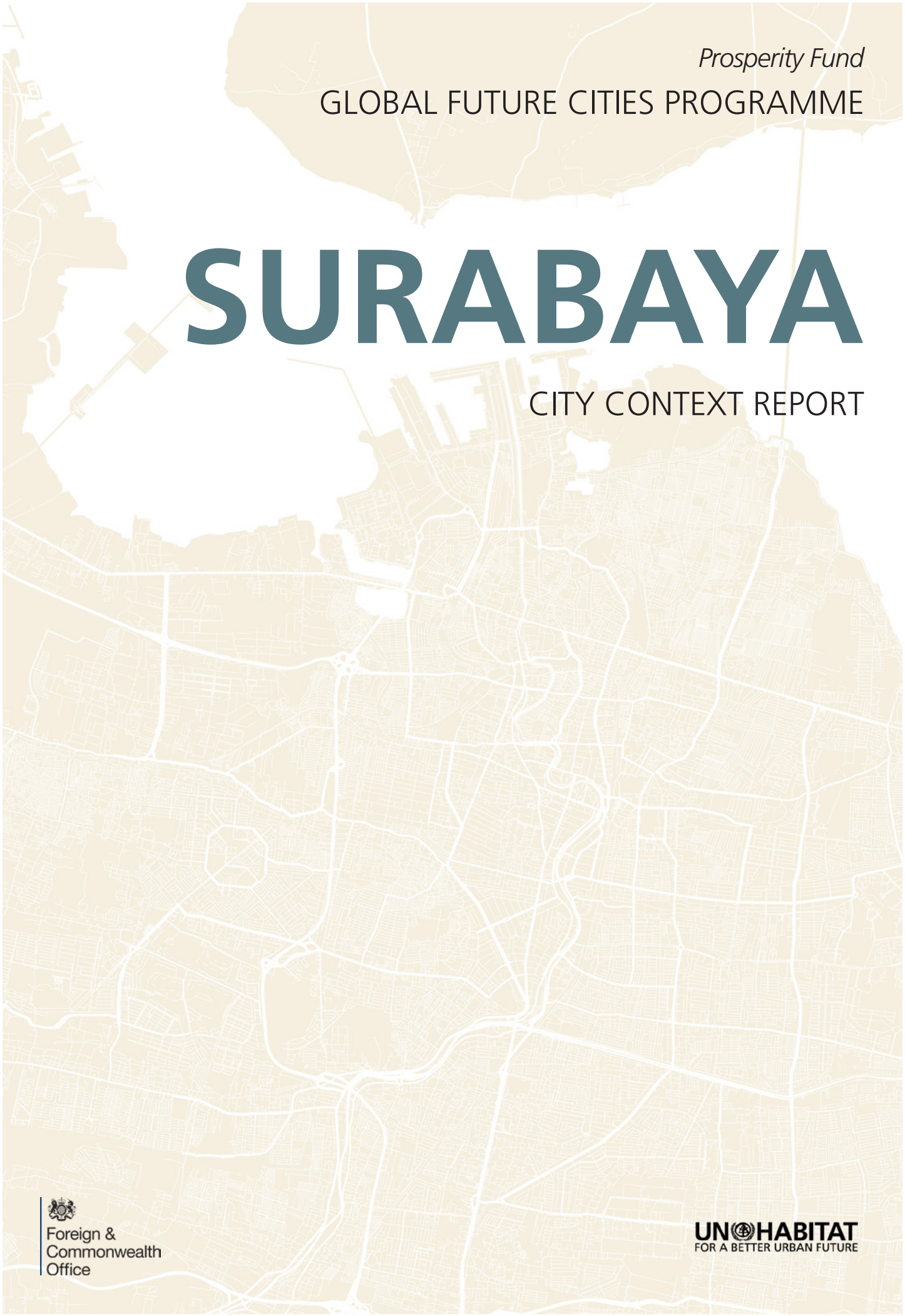
Prosperity Fund

GLOBAL FUTURE CITIES PROGRAMME

SURABAYA

CITY CONTEXT REPORT



Foreign & Commonwealth Office

UN HABITAT
FOR A BETTER URBAN FUTURE

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December 2018

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FOR A BETTER URBAN FUTURE

Global Future Cities Programme
SURABAYA
City Context Report

UNITED NATIONS HUMAN SETTLEMENTS PROGRAMME
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GLOBAL FUTURE CITIES PROGRAMME

Introduction

ABOUT THE GLOBAL FUTURE CITIES PROGRAMME

In 2015, the UK government created a new Cross-Government Prosperity Fund worth £1.3 billion from 2016-2021, in order to help promote economic growth in emerging economies. Its broad priorities include improving the business climate, competitiveness and operation of markets, energy and financial sector reform, and increasing the ability of governments to tackle corruption.

Emerging Economies still face considerable challenges such as uncontrolled urbanisation, climate change and high and persistent inequality which can lower long-term growth prospects. The Prosperity Fund supports the broad-based and inclusive growth needed to build prosperity and reduce poverty, but also make development overall more sustainable through the strengthening of Institutions and Improvement of the global business environment.

The Global Future Cities Programme (GFCP) is a specific component of the Prosperity Fund which aims to carry out targeted interventions to encourage sustainable urban development and increase prosperity whilst alleviating high levels of urban poverty. The programme will also create significant short and long-term business opportunities in growing markets, forecast to be regional growth hubs, including for UK exporters who are world recognised leaders in urban innovation.

The overall strategy of the Global Future Cities Programme is to deliver the Programme in two phases; a strategic development phase (2018), followed by an implementation phase (2019-2021). UN-Habitat, in collaboration with the International Growth Centre (IGC) and the UK Built Environment Advisory Group (UKBEAG), has been mandated by the UK Foreign and Commonwealth Office (UK FCO) to develop and undertake the strategic development phase. This in turn, will inform and shape the implementation phase, and collectively provide further evidence for the overall programme.

The Programme builds upon a coherent series of targeted interventions in 19 cities across 10 countries, to support and encourage the adoption of a more sustainable approach to urban development. In general, the proposed interventions aim to challenge urban sprawl and slum developments, thereby promoting more dense, connected and inclusive cities that in combination contribute to prosperity, achieving the Sustainable Development Goals (SDGs) and implementing the New Urban Agenda (NUA).

The Global Future Cities Programme builds upon three integrated pillars, that will address key barriers to prosperity, in selected cities:

- **Urban planning** – technical assistance for spatial restructuring (Public space, Heritage and urban renewal, Urban strategies and plans, Data systems for integrated urban planning);
- **Transportation** – technical assistance to support cities to develop integrated transport systems (Multi-modal mobility strategies and plans, Data systems for multi-modal mobility);
- **Resilience** – technical assistance to develop strategies to address the impact of climate change and ensure development is sustainable (Flood management plans and systems).

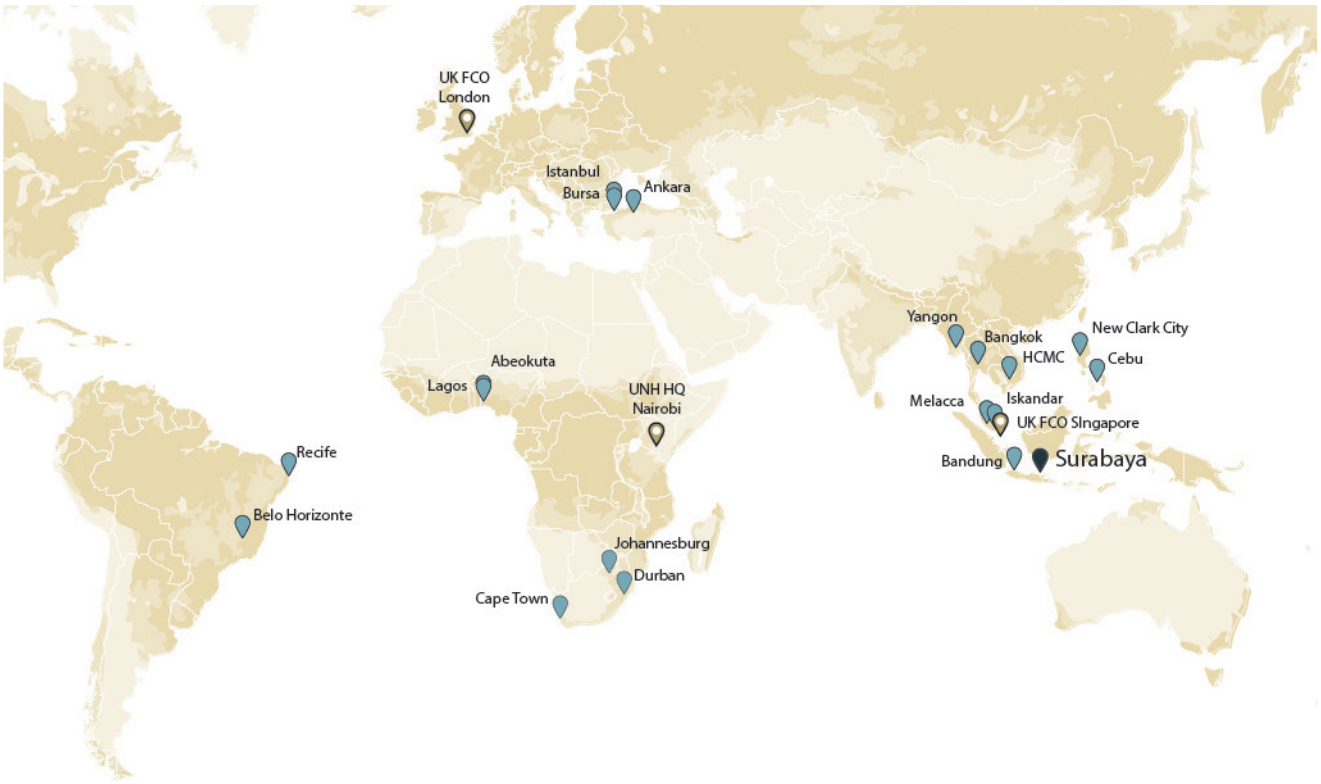
In order to capitalize on the proposed interventions and to ensure sustainability and impact in a longer-term perspective, the programme has a strong focus on technical support and institutional capacity development.

In many of the interventions, there is a particular focus on the potential of embedding smart/digital technology and data analysis platforms in urban governance and management processes. Integrating smart technologies is recognized as an instrumental area that significantly can improve the efficiency in the provision of key infrastructure services, enhance urban resilience, support evidence-based plans and strategies and promote integrated planning approaches across sectors.

INTERVENTION DEVELOPMENT AND VALIDATION

Based on initial scoping studies and government-to-government engagement carried out by UK FCO, the UN-Habitat team worked with partner local authorities and wider stakeholders to corroborate their city development strategies, and to confirm, enhance and develop the intervention proposals.

In each city, a Local City Specialist, supported by the national and regional country offices of UN-Habitat



and in liaison with the FCO local posts, took the lead in identifying stakeholders in a series of bilateral meetings, interviews and focal group discussions. This has collectively gathered information and provided more detailed knowledge and information on the City's visions and goals.

Based on this initial phase, a Charrette (planning workshop) involved high-level decision-makers from the public and private sectors together with civil society representatives. This facilitated discussion on the proposed and possible alternative interventions, related individual interests, technical opportunities and constraints, as well as political objectives. The outcome of the Charrette provided clarity on where stakeholders stand in relation to the strategic potential of the discussed projects and it allowed for the mobilisation of support.

At the same time, the Charrette allowed for the technical teams to proceed with the development of a Terms of Reference, outlining the specific scope and activities of each intervention. A final Validation Workshop assured consensus on the proposed projects and document's endorsement by the authorities.

Parallel to preparing the Terms of Reference, an evaluation of the interventions was initiated, aiming to address its feasibility within the local strategic context, identify potential impact on prosperity barriers and to explore the optimal delivery models. This process resulted in a set of City Context Reports as well as an analysis of the technical viability of the interventions. The analysis aimed at both informing the development of the Terms of Reference and the future implementation phase of the Programme.

THE CITY CONTEXT REPORT

Objectives

A City Context Report is provided for each city of the Global Future Cities Programme. It serves as a tool to frame the proposed Programme interventions within the characteristics and pre-conditions of each city.

The Report targets a variety of stakeholders in the Programme: administrators, city managers, policy makers, legislators, private sector actors, donors, and local as well as international researchers and knowledge generators. The Reports also provide UKFCO the contextual setting of each proposed intervention, and can in addition, be used by the Service Providers as an entry point for the implementation phase.

