

Prosperity Fund

GLOBAL FUTURE CITIES PROGRAMME

YANGON

CITY CONTEXT REPORT



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UNHABITAT
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Global Future Cities Programme
YANGON
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Note on Nomenclature

This report uses the name Myanmar to refer to the United Nations Member State, the Republic of the Union of Myanmar. In the context of this report, the nomenclature 'Myanmar' refers to what the UK FCO may call Burma. This discrepancy is still pending resolution and will be updated in due course.

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CONTENTS

FUTURE CITIES PROGRAMME	4
Introduction	4
About The Global Future Cities Programme	
Intervention Development and Validation	
The City Context Report	
Yangon	9
General Overview	
Problem Statement	
Revitalising Streetscapes: Unlocking The Potential Of Yangon City's Assets	
URBAN ANALYSIS	12
Spatial Analysis	12
Area Of Focus: Yangon's CBD	
Heritage	
Resilience	
Public Space	
Financial Analysis	21
Municipal Financial Capacity	
Access to Finance	
Public Private Partnerships (PPPS)	
Legal Analysis	24
Governance Structure	
Alignment To Existing Plans And Policies	
INTERNATIONAL ALIGNMENT AND TECHNICAL RECOMMENDATIONS	27
Potential Impact	27
Short-Term Outcome	
Medium-Term Outcome	
Long-Term Potential Impact	
Contribution to Sustainable Urban Development	29
2030 Sustainable Development Goals	
New Urban Agenda Alignment	
Alignment with Cross-Cutting Issues and the Prosperity Fund	
Success Factors	32
Spatial Considerations	
Financial Considerations	
Legal Considerations	
ENDNOTES	38

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. Typical Yangon Streetscape (Source: Jacob Kalmakoff, UN-Habitat)

Yangon

GENERAL OVERVIEW

Originally a small fishing village centred around Shwedagon Pagoda, Dagon was founded by the Mon people in the early 11th Century CE, who were the primary residents of lower Myanmar at that time. In 1755 King Alaungpaya conquered Dagon and renamed it Yangon, adding further settlements around the existing one. During the First Anglo-Burmese War (1824-1826), Yangon was ceded to the British and subsequently developed into an international hub of activity.

During the period of British rule, namely 1824 – 1948, Yangon served as the cultural and educational hub for the colonial elite. In 1852, British military engineers Fraser and Montgomerie laid out a plan for the city's grid pattern, originally conceived as a settlement for 36,000 inhabitants.¹ Currently, this area comprises the Central Business District (CBD) of the city. Yangon became an important centre of the British Empire, and later of the Union of the Republic of Myanmar, and has since grown to become a city more than 100 times its original size.



Fig. 2. Comparison of Myanmar's major cities by population

At varying times in Yangon's history, it has been populated with Han Chinese, as well as Hokkiens and Cantonese people. Indians, specifically from Gujarat have also had a significant presence in Yangon meaning that the city has always contained a tapestry of culture. This cosmopolitan past has contributed to a unique cityscape, including a range of structures from religious sites to colonial administrative buildings, many of which are in poor condition. The city faces tremendous challenges in reviving these structures, due to difficulties in policy, ownership, technical expertises and management. It is estimated that, among its pre-colonial pagodas and temples, mansions and colonial administrative buildings and smaller architectural structures, over 2,000 properties date from before 1950.²

Yangon is now the largest city in Myanmar and the main gateway to the rest of the region. The city lies at the confluence of the Yangon and Bago Rivers, and thanks to its port and its industrial activities it is also the commercial, trade and financial hub of Myanmar.

Administratively, the city is part of the Yangon Region, administered by the Yangon Regional Government (YRG), and divided into four districts composed of

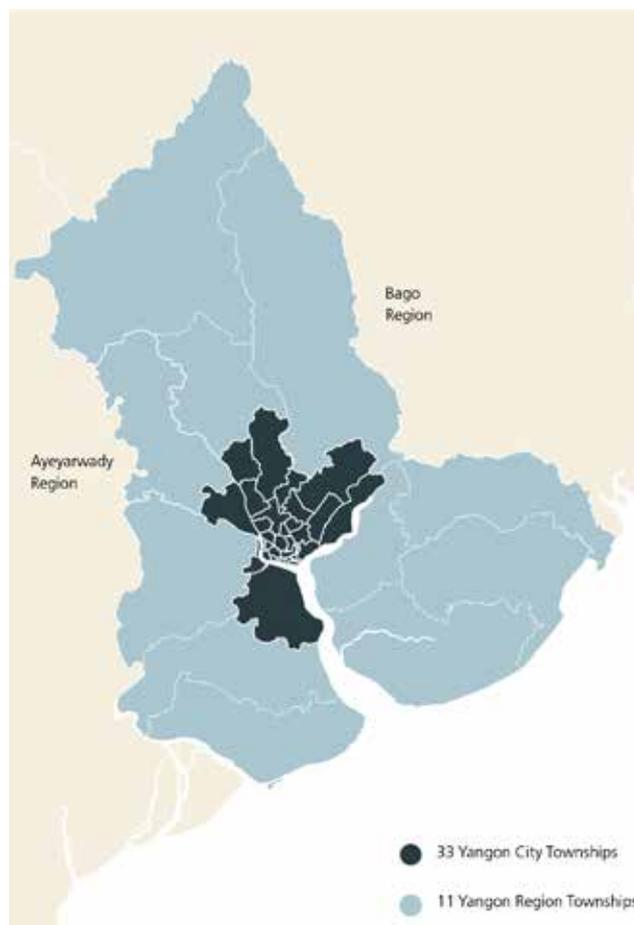


Fig. 3. Yangon Region depicting all 44 townships, 33 under YCDC jurisdiction



Fig. 4. Yangon aerial view (Source: Jacob Kalmakoff, UN-Habitat)

44 townships. Yangon City can be identified by the townships administered by the Yangon City Development Committee (YCDC), which includes 33 of the 44 townships under YRG's jurisdiction. The total area spans approximately 1000 km², while the urbanised land represents approximately half of it.³ However, YRG also recognises a regional spatial development area, Greater Yangon, which includes Yangon City and parts of the six neighbouring townships⁴ of Kyauktan, Thanlyin, Hlegu, Hmawbi, Htantabin, and Twantay for a total of 1500 km².⁵

Currently the population of the urban wards in the 33 Townships of Yangon is estimated at around 5.1 million inhabitants,⁶ while estimates in 2016 suggested the Metropolitan area population at between 6.5 and 7 million.⁷ Yangon has an average population growth rate of 2.6 per cent.⁸ Its population is projected to reach 12 million people by 2040.⁹ At a township level, the central areas of Yangon appear to have a lower population growth rate while peripheral areas have high growth rate. These trends correspond to a phenomenon of urban expansion which is putting pressure on the existing infrastructure and affecting the urban environment.

PROBLEM STATEMENT

Heritage is a well-known concept to Yangon residents. The uniqueness of the city lies not only in its monuments and architectural wealth but also in its human and social

heritage, traditional activities, historical practices and ways of living that unfold within it. Accordingly, the notion of heritage is widely understood by Yangonites.

Increasing urbanisation is putting pressure on the city's infrastructure, and this is putting many areas with historical buildings and practices at risk of being lost. These 'assets'—once a compelling example of human-centred streetscapes, are under pressure from car-centric urban planning. For this reason, a growing movement of heritage conservation is beginning to inform the city's development, primarily focusing on individual architectural landmarks, which are the physical elements of the city's heritage, as well as intangible aspects of the traditions and customs of the diverse communities that call Yangon home.

Flooding is a fairly new phenomenon in the CBD and is only expected to worsen. Climate change is expected to lead to increased volume and more frequent rainfall while projected sea level rise will have a similar effect.¹⁰ In addition, Yangon is built on a wetland, giving it a high water table, which only exacerbates water challenges in the city. Due in part to poorly-maintained drainage and insufficient solid waste management, certain areas of the city flood regularly and this further compounds flood-related issues of public health and sanitation. Flood resilience is something that residents must contend with on a regular basis and, for this reason, new approaches that integrate communities in resilience planning must be explored.

It is indeed the intersection of these two elements—heritage and flood resilience—that provides an avenue to explore tangible urban revitalisation through tangible pilot projects, while strongly advocating for a new approach to the provision of public space. Out of these pilot projects, lessons-learned and evidence-based recommendations can be extracted to further develop policies and regulations.

Currently core societal functions such as administration, banking, business and commerce are located in the CBD of Yangon, and the great interest in developing this area and others is transforming the cityscape at a rapid pace. The urban grid system laid out by the British colonial government was designed for a time when the horse-drawn carriage was the principal mode of transport. As the city continued to expand, arterial roads grew organically but the grid remained largely unchanged. The streets were not developed for regular passage by car, nor did they account for vehicle parking or for the pressures of a city that has grown more than ten times in size since then. Currently, Yangon's grid is often seen to limit the construction of new structures, streets and public amenity improvements.

Yet the grid does provide many benefits including ventilation corridors helping to reduce humidity and the urban heat island effect, a high density of built structures and easy navigation. Today, the grid serves as a relatively efficient network for transport, which is simply hindered by a mismatch with the current volume of vehicular traffic. It should be understood, however, that the CBD can be a model for human-centred development once again. The CBD constitutes a strong asset for the city, which should be preserved and revitalised in order to accommodate changes in the city's planning and function over time.

REVITALISING STREETSCAPES: UNLOCKING THE POTENTIAL OF YANGON CITY'S ASSETS

In the Yangon context, the Urban Planning and Resilience pillars were identified as best fitting for the Programme to further build prosperity and promote sustainable urban development. The focus area under the Urban Planning pillar was heritage in urban development and under resilience, specifically flood resilience was identified. In order for the intervention to achieve the Programme objectives, broader definitions of both heritage and flood resilience were taken.

To better capture the diverse understandings of heritage in Yangon, the approach has been adapted to encompass components of both the built environment and cultural practices, reflecting the complex and multicultural underpinnings of the city's history.

Similarly, flood resilience not only refers to incidences of inundation per se, but looking at alternative solutions to sewerage, drainage, water supply and erosion, solid waste management and public awareness.

Consequently, the scoping work, undertaken by UKBEAG and UN-Habitat during the Strategic Development Phase has determined that the proposed intervention should focus on revitalising streetscapes in Yangon's CBD. The proposed intervention merges heritage and flood components as part of an integrated urban planning approach, addressing the interface between buildings, (semi-) public space and livelihoods.

Therefore, the planned intervention includes four main inter-linked components: **a)** the design and construction of pilot project(s) at three street scales; **b)** the extraction of lessons-learned and subsequent development of evidence-based recommendations for policies, regulations and methodologies both:

- At **city and municipal level** – replicable across other areas of Yangon
- At **city-region and metropolitan level** – scaling up the approach for application on a larger geographic scope and strategic level

The project also contains: **c)** a component of capacity building for government, local academia and professional bodies, and **d)** public awareness raising and outreach on urban issues.

