lacks accountability and transparency. This discovery area seeks to support ongoing efforts being taken by the city to build an efficient and transparent governance system that better serves the residents of Addis and minimizes the gap in service delivery in light of the city's rapid growth and development.

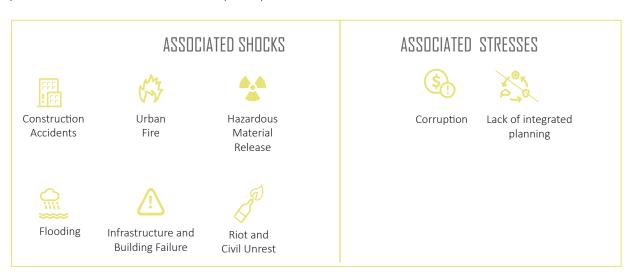
#### CHALLENGES AND OPPORTUNITIES

- Successive reforms undertaken with the aim of improving service delivery in the city have proven to be ineffective
- Coordination across government agencies and service providers in the city is weak
- Exploring new forms of partnerships for integrated infrastructure planning and delivery with neighboring cities could lead to greater resilience impact
- Lack of meaningful public participation is leading to ineffective and poorly accepted interventions
- Knowledge of vulnerabilities and risks facing critical physical assets and infrastructure is limited and the city currently lacks contingency plans for critical infrastructure
- •Lack of enforcement of regulatory measures in the construction sector is compromising workers and buildings safety

Addis Ababa Preliminary Resilience Assessment

## Discovery Questions:

- 1. What are root causes to inadequate basic service delivery in Addis Ababa? What are low hanging fruits for improving service delivery?
- 2. What are institutional and planning tools that can promote more efficient and effective cooperation between agencies and service providers at all levels of government?
- 3. How can Addis Ababa partner with its surrounding cities to proactively plan for urban growth in a way that is integrated, sustainable and mutually beneficial?
- CO
- 4. What are locally appropriate public participation mechanisms which can help improve planning and decision-making? How can we institutionalize them?
- (0)
- 5. How can innovative and smart technologies support good urban governance?
- 6. How can we improve our understanding of both current and future risks facing critical physical assets? What are appropriate contingency plans, mitigation and awareness-raising measures to minimize our vulnerability?
- 7. What enforcement and monitoring mechanisms can be put in place to minimize the risk and impact of building construction accidents and failure?
- £0)
- 8. What is our City's current and future vulnerability to Cybele-attacks?





## 2. OUR PROSPEROUS CITY

Fostering a diverse and sustainable economy that benefits all

#### **DVERVIEW**

Despite being the driver of one of the fastest growing economies in Africa and exhibiting a double-digit GDP growth in recent years; poverty, unemployment and under-employment are still a significant part of Addis Ababa's economic landscape. This discovery area seeks to explore how the gap between the macroeconomic prosperity of the city and the harsh realities facing residents can be addressed to create an economy that equitably benefits all. In addition to exploring potential improvements in creating better employment opportunities in both the formal and informal economies, this discovery area will also explore ways of strengthening existing social safety nets and cultural assets to ensure that residents survive, thrive and prosper despite the eminent shocks and stresses the city faces.

#### CHALLENGES AND OPPORTUNITIES

- Despite recent economic growth and associated job creation, unemployment and underemployment remain a severe challenge, which disproportionately affect women and the youth
- Most jobs in Addis Ababa are concentrated in low-productivity sectors
- Internal displacement and growing in-migration from other parts of the country exert additional pressure on the city to provide livelihood opportunities for all
- Social safety net programs targeting the "poorest of the poor" have recently been introduced but high price inflation continues to place many residents at risk for poverty
- Addis Ababa's vibrant social groups (i.e. edirs, equbs and mahebers) provide a unique opportunity to build resilience from the grassroots upward.