By addressing the specific challenges facing each city, the Report illustrates how the interventions can work towards inclusive prosperity and sustainable urban development. The benefits of each intervention, however, cannot be achieved without certain enabling conditions to ensure its success. Therefore, critical aspects for the delivery of the proposed interventions and its success from a long-term perspective are outlined. Using thematic

best practices and evidence from global learnings and research, contextualised recommendations are provided on the conditions necessary for the intervention to be viable and to reach a maximum impact.

Essentially, the City Context Report serves to ensure that all actors within the Global Futures Cities Programme are aware of the specific conditions to be considered in the delivery of the proposed interventions, on a case-by-case basis.

Set-up and Scope

The first part of the City Context Report (General Overview) provides an overview of the Global Future Cities Programme and introduces the city from the perspective of the urban challenge which the proposed intervention intends to address.

The second part of the Report (Urban Analysis) more critically and technically analyses a selection of factors which need to be considered or to be in place for the intervention to succeed, addressing its feasibility, potential impact on prosperity barriers from a long-term perspective.

The third part of the Report (International Alignment and Technical Recommendations) presents short–and mid-term expected outcomes as well as long-term potential impacts. It further elaborates the contribution of the intervention to the achievement of the SDGs and the implementation of the New Urban Agenda as well as the programme objectives of the Prosperity Fund.

As the City Context Report is tailored directly to the Programme interventions, the analysis does not aim to comprehensively present all aspects of urban development. It does not elaborate on long term planning and transformation strategies, the effectiveness of policy or urban legislation, nor the entire municipal financial system. As such, it also excludes urban policy recommendations.

However, the Report has the scope to illustrate the general capacity of the city for project delivery, and in this regard, make recommendations to support implementation of the interventions and reaching set goals. The City Context Reports will be part of knowledge management for the Programme to generate local information and data on the cities as well as identify gaps in knowledge, systems or governance.

Methodology

Urban Analysis

The City Context Report provides a general analysis of the spatial, financial and legal conditions in the city that can either facilitate or hinder the implementation and the long-term sustainability of the proposed interventions in transport, resilience and urban planning.

This framework follows UN-Habitat's three-pronged approach, recognising the three essential components for a successful and sustainable urbanisation: 1. urban planning and design; 2. urban economy and municipal finance; 3. urban legislation, rules and regulations.

Firstly, the spatial analysis describes the existing urban context specific to the intervention. Urban mobility systems, vulnerability of the built environment, spatial form and trends are considered as possible challenges in urban management that the intervention can address.

Secondly, the financial analysis aims to identify the mechanisms in place by which the intervention could be sustainably financed in the long-run. This section outlines the city's municipal capacity, existing regional, national and international financial ecosystem and existing financing mechanisms at the municipal level.

Thirdly, from a legal perspective, the Report critically analyses how the intervention could be facilitated or challenged by the vision of the city and its governance hierarchy. Enablers and obstacles resulting from any relevant legislation, as well as sectoral frameworks (e.g. strategies, policies, planning frameworks and development plans, detailed plans of relevance) are also described.

This approach aims to offer implementing partners, stakeholders and donors a general context of the city and, with it, demonstrate the appropriateness of the intervention from a spatial, financial and legal point of view, while at the same time informing about potential barriers and enablers for its implementation.

Potential Impact to the Program Objectives and the SDGs

The Report also outlines the potential impact of the interventions, based on the specific activities and outputs proposed. Impact can arise from a complex interaction of context-specific factors, rather than as result of a single action, which makes it difficult to empirically quantify longer-run effects that go beyond the identification of program outputs. An empirical, comprehensive impact assessment is therefore not part of the scope of this report.

Nevertheless, the report outlines potential benefits that are only achievable under certain preconditions and activities. Thereby, short-, medium- and long-term outcomes are defined with reference to a project-cycle approach, which considers all the project phases from

Planning and Design through *Building*, to *Operating and Maintaining.*

Short-term outcomes are directly achieved through the implementation of the technical assistance support, within the 2-3 years scope of the Global Future Cities Program.

Mid-term outcomes are only realised once the intervention is executed through either capital investment, implementation of pilot projects or the actual enactment of legal documents, plans or masterplans, within a possible timeframe of 3 to 7 years.

The broader long-term impact of the interventions is linked to the sustainability of the interventions in a 7-15 years timeframe and relates to the operation and maintenance phase of the project cycle.

The City Context Reports further connect potential impacts to the Programme's objectives, taking into account also the Cross-cutting issues at the core of UN-Habitat's mandate from the UN General Assembly. Consequently, the Programme's objectives are summarized into five principles:

- Climate Change;
- Gender Equality;
- Human Rights;
- Youth;
- Sustainable and Inclusive Economic Growth.

Cross-cutting issues are addressed with explicit reference to the 2030 Sustainable Development Goals (SDGs) and the New Urban Agenda, in an attempt to ensure that the proposed interventions are in line with the design, implementation, review and success of the 2030 Agenda for Sustainable Development. Consistent with UN-Habitat's mandate, the SDG 11 Sustainable Cities and Communities is linked with the urban dimension of the other 16 goals as an essential part of the localisation of the SDGs. In this way, interventions can support localisation processes, to support local ownership and ensure SDG integration in sub-national strategies and plans.

Technical Recommendations and International Best Practices

The interventions proposed in the various cities of the Global Future Cities Programme were grouped into clusters according to their thematic entry-point, as an elaboration of the thematic pillars of Urban Planning, Transport and Resilience.

These clusters are:

- Public space
- Heritage and urban renewal
- Urban strategies and plans
- Data systems for integrated urban planning
- Multi-modal mobility strategies and plans
- Data systems for multi-modal mobility
- Flood management plans and systems

Combining the international experience in urban policy and project implementation of UN-Habitat and the leading academic research of IGC, each cluster was analysed to offer evidence-based recommendations for a successful Implementation and a maximised impact of the intervention. Specific reference was given to implemented plans and international best practices.

The recommendations inform the Planning and Design phase which coincides with the timeframe of the Global Future Cities Programme, and always aim for long-term sustainability of the interventions.

Fig. 1. View of Surabaya (Source: Wikipedia)

Surabaya

GENERAL CONTEXT

The city of Surabaya, capital of East Java Province, is the second-largest city of Indonesia following Jakarta, the national capital. Surabaya is located at the mouth of the River Mas facing the Madura Island. Surabaya has an annual population growth rate of 0.65 per cent and a population of approximately 3.09 million people in 2018. The city has a population density of 8,458 person per km2 and is highly urbanised. The city's borders encapsulate an area of 350 km2, divided into 31 districts (kecamatan) and 154 sub-districts (kelurahan).[1]

Surabaya is located on the northern coast of Java, in a strategic location whereby it is a key connector for domestic and international air, water and land transportation networks. Served by Asia's busiest and largest seaport, Perak Port, Surabaya is an important international gateway to East Java for transporting passengers and goods.

Similarly to other cities in Indonesia, Surabaya lacks some necessary urban infrastructure, particularly in areas that are prone to environmental risks such as flooding. In the effort to provide its citizens with less risky living conditions, the government of Indonesia aims to create a plan to improve the Surabaya metropolitan urban environment.

Between 2002 and 2004, the city of Surabaya experienced a surge in economic development; the economy grew by approximately 5 per cent in 2004 alone. This was largely due to increases in domestic investment of approximately 2 per cent and foreign investment by as much as 33 per cent. The level of investment increased during this time period due to the greater number of investment permits and licenses issued.[2] Surabaya's economic growth is largely in the service sector, which contributes 54 per cent to the regional economy, transportation and communication (9 per cent), and banking and other financial services (6 per cent).[3] With the city's overall growth in business, Surabaya has also experienced a surge in the construction of high-rise apartments, condominiums and hotels in order to attract more foreign investment into the city.

Surabaya's city government is composed of the city government and a parliamentary body. In 1998, a new national policy was passed in which the government structure was decentralised and the provision of public services was governed under the authority of the city (kota) and residencies (kabupaten) levels.[4] Bappeko is the main planning body of the city; however, local multi-level governmental departments and agencies manage policy changes and oversee action items.

The Surabaya Development Plan (RPJMD) is one of the guiding spatial and development plans of Surabaya that is renewed every five years. The Surabaya Development Plan (RPJMD) 2010-2014, is the city's urban development plan that addresses several issues related to spatial planning and the development of clean water systems, utilities and the city's transportation system.

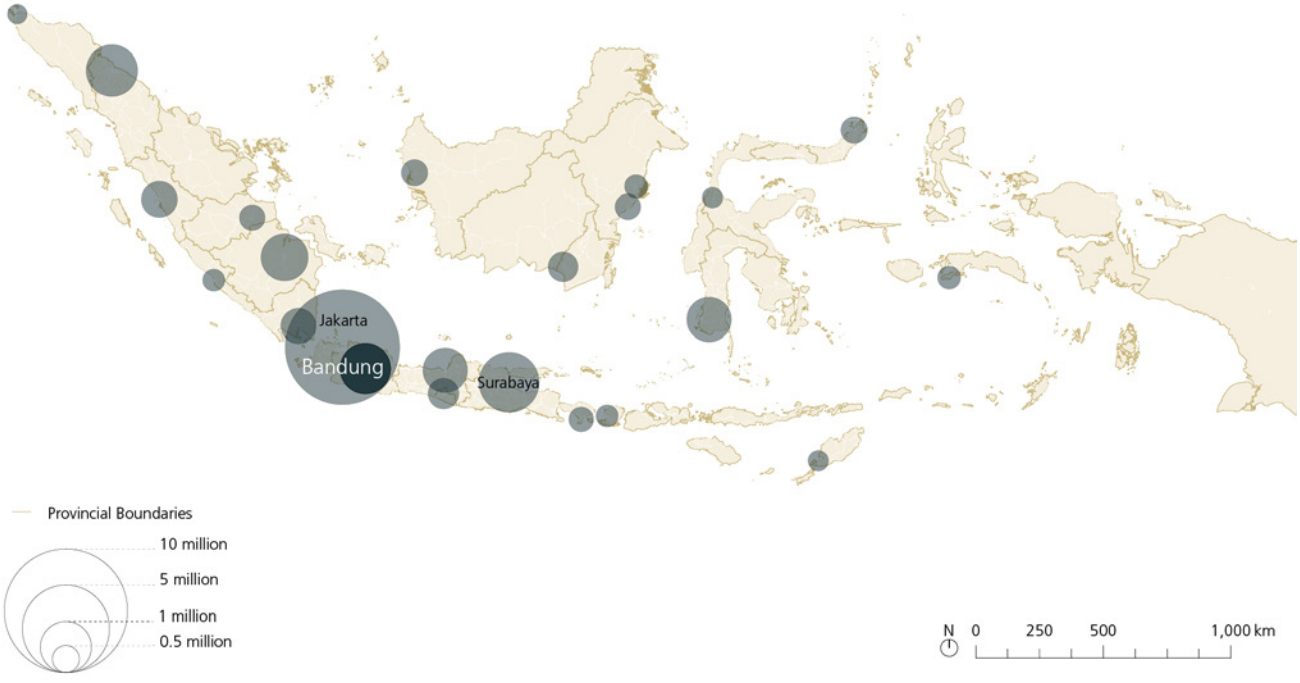


Fig. 2. Indonesia State and main Provinces' Capitals by population

INTERVENTION A

Problem Statement

Indonesia has the most intense seismic activity in the world. It is located along the so-called Pacific Ring of Fire, the geographical area that surrounds the Pacific Ocean where most of the world's seismic activities are concentrated. The conformation and movement of the tectonic plates clash, creating earthquakes when the plates shove against one another. The country has been affected by major destructive events that caused vast structural damage to the cities and hundreds of thousands of fatalities in recent decades.

The state government, through the Ministry of Public Work and Public Housing (PUPR), has been developing studies since 1983 in order to create guidelines for earthquake-resistant buildings and infrastructures.[5] The most recent studies, supported by the modern technologies, show a growing seismic activity and the cities are increasingly conscious of the risks and of the need to prevent them.

Surabaya, as all the main Indonesian cities, has conducted studies on the seismic activity of its region and the most recent results show the presence of two active faults that could cause disaster events with an earthquake magnitude potential of up to 6.5.

Even if they are limited compared to other national areas, the destructive potential of these events has been underestimated by the local government and the local communities. The current measures to face the risks such as awareness campaigns and environmental programmes through building urban forests and parks are insufficient and the growing awareness of the public and private sphere demands effective solutions. Therefore, the city government is urged to provide an integrated and extensive strategy to prevent, control and manage the consequences of potential seismic events to be applied at the city scale.