The aim of the intervention (shown in Figure 5) is to unlock the potential of the city's latent assets and to focus on the development and implementation of replicable and scalable showcases that can embody and be exemplary for the future sustainable development of Yangon.

Main Stakeholder

Yangon Regional Government
Yangon City Development Committee

Thematic Cluster

Heritage and Urban Renewal
Resilience and Flood Management

Keywords

Public space, streetscapes, revitalisation, heritage, resilience, integration, planning

URBAN ANALYSIS

Spatial Analysis

AREA OF FOCUS: YANGON'S CBD

Yangon was originally a fishing village situated on a wetland and there were originally 32 streams that ran through the city.¹¹ Largely built on reclaimed land, the city has expanded into the surrounding tributaries, yet administrative and economic functions still centre around the CBD. Unlike some urban centres, Yangon's CBD contains the highest residential population density¹² in the country.

The CBD contains six townships, which relate to the original 1852 plan by British engineers Fraser and Montgomerie.¹³ Nowadays, with the lack of focus on public transport, the once human-centred streetscape designs have turned into car-centred streets, with motor vehicles having gained dominance over pedestrians. Together with the accumulation of randomly-placed generators, dilapidated drainage covers, exposed electric wiring and piping, the safety, walkability and ultimately livelihoods of these streetscapes are greatly impacted.

Significant political focus is currently directed towards the development of New Yangon to the west of the city while little attention is being paid to the existing assets within the CBD. This includes 'hard' assets such as existing buildings of historical significance (both architecturally and functionally), as well as 'soft' assets such as cultural practices like markets, religious activities and socio-cultural industries. If these are left without consideration, they risk being largely forgotten and will further the spatial income disparity in the city. For this reason, and in order to hit the Programme's objectives, the CBD was determined as the geographic focus area for this project with the highest potential for impact.

Typical streetscapes in the CBD consist of 5-7 storey buildings defined within the grid system. Most of this development took place in the 1920s and 30s adherent to the grid and were either residential or mixed-use developments. The urban grid is composed of perimeter

blocks with ground floors that nowadays typically accommodate economic activities including retail and other shops. The 2nd storey and above were initially meant for residential purposes and today contain a mix of uses. Some buildings contain double height ceilings which have been divided to accommodate ground floor retail and first storey residential functions. There is an increasing number of offices and commercial uses within other storeys of the buildings as well. Externally, the streets have many users—this includes active use by pedestrians and for informal trade. Motorised vehicle traffic typically dominates roads.

HERITAGE

Listed Buildings

According to YCDC's Provisional Zoning and Land Use Plan, Yangon has 189 officially listed heritage buildings, all of which are public. The list is the only statutory protection for built heritage in Yangon to prevent the gradual degradation of historic buildings.¹⁴ The list focuses on the unique value of monuments without consideration of their environment or addressing the general complexity of the CBD. An outcome of this piecemeal approach to heritage conservation is the prevalence of demolitions, which occur in the area of the CBD, causing the gradual substitution of characteristic building typologies with taller and more modern structures which do not compliment or connect with their surroundings.

Many actors in the Yangon urban context recognise the architectural value of the older, mostly colonial buildings in the CBD and see financial potential in their renovation, especially those with a higher potential for capital investment. Most renewal activities, however, are undertaken without any value capture mechanism in place. The process results in properties being renovated and then subsequently leased at a significantly higher



Fig. 5. Map of Yangon City

price, mostly to international investors and/or tenants with a greater purchasing power. This can lead to increased values of adjacent properties as well, pricing out locals from the real-estate market, as well as encouraging free-riders.

Yangon Heritage Strategy

Yangon does not have any all-encompassing policy or strategy to protect both tangible (hard) and intangible (soft) heritage assets in the CBD. However, Yangon Heritage Trust (YHT), an NGO promoting the built and cultural Heritage of Yangon, has developed a strategy which attempts to account for this: the Yangon Heritage Strategy.¹⁵ In the document, which was developed independently and does not have legal status, long-term planning and immediate action are combined, with an attempt to join conservation and development in order to identify key principles for a liveable Yangon.

The strategy puts great emphasis on the upgrading of streets within the CBD. Improving walkability, greening and providing adequate space for commercial and communities activities is recognised as a necessity for a comprehensive conservation strategy, enhancing and giving value to the historic and cultural patrimony of Yangon. The renovation of the public realm is seen as an intervention to build awareness of the potential and opportunities of heritage, an action to ensure a wide support and involvement in conservation practices.

The Yangon Heritage Strategy also proposes a Downtown Conservation Area. The purpose of the conservation area is not only to enlarge conservation prescriptions to a wider number of buildings (roughly 3,000 structures fall under the boundary), but also to enlarge the notion of heritage from a list of architectural exceptions that need protection, to the conservation of the ensemble of monuments, smaller architectural features, open spaces and localised practices which should be maintained in line with the public debate on heritage preservation for the past 60 years.¹⁶ One of the main qualities of the CBD is its almost unaltered streetscape. New construction and building modifications are not always harmful to the urban landscape but their impact depends on the way they integrate in the fabric. The introduction of density controls and restriction on height and structural alignment will safeguard the built environment beyond the individual preservation of listed buildings.

At the same time, a conservation area recognises activities taking place within its boundaries, such as workshops, temporary or permanent markets and cultural and religious events, as also contributing significantly to the environment and the urban landscape of Yangon.

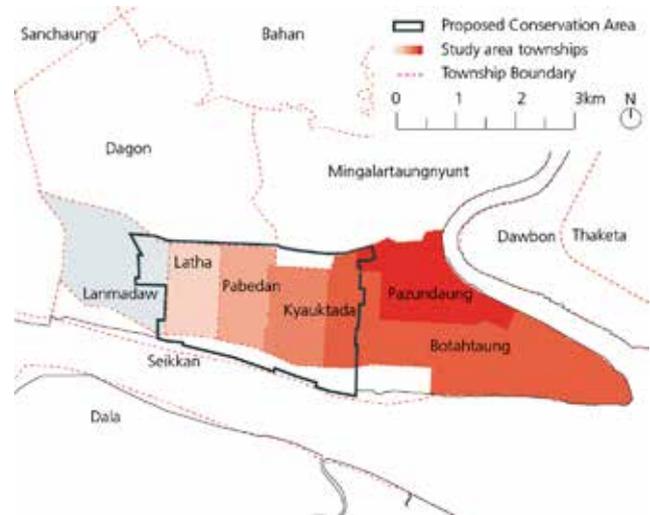


Fig. 6. Study area townships within CBD

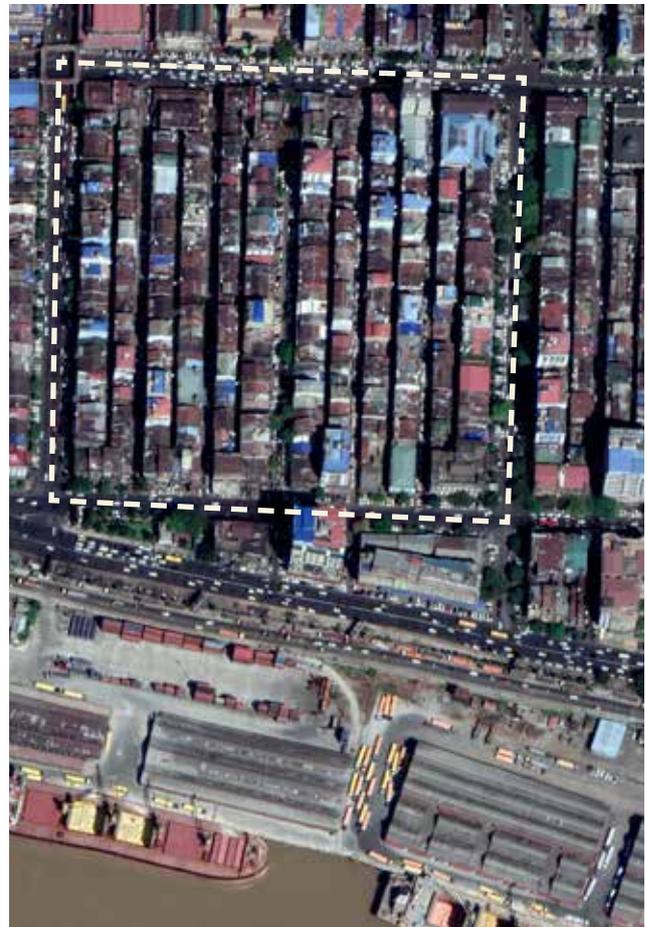


Fig. 7. Area of one city block in the CBD showing urban fabric

RESILIENCE

Yangon is built on a wetland, giving it a high water table. This means that new developments of buildings and infrastructure must contend with challenges of a deteriorating ground structure and as a result, certain parts of the CBD are beginning to sink.¹⁷ The map in Figure 9 depicts the Rangoon of Alaungpaya, predating 1824, and shows the series of rivers and tributaries on which Yangon was built.

One critical action to mitigating risk is the improvement of the infrastructure system, which is considered inadequate and badly maintained.¹⁸ Road conditions in Yangon are satisfactory but potholes, uneven pavement and the damage to ageing water mains mean that repairs are frequently needed. Often, this is done as needed and results in small sections of road being dug up, rebuilt and resurfaced, causing a rise in the height of roads.

During the seven months of the year without monsoon weather, drainage management is not a top concern. Most residents describe the major challenge as having

to deal with solid waste clogging the drains. Even when a section of drainage is cleaned during the monsoon season, within a few weeks the drain becomes fully blocked yet again. This illustrates the interdependency of drainage and solid waste management. It is not simply an issue of improving the quality of the infrastructure but new thinking, capacity development and public awareness needs to be cultivated at a much wider scale for this to be tackled. YCDC's intermittent cleaning of the drains is understood as a 'band-aid solution', which does not include the vital awareness-raising aspect. In addition, regulations must be better enforced, and tools provided that can ensure a comprehensive strategy for drainage management. This must be also examined further from a long-term resilience perspective and can be done in conjunction with improved streetscape infrastructure, as well as events and activities organised around better management of waste in such a densely-populated urban core.