## Discovery Questions:

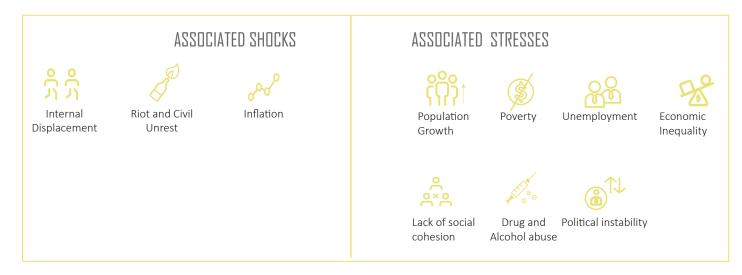
1. How can the City encourage the creation of more and better-quality jobs that are accessible to all, especially women, young adults, IDPs, refugees, and disadvantaged populations?



- 2. How can Addis Ababa leverage existing social and cultural assets to strengthen social cohesion and community-based resilience in the face of rapid urban growth?
- 3. What are best practices in using innovation to improve social cohesion and community-based resilience?



- 4. What role can the City play in fostering business creation, growth and innovation that contribute to a climate resilient economy? What can we learn from other cities?
- 5. How can we advance a better understanding of the urban informal economy to ensure better informed and effective policies that address the needs of informal actors?
  - 6. How can the City partner with businesses and civil society to mitigate the impact of price inflation on the urban poor, strengthen social safety nets and maximize equity?





# 3. THE CITY WE DESERVE

Strengthening systems that make up the backbone of the city

#### **DVERVIEW**

Access to basic services such as water are constitutionally and nationally recognized rights that residents of Addis Ababa have. Despite this, the city suffers from the inability to adequately supply critical services that make up the backbone of the city such as water, safe and affordable housing and transportation. This discovery area explores the gaps in the provision of systems required to meet basic needs in Addis Ababa and seeks to determine appropriate measures that need to be taken to strengthen them. By approaching this task from a rights-based, human-centered point of view, this discovery area aims to support the city in providing the adequate and consistent access to essential systems that Addis Ababa' residents deserve and need to survive and thrive in light of shocks and stresses.

#### CHALLENGES AND OPPORTUNITIES

- Rapid increase in the city's population, unprecedented construction boom, growing impacts from climate change, and limited water supply has created a huge disparity between water supply and demand.
- Addis Ababa's water system currently lacks redundancy, robustness, flexibility and inclusivity
- Leveraging the lessons from past housing interventions, the City is currently open to and exploring new ideas that will help address its longstanding affordable housing challenge
- Addis Ababa's transport system is not keeping pace with rising mobility demand and this, in turn, is limiting access to jobs and services
- With motorization levels currently low by global standards, Addis Ababa has a unique opportunity to avoid locking itself into a path of car-dependency

## Discovery Questions:

1. What are the opportunities for improving resilience of the water system with a rights-based approach in light of emerging risks and recent investments?



2. What are innovative design processes, best practices and solutions to delivering affordable, culturally-sensitive and risk-aware solutions? How can these ideas be applied to existing housing stock (including informal housing) and future interventions in the sector?



3. What are interventions that can help mitigate risks and vulnerabilities of informal settlements?



4. How can we foster better integration and complementarity between para-transit services and existing/planning mass transit projects?



5. What are key principles that can guide an appropriate use of smart city ideas in Addis Ababa? What technology solutions and partnerships should be prioritized to create a safe and livable city?

#### ASSOCIATED SHOCKS



Internal Displacement



Urban Fire



Infrastructure and Building Failure

#### ASSUCIATED STRESSES



Population Growth



Lack of Affordable housing



Water shortage



Homelessness



Flooding



Lack of social cohesion



# 4. OUR HEALTHY AND LIVABLE CITY

Creating a healthy and livable environment for all

#### **DVERVIEW**

As construction and development redefines Addis Ababa's skyline and in-migration increases the city's population, the demand on resources has caused havoc to the city's natural systems. Thus, the city is now being characterized by environmental degradation due to urban encroachment, pollution resulting from poor waste management and environmental regulation and is increasingly vulnerable to climate change. The city's residents also suffer from the lack of safe and enjoyable public spaces, which is exasperated by Addis Ababa's current development pattern. This discovery area seeks to assess interventions being made to address the aforementioned issues and add a resilience lens to efforts in order to create a livable city that promotes the health and wellness of its residents.