Earthquake Preparedness Strategy

The intervention consists of the development of an earthquake-preparedness strategy for the whole city-wide area, in order to provide Surabaya with the means to ensure a safe and organised urban resilience. The main outputs that the intervention aims to provide are:

Risk Assessment Analysis
This first phase will provide the city with a comprehensive analysis of the current studies relevant to earthquakes in the area, improve and update the studies with the support of the academia institutions, create hazard maps, clearly identifying a seismic zonation and security zones, and finally create mechanisms to collect and analyse data of buildings resistance to the earthquake to allow public and private assessment of the buildings.

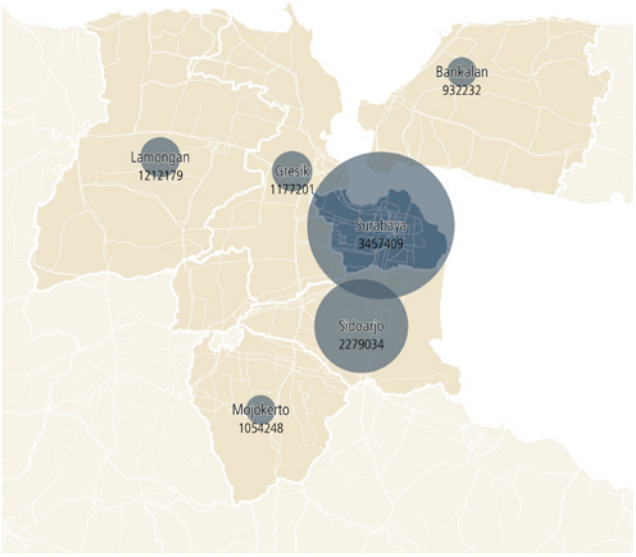


Fig. 3. Surabaya Metropolitan region and its towns by population

Risk Mitigation Strategy
The strategy to prevent and contain the risk related to earthquakes is based on solutions and recommendations for the built environment. The first step consists of updating the building code regulations concerning urban planning and construction rules for future plans. The second step addresses the existing buildings and infrastructures through guidelines and recommendations to improve the seismic resistance of private and public structure.

Moreover, the strategy proposes a series of solutions to improve the capacity of the community to prevent the risks through the development of an earthquake early warning system at the city-wide scale, the conduction of safety training programmes in sensible places such as schools and hospitals and, finally, through awareness campaigns in different social environments.

Prepare to Respond to the Earthquake Strategy
The improvement of the city's capacity to properly react to a seismic event is a core part of the intervention. First of all, the strategy will be based on clear plans and instruction to guarantee the continuity of the provision of basic and emergency services to the community. Secondly, in order to prepare all the different components of the society such as public administration, academia and private citizens to collaborate and to contribute with

different tasks and responsibilities to an earthquake, the strategy proposes the creation of a regional network to connect the different concerned stakeholders and a capacity-building programme for the institutions of urban governance, as well as a communication strategy and community emergency plan to provide data, information to acknowledge the risks, instructions to immediate reaction and short-, medium- and long- term response mechanisms to the event.

Recovery and Build-back Better Strategy

The last output of the intervention focuses on the medium- and long-term reaction of the city to an earthquake. The first steps consist of the creation of a priority action identification plan, in order to guarantee a consistent wide strategy to alleviate the damage suffered by the community. The plan also needs to identify roles and responsibilities of the local actors so as to avoid obstacles to an effective reaction. The second step proposes the developments of a local strategy for post-disaster recovery, rehabilitation and reconstruction in order to seize the opportunity to Build-back Better, to ensure a progressive strengthening of the community and city's reaction.

Finally, a key component is the financial plan to support the whole intervention through a funding strategy committed to emergency preparedness aligned with priorities from emergency budgets and the establishment and resourcing of contingency funding mechanisms for emergency response.

The intervention has a fundamental potential impact for the city of Surabaya. The growing awareness of the risk of earthquakes in Indonesia and in the East Java Province demand a proper strategy to prevent, manage and react to these destructive events. It is essential to underline that the most direct beneficiaries of these measures are the poorest communities of the city as they are most exposed to the threats of natural disaster.

Main Stakeholder

- Surabaya Development Planning Board (Bappeko);
- Department of Human Settlements and Urban Planning Surabaya (DPRKPCKTR/ Cipta Karya).
- KaryaMeteorological, Climatological
- Geophysical Department (BMKG)

Possible Project Partners

- World Bank
- Red Cross Indonesia
- Academia
- Sepuluh Nopember Institute of Technology (ITS)

Thematic Cluster

- Development of Urban Strategies and Masterplans
- Planning and design of public spaces

Keywords

Urban Resilience, Risk assessment, Urban Planning, Capacity Building, Natural Disaster Prevention

INTERVENTION B

Problem Statement

The neighbourhood of Putat Jaya represent a paradigmatic case of the limits of the Surabaya city government to implement effectively strategic urban plans.

Putat Jaya, known for decades as Dolly, used to be the largest and most active red-light district in the Southeast Asian Region. All the social and economic dynamics of the area were connected to prostitution activities. The presence of brothels and the great affluence of clients lead to the establishment of any sort of commercial, hospitality and restaurant services.

The urban fabric, based on the traditional distinction between public roads and semi-private pedestrian alleys, was transformed along the decades through a strong densification. The private properties occupied every plot, while the streets become the only public space of the area.

The vibrant life of the neighbourhood suffered a drastic change in 2014 when the Government decided to close all the brothels and banned prostitution from the area.[6] The justification relies on the opposition of the Mayor to this market which is considered to be a source of undignified jobs and harmful not only for the image of the area and of the city but also for the community who are composed of the poorest and most vulnerable part of the society.

These measures had a direct and massive impacts on the economy and life of the neighbourhood. The number of people who visited and lived in the area drastically decreased and consequentially after the brothels, the bulk of the commercial and service activities closed. The economic decline followed the progressive deterioration of the social environment.

The administration developed different strategies to facilitate the deep transformation required for the area. It proposes several solutions in support of the community, mainly through the acquisition of the former brothels, transformed in spaces for public services, through professional training and support to new small and medium businesses. An urban renewal strategic plan has already been developed to support a change of land use, improve the mobility system and support a more livelihood environment.

Despite this effort, the socio economic situation of the community and the spatial quality of the area have struggled to improve and overcome the difficulties started in 2014. Even though more than 60 per cent of the Putat Jaya's population is off productive age, the rate of unemployment is still high. According to the data provided in 2017 from the Planning Agency, 18 per cent of Putat Jaya residents are below the poverty line. The majority of the working population are instead working in the informal sector in precarious conditions.

Urban Transformation Plan for Putat Jaya

The intervention consists of a comprehensive plan to implement urban planning and socio economic solutions through a strong community engagement process in the area of Putat Jaya.

This intervention will be based on a precise analysis to provide a physical and socio economic assessment of the site opportunities and constraints for development. The analysis will also explore plans and programmes that the municipality promoted in the area, with the aim to understand what can be learned by the previous projects and how to coordinate them with new urban plan.

Considering the limits of the municipality in implementing the planned strategies and programmes, the intervention will put into practice the process of learning by doing through the technical support to two pilot projects implementation. Two significant plans have been identified: a government urban plan to develop the area of Jalan Kupang Gunung Timur 1 and the development of community engagement through English courses.

The process of implementation will be monitored and reported in order to learn the potential benefits or barriers from a practical application of public plans so to inform the next steps of the strategy. The next step will be to organise a capacity-building programme to ensure the effectiveness of the project in the long term and to ensure the involvement and collaboration of the government and relevant stakeholders such as municipal agencies, NGOs, academics and the community.

Finally, based on the monitoring of the previous steps, the final frame for the Urban Design Guidelines will be developed. The plan will regard a precise indication of the ideal land use, a clear mobility plan (both for private and public means and for pedestrian and cycles) and a public space proposal. The plan will also include socio economic activities supported by a defined business model. A financial and operational plan will then support the whole programme in order to overcome the current difficulties of the municipality.

The holistic approach of the intervention aims to reach wide range of results. In particular, the expected impacts are:

- Create a vibrant area with a mix of uses and diverse activities
- Reinforce the sense of place and give structure and orientation to the urban experience
- Provide for the safety and comfort of pedestrians, bicyclists, and transit
- Improve accessibility to the area
- Promoting creativity and innovation
- Encourage sustainable design
- Respect context and promote sense of community

Main Stakeholder

- Surabaya Development Planning Board (Bappeko)
- Department of Human Settlements and Urban Planning Surabaya (DPRKPCKTR/ Cipta Karya)
- The Social Service Department
- The Cooperative and Small Business Department

Possible Project Partners

- UN-WOMEN
- Save the Children
- Local NGOs

Thematic Cluster

Urban strategies for urban renewal

Keywords

Urban regeneration, Urban Planning, Participatory Planning, Capacity Building

URBAN ANALYSIS

Spatial Analysis

INTERVENTION A

The city of Surabaya is located in the north part of the East-Java Province on the sea canal that separate the islands of Java from Madura. The abundant presence of water elements such as rivers, canal and the sea that surround a wide part of the city has always made the risk of flood the main concern of the city. Nevertheless, the disastrous seismic events that hit Indonesia in recent decades and the improved awareness of the direct connection between earthquakes and other natural disaster such as flooding and tsunami, made the municipality aware of the need of an integrated resilience strategy.

Earthquake Risk

Indonesia is located along a specific geographical area, named Ring of Fire that surround the Pacific Ocean. This is the area where most of the world seismic activities are concentrated. The country suffers from the pressure of three tectonic plates; the Indian-Australian Samudera Plate, the Eurasian Continent Plate and the Pacific Ocean Plate; which move in a variable speed from 2 to 7 cm per year and constantly cause unpredictable seismic events.

In order to develop monitoring and preparedness measures, the State government through the Ministry of Public Work and Public Housing (PUPR) has been developing studies to identify the risks related to seismic events since 1983 and to develop guidelines for earthquake-resistant buildings and infrastructures.

Since 2002, earthquakes and hazard maps have been prepared at the national level and these maps have been updated in 2010, 2012, 2016 and 2017. This progressive study led to a more precise knowledge of the topic and the identified risks in the last surveys resulted to be extremely more severe than the years before. In 2017, the National Earthquake Centre calculated a potential seismic event of M 8.7 in the southern coast of East-Java. 285 active faults were identified in 2016, while only 81 active faults were identified in 2010. .[7]

The city of Surabaya has a seismicity level that has been classified by the authorities as moderate. The latest seismic events registered, mainly concentrated along the southern coast of Java, presented epicentres located in a range of distance of 70 to 500 km from Surabaya. Even if the distance is relevant, earthquake with epicentre at 250km from the city has been strongly perceived, as in the case of the M 5.6 Yogyakarta earthquake in December 2010.[8]

Moreover, recent studies have indicate the presence of two active faults that pass through Surabaya. They are the Surabaya Fault, located in the northern part, and the Waru Fault, located in the southern part of the city. These faults move at 00.5 mm/year and they have a calculated potential of a M 6.5 earthquake.[9]

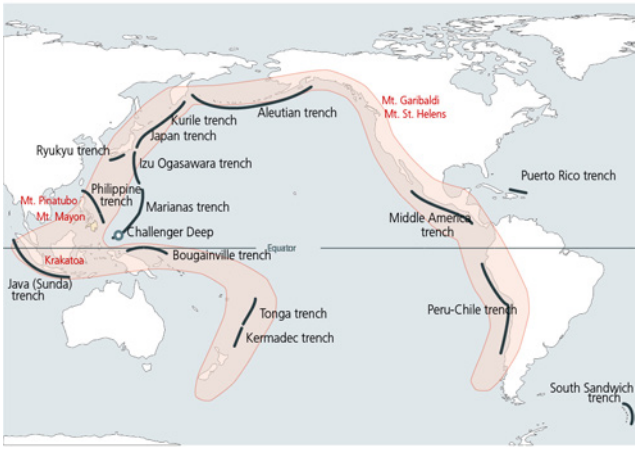


Fig. 4. Ring of Fire.