Currently, the largest drainage survey ever completed is underway (as of October 2018) and is mapping the drainage in the Six Townships. The data collection was conducted by use of LIDAR (Light Detection and

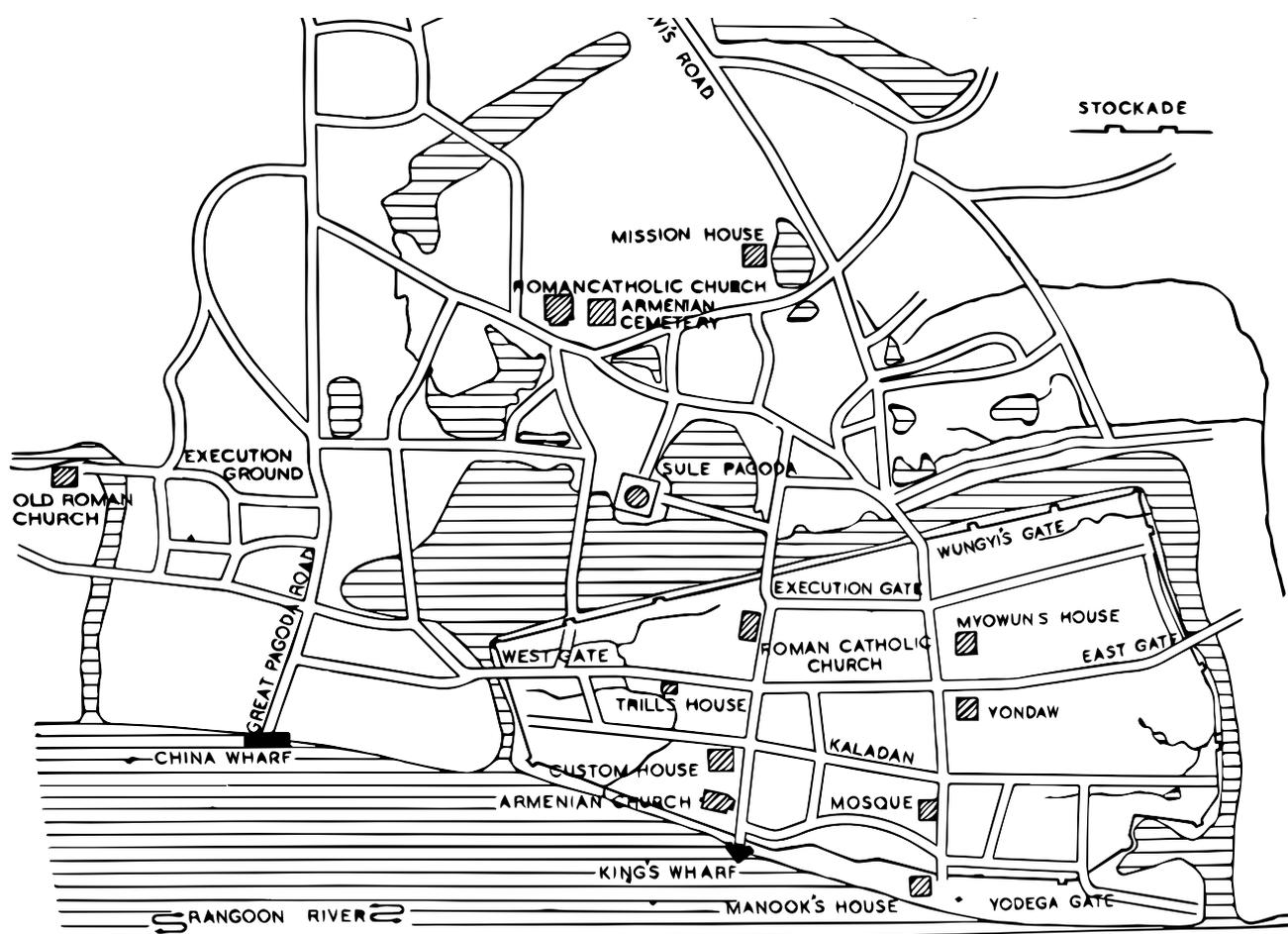


Fig. 8. Rangoon of Alaungpaya, predating 1824

Ranging), which has the ability to measure distances using lasers and reflected pulses. This work is funded by the World Bank who is also providing data that will guide programmes on water management by the Dutch Government, Asian Development Bank and others. Many initiatives focus on necessary infrastructure upgrades which are necessary to support a growing population. However, many approaches to public space do not include a focus on marginalised communities, participatory design and economic empowerment— aspects which are key and central aspects of the GFC Programme.

PUBLIC SPACE

Public recreational space is scarce in Yangon, with a ratio of only 0.37 m² per person in the city as a whole, and 0.20 m² per person in the CBD (whereas UN-Habitat recommends 15m² per person).¹⁹ Despite the roads being legally recognised as ‘shared spaces’ for all forms of transport, comfortable spaces for non-motorised transport (NMT) users are at a premium. Public space, defined as ‘sites which are accessible and enjoyable by all without a profit motive’, can take on various spatial forms, including, streets, pavements, markets and playgrounds in addition to conventional definitions that include green space such as public parks.²⁰ Many green and open spaces are inaccessible, private and fenced off. Yangon’s waterfront is also mostly inaccessible due to complex land ownership issues and the activities related to an operating seaport. For these reasons, in a compact CBD such as Yangon, it is imperative to include streets, pavements, markets and playgrounds in a definition of public space.

The CBD grid pattern lends itself very well to work at different scales of the urban fabric wherein there are three distinct scales of streets. It includes roughly four typologies of streets:²¹

- Broad 160-foot (49m) wide roads running west to east (Major Roads)
- Broad 100-foot (30m) wide roads running south to north (Major Streets)
- Mid-size 50-foot (15m) wide streets running south to north (Numbered Streets)
- Two narrow 30-foot (9.1m) wide streets running south to north (Numbered Streets)

Major roads/streets tend to be between four and eight lanes in width and are often dominated by car traffic, with pedestrian uses relegated to the pavements. Numbered streets make up the majority of north-south streets, most of which are designated for one-way vehicular traffic. The alleyways, most of which are not publicly accessible, make up a large amount



Fig. 9. Looking South on 28th Street (Source: Jacob Kalmakoff, UN-Habitat)

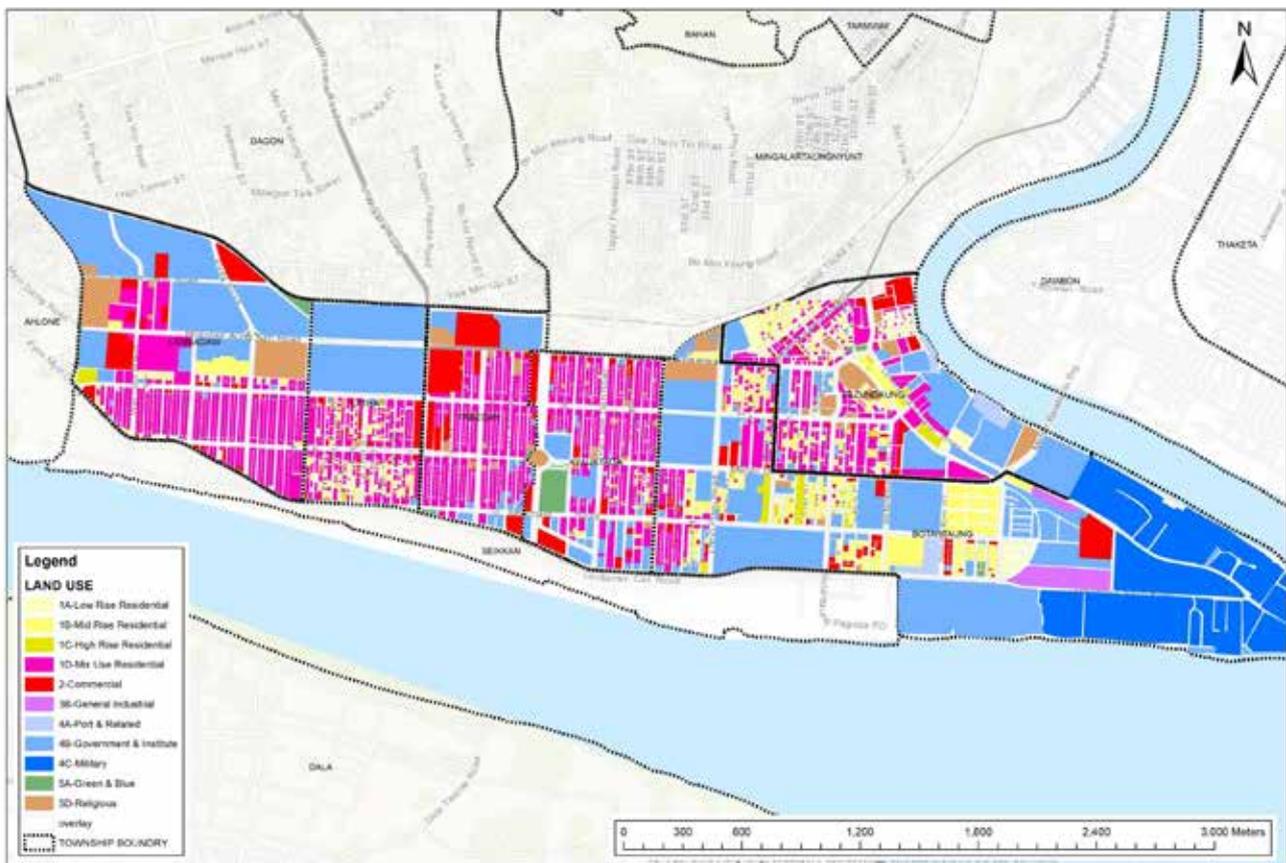


Fig. 10. Draft Land Use Map of Yangon CBD, YCDC, 2018

of currently-unused space in the city as many of them are used as dumpsters, although their potential is being explored through recent revitalisation activities. These three scales are where the majority of unlocked asset potential in the public realm lies.

Parks

Walking through the CBD, there appears to be significant accessible green space in the CBD. Officially, however, only one public park exists in the CBD (shown in green in Fig. 9) — Maha Bandoola Park. Maha Bandoola Park, perpendicular to the CBD’s centrepiece Sule Pagoda and directly across from City Hall, is a well-maintained and heavily-used central green space that provides a recreation spot for residents throughout the day. In the draft land use map of the CBD, this area and one other space in the North West corner of the Six Townships have been designated as a ‘green & blue’ space. There are two other small public parks in the East of the city, making up a total of 1 km² of additional public green space. Many other spaces are used ‘informally’ as what could be described as the ‘commons’, and officially have no legal recognition as a site that is accessible and can be enjoyed by all. In addition, there are several green spaces with a varying degree of accessibility and standard but none of which are officially recognised.

Other initiatives, such as the redevelopment of the riverfront area, have been discussed²² but face continuous challenges of complex legislation, private developers and contentious interests beside the huge task of redeveloping and possibly relocating the port. An active public riverfront recreation area will involve significant internal coordination.