#### CHALLENGES AND OPPORTUNITIES

- Addis Ababa's natural ecosystems have significantly deteriorated under the pressure of poorly managed urban growth and unrestricted economic activities.
- The loss of ecosystems is exacerbating the city's vulnerability to both man-made and natural hazards and poses serious threat to residents' health and wellbeing.
- The City has recently taken commendable steps towards creating more green and open spaces, rehabilitating rivers and riversides, and addressing air pollution, which could be further harnessed to strengthen the city's resilience to shocks and stresses.

## Discovery Questions:

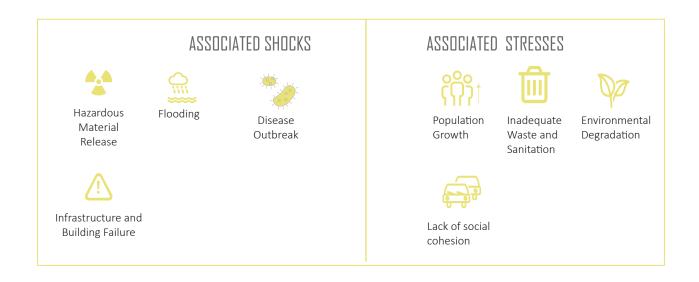
1. What are the gaps and implementation barriers that prevent effective action to liquid and solid waste management? How can PPP support implementation?



2. How can the City integrate waste pickers into the larger waste value chain and help them access safe, dignified and adequate employment?



- 3. How can we leverage innovation and technology in modernizing the Water Supply and Waste systems?
- 4. What are relevant and best practices for planning, designing and implementing resilient public spaces (riversides, parks and roads) in Addis Ababa to achieve better social, health and ecological outcomes? Are there ongoing projects we can influence?
- 5. What are the ongoing actions to address environmental degradation and pollution (air, water, noise and soil)? What are the gaps and opportunities to add a resilience lens to planned efforts/interventions?
- 6. How vulnerable is our food system to current and future shocks and stresses? What are opportunities to strengthen the resilience of our food system?



March, 2019





### TOWARDS A RESILIENCE STRATEGY

During Phase I, we have been able to uncover critical data, insights, and questions on Addis Ababa's risks, strengths and weaknesses, as well as challenges and opportunities to build resilience. These insights have enabled us to establish a renewed and holistic understanding of Addis Ababa's existing resilience context. They have also helped in identifying and developing four Discovery Areas and two Cross-Cutting Themes that will serve as the basis for our work in Phase II.

Additionally, Phase I has provided us with a unique opportunity to meaningfully engage with different stakeholders from across the city who are impacted by and committed to resilience building. We believe that the extensive stakeholder engagement undertaken is an essential and mutually beneficial process that will lead to the development and implementation of an inclusive, better-informed and more effective resilience strategy for Addis Ababa.

The next step from this PRA report is to develop a more detailed Scope of Work for Phase II, which will include specific planning for the management and delivery of tasks related to each Discovery Area. Through the exploration of these Discovery Areas, we hope to gain a better understanding of risks, gather new data or analysis, evaluate interdependencies, as well as identify opportunities and innovative solutions to Addis Ababa's intractable resilience challenges.

For each Discovery Area, we will set up a working group comprised of City officials and technical experts to lead the investigation. We will also partner with 100RC platform partners to deploy cutting-edge research and analysis to delve deeper into the Discovery Areas. Through this exploration, the working groups, 100RC and its partners will help the Resilience Office identify resilience building and implementable initiatives.

We also plan to broaden and intensify our stakeholder engagement which was part and parcel of Phase I of the strategy development process. We envisage even stronger engagements with government stakeholders at all levels, the private sector, and research and academic institutions in Phase II. Overall, we plan to broaden and strengthen our relationships across the city to build a broad and diverse coalition.

The expected duration of Phase II is 4-6 months and culminates in the release of Addis Ababa's Resilience Strategy.