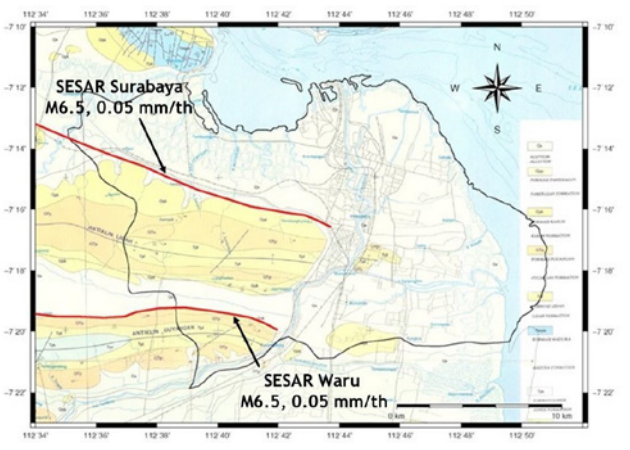


Fig. 5. Surabaya Fault and Waru Fault (Source: LPPM ITS Centre)

Geologic Context

The geographical area of North Java is characterised by the predomination of lowlands. Almost 80 per cent of the region is composed by alluvial deposits accumulated in the centuries along the Porong and Surabaya River. Regions formed by alluvial sediments, sand stone, tuff and clay have a strong potential of ground vibration during the earthquake due to the interaction of different soil strata.[10]

Moreover, considering that the area's soft sedimentary rock can strength the vibrations, the risk of severe earthquake damages is potentially higher than in geological areas composed by hard rocks.

This phenomenon verified in Mexico City in which the 1985 earthquake with an epicentre of more than 390 km caused devastating damages to the city because of the horizontal wave acceleration.

This brief description of the context, aligned with the studies mentioned in the previous paragraph, clarify the risks concerning Surabaya are not limited to its proximity to active faults but also to its soil composition. The current monitoring instrument and the better knowledge of the seismic phenomena nowadays provide the municipality of Surabaya with data that was unavailable before. The above-mentioned studies show the dimension of the risks for Surabaya and the need to develop instruments to prevent what can be a catastrophic event for the city and its inhabitants.

The map below shows a considerable number of public vulnerable facilities such as hospitals, clinics and schools. Moreover, it shows the city's main infrastructure, highlighting the number of bridges, key connection element for the city and paradigmatic example of the close connection between risks related to the city symbiosis with water and risk related to seismic activities.

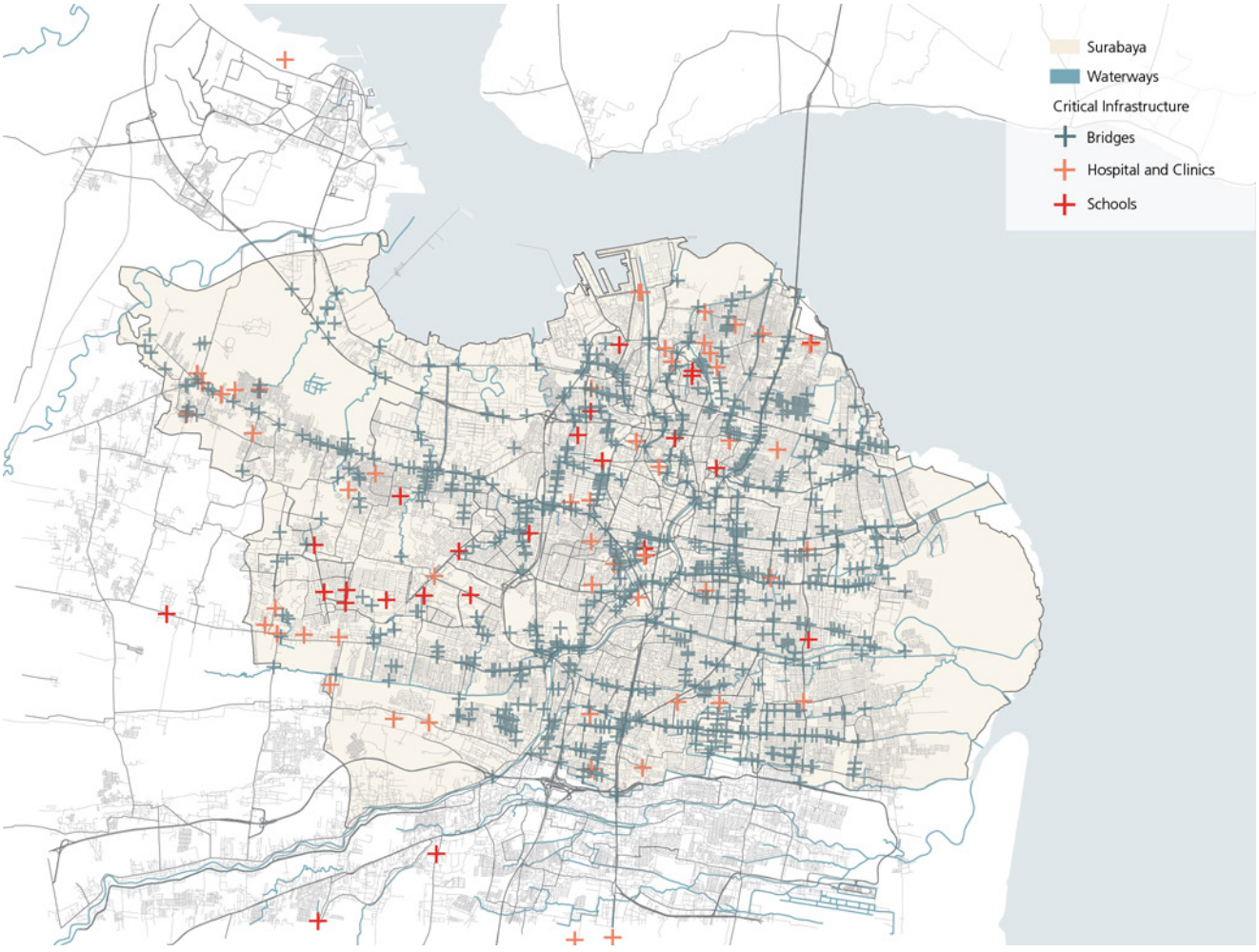


Fig. 6. Main transport corridors.

INTERVENTION B

Context Background

Putat Jaya is a neighbourhood located in the south-east of Surabaya. It represents a paradigmatic case in need of urban and social transformation, not only to solve the issues that affect the area but also for the potential replicability of the identify solutions in other part of the city. Focusing on this area, setting-up a standard of urban transformation guidelines has an essential strategic meaning for the city of Surabaya. In fact, Putat Jaya not only embodies the traditional and common urban structure of many other neighbourhoods but, due to Putat Jaya's history, it also represents the occasion to renew the image of the city.

Geographical and Demographic Context

Putat Jaya is a sub-district of Sawahan, one of the 31 districts of Surabaya. The total population of the area is 48,566 people, distribute in an area of 1.35 km2. With a population density of 35,975 people/km2, the neighbourhood represents one of the densest in the entire city.[11]

Fig. 7. Putat Jaya Location in Surabaya

The population of the area is mainly composed by low-income groups that according to National Population and Family Planning Board (BKKBN) is classified as Prosperous I and Prosperous II. This classification considers five stages that goes from the inability to satisfy basic needs (Pre-Prosperous) to the possibility to actively participate to social activity and to contribute to the society development.[12] The drastic changes that followed the prostitution market closure in terms of employment opportunities and commercial and social dynamism of the area have still strong repercussion on the inhabitants' life.

Fig. 8. Putat Jaya Area and Main Facilities

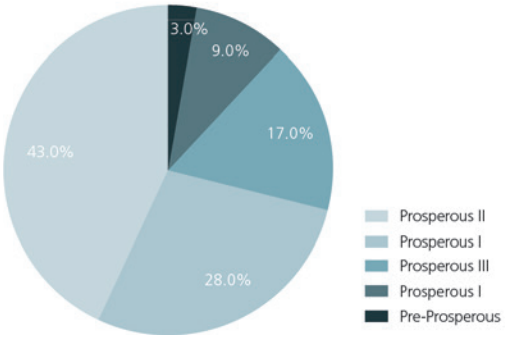


Fig. 9. Family Prosperity Stages (Source: Sawahan Sub-district in Figures, 2017)

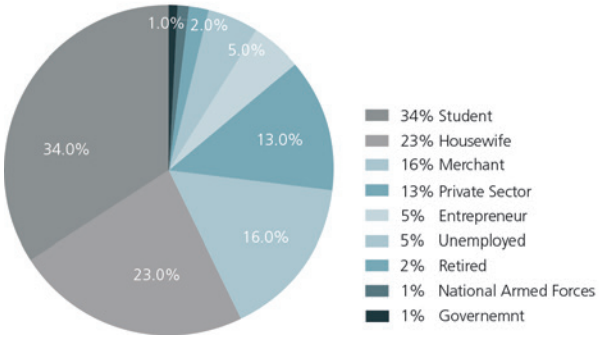


Fig. 10. Employment Sector (Source: Sawahan Sub-district in Figures, 2017)

The mentioned statistics show the presence of a lower-middle class composed mainly of young people, generally students, and people involved in a wide range of occupations, often characterised by informal settings as for housekeepers and merchants. Based on the 2017 data from the Planning agency, 18 per cent of Putat Jaya residents are below the poverty line.

Land use

Despite the several economic activities that were tied to the prostitution market along the decades, the official land use of the area remained strictly residential. This was also asserted by the Law Regional Planning No. 12/2014 that identified Putat Jaya as formal settlement with no social housing nor any other use.

However, the regulation has been updated with the 2016 Mayor Decree No. 4/2016, in line with the ban of prostitution from the area and the programme of urban renewal promoted by the municipality. Based on the decree, land use of the area is designated for residential, trade or commercial services.

As indicated in the map, Putat Jaya hosts a wide range of facilities. The political will of changing the image of the neighbourhood and improving the living conditions of the citizens lead to the provision of public services and spaces such as community centres, education facilities and administrative district office. Many of these facilities have been introduced through a process of acquisition and renovation of ex-brothels, implemented by the municipality to support the owners of the closed activities and to provide the community with improved services.

Mobility system

The original urban structure of Putat Jaya remain clearly readable today in its ordered and hierarchic road network. While the private plot transformed into a progressive densification often led to the complete saturation, streets remain basically the only open space of the area and serve also as public space where many social and commercial activities take place.

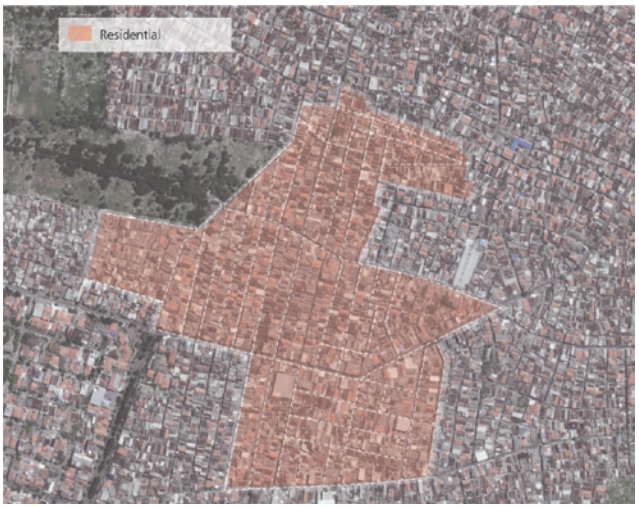


Fig. 11. Designed Land Use (Source: Bappeko Surabaya, 2014)

Fig. 12. Designed Land Use (Source: Bappeko Surabaya, 2016)

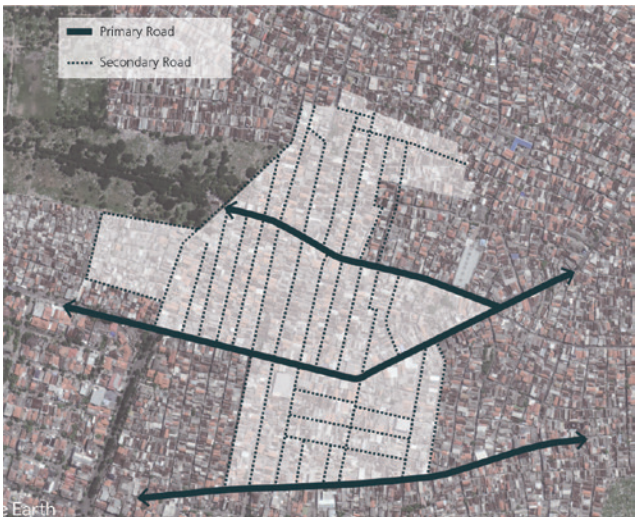


Fig. 13. Putat Jaya Streets Hierarchy

Fig. 14. Putat Jaya Primary Road (Source: UN-Habitat)

Fig. 15. Putat Jaya Secondary Road (Source: UN-Habitat)

The street hierarchy consists of primary and secondary roads. The primary ones connect the area with the surrounding neighbourhoods and they are characterised by an intense traffic activity during the day. The secondary roads, usually large 3-4 metres' wide, serve the internal blocks mostly for a traffic of motorcycles and rickshaws. These roads have an entrance highlighted by decorated portals, meant to increase the semi-public nature of these spaces. In fact, they lead directly to house entrances or to another type of smaller roads, 1 or 2 meters large, that represent alternative passage only for pedestrians.