Major Streets/Roads

During the colonial era, Yangon’s major streets were mostly grand boulevards. Gradually, many of these were modified to accommodate a need for more vehicular lanes on the larger arterial roads to accommodate higher levels of traffic. Given the centrality and importance of the CBD for marine transport, the city has over time been put under a lot of pressure to accommodate increased car traffic, resulting in the culling of pedestrian spaces along major roads. If approached correctly, the walkability and ease of mobility can be restored in order to bring back some of the original qualities. As shown in Figure 13, the estimated total potential public space that could be unlocked on the major streets/roads in the CBD is approximately 220 km².

Numbered Streets

Yangon's CBD is famed for its long narrow blocks, and equally narrow streets. The streets are numbered from west to east (from 1st up to Yazadirit Road—which is effectively 65th Street). Each numbered street block is between 240-250 metres long and 40 and 45 metres wide. Because of uncontrolled zoning and height restrictions, building height in the CBD is highly diverse with an average of 5.2 storeys.²³ This street width to building height ratio provides an optimum ventilation and sunlight exposure. Thus far, this work has not resulted in any particular legislation being passed. Along with this diversity of building heights, the urban fabric has a range of qualities with each block being unique. It is estimated that the potential public space in all of the CBD's numbered streets totals approximately 370 km².

Alleyways

Alleyways behind the buildings of Yangon's CBD were planned as part of the Fraser and Montgomerie Plan in order to improve ventilation, provide direct access to sewers and allow for improved drainage during the rainy season. Most of these alleyways became areas for refuse collection and are still now leftover spaces.

Recently, organisations such as Doh Eain in conjunction with YCDC, through a participatory design process have turned these alleyways into usable spaces that residents and visitors can use and feel a sense of ownership towards. Currently, 6 alleyway revitalisation projects have been completed and the spaces are being actively used and managed by residents for leisure, sports and community activities. According to Doh Eain, there are roughly 150 alleyways that have the potential to be used as semi-public space. This accounts for around 150 km² of unused ground-level public space, roughly 3% of the total CBD area. Still, challenges remain in identifying the legal ownership of these spaces. As it stands, the accessibility of each alleyway is up to each block resident's association. A larger city-wide strategy could help in assisting residents' groups to collectively manage these sites.



Fig. 11. Phayre (Pansoedan) Street, Yangon, 1920s, 2018



Fig. 12. Total estimated potential public space of major streets/roads: 220 km²



Fig. 13. Total estimated potential public space of numbered streets: 370 km²



Fig. 14. Total Estimated potential public space of alleyways: 150 km²

Livelihoods and use of space

Small and medium business sector is embedded in the dominant residential use of the CBD, and represents for many residents the main locational advantage of the area. However, street vendors constitute one of the most evident feature of the street life, and make up a significant portion of street users in the CBD. In addition to residents and visitors, vendors play a large role in the dynamic use of space in the CBD. According to the TWHUP (Transport Waterfront and Heritage Urban Project) Report released in 2016, there are over 3000 street vendors on the streets of the CBD.

Vendors are unlicensed and not formally recognised through any system of taxation, although they often do pay a form of rent to the adjacent building owners. Several plans are in the works to develop an improved system of management. The Chief Minister of YRG has stated one of his priorities to be the relocation of many of the street vendors to more high-traffic areas such as markets. Further mapping, as well as spatial analysis of street vendors is essential to gaining a better understanding of their contribution to the urban economy. This will hopefully contribute evidence to an

improved vendor management strategy that is both equitable and accounts for their unique contribution to the cultural and gastronomic heritage of Yangon. Figure 16 shows the approximate density of street vendors by street in the six townships area as of December 2016.



Fig. 15. Street Vendor density in the CBD (Source: JICA, 2016)

Financial Analysis

MUNICIPAL FINANCIAL CAPACITY

The total revenue²⁴ for 2017 for Yangon Region stood at 382,585.316 million MMK (Myanmar Kyat) or about 255 million USD. This is a rather low budget even when compared to other cities in region. By way of comparison, Ho Chi Minh city had a budget of 14 billion USD even with only a slightly higher population than Yangon metropolitan area, at 8.4 million.

Figure 17 demonstrates how YRG has a higher tax collection and own revenue than other regions in the country including Mandalay. YCDC levies various forms of taxes (on buildings, lands, water, street lightings, and wheels) and fees (such as water and sanitation fees). However, the city has a relatively low ability to capture land values as has been demonstrated through estimates of property tax collection in the city in 2016 which were shown to be just 1.86 USD per capita.²⁵ This may be a point of concern as funds from land value capture could

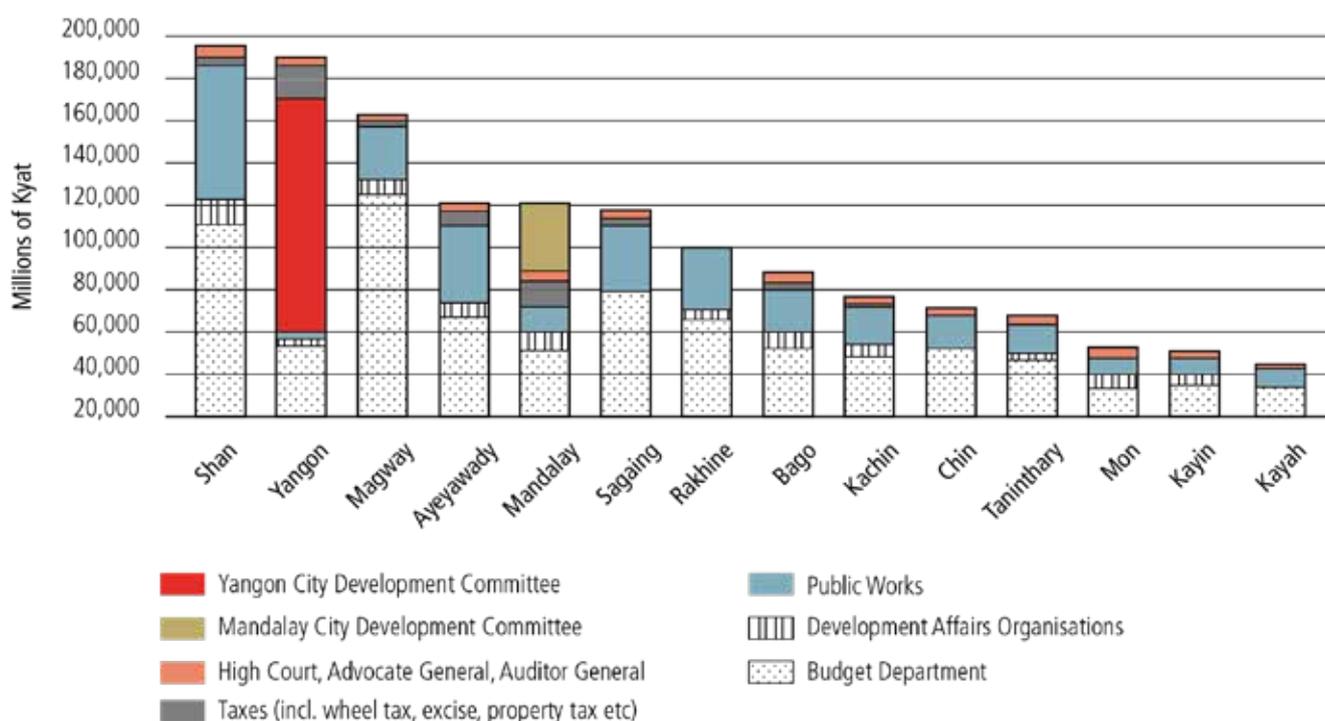


Fig. 16. 2013-14 State and Region Revenue Composition

theoretically be a useful source of finance for resilience and heritage investments in the city as well as a tool to extract the dividends generated by such investments.²⁶

Another potentially important tax in Myanmar is the 'tourism tax' imposed on hotels and guest houses, which is based on the number of tourists staying at these. That said, the extent of revenue generated from this tax has not been made publicly available so it is difficult to discern its relevance to revenue collection in the Region.²⁷

Nevertheless, when analysing the Regional expenditure, it becomes evident that there is a strong dependency on Government transfers to fund municipal expenses and capital investments in the city. Regional expenditure stood at 424,280.667 MMK (about 280 million USD) from which about 121,603.837 Million MMK (81 million USD) comes from central government transfers. However, as shown in Figure 18, this dependency is much less prominent than in any other regions across the country.

With approval from YRG, YCDC is able to fund the restoration of cultural buildings and resilience projects in the city. In particular, YCDC's financing capacities are

strengthened by its ability to borrow capital. However, this capacity is weakened by the city's lack of land value capture and general extent of own-source revenue generation.

Although the 2008 Constitution provides some guidelines for revenue and expenditure responsibilities of the state and region governments, there is a lack of clarity on the taxation rights of the state and the region governments and especially on the expenditure responsibilities.²⁸

ACCESS TO FINANCE

YCDC has the precedent and the capacity to borrow capital internationally. This is also indicated by a recent loan of about USD 116 million from the World Bank. Presently (2017-2023) YCDC is receiving a USD 71 million loan to manage flooding in the city.²⁹

There is no local budget earmarked for heritage protection in Yangon. This is a constraint for financing heritage preservation initiatives. At present, financing for urban heritage protection is done mainly through two channels: the Ministry of Religious Affairs and Culture