In the area, parking spots are missing and the impossibility of parking in the narrow streets lead many inhabitants to rent houses' ground floors as parking space to take advantage of the traffic issue and have an alternative source of income.

Finally, the lack of sidewalks and the diffuse presence of shops facing directly the roads make the road network a lively but congested space, compromising the accessibility to services and the attractiveness of the area.

Alignment with Governmental Plans for Putat Jaya

Since the closure of the prostitution activities in the Dolly area and the surrounding areas the city government has provided services and guidance to the neighbourhood and to its community, with the aim of regaining social independence and economic prosperity.

The efforts made by the government through the acquisition and renewal of the ex-brothels to host public services or commercial activities rivalled to be insufficient and the city vision for the area struggle to be reached.

The most updated strategy, developed by BAPPEKO (Urban Planning Agency of Surabaya), was defined in 2018 and set a series of principles to follow for the future implementation:

- Develop a mixed use and diverse urban environment
- Integrate land use and motorised and non-motorized mobility
- Build sense of community and improve social equity
- Create a safe, welcoming and accessible environment for residents and tourists
- Rebrand the area and community image

The strategy proposes different interventions, presented at a conceptual phase, focused on different urban elements.[13]

Structural Plan

This section defines the new uses to introduce and promote in the area. It focuses on the improvement of the main corridors conceived as a diffuse system of commerce, cultural sites or creative industries hub. The activities are distributed depending on their location inside the area and are meant to be supported by existing and future professional and educational training programmes.

In this regard, the main priority of the municipality is represented by the Pilot Test Transformation on Jalan Kupang Gunung Timur I. It focus not only on innovative activities to introduce but also on the realisation of a new street design and the introduction of the first street gate, conceived as a landmark for the area and a model to replicate in the main entrance points of Dolly to strengthen its renewed image.

Building Indexes and Typologies

The strategy proposes new building indexes with a maximum of five floors, depending on their functions: commercial and training facilities, student dormitories and parking buildings and on their location in the area as visible in the map below. The guidelines provide an indication about the general architectural character of the neighbourhood, promoting the conservation of the residential village image that persist in Putat Jaya. This indication focuses on the inner blocks, allowing a deeper transformation for the main corridors in need of adapting to a sustainable urban development.

Mobility

The solutions proposed to improve the mobility conditions of the area focus on the main weakness of the current system. First of all, a new street configuration to promote a friendlier environment for pedestrians is proposed for the main corridors. In particular it plans the introduction of urban furniture, gates to the main area's entrances, wayfinding signages, road drainage canals and greenery. Moreover, the strategy focusses on solutions to reduce traffic congestion. The main proposals are the introduction of parking buildings along the main roads and a new shuttle system composed of 6-8 seat buses to enable a collective transport service to reach strategic points of the area, both for inhabitants and for tourists.

Fig. 16. Putat Jaya Governmental Strategy

Financial Analysis

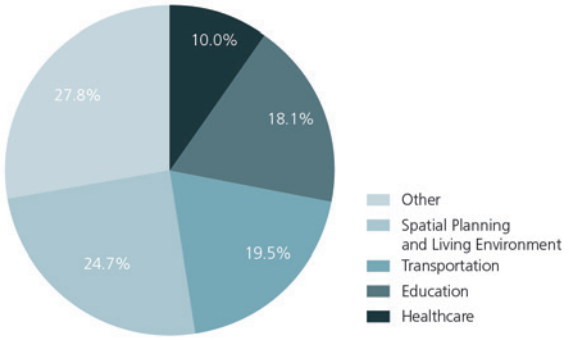


Fig. 19. Municipal Budget Allocation (2016)

MUNICIPAL FINANCIAL CAPACITY

Surabaya raises a significant portion of its revenue through own source revenues. As of 2016, the total city revenues came to RP 5,405,235,368,337 - which is approximately USD371.2 million or about USD 107 per capita. This is lower than but similar to Bandung's municipal, which is approximately USD 174 per capita2. This is moderate compared to other cities of a similar size and income level such as Cebu (USD 400) or Melaka (USD 103).

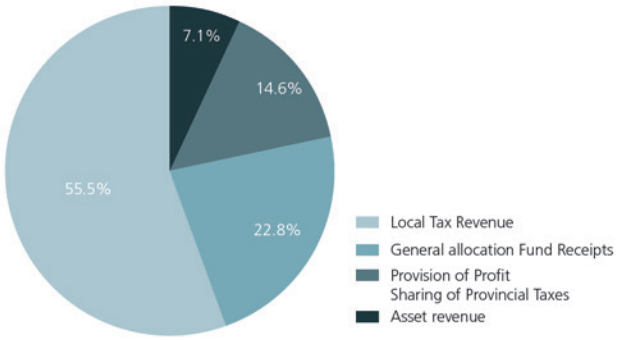


Fig. 18. Municipal Revenue Heads (2016)

Surabaya raises a significant portion of its revenue through own source revenues. As shown in the pie chart below, local tax revenue accounts for 55.9 per cent of the total revenue. The provision of profit sharing of provincial taxes and the General Allocation Fund Receipts, both central government transfers, jointly account for 37.4 per cent of revenues.

Regarding expenditures, as shown in the figure bellow, 24 per cent of the municipal budget is allocated towards spatial planning and living environment, which is aligned with the intervention and the finance requirements of urban design strategies.

MUNICIPAL FINANCING MECHANISMS

Law No. 34/2000 provides local governments with the legal mandate to impose taxes as long as that tax does not (1) Impose high costs on the economy, (2) restrict the mobility of trade and services across the national borders or (3) constrain international trade.[14] Additionally, since January 2010, Law No. 28/1999 has provided local governments with the mandate to collect land and building taxes directly[15], showing an ability to implement land-based finance mechanisms.

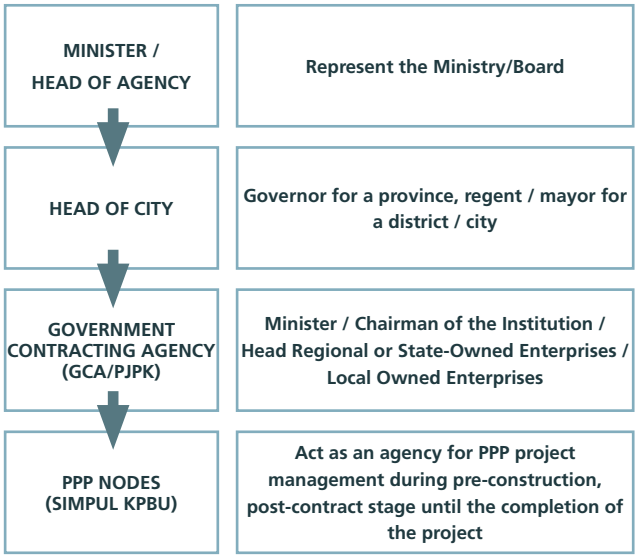


Fig. 17. Spatial and strategic planning hierarchy in Indonesia

Moreover, Surabaya can hold PPP bids, as mandated by the Benchmarking PPP Procurement 2018, and as amended by RA 7718. Furthermore, the use of PPPs as a municipal financing mechanism is encouraged at the national level. The central government has promoted the use of PPPs by setting up a joint secretariat. This centre provides ad hoc assistance to municipalities. The use of PPPs is further promoted by the National Medium-

Term Development Plan 2015–2019.[16] The figure below illustrates the legal process to be followed while procuring a PPP in the city.[17] In addition to PPPs, Surabaya is able to loan capital domestically and internationally.

Presently, most of the lending is done through borrowing from the central government through the Subsidiary Loan Agreements (SLAs), and from the World Bank and the Asian Development Bank (ADB) through Integrated Urban Infrastructure Development Programs (IUIDP).[18]

URBAN DESIGN GUIDELINES

In developing urban design guidelines and a community action plan, to be tested in Putat Jaya, the city of Surabaya will have a number of projects associated with achieving the overall urban renewal. Where these projects are localised (those under 10 ha), the city is able to undertake them, based on Law 1 of 2011. However, without a corresponding financing and funding strategy, it will be difficult to implement these projects and sustain their quality.

Given that Surabaya already spends more than 24 per cent of the municipal budget on Spatial Planning and Living, which is the budget line item that will probably finance further projects. These could be directly financed by the city. Furthermore, the city can enter into an agreement through which the city would pay a private company to design and build a project. This can involve a longer-term contract in which the private sector is also in charge of the operation and maintenance. As explained above, the enabling environment to implement PPPs is positive in Surabaya.

Some of these urban renewal projects will inevitably increase land value, particularly in the Putat Jaya area. Land value capture instruments can therefore help raise financing and funding for the urban renewal projects. Surabaya already collects a significant portion of its revenue from land value capture.

However, accurate valuation can be a barrier to the implementation of land and property tax, particularly because the local government has only recently taken over property tax collection and hence does not have a long-run local precedent of calculating and enforcing such taxes.

As investments may result in the city having to increase services in certain areas, such as laying utilities, the city could also use indirect value capture instruments such as impact fees or exaction to ensure they have the funds to make the regenerated land liveable. However, as these are fees and not taxes, under the Law 24/200 Surabaya might have to gain permission from higher levels of government to impose them.

There are additional considerations that need to be made in terms of understanding the potential of land value capture in the case of the proposed community projects if they are to be undertaken at a neighbourhood level. In particular, these types of instruments have been most effectively used on large-scale projects such as transport or infrastructure investments. At a community level, depending on the scale of the project under consideration, the increase in land value may be too small to be able to be assessed and collected.

EARTHQUAKE RESILIENCE STRATEGY

An earthquake-resilience strategy and the potential corresponding infrastructure investments that will need to take place is a regional good as it can affect multiple parts of the city and beyond. Therefore, financing will most likely come from a regional or even national source. In this regard, there is national level government financial support coming from the Law on Disaster Management (Law 24/2007). Additional sources of funding could also come from development partners, which include the World Bank and JICA.

Other municipal financing mechanisms such as land value capture instruments will only become an option if the resultant strategy highlights new areas that benefit from the earthquake strategy or provide new information that affects land prices. For example, if buildings are upgraded as a result of the strategy, then areas where the buildings are in better condition will have higher land values. There are also potential gains should the area then be zoned into low-, medium- and high-risk of earthquake. In this regard, the viability of implementing land-based finance will depend on the design of the intervention as well as on the enabling environment for the use of the financial instrument discussed above.

Legal Analysis

URBAN TRANSFORMATION GOVERNANCE

Municipal governments have the authority to undertake rehabilitation and regeneration of urban areas, as per the Law on Housing and Urban Settlements (Law 1/2011).[19] Therefore, the Government of the City of Surabaya (GCS) has a significant legal mandate to undertake urban renewal projects in its jurisdiction, as long as these projects do not contradict with higher-order spatial and strategic plans. However, the regeneration of slum areas larger than 1000 km2 falls under the provincial or central government domain,[20] though it is unclear how slum areas are delineated and are thus subject to this provision.

The Surabaya Development Planning Board (Agency), also called Bappeko, is the main city-level urban planning stakeholder.

Bappeko works on urban transformation together with several other departments, such as the road, transport, social services, cleaning and open spaces, tourism and cooperatives and small businesses departments, as well as the Surabaya Department of Human Settlements and Urban Space, which oversees land use planning and public works infrastructure construction. The Mayor's strong leadership role is also critical for urban renewal governance and the proceedings of urban redevelopment programmes.

The GCS enjoys significantly more autonomy of affairs than the provincial body, which is associated more with the national government.21 The 2014 Law on Local Governance (Law No. 23/2014) mandates the GCS to initiate development plans, implement and evaluate the management of urbanised areas within the city boundaries.

The smallest government unit in Indonesia is the sub-district leader, at the neighbourhood level. This decentralisation enables public participation in plans.

	General Spatial Plan	Detail Plan
Central Gov.	National Spatial Plan	National Strategic Regional Plan, and Island-specific Regional Spatial Plan
Provincial Gov.	Provincial Spatial Plan	Provincial Strategic Regional Spatial Plan
City Gov.	City Spatial Plan	City Strategic Regional Spatial and City Detailed Spatial Plan

Fig. 20. Spatial and strategic planning hierarchy in Indonesia

URBAN PLANNING HIERARCHY

Figure 12 provides a simplified version of spatial and strategic planning hierarchy in Indonesia, as outlined in the Spatial Planning Law (No. 26/2007).[22]

Lower level plans must conform to higher-level spatial plans. There is rarely conflict between different order spatial and strategic plans. However, if there is a conflict, the central and provincial governments can use the Government Regulation (No. 26/2008) to override land-use decisions made by the municipal governments. This is, however, rare.[23]

The current National Spatial Plan (Law No. 26/2008) covers spatial planning in Indonesia until 2028 and is reviewed every five years. This is drafted and updated by the National Spatial Planning Coordination Board of the National Development Planning Agency (BAPPENAS).

The GSC's current Spatial Plan of Surabaya guides planning from 2009 to 2029. However, some national legislation effects spatial planning in the city, for example, guidelines in the Spatial Planning Law No. 26/2007[24] mandates all cities to utilise a minimum of 30 per cent of its land area for open spaces.

DISASTER MANAGEMENT GOVERNANCE AND LEGAL FRAMEWORK

The Law on Disaster Management (No. 24/2007) offers regulations and implementation strategies concerning natural disasters in Indonesia. The law establishes three layers of disaster management institutions paralleling the layers of government, a departure from the ad-hoc centralized disaster response undertaken in the country prior to this law.[25]

First, the central government operates the National Disaster Management Agency (BNPB), the apex body in charge of the national disaster response and management. The BNPB drafted the National Disaster Response Framework (NDRF) based on the Law on Disaster Management. BNPB also established a Technical Assistance Team to assist provincial governments with disaster response coordination.[26]

Since 1983, the Ministry of Public Works and Public Housing (PUPR) has been researching earthquakes in Indonesia. They released an earthquake map in 2002, which has been used nationally for planning earthquake-resistant buildings and infrastructure. It is regularly updated with the most current update occurring in 2017.

Second, the Regional Disaster Management Provincial Agency is tasked with coordinating provincial disaster response management systems. This is structured similarly to the BNPB, but in many cases it plays a coordinating role between the lower- and higher-level regional disaster agencies.

Third, the city-level Disaster Management and Community Protection Agency (BPB Linmas) is the city level chaired by the second highest executive officer in the city. The chair is answerable to the mayor of the city. The agency is funded by the city budget but it can request further financial assistance from the central government through the provincial government. However, Surabaya lacks a local, city-focused disaster resilience strategy and an institutional structure to support the strategy.

Some national policies relevant to disaster management emphasize community engagement and involvement. The Law on Disaster Management (No. 24/2007) obliges citizens to engage in disaster management activities through training and public education. To this end, there has been a promotion of community-based disaster risk management (sometimes referred to as CBDRM) initiatives across the country. For example, the National Disaster Management Agency launched the National Program for Community Empowerment (Program Nasional Pemberdayaan Masyarakat - PNPM) through the BNPB Regulation (No. 1/2012). The initiative included a Resilient Village/ Urban Ward programme which has been piloted in 42 villages in 21 provinces and several cities, including Surabaya. This programme mainly includes public engagement in responding to disaster risks.

INTERNATIONAL ALIGNMENT AND TECHNICAL RECOMMENDATIONS

Potential Impact

The potential impact analysis outlines the main benefits that can be potentially attained through the Global Future Cities Programme in Surabaya, under the assumption of three views: short-, medium- and long-term. Nevertheless, as impact can arise from a complex interaction of context-specific factors rather than as result of a single action, an empirical impact assessment is out of the scope of this report.

The short-term assumption refers to the outcomes that can be achieved through the implementation of the technical assistance support within the 2-3 years scope of the Global Future Cities Programme. Mid-term outcomes are only achievable once the intervention is executed at the city level either through capital investments or the legal validation of key polices and plans. Long-term impact of the interventions is linked to the sustainability of the interventions in a 7-15 years' timeframe and is related to the project cycle phase of operation and maintained.

SHORT-TERM OUTCOME

The technical assistance for the development of the Earthquake Preparedness Strategy and the Urban Transformation Plan for Putat Jaya will directly contribute to improving the governance and management of the city, including better coordination and cooperation between different tiers of government. Additionally, the capacity-building component, oriented to civil servants and key stakeholders, aims to guarantee a long-term effect and address the issue on a city-wide scale.

One of the main short-term outcomes of the Programme in Surabaya is the increased capacity for planning and managing the impacts of natural disaster as earthquakes while protecting the essential infrastructure, the functioning of basic services and the safety of the inhabitants. Therefore, the increased capacity of evaluating and monitoring the impact of urban plans and strategy will promote a more effective and integrated approach to a sustainable and resilient urban development.

In the short-term the Urban Transformation Plan will improve the urban planning and management capacity at the neighborhood scale, providing the city with replicable integrated approaches and guidelines to improve the condition of the existing urban fabric. The Plan will be based on the principles of a sustainable density and mixed use to attain the economies of agglomeration to promote urban vibrancy.

Moreover, the process of community involvement in the analysis and design phase will increase citizen participation in developing municipal plans and decision-making processes. This dynamic will guarantee a more socially-inclusive city, with a particular attention to the most vulnerable groups such as women, youth and low-income communities.

Finally, both interventions will be based on a deep analysis of the environmental and social context, increasing the capacity of the city prioritisation strategies and improving tools for decision making based on informed demographic, economic, cultural, environmental and other holistic projections.

MID-TERM OUTCOME

In the mid-term the implemented Earthquake Preparedness Strategy will provide the city with a tool to guide the development of a wide range of plans or projects related to several urban sectors. In fact, the Strategy is meant to influence the future urban plans and building regulations and improve the conditions of key infrastructure and public services for the city's resilience.

The Urban Transformation Plan through the implementation of the government pilot project and the community engagement will have direct effect on the livelihood of the neighbourhood of Putat Jaya. Most of all, the inhabitants will have an easier access to basic services, professional training and job opportunities particularly for women, youth and disadvantaged groups.

Moreover, the urban quality and mobility of the area will increase and the sense of place and ownership of the public space will grow, leading the urban transformation strategy toward a long-term process of regeneration in which public and private sphere contribute to a sustainable development.

LONG-TERM POTENTIAL IMPACT

In the long-term the interventions will enforce the capacity of the cityin planning, monitoring and evaluating urban plans and strategies both in city-wide and in neighbourhood scale. This will lead to an improved quality of the urban governance and at the provision of efficient and reliable public infrastructure and basic services.

The Urban Transformation Plan will promote sustainable urban design for public space, integrated and participative governance models, as well as legal considerations for the streetscape revitalisation and financial mechanisms for sustainable operation, maintenance and management of the pilot areas.

Moreover, the lessons learned after the implementation of this intervention and the replicable exercise in the public space transformation can deliver an impact on increasing the capacity of the main stakeholders for developing comprehensive urban renewal instruments that enhance linkages between the spatial, economic and social development.

Thanks to the Earthquake Preparedness Strategy and the Urban Transformation Plan the city will have the possibilities and capacity to increase the number of integrated plans, frameworks and approaches to promote more sustainability, resilience, and social inclusion, not only for the specific areas but also for the city-wide scale of Surabaya.

Finally, the Earthquake Preparedness Strategy will build the capacity within the city authorities to update and improve the tools to monitor and prevent the seismic events constantly in order to guarantee a safe urban environment to Surabaya's citizens. 2030 Sustainable Development Goals

Contribution to Sustainable Urban Development

The Global Future Cities Programme aims to contribute the implementation of the 2030 Agena for Sustainable Development, whilst mobilising efforts to end all forms of poverty, fight inequalities and tackle climate change and ensuring that no one is left behind.

The Earthquake Preparedness Strategy for Surabaya is broadly aligned with the Strategic Development Goal 11

INCLUSIVE AND SUSTAINABLE CITIES

as it contributes to the adoption and implementation of integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change and resilience to disasters (target 11.b) and enhances inclusive and sustainable urbanisation and capacity for participatory, integrated and sustainable human settlement planning and management (target 11.3).

Additionally, the implementation of the Earthquake Preparedness Strategy can have a potential impact

RELIABLE INFRASTRUCTURE

on Goal 9 with the development of quality, reliable, sustainable and resilient infrastructure that can have a specific effect on reducing the exposure and vulnerability to natural extreme disasters (SDG 1).

In this regard, it can also contribute to Goal 13 as it will strengthen resilience and adaptive capacity to climate-related hazards and natural disasters and integrate climate change measures into national policies, strategies and planning.

INCREASED ACCESS TO EMPLOYMENT

The revitalisation of the Urban Transformation Plan can promote economic growth and contribute to decent job

INCREASED ACCESS TO EMPLOYMENT

creation, especially to street vendors (SDG 8). Youth and women will be prioritised in the whole process (SDG 5), especially when promoting safer, more peaceful and inclusive societies (SDG 11, SDG 16).

The Programme's implementation methodology directly contributes to ensuring responsive, inclusive,

PARTICIPATORY DECISION MAKING-PROCESS

participatory and representative decision-making at all levels (SDGs 5, 10, 16), as well as to enhance capacity for participatory, integrated and sustainable human settlement planning and management (SDG 11).
Moreover, it has a direct effect on enhancing multi-stakeholder partnerships that mobilise and share

ENHANCING STAKEHOLDER PARTNERSHIPS

knowledge, expertise, technology and financial resources to support the achievement of the Sustainable Development Goals (SDG 17).

NEW URBAN AGENDA ALIGNMENT

The United Nations Conference on Housing and Sustainable Urban Development (Habitat III) held in Quito, Ecuador, in 2016 adopted the New Urban Agenda, a new framework that that lays out how cities should be planned and managed to best promote sustainable urbanisation.

The New Urban Agenda encourages UN-Habitat and others "to generate evidence-based and practical guidance for the implementation and the urban dimension of the SDGs in close collaboration with Member States, local authorities, major groups and other relevant stakeholders, as well as through the mobilization of experts".

The GFC Programme is directly related with the UN-Habitat's draft Action Framework for Implementation of the New Urban Agenda (AFINUA). This framework is organized under five categories: (1) national urban policies; (2) urban legislation, rules and regulations; (3) urban planning and design; (4) urban economy and municipal finance and (5) local implementation.

The implementation of the Earthquake Preparedness Strategy in Surabaya aims to support the municipality to align and contribute in establishing "national rules to determine land suitability for urbanization and for environmental and cultural heritage protection and disaster risk reduction and sustainable and resilient development while taking into account its equitable distribution and accessibility." (AFINUA key item 1.2)

The intervention will require an effective coordination and cooperation between different institutions and levels of government. Therefore, it will promote two AFINUA key items: the alignment between national and sectoral development plans and policies at all territorial levels (AFINUA key item 1.4), and jurisdictional coordination and coherence (AFINUA key item 1.6).

At the same time the Urban Transformation Plan will address the design, governance, legal and financial aspects to reach an inclusive and sustainable urban development of Putat Jaya. It will be set up under a planning and design process that is evidence based, integrated and participatory (AFINUA key item 3.1) while liaise between citizens and government (AFINUA key item 5.6) and help local authorities to design and implement systems that ensure social, economic and safe physical access to quality basic services by all (AFINUA key item 4.5).

The urban designs will promote the creation of liveable spaces, walkability and a sense of place (AFINUA key item 3.5), and the protection and preservation of natural resources and cultural heritage (AFINUA key item 3.6). The regeneration and upgrading of existing urban fabric will also include gentrification prevention measures (AFINUA key item 5.2) and public space and vendor space usage regulations (AFINUA key item 2.3). All these measures aim to create sustainable density and mixed use to attain the economies of agglomeration (AFINUA key item 3.4).

ALIGNMENT WITH CROSS-CUTTING ISSUES AND THE PROSPERITY FUND

The Global Future Cities Programme seeks to achieve higher rates of sustainable and inclusive growth while increasing long-term investments in sustainable urban projects. Moreover, it will provide greater awareness, capability and confidence, while establishing regulatory frameworks that result in higher incentives for partnerships and financial mechanisms.

The four Cross-Cutting Issues of UN-Habitat, as identified in the Strategic Plan 2014-2019, are mainstreamed to ensure that all UN-Habitat work targets those with the most need and promotes socially- and environmentally-sustainable cities. In this regard, the interventions detailed for Surabaya are shaped under the mainstreaming of environmental safeguards youth, gender equality, and Human Rights.