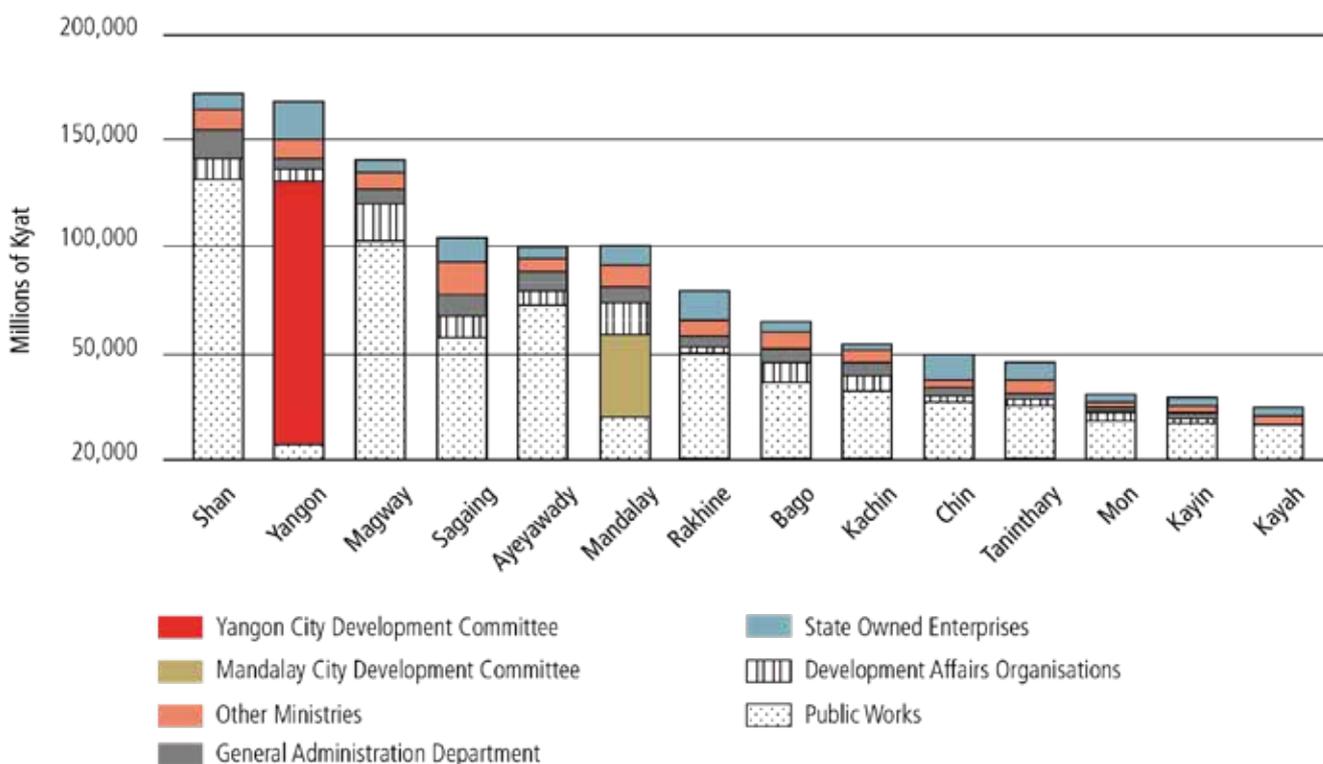


Fig. 17. 2013-14 State and Region Expenditure Composition (Total in Millions of Kyats)

maintains a budget for renovating historic sites³⁰ and other ministries, including the Ministry of Education, also have their own budget for renovation of heritage structures if the project relates to their mandate.

Given Myanmar's investment priorities on infrastructure in order to close the infrastructure gap that the country faces, there is an opportunity to tap into funds dedicated for the improvement of roads and streets.³¹ However, the focus of the investment priorities does not seem to align with the improvement of secondary streets in urban centres.

PUBLIC PRIVATE PARTNERSHIPS (PPPS)

YCDC has negotiated and entered into PPP agreements in the past, however, there is no specific law which currently governs such partnerships in the city—something that is currently under development by the Ministry of Planning and Finance through consultations with international advisors.³² PPPs in Yangon first require approval from the Yangon Regional Government. Still, no such PPP agreements have been undertaken for heritage protection or restoration activities.

Although there is no formal law yet developed for PPPs with national or international partners, it is often the case that partnerships with foreign business investment are channelled through the Myanmar Investment Commission. For example, this was the case for the leasing out of the secretariat building to the private Anwamar Group.

Legal Analysis

GOVERNANCE STRUCTURE

As defined in the Yangon City Development Law (2013), Yangon City Development Committee (YCDC) is the principal operational authority in Yangon, providing core municipal services in the city. However, YCDC's role is highly influenced both in practical and in legislative terms by the Yangon Regional Government (YRG).³³ The Yangon Regional Government is the principle decision-making body of the region.³⁴ This is for three key reasons:

- i. YCDC's municipal jurisdiction extends to 33 of the 44 townships that make up the Yangon region, resulting in a mismatch between its jurisdiction and the city-region. The other 11 townships are administered directly by YRG. YCDC has an administrator for each of its townships who does not have decision-making power but is responsible for overseeing the on-the-ground implementation of YCDC projects. Each township includes several wards, which are the lowest level of governance in Yangon.³⁵ Each ward administrator is elected by the residents of that area and they report to the National level General Administration Department (GAD) of the Ministry of Home Affairs,³⁶ rather than YCDC. As a result, the Ministry of Home Affairs holds all ward-level data collected.³⁷ These wards also receive a grant from the GAD to finance their operations.³⁸
- ii. Yangon's Regional Minister for Development Affairs is the chair of YCDC. This in effect makes the minister the Mayor of Yangon as well.³⁹ The Chief Minister who heads up YRG is considered to be the paramount decision-maker in the region.
- iii. As underlined by the 2013 Yangon City Municipal Law, the Mayor of Yangon is accountable to the Yangon Region Hluttaw (parliament) which controls the budgetary powers of the city. In effect, this means that YCDC's budget is integrated into the regional budget as an earmarked section of funding.

Certain Union Government agencies including national ministries have direct jurisdiction over specific areas of the city, depending on their exact mandate. These ministries maintain the area, but are not accountable to local government and therefore there is often a mismatch between the scope and responsibilities within any given urban jurisdiction.

The intervention coordination structure in Figure 19 has been developed to illustrate the structure of different entities within the context of the planned intervention.

ALIGNMENT TO EXISTING PLANS AND POLICIES

Despite the fact that a Strategic Urban Development Plan for Greater Yangon was drafted in 2013 and includes general outlines on the direction for urban growth in the city, there is a lack of a comprehensive land use plan for the city.⁴⁰ This SUDP is yet to be translated into a legally-recognised document with specific guidelines.⁴¹ The planning hierarchy of Yangon can be explained through the following diagram:⁴²

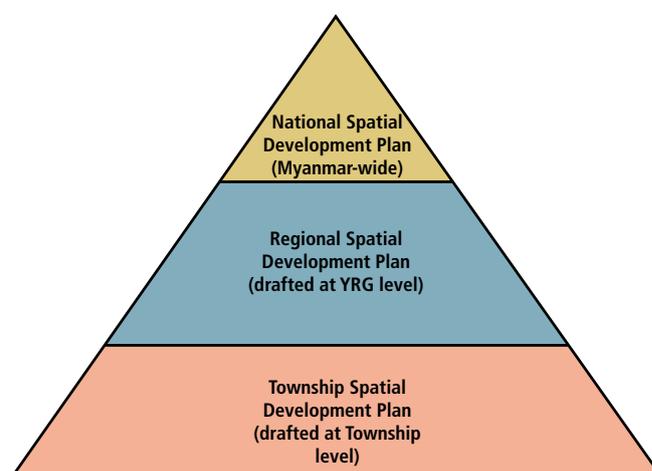


Fig. 18. Myanmar planning system hierarchy

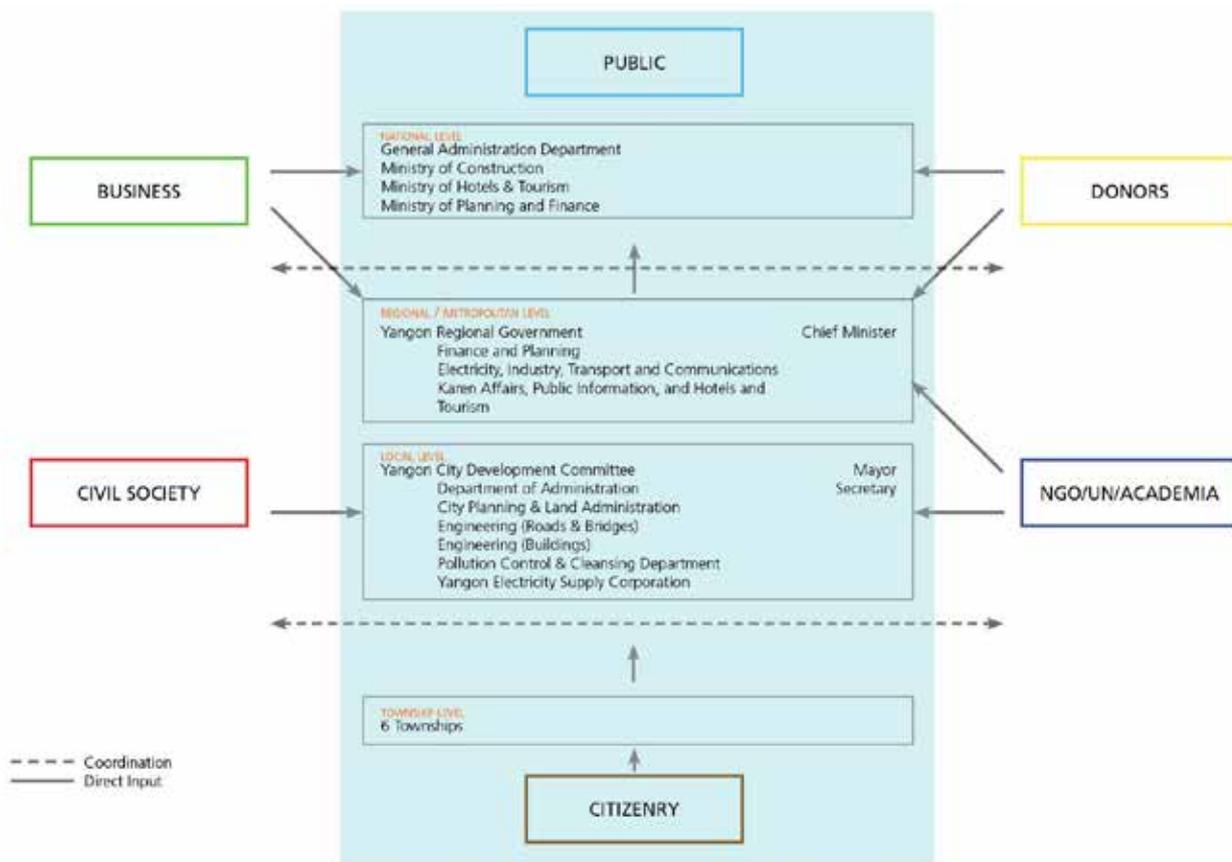


Fig. 19. Intervention coordination structure

In June 2018, YRG Hluttaw approved the YCDC New Law, which removes power from them to engage in the creation and development of YCDC-led enterprises. This effectively prevents YCDC from doing business, further restricting its already severely limited revenue generation capacity. Currently YCDC leases public lands to build markets, malls, car parks and banks through PPPs. It offers very cheap leases on public spaces and this means that these have mostly become businesses rather than public recreational spaces.

The New Law, however, also reorganised the structure of YCDC from 20 departments to just 7 authorities and 3 departments, resulting in a much less fragmented structure.

Heritage Conservation Legislation

There is limited legal procedure and guidelines in place for effective preservation or restoration of historic buildings in Yangon.