The proposed interventions aim to improve the prosperity of Surabaya making it a model of a sustainable urban development. In fact, the Earthquake Preparedness Strategy will provide the essential tools to monitor, prevent and react to natural disasters while setting a high standard and replicable example for the other Indonesian cities. Moreover, the Urban Transformation Plan will trigger an economic, social and urban development of Putat Jaya and will provide the municipality with guidelines and capacity to address similar issues in the growing city, promoting a sustainable, dense and mixed used urbanization.

Through the aforementioned Strategy, the municipality will guarantee effective environmental and urban resilience at the city-wide scale, providing the city with tools to ensure a safe environment for all the citizens, with particular attention to the most vulnerable groups as low-income communities that often settle in areas with high hydrogeological risk and lacking in basic services.

The urban renewal plans will provide a city neighbourhood with the instruments to overcome the economic and difficulties of the last decades. Through a participatory approach the needs of the inhabitants will be consider, while the potential of the area will be exploited through innovative urban design guidelines and through the promotion of professional and educational

programmes. The overall objective is to improve the social and economic conditions of the residents so to allow them to stay in the area and become the main actors of its urban transformation. The process aims to facilitate accessibility to basic services and to guarantee decent leaving conditions, in particular to low-income communities, women and youths. In fact, these groups are the groups in Putat Jaya that nowadays have the most limited access to information; these groups are unfortunately also less involved in the public decision-making process and are in most need of education as well as professional and vocational trainings. Considering that the intervention aims to overcome the difficult condition of a community engaged in the prostitution industry, the expected impact is meant to benefit women groups, through a process of empowerment that will provide them dignified jobs opportunity and living conditions.

Fig. 21. Putat Jaya, Surabaya (Source: Niina Rinne, UN-Habitat)

Potential Benefit	Short term	Medium Term	Long term	SDG Alignment		New Urban Agenda	Programme Objectives and Cross-cutting issues
				GOALS	TARGETS	AFINUA KEY ITEM	1. Climate change; 2. Gender equality; 3. Human Rights; 4. Youth; 5. Sustainable and inclusive economic growth
Better Governance & Integrated Management of cities including better coordination and cooperation between different levels of government.				17	17.14;17.15	1.4, 1.6, 2.5	Climate change; Human Rights; Sustainable and inclusive economic growth
Increased local capacity for evaluating and monitoring the impact of urban plans, policies, and strategies.				17	17.16; 17.18	3.1, 5.1	Climate change; Gender equality; Human Rights; Youth
Increased capacity to prioritize strategies and improved tools for decision making based on informed demographic, economic, cultural, environmental and other holistic projections.				11, 17	11.a; 17.18	1.1, 3.1	Climate change; Gender equality; Human Rights; Youth; Sustainable and inclusive economic growth
Comprehensive urban renewal instruments adopted, that enhance linkages between the spatial, economic and social development.				5, 8, 10, 11	5.a; 8.3; 10.3; 11.a; 11.3	2.4, 2.7, 3.4, 3.5, 3.8, 5.2, 5.3, 5.4	Human Rights; Sustainable and inclusive economic growth
Implemented urban plans for creating sustainable density and mixed use to attain the economies of aglomeration and promote urban vibrancy.				11	11.1; 11.3; 11.7	2.2, 2.4, 3.3, 3.4, 3.5, 3.8, 5.1, 5.2	Gender equality; Youth; Sustainable and inclusive economic growth
Increased citizen participation in developing municipal plans and decision making processes.				11, 16	11.3; 16.7	3.1, 4.5, 5.6	Gender equality; Human Rights; Youth
Integrated gender equality approach in policies, strategies and plans.				5	5.c	3.1, 4.4, 5.4, 5.6	Gender equality
Integrated plans, frameworks and approaches to promote more sustainable, resilient, and socially inclusive cities				1, 11, 13, 16	1.5; 11.3; 11.b; 13.2; 16.7	2.1, 2.7, 3.2, 4.5, 5.1, 5.2, 5.4	Climate change; Gender equality; Human Rights; Youth
Enhanced monitoring of environmental risks and increased capability for forecasting				13	13.2	3.6	Climate change
Increased quality of life, including the promotion of economic equality and poverty reduction.				1	1.1; 1.2	3.5, 4.2, 4.4, 4.5, 4.6	Gender equality; Human Rights; Youth; Sustainable and inclusive economic growth
Increased ability to access employment and services, particularly for women and lower income groups				8	8.3	3.4, 3.8, 4.4, 4.5	Gender equality; Human Rights; Youth; Sustainable and inclusive economic growth
Increased creation of job opportunities, particularly for women, youth, and disadvantaged groups.				1, 8	1.1; 1.2; 8.3; 8.5; 8.6	3.4, 3.8, 4.4, 4.5	Gender equality; Human Rights; Youth; Sustainable and inclusive economic growth
Increased mobility and accessibility for poor women and men and other marginalised groups.				9, 11	9.1; 11.2	3.3, 5.3, 5.4	Gender equality; Human Rights; Youth
Improved access to basic services in informal settlements & peri-urban areas				1, 16	1.4; 16.6;	4.5, 5.3, 5.4	Gender equality; Human Rights
Established land management systems, including fit for purpose planning tools and land administration, for the sustainable delivery of all other elements of the urban fabric				11	11.a;11.3	2.3, 3.3, 4.5, 5.1, 5.2, 5.4	Gender equality; Human Rights; Youth; Sustainable and inclusive economic growth

Fig. 22. Potential Impact and Programme Objectives Alignment

Success Factors

The following statements are considered as evidenced success factors, based on international best practices, for the interventions in Surabaya in order to achieve maximum impact in line with the Goals, the prosperity fund and the cross-cutting issues. Success factors are divided into spatial, financial and legal and aim to address potential barriers for the long-term sustainability of the interventions.

SPATIAL CONSIDERATIONS

Coordinated, Realistic and Context-Relevant Urban Plans

The Urban Transformation Plan should be credible, realistic, well-coordinated in order to succeed and be implementable. The plan should be feasible and realistic given the existing city land use, administrative and political constraints such as budgets for public investments, and realistic forecasts for urban population growth and population income levels. Additionally, it should consider the coordination between other strategic urban plans (e.g. transport).

Earthquake and disaster risk mitigation strategies and planning

Together with urban vulnerability assessment, many cities have introduced planning instruments for the identification of functional element for the provision of emergency facility in case of crisis.

A step forward for integration of seismic and disaster prevention and urban planning is the detection, as a structural element of a city plan, of a Minimum Urban Structure (MUS). Composed by urban elements, the MUS is able to stay functional and able to ensure the vital functions of the city during the emergency phase following the seismic event. The MUS is also able to provide the base for the recovery in the post-emergency phase. The MUS looks at the survival of the individual inhabitants in an urban settlement, as well as at the protection of the urban community "as a whole" and its functional territorial systems.

The identification of this group of urban elements should take into considerations:

- basic services and emergency-related buildings (hospitals, power stations, fire station, etc.) and strategic urban functions;
- open public spaces system, so to guarantee availability of gathering places and temporary service locations;
- the mobility system, so to maintain evacuations and functioning of emergency measures, as well as accessibility within the territorial context.

The Umbria region in Italy can be taken as an example on the practice of this aforementioned identification. The Umbria region introduced the legal obligation to identify the "minimum urban structure" in the cities' Structural Plan with the Regional Law n.11 of February 22nd, 2005.[27]

Mixed Land uses

Social and public infrastructure will need to be properly balanced with the need to create the right commercial environment to attract private participation and maximise economic benefits. Creating an optimal mix of uses requires project designers to consider a number of key elements. In this regard, the Urban Transformation Plan of Putat Jaya can take the following into account:

- The needs to maximise revenue: creating a mixed-use that creates sufficient financial return to cover necessary public contributions while creating an environment that stimulates demand;
- Integration with the local environment: mixed-uses can help to define the character of surrounding amenities and act as a catalyst for urban renewal objectives in surrounding areas;
- Housing requirement and affordability: balancing the residential mixed-use between current and future demand requires a focus on various housing, including units, houses and affordable housing, to target a variety of potential users;
- Employment and retail: access to employment and retail is key to sustaining major renewal areas but oversupply can saturate the market or reduce the competitiveness of surrounding areas;
- Public spaces, amenities and facilities: this mix should include open spaces such as streets, parks and recreational areas, public facilities from medical centres and schools to

community and youth centres, cultural centres and historic sites, and is critical to creating a liveable and enjoyable environment;
- 24-hour activation: uses can be optimised to create activation of the site beyond the traditional two-hour rush in the mornings and evenings; and,
- Cohesion and social mix: mixed-use can provide effects on the wider urban area and contribute to the city's broader social mix.

Adequate Space for Streets and an Efficient Street Network

The Urban Transformation Plan should define an adequate level of street network that not only works for vehicles and public transport but also specifically aims to attract pedestrians and cyclists.

It will include a street hierarchy with arterial routes and local streets based on traffic speed differences. The street network will also shape the urban structure which, in turn, sets the pattern of development blocks, streets, buildings, open spaces and landscape.

Non-Motorized Transport to Improve Urban Mobility and Walkability

Including walking and bicycle networks enhances the quality of urban environment whilst benefiting lower-income groups. While private vehicles are the most expensive mode of transport, Non-Motorized Transport can increase the accessibility and mobility of users of public transport especially women and youth. Additionally, it can also improve greening in the city and, depending on the density such services, can reduce congestion.

The spatial designs for the urban renewal intervention should promote walkability as a key measure to bring people into the public space, reduce congestion and boost the local economy and interactions. A vibrant street life encourages people to walk or cycle around, while a rational street network enables necessary city administrative services to be offered within walking or cycling distance and ensures security. High density, mixed land uses, and a mix of socio economic characteristics make proximity to work, home and services possible. Walkability helps to reduce automobile reliance and thus alleviate relevant congestion, air pollution and resource depletion issues. It is healthier to walk more and drive less. Pedestrians add an incredible amount of vibrancy to city life.

Social Mix

UN-Habitat recommends that "the availability of houses in different price ranges and tenure types in any given neighbourhood to accommodate different incomes; 20 to 50 per cent of the residential floor area is distributed to low-cost housing, and each tenure type should be no more than 50 per cent of the total."

The Urban Transformation Plan for Surabaya should promote the cohesion of and interaction between different social classes in the same community and to ensure accessibility to equitable urban opportunities by providing different types of housing. Mixed land-use and appropriate policy guidance lead to social mixing. In a mixed land-use neighbourhood, job opportunities are generated for residents from different backgrounds and with different income levels. People live and work in the same neighbourhood and form a diverse social network.

Creating a Sustainable Programme

Recently, there has been an increasing focus on the concept of sustainable communities, where urban transformation projects absorb the skill and experience of local people into the overall design, delivery and operations of the interested area.

Measuring local participation as part of ongoing performance metrics and evaluations could assure social sustainability to the Programme. In the same way, incentives to take into account new environmental, social and financial sustainability practices and technologies in the design of the intervention could help ensure efficiency and viability of the project.

These could range from reusing or adapting structure, infrastructure or natural features on the existing site, reducing cost and material, to more advanced technologies and approaches such as smart architectural and engineering design.

FINANCIAL CONSIDERATIONS

Strengthen Municipal Capacity for Land Value Capture and Financing Mechanisms

The implementation of urban transformation projects can increase land values. Land value capture is an efficient instrument as land is in fixed supply and therefore taxing it should not have adverse effects on investments. Land value capture instruments include aspects like development fees charged to nearby landowners to fund the infrastructure or tax increment

financing to enable property taxes to recoup revenues from increasing property values. Ensuring financing mechanisms are in place is also important to ensure long-term sustainability of the system.

The city of Surabaya may also want to consider some indirect value capture instruments, such as impact fees or exaction, as the regenerated land will need to be serviced to attract firms to what was once purely a residential area. The intervention should take into account the following challenges related with this type of instruments:

- Institutions: requires strong land institutions vibrant construction/real estate markets
- Assessment: how you understand the costs upfront, particularly if the development is new
- Incentive: if fees are too high then this might disincentivise the private sector from investing
- Resistance: negotiations with private sector
- Equity: broader goals of public provision

Considerations for Financing Flood and Resilience Infrastructure

There are various options for financing the suggested interventions that Surabaya can explore. Earthquake resilience infrastructure is more of a regional good as it can affect multiple parts of the city and beyond. Therefore, financing will most likely come from a regional or even national source.

Given that flood prevention infrastructure can have benefits beyond municipal boundaries, it is considered a good spillover effect. These types of goods, even if they would continue to be locally provided, would require transfers from higher levels of governments to finance. Additional sources of funding coming from development partners including the World Bank and JICA can also be considered for building the intervention.