The Ministry of Religious Affairs and Culture, a central government ministry, has the legal mandate to protect heritage buildings in the city. The Protection and Preservation of Cultural Heritage Regions Law (1998)

gives extensive power to the Ministry of Religious Affairs and Culture to ‘protect and preserve the cultural heritage regions and the cultural heritage therein so as not to deteriorate due to natural disaster or man-made destruction.’ The Protection and Preservation of Ancient Monuments Law (2015) gives the same ministry the power to protect and preserve ancient monuments. However, despite these laws there are no formal heritage guidelines, particularly at the municipal level. There is also very limited enforcement of both laws as no specific body is dedicated solely to this purpose.

No long-term strategy for the protection of heritage sites in the city has been elaborated, including a financing strategy for preservation.⁴³ While YCDC’s directory of heritage buildings has existed since 1996, there is no procedure in place preventing these buildings from being torn down and redeveloped.⁴⁴ In 2013 the regional government drafted the Yangon Urban Heritage Conservation Law, the first regional bill protecting urban heritage. It has not yet been passed by parliament and activists have argued that the draft does not provide sufficient protection to the city’s heritage architecture.⁴⁵

In particular, privately-owned buildings and those previously used by the central government have no guidelines for protection, even if they are deemed historically significant. Several old buildings in Yangon were used by government ministries and managed separately by each ministry but the move of the national capital to Nay Pyi Taw has led to many buildings to be either underutilized or abandoned.⁴⁶ There is currently no law or department to maintain these buildings. Several heritage-worthy buildings in Yangon are privately owned. Despite this, there is no legal listing of privately-owned heritage assets and no set strategy for preserving these buildings.⁴⁷

Yangon Heritage Trust is commonly understood as the main organisation that sets best-practices for heritage conservation in Yangon. Whilst they don't legally have a role, in practice they provide advice and input to many aspects of urban development in Yangon. YHT staff members are quite deeply embedded in the Regional Government as they sit on committees and advise on a wide variety of issues. In this way they are a central body that advocates for built and cultural heritage preservation in the city.

Effective implementation of cultural preservation regulations still requires input in the form of enforcement and data collection by local authorities in Yangon. Currently, YCDC has no legal mandate for the protection of heritage sites, and this restricts local implementation and effective long-term heritage conservation efforts.

Resilience Legislation

Certain legal and planning documents exist that actively promote resilience against urban flooding in Myanmar, and particularly in urban centres.⁴⁸

- The Standing Order on Natural Disaster Management (2011) and the Disaster Management Law (2013) shape the national legal framework regarding disaster risk management.
- There is also a Myanmar Action Plan on Disaster Risk Reduction (2017), which is a comprehensive plan aimed at shaping risk management in Myanmar until 2020.
- The Plan's Priority Area 3.6 calls for the establishment of 'urban resilience to address disaster and climate risk in selected urban centres of Myanmar.'⁴⁹

The National Disaster Management Committee (NDMC) is the apex body responsible for the disaster risk management in Myanmar. YCDC's Roads and Bridges Engineering Department also plays an important role in managing urban roads making it responsible for most components of disaster risk management within the city.

Legislation on Data Use

There is limited data collection in Yangon, particularly on land use. Most spatial data comes from international agencies, particularly the Japan International Coordination Agency (JICA), but original data is rarely available to the public.⁵⁰

The establishment of the Myanmar Information Management Unit (MIMU) is the first attempt to bring together an integrated information and data repository in the country. Operated by the UNDP Country Team and Humanitarian Country Team, MIMU maintains an open-access online information database that is constantly expanding. However, the country currently lacks any legislation to guide the use of open data or the smart usage of data.

INTERNATIONAL ALIGNMENT AND TECHNICAL RECOMMENDATIONS

Potential Impact

The potential impact analysis outlines the main benefits that can potentially be achieved through the Global Future Cities Programme in each city. The impact analysis covers three phases: short, medium and long term. Given that impact can arise from the complex interaction of context-specific factors, rather than as result of a single action, an empirical impact assessment is not part of the scope of this report.

Short term aspects refer to outcomes that can be achieved through the implementation of the technical assistance that is provided through the interventions within the 2-3 year scope of the Global Future Cities Programme.

The 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 policies and plans. This phase is understood to take between 3-7 years. The long-term impact of the interventions is linked to their sustainability in a 7-15 year timeframe and is related to the project cycle phase of operation and maintenance.

SHORT-TERM OUTCOME

The technical assistance to the City of Yangon for the development and implementation of the streetscape revitalisation intervention in the CBD will directly contribute to improving the governance and management of the city, including better coordination and cooperation between different tiers of government. This feeds into a capacity-building component, oriented both towards civil servants and key stakeholders, which aims to have a long-term impact by addressing city-wide systematic challenges through the implementation of key performance indicators.

One of the main short-term outcomes, is the increased capacity for planning and managing the impacts of climate change while protecting the cultural heritage of the city centre. YCDC will also see an improvement in its ability to access sustainable financing for the implementation of public space and basic infrastructure projects. Capacity building will also take place with local academia and professional bodies to empower those with knowledge to contribute to their local context in new ways. Public awareness raising and outreach will ensure that the intervention is understood on the ground.

The development of Key Performance Indicators (KPIs) by the DP will help assess the contribution and impact of the intervention on the objectives of the Global Future Cities Programme (GFCP), the Sustainable Development Goals and the New Urban Agenda. This will have an impact on local capacity to monitor and evaluate urban plans, policies and strategies, as well as to be able to better prioritise strategies for decision making.

The GFCP implementation phase in Yangon will engage with partners from the public sector and academia and include participatory planning processes with communities. Participation of citizens—especially youth, women and vulnerable groups—in the development of municipal plans will be increased and equal contribution of marginalised groups to decision-making processes is a direct output of the Programme.

MEDIUM-TERM OUTCOME

Following the GFCP implementation process, evidence from data collected during the Streetscape Pilots, will impact upon the development and introduction of new policies and legislation around streetscapes in the city. Specifically, evidence gathered will contribute to addressing the protection of cultural and natural heritage whilst increasing access to safe, inclusive and

accessible public spaces, in particular for women and children, older persons and persons with disabilities.

Better mobility and accessibility in the CBD should also be addressed in the medium-term, and in conjunction with this traffic congestion and associated emissions will be reduced leading to human health and environmental benefits. Additionally, public space improvements and basic infrastructure can contribute to an increased reliability on public services, while enhancing the quality of life to include the promotion of economic equality and creation of job opportunities, particularly for women and youth.

LONG-TERM POTENTIAL IMPACT

The intervention in Yangon addresses components of sustainable urban design for public space, integrated and participatory governance models, as well as legal considerations for streetscape revitalisation and financial mechanisms for sustainable operation, maintenance and management of the pilot areas. Additionally, the intervention will explore financial tools to unlock and capture value of assets to leverage the municipal and regional budgets (of YCDC and YRG respectively).

In the long-term, the lessons learned after the implementation of the GFCP and the replicable exercise in public space transformation will have an impact on increasing the capacity of the main stakeholders for developing comprehensive urban renewal instruments that enhance linkages between spatial, economic and social development.

Furthermore, the city can increase the number of integrated plans, frameworks and approaches to promote more sustainability, resilience, and social inclusion, not only for the CBD but also city-wide.



Fig. 20. Colonial heritage residential buildings (Source: Jacob Kalmakoff, UN-Habitat)

Contribution to Sustainable Urban Development

2030 SUSTAINABLE DEVELOPMENT GOALS

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

SUSTAINABLE CITIES AND COMMUNITIES



The GFCP intervention in Yangon is broadly aligned with SDG 11 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); strengthening efforts to protect and safeguard the world's cultural and natural heritage (target 11.4); as well as enhancing inclusive and sustainable urbanisation and capacity for participatory, integrated and sustainable human settlement planning and management (target 11.3).

SUSTAINABLE & RESILIENT INFRASTRUCTURE



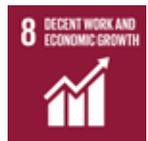
Additionally, the implementation of the pilot project component of the intervention can have a potential impact on SDG 9 with the development of quality, reliable, sustainable and resilient infrastructure that can have a specific effect on reducing the exposure and vulnerability to climate-related extreme disasters (SDG 1).

INCREASED RESILIENCE



In this regard, it can also contribute to SDG 3 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 ECONOMIC GROWTH



Further replicable streetscape revitalisation work in the CBD can promote economic growth and contribute to decent job creation, especially for street vendors (SDG 8).

PEACEFUL AND INCLUSIVE SOCIETIES



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).

PARTICIPATORY DECISION-MAKING



The Programme implementation methodology directly contributes to ensure responsive, inclusive, participatory and representative decision-making at all levels (SDGs 5, 10, 16), as well as to enhancing capacity for participatory, integrated and sustainable human settlement planning and management (SDG 11).

ENHANCING MULTI-STAKEHOLDER PARTNERSHIP



Moreover, it has a direct effect on enhancing multi-stakeholder partnerships that mobilise and share 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 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 to 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 Pilot Projects under the GFPC in Yangon will address the design, governance, legal and financial aspects for their sustainable implementation. The intervention will be set up under a planning and design process that is evidence based, integrated and participatory (AFINUA Key Item 3.1). The associated 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 evidence-based recommendations for policies and legislation component will address the establishment of a legal basis for the urban plan and distinguish public space from buildable urban land (AFINUA Key Item 2.2).

The regeneration and upgrading of existing urban fabric in the CBD will also include gentrification prevention measures (AFINUA Key Item 5.2) and public space and vendor space usage regulations (AFINUA Key Item 2.3). This component will also help Yangon to create policies and legislation to better recognise and regulate urban development (AFINUA Key Item 2.4).

ALIGNMENT WITH CROSS-CUTTING ISSUES AND THE PROSPERITY FUND

The Global Future Cities Programme seeks to achieve higher rates of sustainable and inclusive growth in its target cities, while increasing long-term investment in sustainable urban projects. Moreover, it will provide greater awareness, capability and confidence, while establishing regulatory frameworks resulting 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 integrated to ensure that all work by the agency targets those with the most need and promotes socially- and environmentally-sustainable cities.⁵¹ In this regard, the interventions detailed for Yangon are shaped under the cross-cutting issues of environmental safeguards, youth, gender equality and human rights.

The Programme’s intervention should address disaggregated data collection with emphasis on gender, age and socio-economic conditions in order to develop the KPIs within a gender equality, youth and human rights perspective.

Differential criteria for the public space design for women, youth and disadvantaged groups will be considered as part of the Streetscape Pilot Projects. Furthermore, awareness on social inclusion and human rights will be taken into account as part of the whole Programme.

Potential Benefit	Short term	Medium Term	Long term	SDG Alignment		New Urban Agenda	Programme Objectives and Cross-cutting issues
				GOALS	TARGETS	AFINUA Key Item	
Better Governance & Integrated Management of cities including better coordination and cooperation between different levels of government.				17	17.14	1.4, 1.6, 2.5, 5.5	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	17.18	1.1, 3.1	Climate change; Gender equality; Human Rights; 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
Sustainable financing models for urban renewal developed, that enable the city to finance provision of public space, basic services, and local infrastructure.				11, 16	11.7, 11.b	4.2, 4.6, 5.3	Gender equality; Human Rights; Youth; Sustainable and inclusive economic growth
Better Planning for & Managing the impacts of climate change				1, 11, 13, 15	1.5, 11.5, 11.b, 13.1, 13.2	2.1, 2.2, 2.3, 3.2, 3.6, 5.1	Climate change
Protected and safeguarded cultural and natural heritage				11, 15	11.4	2.1, 2.2, 3.2, 3.6	Climate change; Human Rights
Increased access to safe, inclusive and accessible public spaces, in particular for women and children, older persons and persons with disabilities.				10, 11, 15, 16	11.7	2.2, 2.3, 3.5, 5.1	Gender equality; Human Rights; Youth
Increased efficiency, quality, and reliability of public infrastructure and basic services.				9, 12	9.1	2.3, 4.2, 4.5, 5.3, 5.4	Climate change; Human Rights; Sustainable and inclusive economic growth
Increased mobility and accessibility for poor women and men and other marginalised groups.				9, 11	11.7	3.3, 5.3, 5.4	Gender equality; Human Rights; Youth
Reduction in traffic congestion and in air pollutant emissions				13	13.2	3.5, 5.3	Climate change
Increased quality of life, including the promotion of economic equality and creation of job opportunities, particularly for women and youth.				1, 5, 8	8.3, 8.5, 8.6	3.5, 4.2, 4.4, 4.5, 4.6	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.				11	5.a, 8.3, 10.3, 11.3	2.4, 2.7, 3.4, 3.5, 3.7, 3.8, 5.2, 5.3, 5.4	Climate change; Human Rights; Sustainable and inclusive economic growth
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, 2.2, 2.3, 2.7, 3.2, 3.7, 4.5, 5.1, 5.2, 5.3, 5.4	Climate change; Gender equality; Human Rights; Youth
Strengthened municipal finances and increased municipal capacity for revenue generation.				17	17.1	2.6, 3.4, 4.1, 4.3	Sustainable and inclusive economic growth

Fig. 21. Potential impact and alignment with Programme objectives

Success Factors

SPATIAL CONSIDERATIONS

Prioritisation of Pedestrians and Human-scale Designs to Attract People to the Area

The transformation of Yangon's CBD can improve the quality of the public space and promote economic vibrancy through the prioritization of pedestrian and human-scale designs for the Streetscape Pilot Projects.

For example, in Melbourne, Australia, the strategy to revitalise its city centre demonstrated that improving pavements on the main commercial streets, as well as converting some streets into permanent or part-time pedestrian zones and adding new plazas, trees and urban furniture, resulted in a huge upsurge in street life. In ten years, pedestrian volume on the main street jumped by 50 per cent and surpassed that of London's busiest commercial street, Regent Street.

Non-Motorized Transport to Improve Urban Mobility and Accessibility

Including walking and bicycle networks enhances the quality of the 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 public transport users especially women and youth. Additionally, it can also lead to more environmentally responsive urban environments, and depending on the density such services, can reduce congestion.

Short- Medium- and Long-term Implementation and Activation Strategies

Strategies and measurements for revitalising the use of public space that connect with cultural and heritage activities should be considered in Yangon for long-term sustainability and the promotion of local identity.

In the San Isidro neighbourhood of Lima, Peru, the activation of public space through short- medium- and long-term strategies such as daily cultural events, placement of urban furniture and integrated urban transformations has reconnected people with public space and improved the quality of life of all space users.

City-wide Public Space Strategy With Inclusive, Accessible, and Resilient Green Space Design

Public space design should promote different uses to include diverse users including women, people with disabilities, the elderly, youth and those from different socio-economic or racial backgrounds. Moreover, strategies for increased resilience can be enhanced through the provision of flood infrastructure linked with public spaces.

Evidence-based recommendations generated from the streetscape pilots in Yangon will feed directly into a city-wide public space strategy that combines different types and scales of open and public spaces for all, including streets, plazas, sidewalks and bicycle lanes.

Use mix

Social and public infrastructure will need to be properly balanced with the need to create the right commercial environment to attract private participation and maximize economic benefits. Creating an optimal mix of uses requires project designers to consider a number of key elements. In this regard, both the pilot projects and related city-wide public space strategy for Yangon should take the following into account:

- Need to maximise revenue: creating a use mix that ensures sufficient financial returns to cover public contributions while creating an environment that stimulates further demand for spatial interventions
- Integration with the local environment: mixed use development can help to define the character of surrounding amenities and act as a catalyst for urban renewal in adjacent areas
- Housing requirement and affordability: balancing a residential use mix between current and future demand requires development of various housing typologies including single units, detached homes 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. However, oversupply can saturate the market or reduce the competitiveness of surrounding areas
- Public spaces, amenities and facilities: this mix includes 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 sustainable urban environment

- **24-hour activation:** uses can be optimised through safety, security and sanitation measures to allow spatial use of the site at all hours of the day
- **Cohesion and social mix:** use mix can provide effects on the wider urban area and contribute to the city's broader social mix

There has been an increasing focus on the concept of endogenous development, where urban renewal projects absorb the skill and experience of local people into the overall design, delivery and operations of the region.

Measuring local participation, engagement and interest as part of ongoing performance metrics and evaluations will ensure the social sustainability of the Programme. Public engagement through capacity development and sensitisation to urban issues such as public space

design, is necessary to promoting involvement of all citizens that goes beyond vocal contributions at townhall meetings. 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

Revenue Generation Mechanisms for Public Space and Heritage Sites Maintenance in the Long-Term

As heritage sites will have to be maintained over time, other funding streams will have to be examined. One set of instruments that is currently underutilised in Yangon are those associated with land value capture.



Fig. 22. Risk-mapping exercise during GFCP Yangon City Charette (Source: Jacob Kalmakoff - UN-Habitat)

For example, establishing municipal mechanisms for capturing increased land values triggered by revitalising public space enables cities to recoup investments in public infrastructure and reinvest this revenue in further infrastructure. Land value capture instruments include tools such as development fees, charged to nearby landowners to fund infrastructure, or tax increment financing to enable landowners to recoup revenues from increasing property values. Examples of this can be seen in Bogotá, Colombia.

Given that land in Myanmar is publicly owned and leased out to developers, changes to lease fees to include the increased value may be considered. The fee can be increased on land and/or property owners who have in principle not contributed directly to the improvements in value but who, without any value capture instruments in place, reap all the benefits.

The challenges with this type of instrument:

- **Financing:** this fee is only generated ex post based on increase in land value and the city still has to look for other instruments for initial financing
- **If the value is estimated too high** then revenue will be lower than expected yet if the value is estimated too low, there may be resistance
- **Transparency:** accurately and transparently determining the increase in value is not straightforward
- **Efficiency of assessment:** cost of assessing parcel vs revenue generated
- **Equality:** how to ensure the fee is not regressive
- **Resistance:** overcoming resistance of private developers
- **Enforcement:** Myanmar currently has no system in place to enforce the collection of this type of tax, and it is unclear as to where the responsibility for this collection and enforcement would lie

Institutional Capacity to Mitigate the Risks of PPPs

Yangon may want to consider engaging the private sector to provide upfront financing for urban heritage renewal/revitalisation projects. Although YCDC has engaged in PPPs previously, it is not clear that they will be able to continue to do so under the New Law. Therefore, these PPPs will potentially have to be undertaken by the regional government.

To develop effective PPP agreements, strongly coordinated public institutions are needed to set contracts with the private sector. Some of the risks associated with lack of capacity from the public sector side are a tendency towards cost minimisation over

quality, increasing private premiums on private finance and increasing direct and indirect costs associated with the renegotiation of the contract.

In determining the details of the contract, it is important to note that each party should take on the risk they are best set to manage. A typical challenge in PPPs is that both public and private entities lack a common understanding of what the partnership entails. To mitigate this, capacity development on both sides is essential and strong relationships must be built.

The Regional Government is quite far removed from the neighbourhood and therefore may struggle to tackle local level issues through conditions set out in a PPP. Therefore, in negotiating a PPP it is important that relevant neighbourhood actors, such as ward administrators, are involved. Otherwise there may be a mismatch between what is agreed at a regional level and what is required on the ground.

In order for PPPs to be successful, financing mechanisms will have to be agreed upon and both parties must share a common understanding of urban heritage as a public good. Ideally the initial arrangement should come through a property tax. Property tax collection for Yangon, is currently relatively low, and it is likely insufficient as a funding stream. Other funding mechanisms such as Community Savings Groups (CSGs) may play a role in the microfinancing of initiatives at a neighbourhood scale.

Considerations for Financing Flood and Resilience Infrastructure

There are various options that Yangon can explore for financing the suggested interventions from a resilience perspective. Flood 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 with spill over effects. 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.

Financing Options for Heritage Projects

Heritage projects should be understood as public goods. Such projects are often best funded through property taxes as they are collectively enjoyed by residents of the city but cannot be assigned on one particular individual.

However, currently at USD 1.86 per capita, property tax collection is simply too low to fund these projects. Mechanisms to increase property tax collection will need to be explored in future in the context of this and other projects.

At the same time, there are many cities around the world which have correctly argued that urban heritage is actually a national public good and therefore its preservation is the responsibility of regional or national governments through revenue transfers to the city.

Particularly where heritage is line with national tourism goals, the spill over effects are for the whole country. However, this also means that urban heritage should be managed and regulated at a national or regional level. This includes instituting laws to protect and manage heritage that covers the whole country. It will also include budgeting at a higher level of government for operation and maintenance of heritage.

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 their maintenance and a fee. Another successful example is in Bogotá, 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 by 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 to play 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 on multiple forms and are usually best combined or 'piggybacked' to create a more benign investment environment. Common incentives include:

- Zoning and planning changes: increases in zoned density lets 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: giving an indication of public infrastructure investments in plans is seldom convincing and often unrealistic or too ambitious; greater certainty can be achieved by moving public infrastructure projects into the delivery stage
- Taxation: taxation in its various forms always creates both 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
- Uniform approval processes: in assessing timing risk on potential projects, developers often look for tangible evidence for uniform approval processes that can provide greater certainty that approvals will be assessed and granted in a transparent and coordinated way

Construction Bonds to Support Urban Heritage Renewal

Construction bonds are another instrument that could entice developers who are investing in other areas of the city to support urban heritage renewal in the CBD.

This would happen within the building permit process when a developer could buy the rights for additional floor-area-ratios (FAR) if they contribute to the renewal of an urban heritage site. This type of instrument addresses the difficulties of assessing the market value of land price increases.