Community Agreements for the Maintenance of Public Space

Community agreements can be a feasible alternative for financing the maintenance and management of public space. Monterrey, Mexico, allows owners of buildings or plots located in the city centre to obtain the use of the public space in front of their property for recreational purposes in exchange for its maintenance and a fee. Another successful example is in Bogotá, Colombia, where community organisations can make voluntary agreements with the city for the use of public spaces with the commitment to maintain and manage them, using the revenues generated with their productive use.

Incentivise Private Investment

Even with an inspiring vision, optimal design and most efficient delivery mechanism, the success of urban renewal projects often rests in the ability of government and private investors to incentivise private and community participation and support.
Governments have a critical role in creating the right mix of incentives to encourage urban renewal. Setting a clear policy framework is critical in providing developers and the community with sufficient certainty to invest in renewal concepts. This is key for the financial viability and the capacity to generate income at a required rate of return.

Incentives can take multiple forms and are usually best combined to create a more benign investment environment. Common incentives include:

- Zoning and planning changes: increases in density let developers spread land costs across a larger saleable area, while rezoning of individual parcels of land offers increased certainty to developers considering underwriting new projects
- Infrastructure delivery: indications of public infrastructure investments in plans is often seen as unrealistic or too ambitious; greater certainty can be achieved by moving public infrastructure projects into the delivery stage
- Taxation: tax in its various forms always creates incentives and disincentives for private developers
- Minimise risk: governments can materially assist in containing the risk associated to renewal projects by purchasing or leasing the development product, potentially reducing equity and debt borrowing risks for developers
- Streamlined approval processes: in assessing timing risk on potential projects, developers often look for tangible evidence of streamlined approval processes that can provide greater certainty that approvals will be assessed and granted in a transparent and coordinated way

Neighbourhood Level Value Capture

There are successful projects that happen out of government at a neighbourhood level that mimic value capture by working with neighbourhoods and individuals themselves. One example of this is the Doh Eain revitalisation project on heritage renewal.

In one example, the renovation of an apartment through up front financing from Doh Eain resulted in rent increases by more than 400 per cent, reflecting the increase in value. Doh Eain recouped its investment over time through charges to the apartment owner who still benefited from a higher value than before.

This demonstrates both the understanding and therefore subsequent willingness of private property owners to potentially engage in renewal projects and later reap the increased value. The challenge is to scale these projects beyond individual properties; these will require much larger upfront financing.

It also requires engagement and willingness by all property owners if this is to be carried out on a neighbourhood scale. Once it is scaled further it will also require strong engagement by government, particularly to ensure that enabling legislation is in place.

Alternative Funding Streams

The private sector can also be engaged in urban regeneration and transformation projects. However, if private sector capital is used to finance these projects, the city needs to ensure that there is a sufficient funding stream.

Outside value capture, other funding streams could include user fees, repurposing of properties or making the private property owners to pay for the renewal themselves. Where there are underutilised properties, such as the ones that were previous government buildings, these could be repurposed and used for commercial purposes such as cafes or museums. This would result in revenue from renting out the buildings.

LEGAL CONSIDERATIONS

Land Rights

Land rights need to be secure, marketable and legally enforceable to enable efficient land use as well as land taxation and planning. Security ensures future ownership which is essential for the for safeguard of the most vulnerable groups with limited knowledge and capacity to manage their investment.

The Urban Transformation Plan should take into account this issue in order to guarantee marketable land rights. In fact, this will ensure that land is transferred to its highest value use, thus encouraging urban transformation.

Adequate Compensation Within Compulsory Land Acquisition

Land acquisition by governments is sometimes necessary for increasing resilience and safer environments or improving land-use efficiency through vital infrastructure projects or placement of large job-creating industries. Where possible this should be facilitated through voluntary market exchange but compulsory land acquisition is also justified if adequate compensation is given to those displaced.

Both the interventions in Surabaya should consider the necessary strategies for the inclusion of affected residents in nearby areas when compulsory land acquisition happens. If this option is not viable adequate compensation mechanisms that ensure social integration and provision of livelihoods for displaced communities are needed.

Adequate compensation includes payment of the market value of land before redevelopment projects are announced as well as an amount to cover the loss of social networks and disruption of livelihoods due to relocation.

Investment in legal and administrative capacity to run a smooth appeals process is also necessary to limit social unrest and ensure land ownership rights are observed. Relocation areas should be well connected to avoid socio economic exclusion and incentivising informal settlement.

Alternatives to Forced Eviction and Forced Eviction Due Process

Eviction may become justified and unavoidable, especially when urban transformation programmes involve informal areas. In that case, it is important to assure that evictions carried out do not violate the human rights of affected persons and groups.

All potential risks should be taken into account when evaluating the impact of such an action, in terms of costs and damages that could occur as a result of an eviction or displacement.[28]

Consultations with the affected individuals, households and communities must be held to ensure that their needs are taken into account. It is also important to consider alternative solutions prior to necessitating a displacement.

Engaging Community and Stakeholder Support

The transformation of urban areas directly affects the future of communities and all individuals within it, so engaging the relevant stakeholders and keeping them onside throughout the duration of the development process is crucial.

Some stakeholders have a direct role to play in the legal and planning processes. Others are interested observers whose opinions are relevant and, if not supportive, can have adverse effects on the overall level of community and social support for a project.

Considerable opposition during the development lifecycle can be prevented by avoiding perceived

insensitivities and distorted perceptions. Communities should feel that their desires and aspirations are put at the same level of consideration as that for big business and investors. Residents and local business should rest assured that the project will not harm them with higher cost of living and new competition.

From the creation of the project vision through to the operations and lifecycle management of the development, stakeholders need to be kept informed, involved and supportive of the project and its overall direction. A long-term, comprehensive vision designed to allow for public participation should be the base for this.

Regional Governance and Integration mechanisms for Resilience Infrastructure

Natural disasters as earthquakes happen within natural ecosystems, which spread across many jurisdictions and are disturbed by urban development, for this reason coordination with nearby towns and rural districts to understand the region's social-ecological makeup are required.

Regional governance mechanisms should be created under authority from appropriate higher levels of government (provincial or national) for improved inter-jurisdictional coordination, both vertically but especially horizontally. Furthermore, as the main dependencies of the city operate in silos (planning, transport, disaster management, water and so on) more integrated approaches are required to increase cities' resilience to shocks and stresses.

The Programme in Surabaya could provide unique opportunities to undertake interdepartmental conversations under the support of the city leadership. The UK FCO, United Nations and other international institutions can help create the impetus for such processes, though it will require (limited) technical assistance.

Smart Data Management for Risk Reduction

Most countries' data systems are limited in ability to provide granular, sub-regional or even sub-country level natural hazard information. Besides boosting technical capacities in remote sensing, inter-departmental data sharing should be incentivised. This should result in more informed land-use and transport planning.

Early warning systems in many Asian cities are weak to non-existent, causing unavoidable losses. Necessary institutional coordination mechanisms, covering the local, national and international levels, must be established to overcome barriers. Many of these barriers are more political than technical. Cities must be given the necessary permissions, incentives and capabilities to undertake open data sharing, both within and outside, which would support evidence-based disaster management approaches.

Architectural and Urban Design Regulations Requiring a Lively Street and Urban Environment

Using development control regulations such as urban design standards or building codes to ensure that ground-floor facades appeal to pedestrians with good lighting, furniture, levels of interest and activity is recommended. Moreover, setbacks should be minimalised to increase street life and densify the urban form.

Regulations for Land Value Capture

There are also additional considerations that need to be made in terms of understanding the potential of land value capture in the case of the proposed projects in Surabaya if they are to be undertaken at a neighbourhood level.

Enabling legislation for any land value capture instrument will have to take place on a wider scale, either at the Development Committee level or that of the regional government. These types of instruments have been most effectively used on large-scale projects such as transport or infrastructure investments. At a neighbourhood level the increase in land value may be too small to be able to assess and collect effectively.

Parking Regulations

Regulating parking in the dense city neighbourhoods can contribute to diminishing the level of congestion and improving municipal revenues. Parking regulations can constrain parking supply in public transit-rich locations by reducing the amount of spaces, implementing parking maximums for buildings in the core areas or urging parking prices to reflect the land prices of each vicinity.[29]

Fig. 23. Putat Jaya, Surabaya (Source: Bagus Reza, Flickr)

ENDNOTES

1 World Bank, Energizing Green Cities in Southeast Asia. Chapter 7, Surabaya, Indonesia Online: <https://www.worldbank.org/content/dam/Worldbank/document/EAP/region/sueep/energizing-green-cities-surabaya-indonesia.pdf>

2 Ferita H. D. (2006). City Report of Surabaya, for the AUICK First 2006 Workshop.

3 Ibid 2.

4 Further information regarding Surabaya's decentralized governance structure and the relationship between the centralized and local government is discussed in Law No. 32 (2004)

5 LPPM ITS Centre for Disaster and Climate Change Studies, Earthquake resources and hazard map of Surabaya City, 2018.

6 Surabaya City Planning and Development Agency, Putat Jaya Strategy, 2018.

7 Ibid 5.

8 Ma'ruf M.F., WIDODO A., SUWARNO S. , Site response evaluation for Earthquake hazard analysis of Surabaya Metropolitan, 2011.

9 Ibid 5.

10 Bahri A.S., Utama W., Aini D., Lutfie,M. , Valuation of Building strength against earthquake Vibrations using Microtremor Analysis (case study: the city of Surabaya) , 2016. IOP Conf. Ser.: Earth Environ. Sci. 29 012018

11 Central Bureau of Statistics, Sawahan District in Figures, 2017.

12 Ibid 11.

13 Ibid 6.

14 There are eight criteria's the local taxes have to meet: "(i) they are taxes and not user charges, (ii) the tax base is located locally in the region and is immobile, (iii) the taxes do not conflict with public interest, (iv) the tax base is not subject to provincial and national taxation, (v) the revenue potential is adequate, (vi) the taxes do not exert economic distortions, (vii) equity concerns are taken into account, and (viii) environmental sustainability is taken into account." (This is extracted from: Nasution, A. (2017). 8. The government decentralization program in Indonesia. Central and Local Government Relations in Asia, 276.)

15 Previously they were collected by the province and then transferred to the local governments.

16 National middle-term development plan 2015-2019, 2014. Online: < http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/laws/1328.pdf> (in Indonesian)

17 Ikhsan, P. N. I. A., bt Normapiah, S. S., bt Kamarudin, S. N., bt Kamal, N. F., & bt Jafri, M. N. (2016), Public private partnership (PPP) in Surabaya, Indonesia: issues, challenges and strategies.

18 Lewis, B. D. (2003). Local government borrowing and repayment in Indonesia: does fiscal capacity matter?. World Development, 31(6), 1047-1063.

19 Although this law is normally used concerning slum regenerations.

20 Jones, P. (2017). Formalizing the informal: Understanding the position of informal settlements and slums in sustainable urbanization policies and strategies in Bandung, Indonesia. Sustainability, 9(8), 1436.

21 Enterprise Singapore (2015). Surabaya City Brief. Online: <https://ie.enterprisesg.gov.sg/-/media/ie-singapore/files/venture-overseas/browse-by-market/indonesia/surabaya20city-20brief201520may202016.pdf>

22 Spatial Planning Law (No. 26/2007) replaced the Spatial Law (No. 24/1992).

23 Susetyo, C. (2017). Shifting the Focus of Spatial Planning in Indonesia; from General Planning to Detailed Planning. The Social Sciences, 12(3), 555-560.

24 It is important to note that the Spatial Law 24/1992 has no longer legal standing in Indonesia.

25 Law of the republic of Indonesia number 24 of 2007 concerning disaster management. Online: <https://www.ifrc.org/PageFiles/139604/Indonesia_DMAct_2007.pdf >

26 Harvey, C., & Smyth, I. (2012). Post-Earthquake Response and Reconstruction: Gender-sensitive advocacy in Indonesia. Oxfam.

27 Regione Umbria, Territorial governance regulations: municipal urban planning, 2005. Online: <

http://www.crumbria.it/mostra_atto_stampabile.php?-file=LR2005-11.XML>, [accessed 30 November 2018].>

28 The UN Guidelines (A/HRC/4/18) call for a mandatory Eviction Impact Assessment (EvIA) to be conducted prior to any planned/proposed eviction.

29 Asian Development Bank, pg. 53 https://www.adb.org/sites/default/files/publication/28935/parking-policy-asia.pdf

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