The challenges with this type of instrument are:

- Requires a vibrant property market so that developers have a high demand for additional FAR
- Requires a strong urban plan with zones and pre-determined FAR
- If this is not in place or enforceable, then a developer will not be incentivised by the possibility of obtaining more FAR by engaging in an urban renewal project
- Given that allocation of additional FAR may be an exception to an existing urban plan or zoning regulations, there needs to be transparency in how these are allocated and what the city receives in return

- This may be difficult with the current state of the process for obtaining a construction permit, which is highly convoluted

Neighbourhood Level Value Capture

There are many examples of successful projects at the neighbourhood level that mimic value capture, by local governments working out of their will with neighbourhoods and individuals. One example of this is the work of Doh Eain 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 (or long-term tenants in the context of Yangon) to potentially engage in renewal projects and later reap the benefits of their property's increased value. The challenge is to scale these projects beyond individual properties, much larger up-front financing will be required.

It also requires engagement and willingness by all property owners if this is to be carried out on a neighbourhood scale. Before it is scaled further, it also requires a strong commitment by government to ensure that properties don't only fuel the short-term rental market, leading to transient neighbourhoods and absentee landlords. This can be controlled through taxation on absentee landlords and regulations on vacation rental properties.

Alternative Funding Streams

Besides value capture, other funding streams could include the introduction of user fees, repurposing of properties or making private property owners pay for the renewal themselves. User fees for heritage sites can be considered for those buildings that can be marketed as tourist attractions as a result of their listed status. There is already precedence for this in Yangon.

Underutilised properties, such as those that were previously government buildings, could be repurposed and used for commercial functions with secondary cultural benefits such as cafes, galleries, museums or startup incubators. This would result in revenue generated from renting the buildings. However, financing would need to be procured to undertake the initial renovation of the building and make it interesting for commercial investors. This same model can work for POPS, or Privately Owned Public Spaces, which through

regulations can be introduced as a new zoning by-law to mandate its inclusion in any new heritage property renewal activities.

Where a building is privately owned, new legislations introduced could require the owner to maintain the surround site as well. However, no such legislation is in place and it is likely that there will be strong resistance to its passing and subsequent enforcement.

LEGAL CONSIDERATIONS

Institutional Agreements for Well-Coordinated Public Space Management

Coordination and knowledge transfer between different governmental entities and key stakeholders will increase the sustainability of the public space and enhance its appropriateness for users. Developing institutional mechanisms for public space maintenance helps for better municipal coordination. The experience of Johannesburg, South Africa, shows the success of creating a unified public space agency for institutional coordination in the management of public spaces. When more authorities are involved, planning and managing becomes more complex. Creating new institutional arrangements can also improve overall coordination and management between different levels of government.

Regional Governance and Integration Mechanisms for Resilience Infrastructure

Urban floods are only in part due to extraordinary or rare natural events. They are also outcomes of systematic governance failures that could in theory be addressed by consolidating public policies, government bodies and accompanying management systems. In addition, because flooding happens within natural ecosystems, which spread across many jurisdictions and are disturbed by urban development, flood management requires coordination with nearby towns and rural districts to understand the region's social-ecological makeup.

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

The Programme in Yangon could provide the unique opportunity to undertake interdepartmental conversations, under the support of city leadership.

The UKFCO, the United Nations and other international institutions can help create the impetus for such processes, though it will require (limited) technical assistance.

Engaging Community and Stakeholder Support

The transformation of public space 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 those of big business and investors. Residents and local business should rest assured that the project will not harm them or burden them with a higher cost of living and new competition for local resources and jobs.

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 encouraged to be 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.

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, setback regulations should be developed with a specific street width to building height ratio in mind to improve 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 Yangon 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 YCDC level or that of the Regional Government. These types of instruments have been most effectively used on large scale infrastructure projects such as public transport or affordable housing. At the 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 city centre can contribute to diminishing the level of congestion and improving municipal revenues. Parking regulations can constrain parking supply in public transit-rich locations such as the CBD by reducing the amount of spaces, implementing parking maximums for buildings in the core areas or implementing parking fees to reflect land prices in each area.⁵²

Data Systems for Resilience and Planning

Most countries' data systems are limited in their 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 will result in more informed land use management and transport planning.

The preparation of KPIs for the intervention in Yangon will help to leverage development of incentives and capabilities to undertake open data sharing, both within and externally, which will support evidence-based disaster management approaches.

ENDNOTES

- 1 JICA and YCDC (2013) A Strategic Urban Development Plan of Greater Yangon
- 2 CDIA, Heritage-led urban regeneration in Yangon
- 3 Figures based on Myanmar Information Management Unit (MIMU) geographical data and satellite imagery analysis.
- 4 In this report, the six Townships, CBD (Central Business District) and the 'Downtown' are used interchangeably
- 5 JICA and YCDC (2013) A Strategic Urban Development Plan of Greater Yangon
- 6 United Nations World Urbanization Prospects, 2018 revision
- 7 This is based on the findings of "Towards Urban Growth Analytics for Yangon, LSE and IGC (2016)." Link: <https://www.theigc.org/wp-content/uploads/2016/09/LSE-Cities-YUGA-Final.pdf>
- 8 Relative to the period 1998-2011, JICA and YCDC (2013) A Strategic Urban Development Plan of Greater Yangon
- 9 Ibid.
- 10 Ibid.
- 11 Royal Haskoning Myanmar Report (2017)
- 12 LSE IGC-Towards Urban Growth Analytics for Yangon (2017)
- 13 Namely, Babedan, Botahtaung, Kyauktada, Lanmadaw, Latha and Panzuntaung
- 14 CDIA, Heritage-led urban regeneration in Yangon
- 15 Yangon Heritage Trust, Yangon Heritage Strategy, 2016
- 16 Art. 7 of the International Charter for The Conservation and Restoration of Monuments and Sites (Venice Charter) adopted by the International Council on Monuments and Sites (ICOMOS) in 1965, stated "A monument is inseparable from the history to which it bears witness and from the setting in which it occurs"
- 17 Initial Environmental Examination - Myanmar: Greater Mekong Subregion Highway Modernization Project (2017). Prepared by the Ministry of Construction for the Asian Development Bank
- 18 World Bank, Myanmar Southeast Asia Disaster Risk Management Project, 2016
- 19 JICA Public Space Study (2014)
- 20 UN-Habitat (2016) Public Space Toolkit
- 21 Typologies defined in TWHUP Report by AFD, 2016
- 22 JICA and YCDC (2013) A Strategic Urban Development Plan of Greater Yangon, and YHT Yangon Heritage Strategy, 2016
- 23 JICA and YCDC (2013) A Strategic Urban Development Plan of Greater Yangon
- 24 YCDC budget is integrated into the regional budget, hence there is a combined budget for the YRG with an earmarked section for YCDC." This means that there is a single budget for the Yangon Region with an earmarked section to be given to the YCDC. The revenue YCDC collects is, hence, integrated into the YRG budget.
- 25 The official property tax rate is 13% of the annual rental value. It is estimated that in 2016 the property tax was estimated at \$1.86 per capita. See more: <https://www.mmtimes.com/news/yangon-reform-property-tax-system-improve-citys-development.html>
- 26 Collier, P., Blake, M. and Manwaring, P. (2018). Making the most of urban land. IGC Growth Brief Series 013. London: International Growth Centre.
- 27 "Myanmar to Start Collecting Tourism Tax." The Myanmar Times, www.mmtimes.com/lifestyle/travel/25799-myanmar-to-start-collecting-tourism-tax.html
- 28 <https://asiafoundation.org/resources/pdfs/SRPublicFinancesENG.pdf>
- 29 This is part of the South East Asia Disaster Risk Management Project (Component-2).
- 30 The budget has been used to finance the new building of Myanmar's National Library, which was the the old headquarters for the Burma Oil Company. However, this budget is not publicly available.
- 31 <http://www.thaibizmyanmar.com/th/thai-myanmar/trade-investment/Non-paper%20-%2018%20Jan%202018%20-%20Investment%20Opportunities%20in%20Infrastructure%20.pdf>
- 32 IGC's office in Myanmar is presently supporting the Ministry of Planning and Finance on a national PPP law.
- 33 There is evidence that, since 2015, the regional government has increasingly taken the reins of city development. See IGC's 2017 report Tackling Yangon's Mobility Crisis: A Political Economy perspective. Reference: C-53400-MYA-1.
- 34 YCDC has colonial roots with Burma Act of 1898 and the City of Rangoon Municipal Act of 1922.
- 35 Kyi Pyar Chit Saw and Matthew Arnold (2014) Administering the State in Myanmar: An Overview of the General Administration Department, Asia Foundation (2014)
- 36 The GAD constitutes a central administrative structure across subnational agencies, performing fiscal tasks such as tax collection and budgeting through district administrators, township administrators, village tract administrators, and ward administrators.
- 37 This is not publicly available.
- 38 The 2012 Ward and Village Tract Administration Law outlines this structure.
- 39 Source: The State of Local Governance: Trends in Yangon, UNDP Myanmar (2015). <http://www.mm.undp.org/content/myanmar/en/home/library/poverty/TheStateofLocalGovernanceChin/the-state-of-local-governance--trends-in-yangon.html>
- 40 JICA and YCDC (2013) A Strategic Urban Development Plan of Greater Yangon
- 41 World Bank (2017) Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)
- 42 Based on the text here: http://www.mlit.go.jp/kokudokeikaku/international/spw/general/myanmar/index_e.html
- 43 Yangon Heritage Trust has drafted (with funding from the Italian Government) the Improving Yangon Heritage Legislation Framework which highlights many of these legal constraints.
- 44 This list does not include privately-owned buildings.
- 45 www.mmtimes.com/national-news/yangon/14286-ycdc-heritage-trust-to-press-on-with-conservation-law.html
- 46 For example, the former site of Ministry of Hotels and Tourism is vacant.
- 47 Yangon Heritage Trust has informed us that, since 2012, the YCDC's Engineering Department has been seeking their advice when dealing with building permits for private heritage

properties. This process is however not institutionalised in the law.

- 48 The World Bank is currently financing the Myanmar Disaster Risk Management Project which includes strengthening urban resilience to flooding.
- 49 Myanmar Action Plan on Disaster Risk Reduction (2017)
- 50 This is based on the findings of Towards Urban Growth Analytics for Yangon, LSE and IGC (2016). Link: <https://www.theigc.org/wp-content/uploads/2016/09/LSE-Cities-YUGA-Final.pdf>
- 51 UN-Habitat Cross-Cutting Report 2017
- 52 Asian Development Bank, pg. 53 <https://www.adb.org/sites/default/files/publication/28935/parking-policy-asia.pdf>



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